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Finding the Connections Between Teacher Motivation
and Professional Development in the Pursuit of Mastery in Practice

by

Ann Carlson

A dissertation submitted in partial fulfillment of the requirements for the degree of

Doctorate in Education

Hamline University

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ABSTRACT

This qualitative case study investigated the connections between teacher motivation and high quality professional development. The research focused on two elementary schools in one large suburban school district in the upper Midwest. Surveys, individual interviews, focus group interviews, and document analysis were used to collect data. This study identified the attributes of high quality professional development, which include collaboration, sustainability, and active teacher learning (Darling-Hammond, Hyler, & Gardner, 2017; Desimone & Pak, 2017; Macias, 2017; Parsons, Parsons, Morewood & Ankrum, 2016; Steeg & Lambson, 2015). The study explored current research about intrinsic and extrinsic motivation (Deci et al. 1991; Pink, 2009) and strove to determine which types of professional learning best support teachers in the continuous pursuit of developing their pedagogy. One conclusion is that when teachers are intrinsically motivated, the pursuit of mastery is ongoing and raised student achievement can be the outcome.

Keywords: professional development, pedagogy, teacher motivation, intrinsic motivation

DEDICATION

To my husband Dave, and my children Walter, Henry, Peter, and Sally. I dedicate this dissertation to my dear family whose ideas, opinions, and advice are embedded in this paper and never far from my heart.

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Table of Contents

Abstract.....	ii
Dedication.....	iii
Acknowledgements.....	iv
CHAPTER ONE: Introduction to the Research Question.....	1
Rationale.....	3
Recommendations.....	6
Summary.....	7
CHAPTER TWO: Literature Review.....	8
Theoretical Framework.....	9
Variety of professional learning.....	9
Reciprocity.....	11
Motivation.....	12
Self determination theory.....	14
Reaching all students.....	16
Practices of Professional Development.....	18
Workshop.....	18
Job embedded professional development.....	19
<i>Collaboration</i>	20
<i>Learning theories</i>	23
<i>Situated Professional development</i>	24
<i>Professional learning communities</i>	26
<i>Coaching</i>	27

Attributes of Professional Development.....	30
A Framework for High Quality Professional Development	33
Teacher motivation.....	33
Evaluation.....	34
Coherence.....	35
Summary.....	37
CHAPTER THREE: Research Methodology	39
Qualitative Research Framework.....	40
Qualitative Researcher.....	42
Case Study.....	44
Setting and Participants.....	46
Methodology and Data Collection	47
Ethical Considerations.....	50
Conclusion.....	51
CHAPTER FOUR: Results.....	53
Survey.....	54
Overall outcomes of forced choice questions.....	55
Themes from the open choice questions.....	57
<i>Time</i>	57
<i>Relevance</i>	58
<i>Implementation</i>	59
<i>Choice</i>	59
<i>Collaboration</i>	59

<i>Cost</i>	60
Individual Interviews.....	61
Classroom practices learned from teacher preparation program.....	62
Engagement.....	63
What makes professional development effective/ineffective?.....	63
Job embedded professional development.....	66
Document Analysis.....	68
Meeting.....	68
Professional development needs assessment survey.....	71
Focus Group Interview.....	72
What is most valuable about working in this district?.....	72
What is problematic about working in this district?.....	73
Highly effective professional development.....	74
Are you a better teacher now?.....	75
Research based teaching strategies.....	76
Significance.....	77
Summary.....	78
CHAPTER FIVE: Discussion.....	79
Key Understandings.....	79
Authentic professional development.....	79
Teacher motivation.....	80
Development of a structure.....	81
Evaluation.....	82

Coherence.....	83
Implications of the Findings.....	84
Limitations.....	86
Recommendations for Future Research.....	87
Concluding Thoughts.....	88
References.....	91
Appendix A: Survey.....	96
Appendix B: Individual Interview Questions.....	104
Appendix C: Letter of Informed Consent.....	106
Appendix D: Focus Group Interview Questions.....	108
Appendix E: Sunnyvale Public Schools Professional Development Needs Assessment Survey.....	113

List of Tables

Table 1: Attributes of Effective Professional Development.....	31
Table 2: Interview Participant Information.....	61

CHAPTER ONE

Introduction to the Research Question

Do we ever really know exactly how our lived experience has shaped our present belief system? It is certainly a composite of encounters and choices, and opportunities taken and missed, that can shape our questions and aspirations. The contemplation of the purpose of education, along with deeply held beliefs about how to educate our children and ourselves, has called for reflection on what has led to this work in life. In many ways, this is more than a professional pursuit. I am interested in our collective education as a society and as members of the human race. In this qualitative study, public school teachers will describe how and why they are motivated to develop their own pedagogy. Effective and sustainable models of professional learning that encourage teachers to pursue mastery will be discussed, and a collective path towards professional learning that is rooted in teaching practice will be examined. The exploration of these components of teaching and learning will begin to answer the central research question: *What connections exist between high-quality professional development and teachers who continually pursue mastery in practice?*

As I entered the teaching profession in the mid-2000's, I was afforded the opportunity to learn how to reach six and seven-year-old children who had yet to learn the mysteries of reading and writing, by way of becoming a trained Reading Recovery teacher. Reading Recovery is an intensive, daily, 12 – 20-week literacy intervention for the lowest achieving first-grade students. The trained Reading Recovery teacher follows a targeted plan based on specific student need, while also attending periodic, ongoing professional development throughout both the school year, and throughout a career as a Reading Recovery teacher. In this way, the teacher is continuously developing expertise, while using it to teach children and colleagues. This kind of

embedded, ongoing professional development was extremely influential for work with children and other teachers. Becoming a Reading Recovery teacher was likely the first time that I fully understood the necessity of ongoing professional development as a way to continuously improve a teachers' ability to impact student learning. It was also the first time I was asked to think deeply about noticing and naming strength in young children and in all those with whom I relate and using those strengths to guide my instruction and relationship. I began to understand that noticing and naming strength allows "an alternative future [to] occur when we capitalize on our gifts and capacities. Bringing the gifts of those on the margin into the center is a primary task of leadership and citizenship" (Block, 2009, p. 140). Although at the time, I may have been unaware that these elements (working from identified strength, and the need for ongoing learning) were crucial to a teachers' expertise and her soul; it has become clear to me now.

At the same time that I became a trained Reading Recovery teacher, I began teaching courses in a master's degree program, in the area of curriculum and instruction with a reading endorsement. Developing the content for, and teaching these courses allowed the integration of expertise with emergent readers and the developing knowledge for teaching adults. This experience offered a much broader perspective of teachers' professional practice, and their beliefs about professional development and the possibility it offers to students. Through these encounters, I began to develop my own aptitude for teaching teachers to instruct children to read and write. All of these experiences were fixed in my day to day work with children, colleagues, and principals. This period of time naturally called me to become a literacy resource in my building, while at the same time, becoming a reflective practitioner of teaching and learning.

As my work in public schools with teachers and striving readers and writers waxed and waned, I became more interested in how these instructional and coaching strategies fit into the broader scope of the fundamental purpose of educating all people; thus I began work on a doctorate in education in the fall of 2015. The profundity of the coursework and the community to which I still belong cannot be overstated. It is here that my perceptions of the education of humanity have been furthered. It is here that I am beginning to notice the ties between educating children and the restorative community that will consequently be the outcome. Taking this “balcony view” of education has enabled me to see the critical interplay between educational organizations and their constituents, between children and teachers, and between teachers and themselves.

One experience outside of the educational field has also influenced my deep belief in nurturing our souls to nourish humanity. As a young adult, I led young adult women on extended canoe trips through the Boundary Waters Canoe Area and the vast rivers and lakes of Ontario and Manitoba. These wilderness canoe trips planted in me a profound connection to the natural world where I began to understand the importance and need for continuous growth and change. In the wilderness I learned that our reliance on each other and our ongoing need to help and be helped by each other is as true and old as humanity. These opportunities to teach and learn with a variety of people in a variety of contexts have led me to this research inquiry.

Rationale

The described events most certainly led to beliefs and assumptions about what education is and inspired discernment about some of the components of the successful education for all. One of these is the necessity of professional learning in a public-school setting. There are many models of professional learning that can develop a teacher’s pedagogy, and improve the larger

and perhaps more important goal of “the desire to learn more and do better – for our students, our school communities, and ourselves as educators” (Routman, 2018, p. 105). Recent research suggests that perhaps some of the most powerful professional learning models are those that occur authentically, that is, situated with our own colleagues and students, and in our own classrooms (DeLuca, Bolden, & Chan, 2017; Gutierrez, 2015; Kennedy, 2016; Margolis, Durbin, & Doring, 2017; Steeg & Lambson, 2015; Stewart, 2014) . While the workshop model of professional development that occurs away from students and classrooms is still quite common in many schools and districts, “there is very little evidence of resultant improvements in classroom practice” (Margolis, et al., 2017, p. 24). As I have read and reflected upon a significant body of research around professional development, an interest in the intersection between high-quality professional development (PD) and teacher motivation has been piqued.

Last year, as a literacy coach in a large suburban public school district, I led an initiative in the two buildings called Lesson Study (Lewis & Hurd, 2011). Lesson Study is a form of professional development that asks teachers to collectively research and plan, execute with observation, reflect on, and revise lessons together as a way to continuously improve instruction collaboratively, learning from each other’s expertise. This experience developed the firm belief that it is an ethical imperative to continuously develop our own pedagogy in order to reach students and each other. While I had full support from administration, and many teachers seemed to learn from the experience, the subtle pushback from classroom teachers felt clear. This kind of collaborative professional development was unwanted or undervalued. Was this due to the way in which I introduced Lesson Study, or something else? Was it the model of professional learning, or the way in which it was implemented? It began to appear that no matter

how good a model is in theory if it could not be carried out with teachers in classrooms, it was bound for failure.

It may be true that many times we ask too much of teachers, with new district initiatives, and the inherent joys and challenges of working with students. Teachers often feel they simply do not have time to truly reflect and collaborate around their own practice. Even when teachers would like support to become more effective, they believe that the extra time and effort this support may require is more than they can engage in (Survey, Appendix A). It is often the case that when we are the most stressed or worried or depleted, we have the least amount of reserves to try something new or look at something through a different lens, even when doing those things might help the situation considerably. Having been both a recipient and a facilitator of professional learning, I am acutely aware of the perception that it often feels like “one more thing” when teachers are being asked to learn or to do. I want to know how to shift this perspective so that professional learning can become that entity that is yearned for; that requisite thing to embrace to serve students and ourselves. In other words, how can situated professional learning become the entity we turn to first, and with curiosity, in order to develop our pedagogy? If teachers are motivated to engage in professional learning, the resultant outcomes are more successful. The aim of this study is to identify what attributes make professional learning fruitful, and the ways in which implementation of professional learning can be manifested in the classrooms of public schools. Many, if not most teachers want their students to be successful. Many teachers understand that it is a highly qualified teacher, not a curriculum or a program, that will truly reach students, particularly our striving students (Allington, 2002). Many teachers recognize the inherent need to further their education and build a teaching repertoire to address the needs of an ever-evolving student population. Many teachers also realize that in a learning

organization, all members are sometimes teachers, and at other times students. It is through research and reflection that this maelstrom of ideas, questions, and observations can be organized into an ordered and lucid body of knowledge that will support and encourage educators to pursue mastery in their own practice.

Recommendations

With these ideas in mind, I will begin to discover the conditions of successful professional learning, as well as how professional learning can tap into teacher motivation. Through interviews of teachers and administrators, I will create a composite statement of what teachers would like professional learning to accomplish, and how teachers might implement that ideal. It will also be important to take stock of where professional learning is successful or not, as it stands at present. If I, as a researcher, can identify where educators are now, in addition to where I believe the ideal is, the path to follow will have been identified.

It will be necessary to understand the past and present structure of PD in the district and identify its strengths and weaknesses. Important questions to consider include: where have teachers been able to apply professional learning in their classrooms to effect change in themselves and in their students? What were the conditions created that encouraged teachers to engage in successful professional learning? When professional learning can not only develop and enhance teacher pedagogy, but also raise student achievement, a platform upon which to stand will be closer to realization.

In order to develop a comprehensive and successful professional development structure, specific data will be collected that can clearly identify the needs and strengths for professional development in the learning organization. Through the exploration of effective PD and the teachers who engage in it, I will understand more deeply the essence of professional learning not

only in the buildings where I work but in the hearts and minds of the teachers by my side. In the end, my aim is to discover the best way to continuously sustain professional learning while keeping it sought after and joy-filled, where teachers become eager and curious to develop their own teaching pedagogy.

Summary

The path to this research topic has been circuitous and riddled along the way with tedium and failure, as well as joy and inspiration. The knowledge I gained from teaching young children to read and write and the experience of collaborating with colleagues have served to develop these questions in a way that will help me to better understand the fundamental point of educating a citizenry. Through this work, I have come to believe that ongoing, embedded PD is crucial to student achievement and that figuring out exactly what makes it effective is a necessity. There are certainly many models of effective PD that can benefit teachers and students. In addition, there are many relevant approaches to facilitation, and I will use what I learn to answer the question: *What connections exist between high-quality professional development and teachers who continually pursue mastery in practice?*

I seek to find answers to this question through qualitative research that will enable me to better serve students and teachers in the buildings where I work. I acknowledge how much there still is to learn from the research literature on this topic; a great many teachers and researchers have asked these questions before me. However, I will work to analyze and explain what has already been studied and observed around this topic in Chapter Two. In Chapter Three, I will explain the methodology for the research I intend to implement. Finally, Chapters Four and Five will discuss what I have learned from this work, and will identify limitations and future research recommendations.

CHAPTER TWO

Literature Review

This review of literature will explore the various ways in which public school districts can provide support to teachers, in the service of developing teacher pedagogy and raising student achievement. Many may agree that one of the most important factors in high, uniform student achievement is directly linked to the expertise of teaching, and that elevated student achievement will occur when teachers are continually developing their own pedagogy (Burke, 2013; Ciampa & Gallagher, 2016; Darling-Hammond, Hyler, & Gardner 2017; Desimone, 2009). Indeed, the best teachers are always searching for ways to make their lessons more explicit and for ways to teach and learn from each other. The best teachers are aware of the reciprocity between learning and assessment, not just for accountability sake, but because reflection will drive improvement in instruction (Fullan & Quinn, 2016). Teachers who are motivated to learn more in order to become ever better teachers become a sustainable entity; the simple act of perfecting a lesson becomes the reward that encourages new learning (Pink, 2009).

This review will begin to address the question: *What connections exist between high-quality professional development and teachers who continually pursue mastery in practice?* In addition, it will survey several concepts related to the broad topic of Professional Development (PD). It will provide a theoretical framework for PD and how it can align with teacher motivation and engagement, explaining its significance for our collective children and the teaching profession. This review will detail some of the evolutionary changes in the purpose and design of PD and it will describe what many contemporary researchers promote as necessary for effective PD. Finally, discussion about the possible connection between a teacher's desire to develop her own craft and pursuing professional learning will be explored, and the outcome of

raised, uniform student achievement as a result of effective professional learning will be reviewed.

Theoretical Framework

The very nature of professional learning in public schools today has varied definitions for different people. Educators may understand that it is the time spent in extra classes in order to gain teacher re-licensure. Some forms of PD offers teachers additional compensation and it can also offer teachers new learning around a specific strategy or method to be applied in the classroom. It is often the case that districts or schools mandate participation in PD, and more often than not, it is separated from students and classrooms and occurs outside of the regular school day (Glazer & Hannafin 2006; Margolis, Durbin, & Doring 2017; Sykes 1996). In addition to these understandings of PD, it is also true that the interpretation of it can change year to year and depend on the PD in which teachers are participating. Indeed, the shifting notions of what PD *is*, may be one of the reasons why the promise of how it can impact student learning remains elusive.

Variety of professional learning.

Along with the various understandings of what PD is or should be, are a plethora of models and programs. Sometimes PD is delivered online; sometimes it is delivered by individual and peer coaches; often PD is developed in Professional Learning Communities (PLC), and there are a myriad of one-time workshops. There are multi-day “institutes” during the summer months and outside consultants who provide district-wide PD. All these methods for delivering PD have promise and can be valuable, but some would argue that the sheer variety of offerings is what waters down its effectiveness. Is it because of this varied understanding, along with a seemingly endless list of *kinds* of PD that has given it negative connotations? Tooley and

Connally (2016) described this when they wrote, "...in its present state, teacher PD has gained a poor reputation among many teachers and those who study education, as the American educational system has been more successful at producing PD quantity than quality" (p. 2). While it is commonly understood that PD is important to the teaching profession, creating a unified archetype of what makes it effective is fleeting. Kennedy (2016) posits:

The idea that PD can foster improvements in teaching is widely accepted. PD is required by virtually every teaching contract in the country, and teachers participate in PD every year. Foundations and federal agencies spend large sums on the design and implementation of PD programs. Yet despite this widespread agreement about its importance, there is little consensus about how PD works, that is, about what happens in PD, how it fosters teacher learning, and how it is expected to alter teaching practice. (p. 1)

There is also worthy debate in the education field around whether to use the term "Professional Development" or "Professional Learning." Tooley and Connally (2016) explained, "Some in the education field differentiate between stand-alone workshops and seminars, which they call 'professional development' and experiences that are more embedded into the classroom work of teachers which they call 'professional learning'" (p. 3). In this paper, PD is used to describe any experience a teacher engages in with the goal of improving his or her practice. It would seem then, that analysis of this compilation of ideas and programs could serve to construct a common definition of effective PD, and this may unify the purpose and ultimately guide the teaching and learning of both teachers and students.

Darling-Hammond, Hyler, and Gardner (2017) offered a similar definition of PD when they wrote that effective PD is "...structured professional learning that results in changes in

teacher practices and improvements in student learning outcomes” (p. v). This definition is not dependent on any program or model, instead, it defines three necessary attributes for PD to be effective: 1) it needs to be structured; 2) teachers’ practice needs to change as a result of the learning; 3) and this change in practice will necessitate improved student achievement. Another way to define effective PD is to say that “...the basic goal for teacher professional development is to provide learning experiences that promote the types of pedagogical shifts that can advance student learning...” (Pella, 2015, p. 83). Both of these definitions link teacher learning to student learning and imply reciprocity.

Reciprocity.

This notion of reciprocity is similar to the tenets of Reading Recovery; a program that serves the lowest performing first-grade students in the area of literacy. This daily, intensive, one on one intervention relies on the recursive interplay between child and teacher. The Reading Recovery teacher spends the first ten lessons “Roaming Around the Known,” (Clay, 1993), in which the child is asked only to demonstrate what she already knows. The child is displaying areas of strength in early literacy, while the teacher is taking stock of how and where to build on that knowledge. In these early days, the teacher is simply an observer, a learner, working to discover exactly what the child will need to know next. In the context of every lesson, the teacher becomes the student and the student becomes the teacher in a recursive cycle. This reciprocal ability to be both a learner and a teacher is also a crucial aspect of effective PD. Darling-Hammond and Laughlin (2011) put it this way when they wrote, “Teachers learn by doing, reading, and reflecting (just as students do); by collaborating with other teachers; by looking closely at students and their work; and by sharing what they see” (as cited in Burke, 2013, p. 83).

This idea of teachers as learners is at the very heart of authentic PD. When teachers become learners, their mistakes are necessary and common; when teachers become learners, their vulnerability is exposed; when teachers become learners, they are able to see the very problems students face with the eyes of a student; and when teachers become learners, they will gain the essential vantage point of what it means to be learning still. This true reciprocity between teacher and student is a precept of effective PD. Kennedy (2016) illustrated this idea when she observed:

Education research is at a stage in which we have strong theories of student learning, but we do not have well-developed ideas about teacher learning, nor about how to help teachers incorporate new ideas into their ongoing systems of practice. (p. 29)

Motivation.

There is much research to support the idea that expert teachers are continually learning, and that this continual learning is what makes (and keeps) teachers highly motivated (Deci, Vallerand, Pelletier, & Ryan, 1991; Gorozidas & Papaioannu, 2014; Pink, 2009). Pink (2009) describes the evolution of what motivates people by outlining what he considers to be the evolution of what drives human beings. At the outset, there are the biological drives for hunger, thirst, and sex. He then adds the second iteration of what drives us - one that responds to punishments for bad behavior or rewards for good behavior - commonly known as extrinsic motivation, or the “carrot and the stick” method of motivation. Pink contends that the carrot and stick approach, which today is still overwhelmingly used in business and education to shape the behaviors we wish to encourage in teachers, students, and employees, can actually be perilous for creative, long-term tasks. He wrote:

In environments where extrinsic rewards are most salient, many people work only to the point that triggers the reward - and no further. So if students get a prize for reading three

books, many won't pick up a fourth, let alone embark on a lifetime of reading - just as executives who hit their quarterly numbers often won't boost earnings a penny more...(Pink, 2009, pp. 56-57)

He goes on to outline what he refers to as “Carrots and Sticks: The Seven Deadly Flaws” (Pink, 2009, p. 57). These flaws can: 1) extinguish intrinsic motivation; 2) diminish performance; 3) crush creativity; 4) crowd out good behavior; 5) encourage cheating, shortcuts, and unethical behavior; 6) become addictive; and 7) foster short-term thinking. By using extrinsic rewards to shape behavior, simple compliance rather than engagement is the outcome. If people are to be intrinsically (rather than extrinsically) motivated, he contends, engagement is crucial. In addition, when juxtaposing compliance and engagement, or extrinsic versus intrinsic motivation in education, Pink (2009) suggests, “We’re bribing students into compliance instead of challenging them into engagement” (p. 185). This seems to support the argument that where high-quality professional development can support and meet engaged and motivated teachers, deep and creative learning will be the outcome.

In order for PD to be highly successful, teachers must be motivated to engage in it, according to motivational theorists who suggest that the motivation to learn is instrumental for optimal learning, performance, and greater creativity (Gorozidis & Papaioannu, 2014). In this way, teachers who are motivated move from compliance to engagement. Pink (2009) proposes an “upgrade” from the system of carrots and sticks or extrinsic rewards to shape behavior. He proposes a “new operating system” to describe how people are highly motivated. This new system, backed up by science, has three elements. The first, autonomy, has to do with humanity’s desire to direct its’ own lives. Autonomy is inhibited with the outdated system of extrinsic motivators, and autonomy is essential to teachers who are always keenly interested in

reaching more of their students. The second element is mastery and is defined as the urge to make progress and get better at something that matters. Teachers who are engaged and autonomous are always working to improve their craft. The last element, purpose, is the yearning to do what we do in the service of something larger than ourselves. When teachers are always learning, in order to give the best to their students, they see themselves as a part of something important - the education of a citizenry (Pink, 2009, p. 219).

It would seem then, that the notion of how teachers learn, and their motivation for learning, must be examined. Daniels (2016) supported this idea when she offered, “While engagement and motivation are typically explored as they relate to learners, teachers must also be fully engaged in their practice if they are to create motivating learning environments for their students” (p. 61). Also, the question of what it is that motivates teachers to continually learn may help to define which kinds of PD are the most successful. The research is clear that student achievement is directly linked to teacher expertise and that teachers are most motivated to pursue mastery in their practice when certain conditions are present (Allington, 2002; Clay, 1993; Stewart, 2014).

Self determination theory.

Somewhat similar to Pink’s theory of the evolution of what drives us, the Self Determination Theory (SDT) is a theory of motivation that “is concerned primarily with promoting in students an interest in learning, a valuing of education, and a confidence in their own capacities and attributes. These outcomes are manifestations of being intrinsically motivated...” (Deci, Vallerand, Pelletier, & Ryan, 1991, p. 325). This theory is also concerned with what motivates teachers to pursue mastery, which turns out to be the same as what motivates students to learn. According to these theorists, there are three needs that all humans

desire; 1) competence, or an understanding of how to attain desired outcomes; 2) relatedness, or the development of secure and satisfying relationships with others; and 3) autonomy, or being self-initiating and self-regulating of one's actions. Deci and Ryan (1985), the original scholars of the SDT, have since headed a broad consortium of motivational theorists who have produced hundreds of research papers and studies that arrive at the same conclusion, that "Human beings have an innate inner drive to be autonomous, self-determined, and connected to one another. And when that drive is liberated, people achieve more and live richer lives" (Pink, 2009, p. 71).

SDT further explores what motivates us by a discussion of behaviors. When a behavior is self-determined, or autonomous, there is a high degree of choice. When behavior is controlled, often by extrinsic rewards, simple compliance is the outcome. The theorists go on to contend that autonomously motivated students develop greater conceptual learning and better memory, as opposed to students who are asked to learn something in order to be tested on that content. In other words, students who are intrinsically motivated to learn something, learn it more deeply and richly than those who are learning something for an extrinsic carrot or stick. The same could be said about teachers. When teachers are motivated by intrinsic rewards, by relatedness, autonomy, or competence, they seem to be satisfied, productive, and happy. This intrinsic happiness is similar to what Senge (2006) calls personal mastery; "the discipline [that] starts with clarifying the things that really matter to us, of living our lives in the service of our highest aspirations" (p. 8). When teachers are motivated by extrinsic rewards (incentives, district initiatives, or calls for accountability), they become compliant and short-sighted (Deci, et al., 1991). Deci and colleagues also hint at future directions for educational policy when they contend that schools and districts that encourage autonomous learning for both teachers and

students will always yield a higher degree of creativity, problem solving skills, and persistence for those students and teachers.

It seems a curiosity that in the face of these theories of motivation, coupled with the difficulty of uniform student achievement, that schools and businesses “still operate from assumptions about human potential and individual performance that are outdated, unexamined, and rooted more in folklore than in science” (Pink, 2009, p. 9). What can be said about human motivation may inform the kinds of PD that will truly support teachers in their continual quest to pursue mastery in their practice.

Reaching all students.

In addition to the consideration of teacher motivation and engagement, it is an imperative that all ranges of need of the students served are deliberated. It is clear that society is failing its’ children of color despite efforts on the part of many in education (Minneapolis Star Tribune Editorial Board, 2018; Wastvedt, 2016). The reasons for this inequity go beyond the scope of this paper, but many would argue that developing teacher pedagogy to meet all learners is a fundamental requirement to close this gap. When considering how teacher expertise affects students, Allington (2002) noted, “Students of all achievement levels benefited from exemplary teaching, but it was the lowest achievers who benefited most” (p. 743). Another way to think about the importance of reaching all students is the consideration of the concept of differentiation. When teachers can develop the ability to differentiate deeply, they will have developed a way to impact all student learning. Differentiation is not easy, and ongoing PD could go a long way to helping teachers become proficient with differentiation. In an attempt to join the ideas of PD and differentiation, Dixon, Yssel, McConnell and Hardin (2014) offered:

Allowing teachers to observe each other differentiate lessons, providing feedback to each other after the observation, and giving time for them to collaborate on shared lessons also provide reinforcement for actually practicing what they have learned. Indeed, emphasizing that the process of differentiation is a journey toward the destination of providing worthwhile instruction for each student makes the time spent learning how to do it well a wise investment for a school district. (p. 115)

If ongoing PD is necessary for teachers to develop their own pedagogy, the urgency to cultivate a comprehensive structure for PD is clear, which again leads to the central research question: *What connections exist between high-quality professional development and teachers who continually pursue mastery in practice?* If it is clear that a robust and resilient PD structure is what is needed, in part, to reform education, and that aligning the PD to support teachers in the pursuance of mastery, it is an imperative – not simply a recommendation, to do so. In fact, some would argue educational reform and teacher professional learning are dependent on each other. Sykes (1996) offered, “Many reforms rely on teacher learning and improved instruction to increase student learning; in fact education reform is often synonymous with teachers’ professional development” (as cited in Desimone, 2009, p. 181).

There are wide-ranging understandings of what makes PD effective, from extra compensation to a necessity for re-licensure. There have been numerous models of PD offered for teachers, from online webinars to coaches in classrooms, to summertime institutes. Many teachers have learned from these methods of PD and much has found its way into classrooms. However, this is not enough, not when our children of color are not achieving right alongside their more privileged peers, not when there seems to be no agreed upon definition of what PD is, not when the dollars spent on PD cannot be tied to resultant raised student achievement, and not

when many teachers approach PD as “one more thing” they are being asked to learn or to do. If a common understanding of what makes PD effective for teachers and learners could be found, and if PD could be designed so that teachers are intrinsically motivated to engage in it, then a collaborative structure that shares mistakes, successes, and achievements could be developed. Also, if there were a “standard” for effective PD, evaluation would be possible. As it stands today, the structures are so disconnected that evaluation is impossible. Desimone (2009) explained it like this, “...having a core set of characteristics that we know are related to effective PD, and measuring them every time we study PD, would help move the field forward” (p. 186).

Further discussion will detail some common sets of attributes that can identify effective PD in this review. It is possible that if a structure were standardized and agreed upon, evaluation and replication would be easier. Perhaps then schools and districts would implement these practices intentionally, and teachers and students would be the beneficiaries of highly effective PD.

Practices of Professional Development

Workshop.

Within the last twenty years, the most common form of Professional Development (PD) tended to be workshops or conferences that occurred away from the classroom and often outside of the regular school day. It is still common practice today, even though there is very little proof of its effectiveness (Glazer & Hannafin, 2006). In fact, there is plenty of research to suggest that this kind of PD has been largely ineffective. For example, the research of Mundy, Ross, and Leko (2012) explained:

In recent years professional development has shifted from the one-time workshops that offered little to no follow through and were often disconnected from teachers’ classrooms

to professional development that is job-embedded, ongoing, systematic, related to the work and challenges teachers face in classrooms, and carried out by people familiar with the context of teachers' work. (Deussen, Coskie, Robinson, & Autio, 2007; Fullan, 2001, Guskey, 2000; 2002; Little, 1993; Wood & McQuarrie, 1999, as cited in Mundy, Ross, & Leko, 2012, p. 280)

Glazer and Hannafin (2006) described the workshop model this way, "Workshops are discrete experiences that fail to provide ongoing support and continual feedback to attain long-term, systemic improvements. Skills and strategies simply do not transfer well when they are not learned in situated contexts" (Mouza, 2002; Brown, Collins, & Duguid, 1989, as cited in Glazer & Hannafin, 2006, p. 179). It is also true that while some collaboration may be present in the workshop model, the model is not dependent on collaboration, one of the necessary attributes of high-quality PD. This model also tends to be led by one or more facilitators, which makes its quality dependent upon the expertise of the facilitator. However, there is plenty of recent research that outlines attributes of effective professional learning models. This research is in agreement on three attributes. These are that the PD is collaborative in nature; sustainable over an extended period of time; and that it incorporates active learning (Darling-Hammond, Hyler, & Gardner, 2017; Desimone & Pak, 2015; Macias, 2017; Parsons, Parsons, Morewood, & Ankrum, 2016, Steeg & Lambson, 2015). These three attributes are not widely seen in the workshop model of professional learning. The nature of the workshop model is that it happens away from the students and school making sustainability and active learning difficult, if not impossible.

Job embedded professional development.

There has been a shift in the manner of PD over the last two decades from this workshop or conference model to a trend of "Job Embedded Professional Development" (JEPD). A current

definition of JEPD is "...teacher learning that is grounded in day-to-day teaching practice and is designed to enhance teachers' content-specific instructional practices with the intent of improving student learning" (Darling-Hammond & McLaughlin, 1995; Hirsch, 2009, as cited in Croft, Cogshall, Dolan, Powers, & Killion, 2010). This method of teacher learning has gained in popularity in public education, and many researchers reviewed in this paper have cited its efficacy and authenticity. To further understand the power of JEPD, it will be essential to define and discuss some of its characteristics including collaboration, learning theories, situated PD, Professional Learning Communities (PLC), and coaching.

Collaboration.

The notion that collaboration builds collective knowledge is not new, and has rarely been refuted (Biggsby & Firestone, 2017; DeLuca, Bolden, & Chan, 2017; Dixon, Yssel, McConnell, & Hardin, 2014; Glazer & Hannafin, 2006; Gutierrez, 2015). In fact, the concept of collaboration can be seen as the foundation of many of the characteristics of JEPD listed above. A cursory Google search of the word offered this definition, "the action of working with someone to produce or create something." It describes collaboration as more than just working together; it is working together for the purposes of an outcome. It is similar to the constructivist theory because it describes the act of joining disparate ideas, experiences, or knowledge to create a completely new idea or body of knowledge that is a direct descendent of the collaboration. Steeg and Lambson (2015) point out that "Because collaborative PD holds the potential to build community, provide contexts that support risk-taking, and foster inquiry, the benefits of this model are significant, creating opportunities for teachers to look closely at their own practices in the company of others" (p.478).

Lesson Study (Lewis & Hurd, 2011) is one such form of collaboration as PD. In Lesson Study, teachers collectively research and plan, execute with observation, reflect on, and revise lessons together as a way to continuously improve instruction, learning from each other's expertise. Lesson Study is not about creating the perfect lesson. Rather it is about the recursive process of building teacher capacity to impact student learning, and is a textbook example of collaborative professional development.

Closely aligned to Lesson Study is the practice of Collaborative Inquiry (CI). The foundations of CI and Lesson Study are much the same. They begin with a question that the team is trying to answer, a problem of practice, or need for a new strategy, and both are teacher-led. This characteristic of being teacher-led consequently means that there tends to be more teacher autonomy in CI and Lesson Study; teachers are intrinsically motivated to participate because the PD is addressing their own problems in practice. This is quite different than earlier renderings of PD which tended to begin with an answer and then consequently have an outside expert come deliver the answer. Lesson Study and CI also share collaborative communication that flows among and between teachers rather than from outside expert to teachers.

This idea that authentic collaboration can build teacher pedagogy is similar to the element of relatedness in the Self Determination Theory; where the basic needs of all people is to be in a healthy and fulfilling relationship with others. Ciampa and Gallagher (2016) describe CI when they suggest that the teaching framework should move from "isolated practice to collaborative inquiry," and wrote, "Traditionally, teaching has been an isolating profession, as individual teachers have often prepared, implemented, and evaluated their lessons and their students learning unassisted...however, research has indicated that effective professional learning occurs

in collaboration with others...” (p. 155). Again, there seems to be a connection between the necessity of relatedness in teacher motivation, which in turn leads to rich professional learning.

Even though research suggests that collaborative PD can be quite effective, there are obstacles to this kind of PD. In the case of Lesson Study, for example, substitute teachers must be obtained in order for classroom teachers to participate. This is because just one teacher will actually teach the lesson that has been planned by the team, and the team will observe this lesson, watching for how students are responding to the lesson the team has planned. The team then needs protected time to reflect on and revise the lesson together. In order for this observation, reflection, and revision process to occur, teachers need coverage for classrooms. Substitutes require a financial obligation that districts may find difficult to supply. Perhaps more to the heart of the matter is that agreeing to work collaboratively, let alone volunteering to be the teacher that implements the lesson in front of the team, must be the desired goal of all the teachers. In what ways could a shift in schools and districts from the “carrot and stick” methods of motivation to more intrinsic motivators cultivate teachers who are more willing to take a risk and be vulnerable?

Research has shown that teachers perceive CI to be thwarted by students’ and teachers’ unwillingness to try new things. The teachers, for instance, lack confidence to try new things; the colleagues unwillingness to listen to teachers’ ideas, and finally the opinion that CI takes too much instructional time (DeLuca, Bolden, & Chan, 2017). If it is true that collaboration is essential for highly effective PD, these barriers could be described as short-sighted, and the endeavor of cultivating intrinsically and autonomously motivated teachers would break down those barriers. The strenuous exercise of collaboration to develop teacher pedagogy that raises student achievement seems imperative.

Learning theories.

When teachers work together to solve a problem of practice, they are demonstrating what is meant by the theory of constructivist learning. They are creating a new, unique body of knowledge that could only come from their set of practices, mistakes, conversations, and lessons. A distilled definition of the constructivist learning theory is that it is:

...one that construes learning as an interpretive, recursive, building process by active learners interacting with the physical and social world. It is a psychological theory of learning that describes how structures and deeper conceptual understanding come about, rather than one that simply characterizes the structures and stages of thought or one that isolates behaviors learned through reinforcement. (Fosnot, 1996, p. 30)

The constructivist learning theory lends credence to PD practices like Lesson Study and CI because it helps to explain the inherent power of teachers, and why autonomy is a powerful motivator, teaching each other in order to impact student learning. Burke (2013) posits, “By implementing PD in schools that is experiential in nature, teachers can integrate innovative instruction such as differentiation, constructivist theory, discovery learning, inquiry-based learning, and performance-based assessment through demonstration, observation, collaboration, fieldwork, and reflection” (p. 260). It is the ability to connect what is already known with what is being discovered or learned that describes the constructivist learning theory and it is this theory that can support teacher teams to continuously build on their own pedagogy.

Finally, the research of Gutierrez (2015) offers yet another way to define learning theories when she wrote, "Inquiry based teaching and learning is the product of the blended theories of Piaget, Vygotsky, and Ausubel about the philosophical underpinnings of teaching and learning known as constructivism (Liang & Gabel, 2005), which emphasizes the active thinking process

of integrating prior knowledge with existing knowledge” (Kirschner, Schweller & Clark, 2006, as cited in Gutierrez, 2015, p. 121). Similar to the ideologies of collaboration and constructivism is that of situated learning as a PD practice.

Situated professional development.

An earlier discussion of the workshop model of PD, where the learning occurs outside of the classroom and divorced from students, explained the flaws of workshop model. The research suggests that what is learned in this method of PD may well be important and needed for teacher development, but that it is very difficult to transfer the new learning from the workshop back into the classroom. This has necessitated the call for “situated” PD, which simply refers to teachers learning about their own teaching in their own classrooms with their students. Recent research has indicated that PD without the presence of students is simply not effective. Why not include students and classrooms in the ongoing quest to become better teachers and learners? Margolis, Durbin, & Doring (2017) suggest:

...conspicuously missing from classroom-based Teacher Professional Development (TPD) research... are the students who make up and are ultimately the focus of these classrooms. TPD research rarely mentions students, or only discusses them in passing. It is this ‘student voice’ component that our research suggests is missing from most TPD models and literature, although it is arguably the most critical piece in making a learning situation authentic for an educator. (p. 26)

It is the authenticity of this situated PD that makes it powerful. Feedback, an essential component of PD, is immediate and constant when teachers and students are learning together in the classroom. Situated PD is closely aligned to Job Embedded Professional Development

(JEPD) because it occurs in the classroom with students and is literally “embedded in the job.”

Margolis et al. (2017) went on to say:

Theories of teacher learning... suggest that without the physical presence of students, the content and structure of Teacher Professional Development remains too de-contextualized and abstracted. To improve individual teacher learning, teacher collaboration and school cultures in tandem, the physical presence of actual students must be included in any comprehensive school or district TPD plan... our model suggests that we need, in much more systematic ways, to invite students to the actual event where learning takes place. (p. 31)

There are other professions that also exercise the implementation of observation in order to learn from each other. What has long been a practice in medicine, the “instructional round” has gained traction in the field of education as well. This is a good example of situated and collaborative PD, and Margolis and Doring (2012) further explained the concept of instructional rounds:

...professions such as medicine have embedded their learning experiences in collaborative practice via “instructional rounds” for some time. Through specified processes and protocols, physicians work together to develop their knowledge of practice, in practice. The educational community, in recent years, has more intentionally borrowed these approaches to connect teacher professional development to “the actual work of teachers and students in classrooms. (p. 157)

This practice has some of the properties of what drives human beings. That of mastery, or the urge to make progress and get better at something that matters, and purpose, or the yearning to work in the service of something larger than ourselves (Pink, 2009). This is also reminiscent of

the reciprocity between teachers and students. It is in this situated PD model that all in the classroom can at times be the teacher, and at times be the learner, and perhaps this will lead to the realization of high and uniform student achievement.

Professional Learning Communities.

Another form of Professional Development (PD) practiced in many schools today is that of the Professional Learning Community (PLC). This model calls teams of teachers to meet on an ongoing basis to examine student data asking these questions: 1) What do I want my students to know? 2) How will I know if they know it? 3) What will I do if they don't know it? 4) What will I do if they already know it? (DuFour, DuFour, Eaker & Many, 2010). This form of PD may offer promise because it contains many of the characteristics of JEPD. It is job embedded, collaborative, and situated in the context of the school. Stewart (2014) explained it further when she wrote, "The mission of a PLC is to gain a deeper understanding of how students learn content and then to apply that understanding to how content is taught" (p. 29). The PLC model is present in school districts in the upper Midwest and has guided many teachers and administrators in discussions that get right to the core of addressing student strength and need. However, in part because of its wide use, the term itself and its prescriptive doctrines have become watered down.

The term PLC has become overused and disconnected from its true intent (DuFour, DuFour, Eaker, & Many, 2010). This is one reason that the effectiveness of PLC's have had mixed reviews, and why teachers may only grudgingly participate. Other reasons for the ineffectiveness of PLC's tend to be when they are mandated by a district administration, without a common purpose or goal that is clearly communicated to teachers. When this happens, it is difficult for teachers to understand why they should want to participate, other than that PLC time

is often connected to compensation in teacher contracts. Fullan and Quinn (2016) described this phenomenon when they wrote:

Frustration occurs when people are putting a lot of effort into learning together, such as PLC's...but the experience is not well designed or executed. There may be little or no opportunity to apply the learning in real situations with feedback...(p. 62)

When PLC's are mandated and not fully explained, some of their possible impact is lost and teachers may see them as just one more chore among the long list of chores they are being asked to carry out. Rather than using the process of PLC's to deepen their pedagogy and truly impact student learning, the PLC simply becomes "clocked hours." If this is viewed through the motivational theory lens, it is easy to see how engaging in the PLC becomes an extrinsic motivator, a carrot when it is tied to incentives, or a stick when it is mandated by administrators who fail to explain its purpose. Margolis, Durbin, and Doring (2017) added, "Overall, recent research suggests that PLC's thus far have failed to realize their potential as job-embedded TPD, becoming more an end in themselves (teachers having the meeting) than a means to an end (teachers meeting to transform practice)" (p. 26).

Coaching.

Coaching is another example of a type of PD that shares many of the same attributes as JEPD. Miller Burkins (2007) offered a definition of coaching when she wrote:

The content or the technical aspects of a coaching position may vary significantly, but the role of the coach is the same in every domain. It is the coach's job to bring out the best in the student, the athlete, the singer, the teacher, or the dishwasher. If you were my coach, you would need to develop a relationship with me, develop expertise so that you would know how to help me, plan for my success, communicate your confidence in me and my

potential, help me find the very best in myself, and, in the end, step out of the way so that I could claim the change as mine. (p. 5)

At its best, coaching is job embedded, collaborative, situated, and teacher driven. When coaching is teacher driven, it is another example of teacher autonomy or teachers who are continually seeking support to improve their craft. The most authentic coaching simply addresses teacher and student need. Sometimes the coach is the knowledgeable literacy resource for classroom teachers, and at other times the coach becomes the bridge between the sometimes-steep theoretical research base and the practical reality of the children who show up for school each day. The coach often provides job embedded professional development in the building and in the district and the coach can facilitate Professional Learning Communities where teachers come together to ponder the complexities of teaching children to read and write.

Desimone and Pak (2017) linked coaching with highly effective PD when they said, "...instructional coaching is consistent with research-based ideas of effective professional development, specifically with its fulfillment of five key features of effective teacher learning-content focus, active learning, duration, collective participation, and coherence" (p. 8). Coaching can be effective when the coach engages fully in collaboration with her colleagues and understands that she is as much a learner as she is the teacher or coach and that the pursuit of mastery is endless. Fullan and Quinn (2016) further clarified this when they wrote about teaching and learning, "...you never arrive once and for all, nor should you want to" (p. 2). In fact, coaching will be quite ineffective when the coach is unable or unwilling to try what may well be a failed lesson. There is also a paradox that undergirds the role of coaching. Effective, authentic coaching is only a reality when both teachers and coaches allow for vulnerability and recognize the fact that the act of perfecting teaching and learning is never finished. Without this

fundamental belief, the coach will not effect change, and the rich learning that could occur is lost. Margolis and Doring expound on this notion of the missed opportunity to continuously develop teacher pedagogy:

The common thread among these barriers is a diminished understanding and appreciation for the (teacher) learning process, despite extensive research documenting that learning from mistakes and missteps is fundamental to transforming beliefs and practices. As Jensen (2005) explains, there are “two simple truths about the brain: (1) the brain rarely gets it right the first time, and (2) making mistakes is key to developing intelligence” (p. 52). Yet the rabid emphasis on ensuring that students’ brains were experiencing “best practices” to pass state exams had the counter-effect of reducing opportunities for teachers to expand their pedagogical intelligence. (p. 876)

Another impediment to coaching is the fact that most coaches are teachers, often with no formalized training beyond that of teaching. The research of Mundy, Ross, and Leko (2012) illuminated this further by writing, “Providing job-embedded ongoing professional development is a key component of the coaches role, however, becoming an effective coach requires both knowledge of reading and knowledge of the skills and strategies of coaching” (Dole & Donaldson, 2006; Knight, 2007, as cited in Mundy, Ross, & Leko, 2012, p. 294). This implies on-the-job training, which takes time. Another key component of coaching is building relationship – and there is no easy or fast way to accomplish this. Both of these aspects of coaching - learning how to coach through trial and error, and building relationship - take time. The field of education could be described as impatient. When the data and immediate results needed to prove the effectiveness of a given model are not quickly seen, the education field moves on to whatever the next method of raising student achievement might be. When this

happens it is myopic in scope, because the hope of uniformly raising student achievement is embedded in PD that is job embedded, collaborative, and situated.

Attributes of Effective Professional Development

As we have seen, there are many types of PD, and many different understandings of exactly what PD *is*. This may be what makes answering the central research question: *What connections exist between high-quality professional development and teachers who continually pursue mastery in practice?* so difficult to answer. Much research in the last decade has attempted to quantify the attributes of effective Professional Development, and many of those attributes have been described and defined in this review. (Refer to Table 1). There are four sets of attributes, developed by four consortiums of researchers, settled upon to describe the crucial components of highly effective PD. (Refer to Table 1). Each column in the table displays a set of attributes, headed by the researcher(s) who developed the list. There is much overlap and only subtle differences between these four sets. It is highly likely that there are even more similarities than Table 1 might suggest, and may only seem different due to a variance of language. For instance, one group of researchers cites “acknowledge learning as a social process” while another group of researchers cites “supports collaboration.” It is difficult to know exactly how much is the same or different among these two descriptions, but a case can be made that they mean the same thing. All of the research reviewed for this paper proposes three common features of highly effective PD. These features are: 1) PD is collaborative; 2) sustained over an extended period of time; and 3) offers active learning (Darling-Hammond, Hyler, & Gardner, 2017; Desimone & Pak, 2017; Macias, 2017; Parsons, Parsons, Morewood & Ankrum, 2016; Steeg & Lambson, 2015). All of the research agrees on these three features. Perhaps the set of features that differs most from the others is the set of features written expressly for teacher leaders. This seems to

take into account more of the actual perspectives of the participating teachers. (Refer to Table 1, Macias, Column A).

Table 1: Attributes of Effective Professional Development

	A Macias (2017)	B Desimone & Pak (2017), Steeg & Lambson (2015)	C Darling- Hammond, Hyer & Gardner (2017)	D Parsons, Parsons, Morewood, & Ankrum (2016)
Focus on subject matter/content	X	X	X	
Active teacher learning	X	X	X	X
Coherence with school policies and strategic goals		X		X
Sustained, ongoing duration	X	X	X	X
Collective participation		X		
Collaborative	X	X	X	X
Uses models of effective practice			X	
Provides coaching/ extra support			X	X
Offers feedback/ reflection			X	
Guided by strong leadership				X

Supportive of teachers	X			X
Guided by student assessment data	X			X
Job embedded				X
Acknowledge learning as social process	X			
Enhance teacher pedagogy	X			
Focused on learning outcomes for students	X			X
Acknowledges learning as social process	X			

While the set of features proposed by Macias seems to take into account the sensibilities of teachers, it could be said that the other three sets (defined by the columns B, C, and D in Table 1) may be written more from the broader perspective of educational policy and reform. They include qualities that ask for coherence in terms of district initiatives, district beliefs, and/or reforms. It is an essential distinction to make, and both the broader set of features and the teacher specific set have much to like. It seems important to respect both perspectives as we try to come to an agreement and define the characteristics of effective PD. It may be that teachers have not had enough of a voice in this dialog and that listening to the teacher voice may be one of the missing links to the creation of a comprehensive and sustainable framework for PD. This would

also give teachers an “internal locus of control,” similar to autonomy, or the belief that success is the cause of one’s own efforts. The motivational theorists make a specific correlation between a teachers autonomy, and the intrinsic desire to continuously improve a craft.

Two more sets of core features can be seen in Table 1 as well. Desimone and Pak (2017) and Steeg and Lambson (2015), (Column B) condense their research to offer this list of core features that seem to illustrate the broader perspective of education, while yet another set of characteristics (Column C) are offered by Darling-Hammond, Hyler, and Gardner (2017). This list incorporates components of support and reflection, both of which are considered necessary for teachers to improve their instruction. Finally, the last set of attributes (Column D), in addition to many features already listed, seems to take into account the not so small role of student outcomes, and is in agreement with many researchers in the field of education (Anders, Hoffman, & Duffy, 2000; Bean & Morewood, 2011; Dillon, O’Brien, Sato, & Kelly, 2011; Duffy, 2004; Morewood, Ankrum, & Bean, 2010; Penuel, Fishman, Yamaguchi, & Gallagher, 2007; Taylor, Pearson, Peterson, & Rodriguez, 2005; Taylor, Raphael, & Au, 2011, Walpole & McKenna, 2004, as cited in Parsons, Parsons, Morewood, & Ankrum, 2016, p. 333). It is clear that there is much overlap between these four sets of conditions for effective PD, and differing perspectives on what should guide PD. Even so, these characteristics provide a structure and boundary for the creation of a uniform and effective framework.

A Framework For High Quality Professional Development

Teacher motivation.

The discussion of what makes PD effective, as described here, is important. However, teachers intrinsic motivation to engage in PD is critical as well. Without a high level of engagement that comes from autonomous motivation, the new learning will not be sustainable

(Deci, et al., 1991; Firestone, 2014; Pink, 2009). Two theories of motivation lend credence to the notion that it is the integration of high-quality PD and a teachers intrinsic motivation that will support teachers who are continually pursuing mastery in practice. Pink (2009) promotes a theory comprised of three elements; mastery, autonomy, and purpose. Similarly, the Self Determination Theory also has three elements - competence, relatedness, and autonomy. Both of these theories espouse the belief that people who are intrinsically motivated to learn, will always be lifelong learners and that the reward of getting better at something will always be reward enough. When high quality PD is offered in a coherent framework and the motivation to learn is present, teachers and their students will learn how to learn.

Evaluation.

In teaching, it is the cycle of planning, implementation, feedback, reflection, and revision where pedagogy is fed and improved. These components can contribute to a broad and inclusive structure for effective PD. The research is conclusive about the characteristics of high-quality PD, and researchers have written about the need to replicate this structure. However, they suggest that the structure must be able to be evaluated if it is to be replicated. The first step to evaluation lies in a common understanding of what makes PD effective. The research suggests that this first step has been taken. Desimone's (2009) research illuminated the need for evaluation when she wrote, "For decades, studies of professional development consisted mainly of documenting teacher satisfaction, attitude change, or commitment to innovation rather than its results or the processes by which it worked" (Frechtling, Sharp, Carey, & Vaden-kiernan, 1995; Gusky, 2000, as cited in Desimone 2017, p. 181). She goes on to advocate for the creation of a "conceptual framework" of PD that could then aid in the evaluation and replication of that PD.

She lists six reasons why she believes the creation of this framework would move the field forward:

- the literature seems to agree on what the basic elements of that framework should be
- having a core set of characteristics that we know are related to effective PD, and measuring them every time we study PD, would help move the field forward
- we need such a foundation to answer the types of questions called for in the field
- a shared conceptual framework could steer us toward using an appropriate timeline
- working from a consistent conceptual framework could elevate professional development beyond its current craft-oriented practice to one that is based on a strong theoretical grounding and subjected to rigorous empirical scrutiny
- there has been a call for making connections between existing theories before proposing new ones (Desimone, 2017, p. 186).

The basic agreement of what constitutes effective PD, the creation of a framework to guide the evaluation and replication of PD, and teachers who are intrinsically motivated to pursue mastery in practice, are all necessary for raised and equitable student achievement.

Coherence.

In addition to the need for evaluation is the need for coherence in a PD framework. What the research is suggesting when it proposes coherence, is the idea that all stakeholders and components are aligned so that the framework has sustainability and strength. It is suggesting that all facets of the framework, whether they are ideals, content standards, participants, or characteristics have a common goal and purpose. Desimone (2009) described this when she wrote, “When PD is aligned with key elements such as content standards, curriculum, and daily

lessons, it is more likely to be well implemented” (p. 8). However, there are obstacles to coherence of an effective structure for PD outlined in the literature for this review.

One such obstacle is apparent when too much weight is given to the idea of teacher choice. Although ‘autonomy’ is an important element in the purported motivational theories described here, it must be in balance with the other elements, namely relatedness, and purpose. These two elements imply goals that are sought after in community, and in relationship. They are goals that are a part of something bigger than oneself. That is, autonomy will always be a motivator, but it will be most motivating when it is part of an integrated and important goal that serves a common good. Teacher choice that is not balanced by the elements of relatedness and purpose lessens the effectiveness of the PD. “Teachers designing their own PD (CEU’s) is not integrated or focused...In sum, the way teachers, schools, and districts choose many PD activities is driven by compliance with policies-and/or established relationships with individual PD consultants-rather than based on inquiry into and reflection on what is most likely to be effective” (Tooley & Connally, 2016, p. 9). When there are too many directives for PD, and competing priorities at the school or district level, coherence is sacrificed, and a clear purpose for PD is impossible to ascertain (Tooley & Connally, 2016).

Yet another manner in which a coherent framework is difficult to achieve is through the way that most states manage the re-licensure of teachers. Only eleven states offer an explanation of the purpose of re-licensure of teachers, and the majority of states connect PD hours with the re-licensure. This indicates that states intend this process to encourage professional growth, but how successful can this process possibly be? A recent report suggests that the adult learning offered as part of re-licensure actually are in stark contrast to what is believed about effective PD (Tooley & White, 2018). In order to move forward toward the goal of a comprehensive, unified,

coherent framework for effective PD, there is work yet to be done, and hurdles yet to be cleared, as the literature in this review outlines. If a framework can create a system where all teachers are intrinsically motivated to continuously develop their pedagogy in the service of the education of all children, no obstacle is too steep.

Summary

This review has offered a theoretical framework to build a common understanding of effective Professional Development in elementary schools. The framework has laid out varying understandings of what PD is and what it is not. The framework explored the link between teacher motivation and high-quality PD. It sought to define why effective PD is important and how an understanding of PD might help to answer the central research question: *What connections exist between high quality professional development and teachers who continually pursue mastery in practice?* This review then went on to describe some of the shifts in effective PD over the last two decades, from the popularity of the workshop model to more job embedded models of PD. This is important because it explains why earlier models may have been less than effective, and it begins to chart a course for a more comprehensive and successful structure for PD, with an eye towards raised student achievement.

The shift from PD that happened away from the school and outside of the school day made way to Job Embedded Professional Development (JEPD), and some of these characteristics were explained. The models of PD that employ collaboration, learning theories, “situated” PD, Professional Learning Communities, and instructional coaching were elaborated upon as well as some of the obstacles that can hinder this PD. Some of the obstacles noted, such as the difficulty in implementing effective PD widely, and the necessity for the integration of teacher motivation with effective PD, have been discussed and explored. Researchers have recently developed very

similar sets of features of what they believe all effective PD should include. These sets of features were compared and contrasted in Table 1. Finally, a discussion ensued around the topic of creating a PD framework that can be evaluated. The ability to be evaluated is important, because without a way to measure effectiveness, replication is difficult, and it is in the replication that the field will move forward (Desimone, 2009).

It is in this literature review investigation of PD that the idea of a framework has been proposed. It is in this promise of a framework that at all times calls for the reciprocity of teaching and learning; of teachers who are driven by autonomy, purpose, and mastery (Pink 2009), that teachers may continuously develop their own pedagogy. It is in this profound aspect of the teacher as learner that high and uniform student achievement may be realized.

CHAPTER THREE

Methodology

To approach this inquiry with an adaptive and curious mind, a qualitative case study will be employed to explore the question: *What connections exist between high-quality professional development and teachers who continually pursue mastery in practice?* From a literal perspective, I have chosen to use qualitative research because “Qualitative research begins with assumptions and the use of interpretive/theoretical frameworks that inform the study of research problems addressing the meaning individuals or groups ascribe to a social or human problem” (Creswell & Poth, 2018, p.8). In addition, Maxwell (2013) described qualitative research as research, “in which designs are flexible rather than fixed, and inductive rather than following a strict sequence or derived from an initial decision” (p. 2). This appears similar to a constructivist viewpoint, and this research is imagined in part, to be adapted as it is constructed.

This project will study the ways in which teacher motivation and high-quality professional learning can cultivate and produce learning organizations that promote high and uniform achievement. This implies the strengthening of tier one instruction or instruction in the general education classroom. Qualitative research often explores social justice concerns and then seeks ways to change the current condition of that which is being studied (Creswell & Poth, 2018). The notion of social justice aligns with this study because equal access to a rich and varied curriculum should be a reality for all our children. It is posited that this can only be true when teachers engage in the reciprocity of teaching and learning, and recursively become learners alongside their students.

Interestingly, Creswell and Poth (2018) acknowledge the ever-changing definition of qualitative research. While striving to explain this phenomenon, they wrote, “Perhaps this has

less to do with the author's decision to convey the nature of this inquiry and more to do with a concern about advancing a 'fixed' definition" (p. 7). This notion is striking because it seems to align closely with this topic. When I envision an analysis of teachers and students working together to learn something new, I imagine an inquiry that can be responsive and customized to what is being studied. Because of this notion of a responsive inquiry, I intend to use the data collection tools of surveys, individual and focus group interviews, and document analysis to explore a range of ideas, opinions, facts, and belief of those in education. This will allow the content from various perspectives to be evident, and it will consider the parameters of PD from more than one angle.

In this chapter, an explanation of the qualitative research framework will be described. The case study approach will be discussed, citing the work of expert researchers in education, along with a description of the setting and the participants. The research methodology, the specific data collection rationale, and any pertinent ethical considerations will be examined.

Qualitative Research Framework

The qualitative research framework is a scaffold of sorts because it supports the specific procedures or components of the inquiry. While the method, the tools, the setting and participants, are all important in their own right, it is the research framework, or structure that gives the study its power and insight. Maxwell (2013) espouses an interactive approach to designing qualitative research that illustrates this responsive, yet cohesive framework. He suggests:

Thus, to design a qualitative study, you can't just develop (or borrow) a logical strategy in advance and then complete it faithfully. You need, to a substantial extent, to *construct* and *reconstruct* your research design...Qualitative research design, to a much greater

extent than quantitative research, is a “do-it-yourself” rather than an “off-the-shelf” process, one that involves “tacking” back and forth between the different components of the design, assessing their implications for one another. (p. 3)

With this in mind, in order to answer the question, a qualitative research framework that is sensitive to the actual data that is gathered is appropriate. This inquiry is important because teachers and students who are engaged with their work, achieve more at higher levels as the relationship between engagement and achievement is undeniable (Pink, 2009). It is possible that understanding the connections between teacher motivation and high-quality PD might shed light on the intransigence of the achievement gap. This inquiry may make it possible for us to build what Senge (2006) refers to as “learning organizations,” or “organizations where people continually expand their capacity to create the results they truly desire, where new and expansive patterns of thinking are nurtured, where collective aspiration is set free, and where people are continually learning how to learn together” (p. 3). I am working to understand the very essence of professional learning and how to make it the undisputed norm in our learning organizations. It is my job to collaborate with teachers in a way that will build collective literacy knowledge and develop capacities to engage in continuous learning in the service of high and uniform student achievement.

Is it not true that the very essence of qualitative research is that it can and should adapt to what the ongoing data collection is exploring? In this way, it is analogous to the most basic and critical tenets of teaching. That is, teachers must look to their students to know what to teach next, they must use what they understand and what they have yet to understand to guide their instruction. Lehman wrote in his foreword to the book *Reading Wellness*, “Our best work happens when we align our instructional decisions to students strengths and next steps – when

our children become our curriculum, their actions our data, their potential our standards” (as cited in Burkins & Yaris, 2014, p. x). Perhaps it is this similarity between qualitative research and teaching that calls for engagement in this study. Just as the qualitative research data can guide, but not define this inquiry, so too is teaching led by what students and colleagues are waiting to learn.

Several characteristics of a qualitative research framework will be followed as I set out to explore how teacher motivation serves the continual development of teacher pedagogy in elementary schools. These characteristics include:

- the notion that the study is context dependent, or situated where the participants actually teach and learn
- there are multiple methods of data collection
- the researcher will build themes and patterns in an inductive fashion
- the design is emergent and is capable of shifting depending on what the data presents
- the participants’ multiple perspectives are honored as important findings of the study (Creswell & Poth, 2018).

The qualitative research framework is responsive and adaptive, and at the same time, supportive. It will serve the focus of this study well.

Qualitative Researcher

When I consider my role in the research to be conducted, I look to the many sources already written explaining the role of the researcher in order to craft a path forward. Perhaps one of the most important characteristics of a researcher is the ability to be transparent. It will be important to immerse myself in the research, to actually become a participant acknowledging my

own biases and assumptions throughout the process. My own aspirations will be made clear as I work alongside colleagues both as a teacher and as a researcher. Wolcott (2006) described this when he wrote:

Our readers have a right to know about us. And they do not want to know whether we played in the high school band. They want to know what prompts our interest in the topics we investigate, to whom we are reporting, and what we personally stand to gain from our study. (as cited in Creswell & Poth, 2018, p. 44)

Another characteristic necessary for the qualitative researcher is that she can write clearly and persuasively so that her research is authentic and believable. The researcher should be able to describe the research starting with the specific and moving to the more general, often portraying an unusual angle or perspective. The qualitative researcher needs to begin the study by focusing on a single topic, and keep that topic the center of discussion until it is fully understood. Only then can the researcher relate similar topics or ideas together in order to make the main topic even more explicit.

I am also aware of the fact that I will be conducting research in a well known and personal context. My colleagues and I have opinions and assumptions about each other that are already formed and not easily eradicated. The more I am clear about this, the less of a limitation it will be. In fact, some consider this “insider” quality to be an advantage, when the familiarity is a known phenomenon. Ely (1991) responded to this idea when he wrote, “familiarity with the subject at hand—the subculture, jargon, the unwritten codes of behavior—may enable a researcher to delve deeply into the research without having to do all of the preliminary work” (p. 124). My role in this study is also what makes it qualitative at heart. The fact that I have experiences and biases that will influence my understanding of the research is important to the

findings. This idea is similar to constructivism where the data collected and the attitudes and opinions of all participants, including the researcher, is what will form the new understanding. Creswell and Poth (2018) describe this phenomenon as “a situated activity that locates the observer in the world” (p. 7).

Simply being aware of one’s own perspective is crucial, as I have discussed. But that is not enough. The researcher must also be reflexive. This “self-check” can promote honesty and admit limitations, which will make the research more viable. It is what McMillan and Schumacher (2010) define as a “rigorous self-scrutiny by the researcher throughout the entire process. The researcher’s very act of posing difficult questions to himself or herself assumes that he or she cannot be neutral, objective, or detached” (p. 332). As I begin the work of this study, I will need to immerse myself as a participant, as well as engage in reflexivity. I will also need to step onto the dance floor and participate in the dance, as well as retire to the balcony to observe the party from above.

Case Study

To understand the complexity of the nature of PD and the tendencies of teachers to engage in it to further their own professional practice, I intend to use the case study approach, because “it presents an in-depth understanding of the case” (Creswell & Poth, 2018, p. 98).

Creswell and Poth (2018) go on to define case study when they wrote that it is:

...a type of design in qualitative research that may be an object of study as well as a product of the inquiry. Case study research is defined as a qualitative approach in which the investigator explores a real life, contemporary bounded system (a case) or multiple bounded systems (cases) over time through detailed, in-depth, data collection involving multiple sources of information... (p. 96)

Because case study research involves the study of a real-life case or cases in a contemporary and authentic setting, it is a good choice for this study. This case study will be *bounded*, since it will be described within parameters of a school or schools, and will have a specific timeline, the 2018/2019 school year. This case study will be *instrumental* because it will seek to understand a specific issue or concern (McMillan & Schumacher, 2010). The primary goal is to understand the case (how PD structures in two elementary public schools influence teacher motivation) in depth. It will be important to gather various forms of data including surveys, individual and focus group interviews, and historical and personal documents. The analysis of this data will describe the case and identify themes within the case deeming it a *within-site* study (Creswell & Poth, 2018).

Finally, the case study ends with a conclusion of the researchers understanding of what has been studied. Stake (1995) refers to this conclusion as *assertions*, while Yin (2009) refers to the conclusion as *patterns* or *explanations* (as cited in Creswell & Poth, 2018, p. 98). Again, the description of the key features and procedural directions for the case study seem to align well with this topic. The aim is to study a bounded case in order to deeply understand it and to draw conclusions from what is learned. The case study will be used to better understand the connections between high-quality PD and teacher motivation that ultimately raises student achievement for all.

The role of a literacy coach in two elementary buildings is to collaborate with classroom teachers in order to build a rich literate environment for students and teachers. There have been barriers to this work in the past. Some of these barriers are legitimate such as the limit of time, for instance. But there are also more subtle obstacles that are unexpected. A hypothesis is that one of the biggest barriers to literacy coaching is the structure of a learning organization that

provides very little time, not to mention belief in the coaching philosophy, for deep collaboration among teachers. The time for teachers to collaborate is simply not embedded in American schools today. Lewis and Hurd (2011) hint at this when they wrote, “In the United States, we tend to spend a great deal of time writing standards and relatively little time observing and refining the classroom lessons designed to bring these ideas to life” (p. 10).

The research in Chapter Two of this paper speaks to the need for collaborative inquiry among teachers to develop their own pedagogy and raise student achievement. This case study in some ways is analogous to a “needs assessment” and my aim is to closely (then broadly) examine the PD structures in these buildings and more importantly, in the minds and hearts of teachers. In order to effect change in the world and the profession, this is a place to begin, and that has to be enough to get started.

Setting and Participants

The setting of this study will take place in two elementary buildings in a large midwestern suburban school district in the United States. Initially, all certified staff and administrators will be sent a short survey (Appendix A) describing the purpose and description of the study. In addition, there will be general questions regarding opinions of PD in the district, while at the same time providing some necessary definitions of what is meant by various models of PD. The final question in this survey is whether the respondent would be willing to participate in an interview and focus group. I am approaching the recruitment of interviewees to avoid what might be considered a limitation. If I choose who to ask to participate, I may choose only those colleagues I know well, or those whom I think would benefit from additional PD. I hope to get a diverse range of those willing to participate, in terms of experience, grade level, and role in the school. This diversity will be important to what I learn through interviews and the eventual focus

group because I will want the whole range of educators perceptions and opinions to be represented. I will also be explicit about what the participants time commitment will be. I assume this will be one-hour long interview and participation in a one to two hour focus group in a nearby restaurant or bar.

Methodology and Data Collection

This case study will employ a survey as a data collection tool. According to Fink (2017), “Surveys are information collection methods used to describe, compare, or explain individual and societal knowledge, feelings, values, preferences, and behavior” (p. 2). The initial survey (Appendix A) will serve to explain the purpose of the study and to collect initial opinions of the amount, type, and value of PD in and outside of their school district. I seek to learn “societal knowledge” about the perceptions of PD in order to craft questions for the future interviews. This survey will illustrate the nature of qualitative research well because what I learn from the survey will inform the development of subsequent probes and data collection. The idea that the survey may provide broad opinions is valuable, as I am interested in the “snap judgment” of what teachers believe and understand around PD in the district.

Another set of data to be collected and analyzed will be archived documents of professional learning. The official documents I intend to collect and study will be those deemed informal, such as “Memos, minutes of meetings, working papers, and drafts of proposals...that provide an internal perspective of the organization. These documents describe functions and values and how various people define the organization” (McMillan & Schumacher, 2010, p. 361). The compilation of these documents, will serve to illuminate the recent anecdotal and factual history of PD in the participating schools. This data collection will involve classroom

teachers, administrators, and district employees such as the Director of Curriculum and Instruction.

In addition to document analysis will be the implementation of interviews. Brinkmann and Kvale (2015) wrote that an interview is where “knowledge is constructed in the interaction between the interviewer and the interviewee” (p. 4). These interviews will be designed to collect the understandings and opinions of what teachers and administrators perceive as a need for the PD structure of their school. These interviews may help me gain insight into my own perceived barrier of providing PD in a meaningful and substantive way to those with whom I work. I believe there is a disconnect between what teachers believe they want or need and what administrators and/or those in positions similar to mine believe teachers want or need. Interviews may help all involved understand more of each-others perspective. Brinkmann and Kvale (2015) clarified qualitative interviews when they wrote that the purpose “...is to understand the world from the subjects’ point of view, to unfold the meaning of their experience, to uncover their lived world” (p. 3).

The interview protocol is designed to elicit opinions that describe what is needed in the PD structure in the district (Appendix B). Since many refer to interviewing as a craft (Rubin & Rubin, as cited in Creswell & Poth, 2018), it is assumed that the first interviews may not yield the data expected and that with subsequent interviews, relevant data tied directly to the topic of study may be more common. Brinkmann and Kvale (2015) offer a description of interviewing in two distinct ways, one as the “miner” and the other as the “traveler.” The interviewer as a miner is one who sees the interview and the analysis of the interview as two separate entities that do not influence each other. The interviewer as a miner is digging for valuable nuggets of wisdom that remain objective and isolated from the interviewer.

The interviewer as a traveler enters into the story the interviewee is telling, and may even become a part of that story. The idea of conducting several interviews without the data changing the interview process does not seem possible. I see my interviewing work as a traveler alongside the interviewee.

Brinkmann and Kvale (2015) propose a rather fixed sequence of steps when conducting an interview that includes design, implementation, transcription, analysis, and validity and reliability. Rubin and Rubin (2012) also propose a sequence of steps, but their model is intentionally more fluid, “allowing the researcher to change questions asked, the sites chosen, and the situations to study” (p. 165, as cited in Creswell & Poth, 2018). With a nod to the spirit of qualitative research, the latter of the two sequences will be followed.

It is also true that qualitative research is often referred to as contextual, the phenomena being studied is being studied within its setting. In fact, “qualitative researchers often argue that such phenomena can only be understood when seen in context” (Brinkmann & Kvale, 2015, p. 103). This notion of collecting contextual data (from teachers in their schools) seems vital to understanding the subject of this case study.

In addition to individual qualitative interviews, the case study will culminate with a focus group interview (Appendix C). This type of interview may call on the chosen focus group to influence each other’s beliefs, and perhaps even create new or adapted opinions based on the focused interview. McMillan and Schumacher (2010) described the benefit of a focus group when they said, “By creating a social environment in which group members are stimulated by one another’s perceptions and ideas, the researcher can increase the quality and richness of data” (p. 363). The focus group should be as homogenous as possible in terms of how the members relate to the research. It is suggested that participants are unknown to each other. This may be a

limitation to the focus group data because the members will all be teachers from the same district. The focus group can be seen as a way to confirm what was revealed in the rest of the data collected. It will be necessary to carefully think about the facilitation of this focus group since the most relevant focus group data is produced when the facilitator is skilled at both interviewing and group dynamics. McMillan and Schumacher (2010) offer the most compelling reasons for including a focus group as a data collection tool when they wrote, “With common traits, members of each group are encouraged to think more deeply about the topic and are in a better position to question each other to arrive at a group result” (p. 364). The advice offered by Krueger (2002) will also be followed. The questions will be open-ended and will include opening and introductory questions, as well as questions that start general and move to be more specific. The questions will be summarized towards the end of the interview and elicit the participants to reflect on the process. Soon after the focus group interview, a systematic analysis process will be undertaken in order to yield authentic data.

Ethical Considerations

Brinkmann and Kvale (2015) offer a framework to assist the researcher in terms of assuring that ethical considerations are taken seriously during the entirety of the study. Informed consent is a consideration that entails being sure participants understand the purpose of the study and any possible risk or benefit that may result from their participation. Aside from the necessary verbal explanations of the purpose of this research, I will provide a letter of consent (Appendix D) to be signed by each participant. Confidentiality is another part of the protocol, and describes what may be done with the results of the research once complete. It usually indicates that any data identifying the participants will not be disclosed and that if the results are published, participants will be asked for permission first. The third ethical consideration is that of the

consequences of the qualitative study. Brinkmann and Kvale (2015) described it when they wrote, “The ethical principle of beneficence means that the risk of harm to a participant should be the least possible... the sum of potential benefits...should outweigh the risk of harm...” (p. 96). Perhaps the most critical part of the ethical consideration is the role of the researcher. It is the responsibility of the individual conducting the study to execute an honest and moral study and to be the objective and fair overseer. Without this objectivity and honesty, the results of the study are questionable. Sometimes scientific concerns are compared with ethical concerns in a study. “In the end, however, the integrity of the researcher – his or her knowledge, experience, honesty, and fairness – is the decisive factor” (Brinkmann & Kvale 2015, p. 97). The ethical considerations discussed will be maintained throughout the study.

Conclusion

The road to this topic has been developed over years and experiences in teaching, in life, and in learning. I am passionate about the role lifelong learning can play in the quality of anyone's life, including my own. The teaching profession is a crucial place to continuously become better at teaching children. My research question then, *What connections exist between high-quality professional development and teachers who continually pursue mastery in practice?* relates directly to the notion of continuous improvement. When teachers routinely become learners, the teaching climate will be transformed into one where we all do well. A strong, supportive, and adaptive PD structure will support a climate where autonomy, choice, and mastery are a reality for teachers. I intend to learn all I can about our existing PD structure so that we might be able to describe our school as a “Learning organization [that is] possible because, deep down, we are all learners” (Senge, 2006, p. 4).

As a way to explore this important topic, I will conduct qualitative research in the two buildings where I work. I will learn from teachers and administrators about what they consider to be needs in our PD structure, where their own motivation is strongest, and how to integrate those two entities. I will interview colleagues individually so that we may construct a learning climate that encourages collaborative inquiry. I will study documents and archives in an effort to describe a history of PD implementation in the school district so that where we have been can guide where we are going. I will also invite participants to join a focus group to facilitate collective reflection and vision around our PD practices. I want this study to help educators see how constructively building a successful framework for PD might be what Block (2009) called a “possibility conversation [that] frees us to be pulled by a new future. The distinction between a possibility, which lives into the future, and problem solving, which makes improvements on the past” (p. 125).

I want to ask these questions alongside the teachers with whom I work; How could a sound structure of professional development be cultivated? How can we integrate the many strengths of our current structure into a developing structure that respects the fruits of collaborative inquiry and teachers as learners? How can we be sure that we heed the research and advice of so many experts in the field who promote ongoing, situated professional development experiences for all teachers? How can we shift our own efficacy as teachers to believe that becoming the vulnerable learner is at the very heart of what an education can be? In the end, I want this study to help us see our learning organization objectively and realistically, with all its blemishes and beauty.

CHAPTER FOUR

Results

In this chapter, the collected data is examined and recounted. For this researcher, the words of Creswell and Poth (2018) aptly described this qualitative study when they wrote:

...we collect data using these sources based on open-ended questions without much structure and by observing and collecting documents without an agenda of what we hope to find. After organizing and storing data, we analyze them by carefully masking the names of respondents, and engage in the perplexing exercise of trying to make sense of the data. (p. 52)

As an emergent researcher, the coding and analysis of the data has been a “learn by doing” enterprise. In this chapter, I will illustrate my understanding of what was learned through the data. While the results of the collected data align with much of what has been explained in the Literature Review of this paper, there is much to be realized about the connections between superior Professional Development (PD) and teachers who continually pursue mastery in their practice.

To begin to answer this question, *What connections exist between high-quality professional development and teachers who continually pursue mastery in practice?* data were collected in the forms of an online survey, individual interviews, document analysis, and focus group interview. The initial data collection method, the survey, will reveal some automatic perceptions of what constitutes truly engaging PD, and what some of the obstacles may be. The outcomes of the individual interviews will closely examine attitudes and opinions on how PD affects teachers and their own developing pedagogy. The individual interviews define not only what high-quality PD is, but how it changes the practice of individual teachers.

The document analysis provides a school district's analysis of how PD has affected the overall achievement of students and teachers, and offers a brief historical perspective of some of the shifts the district has tried to make. Finally, the focus group interview offers a different perspective on PD for teachers. While the subject matter and discussion questions are similar to the survey and individual interviews, the ability of participants to dialog about the topics produced unique understandings. The focus group is constructivist in nature in that participants build new perceptions of the nature of PD by listening to, and building on each other's perspectives (Fosnot, 1996). This data, taken together, confirms what many educational researchers have concluded about the nature of PD. In addition, it may well offer some insight and suggestions for a school district to reflect on its own practices while at the same time, imagining ideas for PD that supports educators to pursue mastery in practice in service of uniform and high student achievement.

Survey

Understanding the specific purpose of the survey will make the data easier to interpret. One of the purposes for the initial survey was to collect what Fink (2017) termed "societal knowledge," or the sort of collective ideas from a wide variety of participants. The survey (Appendix A) was designed to elicit the automatic reactions from certified staff about their perceptions of PD, both within the district and outside of the district. It was a short survey with just ten questions, and intended for participants to complete quickly and without a lot of reflection or forethought. It is important to collect "in the moment" perceptions of PD. Another important aim of the survey was to solicit participants for the individual interviews and the focus group interview. Creating a pool of participants in this way facilitated personal relationship out

of the process, because it is much easier to decline an invitation to participate through a survey than it might be face to face.

Finally, because it was important to honor anonymity in the survey, the survey results needed to be separate from the pool of participants it solicited. At the bottom of the survey (Appendix A), language was included encouraging participants to continue to be part of the research. Those willing to consider participating were instructed to follow a link to a completely new form in order to add their name.

The survey was comprised of seven “forced choice” questions, or questions that have forced-response choices, and one “open” question, or an open ended question. Fink (2017) described the advantages of forced choice questions when she said they can be scored objectively, are best at measuring complex behavior (like teacher motivation), and are the least threatening kind of questions. The intent was to get the highest response rate possible. The open ended question requires careful thought and often takes much more time to answer. However, when thought and time are employed to answer the question, the results may be richer. This idea of what data the two types of questions offer held true in this survey. The open ended question yielded interesting and new information, while the forced choice questions mostly confirmed what much of the research around PD is acknowledging.

Overall outcomes of forced choice questions.

The survey was distributed online to all certified staff from two elementary buildings in the fall of 2019. Out of 90 recipients, there were 56 responses. Of those responses, 63.6% identified as classroom teachers, while 36.4% identified as specialists, coaches, and English learner teachers. Almost half of the respondents were seasoned teachers, with 49.1% having been in the profession for thirteen or more years. The remaining educators stated they had been in

education from one to twelve years; 14.5% one to three years, 20% for four to eight years, and 14.4% for nine to twelve years.

The overall perception of PD in this district, according to the survey, points to the idea that PD is necessary for educators to continuously improve their professional practice, and that it is necessary for all teachers, no matter the level of experience. In fact, 98.2% of respondents indicated that PD is important or very important to their professional practice. When asked whether there was a level of experience for teachers when PD was no longer as necessary, 100% responded in the negative, making it clear that the prevailing belief is that PD is always necessary in the education profession.

The survey offered examples of in-district PD and out-of-district PD to improve the clarity of the results. When asked whether teachers preferred in-district or out-of-district PD, 65.5% indicated a preference for in-district PD over 34.5% indicated a preference for out-of-district PD. However, when asked which kind of PD most impacted their practice, the numbers shifted slightly with 70.9% indicating that in-district PD actually transferred to the classroom while 29.1% indicated that outside PD transferred more to the classroom.

Finally, participants were asked to rank three attributes of high-quality PD from Most Important to Least Important. These three attributes were facilitator content expertise, ability to sustain practice and receive ongoing feedback, and teacher choice of PD. Of all the participants, 82% chose the ability to sustain the practice as an important or the most important attribute, while 67% chose teacher choice as an important or the most important attribute, and 55% chose facilitator content expertise as an important or the most important attribute. These results are in alignment with results in the literature review. They both suggest that ongoing feedback and practice elevate teacher expertise.

Themes from the open choice questions.

There were some identified patterns or themes to be deduced from the responses to the Open Choice question, “What are the barriers to engaging in PD?” They are time, choice, relevance, implementation, collaboration, and cost. There were fifty-one responses to this survey question that once analyzed, pointed to many similarities in what teachers deemed as barriers to engaging in PD (Appendix A).

Time.

The response having to do with time can be broken into several distinct categories. The first has to do with when during the school year or the school day the PD is offered. Fourteen percent of respondents identified the beginning of the school year, specifically during workshop week as a barrier to engaging in PD. These respondents wrote that engaging in PD then is difficult because it competes with the important tasks of setting up a classroom and other beginning of the year chores. It is worth noting that PD offerings during workshop week is quite common in this district. Another barrier to engagement had to do with when during a school day the PD is offered. Respondents identified before school as problematic because teachers are concentrating on the arrival of their students and the lessons they will be delivering that day, making it difficult to fully participate in the PD offering. Just as many identified after school as a difficult time to engage in PD because of fatigue and the necessity of moving on to other personal parts of their lives once the school day is done.

Another barrier related to timing was the issue of immediacy. Teachers feel the very real pressure of numerous initiatives competing for their time. Three respondents reported that if they did not feel they were likely to implement the PD immediately, it was difficult to consider it necessary, and therefore difficult in which to engage. Related to these similar answers having to

do with time, was the comment that there is just not enough time to engage in any part of PD. 27% shared this view, the most commonly cited barrier to engaging in PD. There may be some overlap in comments here, as many of the 27% simply stated “time.” It is not clear what was meant by that comment, whether they meant they were too busy, or whether they meant they would not have time to implement, for instance. Of all participants, 9% identified the barrier of having to write plans for substitute teachers so they could be away from their class, and finally, 5% identified a barrier as having to be away from their students causing them to lose valuable teaching time.

Relevance.

Relevance, or whether or not the PD addresses specific teacher need, was cited often, and also had some distinctions. Participant comments pertaining to relevance Thirteen respondents cited a barrier to engaging in PD one of personalization. When the PD does not address their specific need, concentrating on it is difficult. Another seven teachers wrote about the idea of “buy-in.” In other words, if teachers do not believe the PD will actually make them better teachers, it is not worthy of their time and attention.

In education, teachers are often affected by *initiative fatigue*. This term explains the common practice of introducing, then mandating the implementation of, a plethora of new initiatives that are promising to make better organizations, or make students achieve more, as an example. Many types of PD are offered to teachers to support any number of new initiatives, and school districts often introduce new initiatives before the older ones are fully implemented. Initiative fatigue was cited as a barrier to PD engagement. Similar to the notion of “initiative fatigue,” is that of PD that aligns (or not) with specific building goals. This is similar to initiative

fatigue; if the PD is not integrated and aligned with identified building goals, it may feel like “one more thing” teachers are being asked to do or learn.

Implementation.

The literature review in this paper points to the use of coaching or ongoing support and feedback as a fundamental characteristic of high-quality PD. Eleven respondents cited the lack of an ability to implement the PD as an obstacle to engagement. If there will not be support and time built into the PD for implementation, whatever was learned in the PD session, no matter how inspiring, will be lost. Six respondents cited a hurdle as not receiving any follow up after the initial PD. This may be interpreted in two ways: 1) similar to the idea of difficult implementation, that is, there is no follow-up support to aid transferring the PD into the classroom, and 2) to understand this comment is to say that teachers want to be held accountable for implementing the PD into their practice. If there is follow-up from support staff, teachers may be more likely to implement.

Choice.

Twenty respondents cited the lack of teacher choice of PD as a barrier to engagement. Teachers may feel more motivated when they feel they have choice. This is similar to the idea of relevance because when teachers can choose their own PD, it may be automatically relevant to them. Choice also aligns with the idea of “buy in,” or the idea that teachers will want to engage in the PD. When choice is offered, teachers may believe the PD can actually make them better teachers.

Collaboration.

Nine respondents noted the idea of collaboration, or the lack thereof, as a reason PD is sometimes ineffective. Two teachers cited the ability to attend PD with colleagues highly

motivating for them because they are able not only to collaborate during the PD, but can also collaborate around implementation. Five teachers mentioned the format of the PD session as necessary for engagement. When the PD structure allows for participant collaboration, the learning and application are much more successful. For instance, these teachers say, when the PD is in a theater style room where true collaboration is inhibited, much of the new knowledge is lost. This is opposed to a PD format where participants are seated at tables and encouraged to collaborate throughout the PD.

Cost.

The idea of monetary cost as a barrier was referred to by eight participants. One sentiment was that hiring a well-known, reputable speaker to address a district session of PD must be costly. Another was the barrier of proposing attendance to a PD session to administration and/or paying for the PD personally. Although this reference of money or cost was cited frequently, only two of the eight respondents explained what they meant by the term “money” or “cost.”

This survey helped to elicit overall perceptions of the usefulness of PD in the district, as well as obstacles that often get in the way of PD that encourages and supports teachers in the construction of an ever improving pedagogy. The survey illuminated the perception that a majority of teachers believe PD is necessary for all teachers, no matter their level of experience. It showed that a majority of teachers believe that PD is important to their profession. Through a single open choice question, several impediments to engagement in PD were explained and analyzed. The ideas and observations made apparent in this survey provide a foundation for the insights gained in the individual interviews and focus interview.

Individual Interviews

The individual interviews aimed to determine what it is that constitutes effective PD (Appendix B). By asking teachers to reflect on useful PD in their careers, PD that actually transferred back into their classrooms and made them better teachers, a working definition of high-quality PD may be required. These interviews were conducted with seven teachers from two separate elementary buildings. The teachers had varying degrees of professional experience and taught wide ranging ages, from Kindergarten through fifth grade, and Gifted/Talented students. This group of seven teachers was derived from the online survey sent to all certified staff in the fall of 2019. Out of the fifty-six participants, thirty agreed to consider participating in the individual and focus group interviews. From that pool of thirty teachers, seven were chosen to represent most grade levels, years in the profession, gender, and both school buildings. All teachers were asked to read and sign a letter of informed consent, (Appendix D) and the interviews took place in March, 2019. Although the same interview questions were used at all interviews, the time each interview took was variable, ranging in length from twenty-five minutes to forty minutes. The interviews were audio recorded. Teachers who participated in the interviews will be referred to as T1, T2, T3, T4, T5, T6, and T7.

Table 2: Interview Participant Information

T1 – Female, 23 years Experience, Master’s Degree, Gifted/Talented	T2 – Female, 3 years Experience, Bachelor’s Degree, 4 th grade	T3 – Female, 10 years Experience, Master’s Degree, 1 st grade	T4 – Male, 10 years Experience, Bachelor’s Degree, Kindergarten
T5 – Female, 2 years Experience, Bachelor’s Degree, 1 st grade	T6 – Female, 22 years Experience, Master’s Degree, 2 nd grade	T7 – Female, 6 years Experience, Master’s Degree, 5 th grade	

Classroom practices learned from teacher preparation program.

The early questions in the interview asked teachers to reflect on what they had learned in their teacher education programs. What practices in those programs made their way into present day classrooms? A majority remarked that lesson planning was something they remembered learning and has subsequently been applied in their classrooms. Teacher 4 remarked that being asked to write numerous lesson plans forced him to think deeply about all the important components of a lesson, and that practice has transferred into professional practice. Teacher 7 remarked that it was in her teacher preparation program that she had the time to be creative with her lesson plans and formulate them more thoroughly than is often practical in the classroom. She said, “Even though I don’t always have the time to do all of that work for one lesson, I think it stuck with me how original I can be....”

Three of the teachers reported that pedagogy and learning theories about content were areas they remembered learning. Although it may not have had much of an impact on them at the time, the foundation of learning theories can be understood in the classroom today. Teacher 3 commented that she had been introduced to learning theorists Piaget and Vygotsky in her preparation program and went on to say, “None of that really made sense to me until I was years into teaching...and that’s when I realized, ‘Oh that’s why they taught that!’” The time spent in classrooms as a practicum or student teaching was also valuable learning. Not surprisingly, teachers with more experience remembered less from their programs in their profession today than the teachers for whom the preparation program was more recent. In addition, teachers remarked how valuable it was to simply have more time for reflection on what they were learning, since they were not yet teaching professionally.

Engagement.

Teachers were asked, “*Do you ever find it difficult to engage in PD?*” and the answers were similar to the survey findings. Several teachers talked about PD being offered at what they consider inopportune times, such as the beginning or end of the school year, or the beginning or end of the school day, citing a need to concentrate on their own classroom needs or the needs of their personal lives. T2 said, “...Professional Development at the end of a school day or in the afternoon is really hard for me to attend to because I am there all morning, but afternoon my mind starts to wander and I want to work.” Other comments had to do with personalization, the idea that when the PD is not personalized, it is difficult to engage in. T4 shared, “I find it difficult when it’s kind of like a one-size-fits-all format...when you’re in an entire auditorium with one speaker talking about one topic...that’s supposed to like be a blanket for everybody.” Similar to personalization is the concept of choice. When teachers cannot choose their own PD, it often does not feel relevant. T4 commented, “I remember seeing people in the audience like, cutting out their lamination during workshop week because they didn’t find value in what they were talking about.” Analysis of the data revealed that when PD is more personalized to teacher need, and when teachers can choose what they would like to learn, engagement is deeper. These barriers to effective PD are important to note because they define, by contrast, what constitutes effective PD.

What makes PD effective and what makes it ineffective?

Teachers were asked to remember PD that they found effective and that was applied in their classroom. They were also asked to reflect on the characteristics of PD that render it ineffective. Summertime PD is preferable to four of the interviewees. T2 commented, “I was able to go in with a clear mind. I didn’t have to think about school at all and it was two days-

worth of deep, intense instruction and conversation and practice.” Professional Development that occurs in the summer, or when teachers feel less harried, allows for time to reflect on what is being learned. Also related to time, teachers commented on PD that allows for application without a lot of preparation. That is, they are able to take what they have learned and apply it immediately in their classroom. T7 added, “I had like five things that I could walk away with and do the next day. I didn’t have to plan and figure it out long term. I could just try this.” Again, the idea of relevance was cited as an attribute of effective PD. A majority of the time teachers mentioned relevance as necessary for effective PD, they were speaking about PD that was specific to their own personal needs and what they most needed to build their own pedagogy. It could also be related to best practices in teaching. T1 commented, “I don’t teach it that way, and I don’t teach that curriculum, but I was still so engaged in it because even though it doesn’t apply directly to me in the classroom, it still applies to good teaching.”

Another attribute that makes PD engaging and effective, cited by the interviewees, were the ability to observe fellow colleagues and receive ongoing feedback in the form of coaching. A majority of the teachers talked about ongoing feedback as a necessity in order for the PD to be integrated into the classroom and pedagogy. They commented that coaching and observation also offers an authenticity to the PD since it is being practiced in the classroom and with their own students. T6 commented, “The collaboration [the literacy coach] and I did with the writing, I consider that to be PD...For me, those were the most effective because it’s specific. You can’t get more specific than two people talking about what’s happening in my room right now.” T7 said, “I get a lot out of observations...I’ve never walked away from even an informal observation without something I can do better...” Every interviewee cited the ability to collaborate as essential to high quality PD. Hindrances to collaboration, like physical space that makes

collaboration difficult, or colleagues that are not engaged, or poor facilitators, sabotage the quality of the PD.

Not surprisingly, when interviewees were asked about PD that was ineffective, the opposite attributes were named. For instance, when the PD takes place in an auditorium where there is no way to collaborate, engagement is low and the learning is not integrated. Several of the interviewees mentioned poor PD attributable to the fact that three different behavior intervention programs were being implemented in one building, and teachers were asked to learn all three, in the same year. This is an example of initiative fatigue. This created an inability to fully focus on one initiative. Before school staff meetings are often the venue for PD at these buildings, and this created concerns for the teachers. Again they noted the perception that teachers are preoccupied before school and unable to concentrate on PD. There is also the issue of choice. If PD is supplied through a mandatory staff meeting, options are minimal, and teachers value choice in what they will learn or in what they need.

Interviewees also spoke of the kind of PD that is disengaging and ineffective. T4 cited the several online certifications that are required in his building. One in particular was about suicide prevention. T4 said, "...it was just literally looking at slides and then answering questions...I just remembered the information so I would pass the test. I don't know if anything really stuck with me...and I just wish it was more personal." Other teachers mentioned repetition in PD as leading to low engagement. T1 spoke of PD that she was asked to participate in three separate times. Others cited the inability to apply the PD in the classroom, either because too much preparation was required or there was no follow-up. T2 cited the lack of coaching and feedback as something that lowers the quality of PD when she said, "I think the biggest barrier that prevented me from learning is the feedback and coaching piece. The biggest piece is the lack of

coaching related to that.” The expertise of the facilitator was also mentioned as a factor in ineffective PD. In this case, the interviewee thought the facilitator did not know her audience well enough. Because of this, the facilitator was not effective in providing personalized PD. T5 said, “She was telling us things like, ‘You should have a classroom library,’ and we are sitting there thinking, ‘Yeah, we know.’”

PD that offers little active learning or hands on experiences was also mentioned as a characteristic of ineffective PD. The research supports the notion of active learning as a tenet of effective PD, so it is not surprising that without active learning, the PD is less effective (Macias, 2017; Darling-Hammond, Hyler & Gardner, 2017; Desimone & Pak, 2017, Parsons, Parsons, Morewood, & Ankrum, 2016; Steeg & Lambson, 2015).

The individual interviews and the survey findings correlate closely with each other and outline what teachers in these two elementary buildings believe about effective, engaging PD. That is, PD is effective and engaging when teachers have choice, when it is collaborative, when ongoing feedback is available, when it is facilitated in a collaborative space and by an effective facilitator, and when it is relevant. When these things are incorporated into PD teachers have a chance to pursue mastery in practice.

Job embedded professional development.

Finally, interviewees were asked how they felt about Job Embedded Professional Development (JEPD), since recent research suggests it is highly effective (Parsons, Parsons, Morewood & Ankrum, 2016). All teachers recognized the value of JEPD. T2 spoke of the ability to get immediate feedback and offered that the district’s new English language arts curriculum is dependent on JEPD. She also commented that when PD is job embedded, it is an efficient use of time. Lesson Study is one example of JEPD. In Lesson Study, teams of teachers plan lessons,

observe each other, and reflect and revise together. Teachers cited their experience with Lesson Study as engaging and powerful PD. Because collaboration is at the heart of JEPD, it is difficult to reference one without referencing the other. T6 mentioned the importance of relationship when talking about JEPD when she said, "...it's something that is within your best interest to be engaged in because you are using it right now...I am talking with people I trust, that I know, that I have relationships with and we are all in the same boat. So again, giving time for teams to talk...."

The value of teachers learning from each other, an example of JEPD, was reported as a highly effective form of PD. T5 offered an example of this when she said, "I think if you're observing something or learning about something that's happening in the classroom next door, it's not so far-fetched to be able to implement that into your own classroom." Other comments from teachers addressing the value of JEPD included the value of teacher learning alongside student learning, watching colleagues teach, and the idea that if PD could be occurring as we are teaching, it would just make more sense. T7 asserted, "I think it would just make things easier and more comfortable to be getting better at my job while I'm doing my job..." as a way to understand the power of JEPD.

There were also some comments on why some teachers believe in the theory of JEPD, but wonder if it can work well in the elementary classroom. T3 wondered whether Lesson Study is feasible when she said, "I think in theory it would be good, but I think it's just so disruptive...especially with this young age, they get so distracted by things...I like the idea, it's just always the time factor." The individual interviews produced rich data that when triangulated, confirmed much of what research has suggested about teacher engagement and excellent PD. These interviews also illustrated the how PD is perceived in this school district by its teachers.

Another source of data that can help to answer the research question, *What connections exist between high quality professional development and teachers who continually pursue mastery in practice?* is a type of document analysis. The school district that is the subject of this study distributed a survey to all certified staff. Analyzing the results from that study also lends insight to the understanding of the connections between high quality PD and teachers who pursue mastery in their practice.

Document Analysis

The document analysis source of data for this project was approached by way of a meeting with the Director of Curriculum and Instruction in the school district that is the subject of this research. In March, 2019, a meeting was scheduled to discuss current as well as historical PD practices in the district and to determine what documents might illuminate connections between PD and teachers who continually pursue mastery in their practice. This meeting yielded an analysis of how Professional Development (PD) is implemented in the district now and how it has developed over the last approximately 15 years. This discussion also produced the idea to examine district documents in the form of survey explaining teacher perceptions of district PD from the 2015/2016 school year (Appendix E).

Meeting.

The Director cited several PD structures that have been successful in this district. Examples of PD practices include “Quality Compensation” (QComp). Practices known as QComp are derived from the law enacted in Minnesota in 2005 that allows school districts to voluntarily design a plan to meet the four components that must be addressed in the law – Career Advancements, PD, Teacher Evaluation, and Performance Pay. (Minnesota Department of Education, QComp). Incorporated in this “Q Comp” district plan are two widely successful

practices; that of peer coaching and Academy of Educators classes. Each teacher in the district is assigned to a peer coach, and that peer coach offers ongoing observation and evaluation throughout the course of the year, with a monetary incentive offered year-end in return for participating in all components of the program. The Academy classes are proposed and offered through the district, specifically by and for certified teachers, and offer a great amount of choice since there is no prescription about what these classes can entail.

Another type of PD that is firmly planted in this district is that of the Professional Learning Community (PLC), alluded to in Chapter Two of this paper. Professional Learning Communities are given designated time to allow student data to drive instruction. This district became a PLC district in approximately 2007, and is continuously working to define and make explicit what that means for teachers and teams of teachers. Time devoted to PLC's has undergone numerous changes as to how and when it occurs, as the district and teams of teachers negotiate to find the most effective and efficient model to guide the use of this time. Currently, changes to the PLC model are being evaluated and discussed.

A dichotomous issue that helps and hinders PD in this district is the autonomy that the various buildings have developed. The eight elementary buildings each have diverse building climates and sets of differing staff and student needs. While this may generally be understood to be a good thing (the motivational theorists cited in this paper name autonomy as one of the three most important motivators), it can also get in the way of a unified and aligned PD structure for the district. Each building often sets out on its own individual path of PD, and this makes a district-wide holistic approach either redundant or lacking.

There are also opportunities for PD in the district to more clearly and efficiently address the needs of more of its' teachers. According to the director, there are just 15 hours of district

designed PD offered over the course of a school year. Although simply adding more time to these offerings would help, there may be other ways to enrich the PD contributions. An example of altering the structure may be designing small institutes that could address specific teacher needs while still allowing for collaboration. Additionally, it may be possible to meet more personalized needs of teachers if PD could occur at alternative times, on Saturday mornings or on a “late start” day where students are in attendance for just half a day.

In the course of this meeting, the question about Job Embedded Professional Development was posed. *When there is so much research that supports professional learning that is job embedded, why is this district (and many others) so hesitant to adopt those practices more systemically and intentionally?* One such barrier is the fact that QComp is already in place. Many misinterpret QComp’s peer coaching program as analogous to the JEPD structures like instructional coaching and Lesson Study (see Chapter Two of this paper). While there may be some similarities between peer coaching and instructional coaching, there are important differences. The peer coaching structure in this district is evaluative and offers monetary incentives. This profoundly changes the nature of the relationship between teacher and coach. A coaching relationship that is not based on incentives or formal evaluation, is free to be supportive, collegial, and intrinsically motivated. Once extrinsic rewards are a part of the relationship, the work of teaching and learning becomes commodified. Other obstacles to developing a JEPD structure are those of the district calendar, which is approved and negotiated years in advance which makes change to any structure extremely difficult. Finally the intrusion of the teachers union can be an obstruction to JEPD. In an effort to support teachers, many innovations and ideas are simply struck down before even being tried so that teachers and their

time may never be taken advantage of. It is often the case that to protect such a broad swath of humanity, rules and regulations do not allow for innovation or creativity.

Professional development needs assessment survey.

This district generated online survey was distributed in January 2016 to inform the planning for PD in the 2016/2017 school year (Appendix E). The survey's aim was to measure the overall quality of PD, the content of PD, the preferred format, and ongoing support. Out of 797 surveys delivered, there were 440 responses, or a response rate of 55%. Teachers at the elementary level had a 34% response rate. The key takeaways from the survey had to do with quality of PD, a general overview, possible improvements in PD, and preferences for optimal learning. According to the survey results, 83% reported PD in the district as excellent or good, and 73% said the PD had increased their skills. A majority of participating educators (82%) said they learned from each other during PD offerings, and 77% reported they had incorporated these new instructional strategies into their professional practice. Even though 77% reported adopting these strategies, only 57% believed that what they had learned in PD offerings actually raised student achievement. A significant majority of respondents (89%) indicated a desire for time for collaboration with colleagues after the PD session.

When prompted to suggest possible improvements for district PD, 50% cited the need for follow-up training, while 46% would like ongoing training opportunities. When teachers were asked about PD choice, 49% suggested they would like more input in PD topics. In terms of preferred time for PD, participants ranked after school as their top choice. During the school year, fall (36%) was the preferred choice, followed by winter (34%), summer (22%) and spring (8%). When asked how teachers learn best in the context of PD, 89% responded they learn best in a small group setting, as opposed to just 7% in a large group setting and 4% in a one on one

setting. The opinions and preferences displayed in this online survey can begin to illuminate the components of high-quality PD that best support teachers to pursue mastery in their practice.

Focus Group Interview

The focus group interview was held on May 14, 2019, at a nearby restaurant. Out of the seven teachers who originally participated in the individual interviews, five participated in this interview; T1, T2, T4, T5, and T7. The interview took 54 minutes and the interview questions centered around teaching and learning, how PD is structured in the district, and possible areas for improvement (Appendix C). The interview opened by discussing norms for the interview and having all participants introduce themselves, and describe their current positions in education (Table 2). After introductions, the discussion commenced.

What is most valuable about working in this district?

The teachers who participated in the focus group cited available resources as an asset to working in this district. T5 spoke of the excellent books and the availability and accessibility of a leveled library. She furthered this sentiment by explaining that the availability of better resources is equal to more preparation (prep) time since she is not using her prep to locate or create materials for her students. In addition, prep time could be used for conferring with the school literacy coach. Others mentioned human resources, like social workers and school psychologists as valuable. T2 relayed the idea that at her former district, social workers were shared between buildings and were thus not always readily available.

Another entity mentioned as valuable was the amount of opportunities that are offered to all staff. T5 spoke of the volume of PD offerings throughout the year and reiterated the presence of support staff at each building. T7 mentioned the alignment of PD in this district and how much that allows for deeper learning and application into the classroom. She spoke of how in her

former district, the PD felt shallow and disconnected. She said, "...but what really frustrated me was, at the end of the year, I felt like I hadn't gotten any better as a teacher." T4 added that he valued the organization in the district. He described an organization where "everything has its place and every place is facilitated by a person." In addition, he spoke of how the district departments and even the district website are designed for easy and clear accessibility. Finally, these teachers felt that they had a voice in the district. When they wanted to raise questions about anything to district leaders, they reported feeling listened to and valued.

What is problematic about working in this district?

The idea of broader collaboration among district teachers was discussed as an area that could improve building teacher pedagogy. The thought of allowing time for cross district grade levels to explore each other's teaching practices was an idea that these teachers felt would be innovative and positive. T4 added that this kind of collaboration could reform assessments that seem vague or purposeless. He feels that some of these assessments are simply implemented because they have always been done that way and that no one quite remembers why.

There was much discussion around closing the race-based achievement gap, and how the district has supported teachers in this endeavor. Many of the participants felt that they have had a lot of PD and discussion on this topic, but they still do not know what to do to address its closure. T1 said, "I don't think, as a district, we've got a clear focus on that yet." T7 offered, "...how do we actually teach in a way that helps everybody succeed, regardless of what we might predict about them?" T4 felt that his building is beginning to address some of the strategies that might be working to close the achievement gap. He mentioned that one of his buildings "strategic goals" is tied to closing the gap, and added, "...so we're constantly circling back and coming up with interventions that we're trying...I feel like we're aware of it, and have

action steps to get there.” Lastly, T7 and T2 brought up the idea of the personalization of PD in a district this size. In an effort to keep PD aligned and integrated, the offerings are sometimes too general to feel relevant and personalized.

Highly effective professional development.

In this district, as part of the state’s QComp law enacted in 2005, courses are offered on a range of educational topics. Some are focused on content and some are designed to address behavior management, as two examples. These courses are teacher designed and taught. In the fall, these courses are offered in a course catalog and teachers can register for what is of interest and relevance to them. Teachers are paid for their time to both take them and teach them. These courses, called Academy of Educators (AE) a pseudonym, were cited as important and powerful examples of authentic and powerful PD. T4 spoke of the built-in time to reflect on and revise what had been taught in these courses, and the fact that they accommodate teacher choice. He said, “...you have an opportunity to brainstorm ways to make it better, to tweak it. Then you get to put it into practice again, so it's almost that immediate getting to it...” Another example of PD that was noteworthy was the implementation of Lesson Study two years ago. Lesson Study allows teams of teachers to develop and research a lesson around a problem of practice, teach while observing the lesson, then revise and reteach the lesson, all the while building on their own pedagogy.

An attribute mentioned that is a facet of any good PD is time for implementation and collaboration after the session. Related to this idea of time for implementation is the time of year in which the PD occurs. T2 mentioned a two day workshop on behavior management over the summer that had a lasting effect. She offered how open her mind was to new learning in the summer. This PD also offers frequent, ongoing coaching over the year, that enables effective

application in the classroom. In addition, the overall PD was broken down into actionable steps. She said, “I had two days in the summer when I was free...I could fully immerse myself...[it] was the most impactful because I was given little bits and pieces to work on, and not this giant agenda...”

A type of job embedded professional development also cited as highly effective is that of coaching. This district offers peer coaching as part of its adherence to the state’s QComp law, and literacy coaching in select buildings. T5 described her work with the literacy coach when she said, “[The coach] has been in my room and seen my whole group, my small group...right after my reading instruction I have prep. She’s coming immediately in and we’re talking about it right away...it’s not a presenter on a stage, it’s what did I do that was effective for learning, and what could be improved.”

Are you a better teacher now?

The teachers that participated in the focus group interview all agreed that while they do believe they are better teachers than when they started, the term “better” is not how they would describe their own improvements. T2 described herself as a stronger teacher, while T1 explained the way she understands teaching now as opposed to five years ago. T1 was a peer coach in the last five years and talked about the impact it had on her own teaching pedagogy. She said, “I got back into the classroom, and I realized what I needed to do with my lessons to engage kids...There’s so much more purpose and intention to what I’m doing than what I did even five years ago.” T7 remarked on how her understanding of what makes a teacher excellent has changed over the years. She said, “...my favorite thing about my job is, I’m never going to be at my peak. There’s always something I can get better at...” An important element of focus group interviews is that through discussion, knowledge can be built in an inductive, constructivist

fashion. This is illustrated several times throughout the interview, but pointedly here, when T4 said, “Listening to everyone, the word that I was thinking of to replace ‘better,’ was evolved. I feel like I’ve evolved so much.” Finally, T5 mentioned how her understanding of the Gradual Release of Responsibility, or the way a teacher can guide students to independence (Pearson & Gallagher, 1983) has transformed the way she approaches the profession. She mused, “the learning is going to come from them actually doing it and not me trying to do it for them because I’m looking for a perfect result, has made my classroom and my life easier, and my students learn more.”

Research based teaching strategies.

One of the questions in this interview was, “*Are you more likely to try implementing a teaching strategy when it is research-based?*” To this there were two bodies of thought. Several of the teachers felt that the term “research-based” does not automatically make something better or more authentic or more worthy of trying. They felt that one could find research to back just about anything, so just because a strategy is research based does not necessarily make it worthy of teaching and learning. Alternatively, or perhaps building onto this original thought, is the idea that there are several characteristics (research based being one of them) that compel teachers to engage in certain teaching strategies. T7 put it this way when she said, “...research-based could be a lot of different things, but if it aligns with what I know about kids, and what my beliefs are, and the resources that I’ve trusted in the past, then it’s like gold to me...I’ll modify as needed for each kid.” During the course of this focus group interview, various types of PD were discussed and evaluated in the district as well, with general agreement that more PD that addresses social emotional learning would be beneficial for all teachers, and that PD that is engaging and timely

is an important motivator for teachers. Finally, participants were asked to reflect on the most significant things we talked about during the interview.

Significance.

Upon reflection of some of the most important things discussed, four entities came to light. The first was the importance of teacher choice and voice. As cited earlier, teachers felt they were listened to in this district, and when they could choose what they would learn, the PD became instantly relevant. T4 tied together the significance of choice and the way he considers himself a better teacher when he said, “The choice has allowed me to be more reflective, which in turn, makes me an evolved teacher.” T1 also spoke about the value of choice when it comes to professional development when she said, “I think that choice [is significant] because it’s the direction that we want to go, where our passions are, what we believe in.” Another topic exposed as weighty was that of a teachers positive mindset. When explaining what can make PD valuable, T2 agreed with T1 about choice but then went on, “A choice, but then also, your own personal mindset has a really big impact on how productive it is.”

Another important discussion point was that of the importance of timing. This can be broken down into two subtopics. The first could be understood as the right time. For example, during the summer when teachers have more time to immerse themselves in learning, or during a few days in the school year devoted to PD. A caveat here is that there are many different opinions of what constitutes the “right” time. However, the discussion from this focus group seemed to be in agreement that dedicated time to PD during the summer or workshop days during the year was vastly preferable to before school staff meeting, for instance. The other definition of time is the idea of having enough of it to implement the new learning. Whether there is time built into a PD session that allows for collaboration and planning, whether teachers

are given dedicated time immediately following a session for implementation, or whether ongoing follow up and feedback is part of the session, ample amounts of time are necessary for PD to impact a teacher's developing pedagogy.

Summary

In order to answer the research question, several sources of data were collected over the course of the 2018/2019 school year in two elementary school buildings in a large upper midwestern school district. This qualitative case study employed a survey, individual interviews, document analysis, and a focus group interview to examine the question *What connections exist between high quality professional development and teachers who continually pursue mastery in practice?* The data was collected and organized by way of audio recordings and transcriptions, by handwritten notes and graphic organizers, in order to illuminate how teachers are motivated to develop their own pedagogy through high-quality professional learning. The results of the data have been examined and categorized, explained and pondered.

The focus group interview generated important discussions around high-quality PD and the types of learning that motivate teachers. This data provides rich thoughts exploring the research question. Participants were asked to engage in dialog that would articulate the advantages and disadvantages of the PD structures in their district. They were asked to reflect on how they have changed as teachers and whether or not they believe the term research-based necessarily equals worth. The unique tenet of the focus group interview allowed the dialog to create a new understanding of many of these topics; that is, each participant offered ideas and opinions that created a distinctive definition of the items discussed. In the last chapter, the conclusions that have been derived from careful study of this data will be shared.

CHAPTER FIVE

Discussion

This qualitative study was designed to answer the question, *What connections exist between high-quality professional development and teachers who continually pursue mastery in practice?* The data collection methods of surveys, individual interviews, document analysis, and focus group interviews were used to explore the question. This chapter discusses key understandings, implications of the findings, limitations of the study, recommendations for further research, and concluding thoughts.

Key Understandings

Authentic professional development.

There are many models of PD implemented in school districts across the country and around the world. These models include workshop, in-district, out-of-district, and summer institutes. They have advantages and disadvantages depending on who is being asked. There is little consensus on which *models* effect teacher and student learning (Kennedy, 2016). The research suggests, however, that PD can be decomposed into attributes, and that these attributes are indicative of effective PD. Researchers are in considerable agreement on the identification of these attributes. Some of the most important are that PD is sustainable and ongoing, collaborative, includes active teacher learning, and that it provides coaching and extra support (Darling-Hammond, Hyster, & Gardner, 2017; Desimone & Pak, 2017; Macias, 2017; Parsons, Parsons, Morewood, & Ankrum, 2016). When these characteristics are present in PD, engagement is high. This elevated level of engagement is crucial because engagement is foundational for student and teacher learning (Kennedy, 2016). The data collected confirms what the research says about high-quality PD. The participating teachers in this study illustrated how

these characteristics can make PD accessible and actionable for teachers and how the lack of these characteristics can deem the PD of little worth.

Teacher motivation.

Teachers who are continuously pursuing mastery are lifelong learners; the very act of developing their pedagogy is its own reward. Senge (2006) put it this way when he wrote:

People with a high level of mastery are able to consistently realize the results that matter most deeply to them...they approach life as an artist would approach a work of art. They do that by becoming committed to their own lifelong learning. (p. 7)

This is similar to Pink's (2009) description of what truly motivates us. He references three terms:

- autonomy, or the desire to direct our own lives
- mastery, or the urge to get better at something that matters, and
- purpose or the yearning to work for something larger than ourselves

Participants in this study demonstrated these three qualities as they answered interview questions and discussed PD as a focus group. They mentioned the need for purpose and focus in PD, as well as the value of continually learning new strategies and ideas for instruction. When consideration is given to the notion that the expertise of teachers is directly linked to the success of students (Allington, 2002; Clay, 1993; Stewart, 2014), it is crucial to understand the connections between teacher motivation and PD that engages participants and lifts teacher pedagogy. There is a reciprocity in the idea of teachers being lifelong learners. When teachers become students, the learning environment itself becomes a place where teaching and learning are in a symbiotic relationship, and raised student achievement is the outcome.

Another way to think about the connections between successful PD and teachers who pursue mastery are what motivational theorists Deci and Ryan (1985) describe as the three needs that all humans have: 1) competence, or an understanding of how to get better at something; 2) relatedness, or the need for belonging; and 3) autonomy, or the ability to self-initiate. These three entities form the basis of the Self Determination Theory (SDT) and are believed to be the predominant motivators for people. They are also apparent in the data collected for this study. One of the participants in the focus group interview talked about the fact that she would never be “at her peak,” that there would always be something in her teaching craft that she could improve.

Collaboration, was cited many times as critical for the success of PD, and the ability to choose PD was also very well represented in the data. In fact, across all four modes of collected data, teachers agreed that the most important aspects of PD are choice, collaboration, relevance, and ongoing coaching related to the PD. Teachers cited the need for more time devoted to PD to be crucial as well.

Development of a structure.

Teachers by-and-large know that continually pursuing mastery in practice will raise student achievement and enrich their lives professionally. These same teachers want their students to succeed academically, socially, and emotionally. However, the conditions in PD to support teachers to continuously develop their pedagogy are often lacking (Kennedy, 2016). Regularly, there is not adequate time allowed for PD and consequently, follow-up feedback and coaching. At times, the PD offered does not seem relevant to teachers, or they feel they do not have a choice in what to learn. At other times, collaboration among colleagues is not allowed or encouraged during a PD session. These negative characteristics of PD, referenced in

the literature review and in the data collected, hinder the ability of teachers to engage in PD. When there is little engagement, optimal learning will not occur. It would seem that building a PD structure that is engaging, collaborative, ongoing, and embedded in the school day would encourage and support educators to pursue mastery in practice. This study has made assertions about the components needed for high-quality PD. A case can be made that PD that is job embedded would alleviate many of the obstacles cited in the research and by the teachers that participated in this study. This research provided evidence that when PD is job embedded, not only is it more efficient, but more importantly, it is highly engaging and relevant for teachers. When teachers can learn in the context of their teaching environment, and with their students and colleagues, the ability to develop their pedagogy is solid.

Another consideration for continuously improving the practice of educators is the race based achievement gap. Its very existence implies that the way in which educators are teaching and responding to children of color is missing the mark. It is an imperative that this gap be closed. Since we know that student achievement is directly tied to teacher expertise (Allington, 2002), the aim of the teaching profession must always be the pursuit of mastery in practice.

Evaluation.

One might wonder why such a framework for Job Embedded Professional Development (JEPD) is not common. The research cited several reasons. Public policy and practice are not in consensus when it comes to why and how to best educate teachers, and these policies and practices often dictate decisions at the district level. Darling-Hammond et al. (2017) cite four obstacles at the district level: 1) an inability to identify PD needs, 2) knowing which approaches would be the most effective, 3) implementing approaches with fidelity, and 4) assessing PD outcomes. Other reasons at the school level include a lack of resources, time, and classroom

management issues. Lastly, innovation can be difficult to instigate and achieve when a majority of the students in the studied district are performing well. All of these conditions have been barriers to developing a structure of JEPD. However, developing this structure would go a long way to the realization of JEPD as a normalized system in our schools. Desimone (2009) proposes creating a conceptual framework to support and explain a structure of JEPD. The reasons cited for this align with much of what has been discovered in this study. Among these reasons are:

- research is in agreement on what makes PD effective,
- because of this agreement the PD is measurable,
- working from a conceptual framework could elevate PD from a craft-oriented practice to one of strong theoretical grounding.

Desimone (2009) makes the claim that creation of a conceptual framework would make evaluation a possibility and that once the structure can be evaluated, replication is possible. The notion that a PD structure can be replicated is important, especially when there is much consensus about what makes PD highly effective.

Coherence.

Finally, the need for coherence seems certain for a strong JEPD structure. Two perceptions having to do with PD in the district indicate a need for this. The issue of time was mentioned often in all four sets of data. Teachers feel they do not have time to engage in PD. At other times the issue of time had more to do with when PD was scheduled. Some participants did not like PD to be delivered during before school staff meetings, while others cited after school sessions as problematic.

The second perception was that of choice. Again, in all the data collected, choice in PD was cited as crucial for teacher engagement. This is interwoven in what the motivational

theorists tell us about the need for autonomy. For instance, Pink (2009) describes autonomy as the desire to direct one's own life, while Deci and Ryan (1985) describe autonomy as the ability to self-initiate. Both of these definitions are analogous to the notion of choice.

It seems certain that choice must be a factor in developing any structure of PD. This idea of choice, though, is an inherent obstruction to an integrated, streamlined structure of PD because teachers need different types of it at different points in their career. If a PD structure is to be coherent, then allowing for teacher choice within a scaffold that gives equal weight to relatedness and purpose is necessary. Choice must be allowed for, but in balance with relatedness and purpose. Deci and Ryan (1985) cite relatedness, or the need for being in relationship with others, as one of the three human motivations. Pink (2009) cites purpose, or the need to do what we do for something larger than ourselves as another powerful human motivation. If autonomy, relatedness, and purpose can be woven into the fabric of a PD structure, learning will enrich a teachers profession as well as raise student achievement.

Implications of the Findings

The findings of both the literature review and research conducted in this case study confirmed much of what was suspected about high-quality PD and its connections to teacher motivation. Unique to this body of information is how these two phenomena can influence and shape each other. The attributes that are a hallmark of effective PD have been well established in the research, and corroborated by the participants and documents included in this study. Many of these attributes also define the essence of JEPD. These include:

- situated
- actionable
- sustainable

- ongoing and provides coaching and feedback
- enhance teacher pedagogy
- acknowledge learning as a social process
- collaborative

Research has also shown what motivates teachers to continuously develop their pedagogy.

Teachers with a high level of autonomy, purpose, and mastery, as Pink (2009) described, are self-directed, devoted to becoming better at something that matters and are able to connect this quest for excellence to a higher purpose.

Job Embedded Professional Development has much of what has been identified as crucial for high-quality PD. Motivational theorists have convincingly explained what truly motivates human beings in the long-term, and in ways that create rich and meaningful lives. It is at this intersection of job embedded high-quality PD and the understanding of what motivates educators to be their best, that teacher expertise will be continuously nourished.

Darling-Hammond et al. (2017) explain implications for the development of a PD model resulting in changes in teacher practices that improve student outcomes. These implications include the need to adopt standards for the new structure, redesign the school calendar, conduct regular needs assessments, and identify teacher mentors and coaches. Considering the time and effort needed to achieve this overhaul of PD structures, it can seem daunting. A structure, such as this seems far from reach when it must be created, evaluated, and replicated before it can be widely experienced. But perhaps moving ahead in small ways is better than not moving ahead at all. The schools involved in the study have the tools to implement a Lesson Study, and they have the ability to devote some monies to the presence of instructional coaches whose purpose is purely to coach and not to evaluate. They have gifted teachers who seek to improve their craft

while observing others and while being observed. They have teachers yearning for more time for collaboration, and they have thoughtful, dedicated administrators who can imagine innovative ways to allow for this. A PD framework where the enrichment of students, teachers, and all stakeholders is embellished and cherished may never be a reality if the first halting step is not taken.

Pink (2009) illustrates this idea of simply getting started when he lamented the fact that so many schools and businesses operate in the old system of carrots and sticks – where people are motivated by either incentives or punishments. He encourages organizations to develop practices that will highlight the three motivators he espouses. He wrote:

So we have a choice. We can cling to a view of human motivation that is grounded more in old habits than in modern science. Or we can listen to the research, drag our business and personal practices into the twenty-first century, and craft a new operating system to help ourselves, our companies, and our world work a little better. It won't be easy. It won't happen overnight. So let's get started. (Pink, 2009, p. 79)

Limitations

There are several limitations of this qualitative case study. The first is that of the small number of participants in the individual and focus group interviews. The online survey distributed as part of this case study drew a 62% response rate, and from that survey, a total of 30 teachers submitted a form stating they would be willing to consider participating in the individual and focus group interviews. Eight were chosen to best represent the number of years in teaching, gender, grade level, and teaching specialty. Of these eight, seven continued to participate in the individual interviews. Of these seven, five participated in the focus group

interview. While the representation of possible teaching experiences for the interviews was fairly robust, a total of seven does not represent a total of just under 900 teachers in the school district.

The second limitation was that of the teachers who participated in the individual and focus group interviews. While the study's aim was to find connections between high-quality PD and teacher motivation in an effort to support the many teachers who may be unmotivated or overwhelmed, the participants in this study were likely all motivated teachers. This assumption is based on the fact that they were all willing to offer a considerable amount of time to be part of a research study with no incentive other than the reward of rich conversation around teaching and learning.

A final limitation of this study is that while there were two schools participating, the data collected was drawn from only one school district. Thus, perceptions of PD and teacher motivation included in this study would be difficult to generalize. In addition, a majority of the data was collected over the course of the 2018/2019 school year. The initiatives implemented in various school years will inform teacher attitudes and perceptions of PD. For instance, this district initiated three separate behavior intervention programs in an effort to address a teacher need for behavior management in 2018/2019. This lack of focus was difficult for some teachers and shaped their perceptions of PD.

Recommendations For Future Research

The research identifying the characteristics of high-quality PD that supports teachers in the continuous development of pedagogy is largely in agreement. The need to move the field forward by creating a PD framework that can be replicated has also been proposed (Desimone, 2009). There remains, however, barriers of policy (Darling-Hammond, et al., 2017) and practice

(Tooley & Connaly, 2016). Research that can address these barriers in order to build the framework is still needed. Recommendations for further research include:

- Identify and create a structure for PD that is able to be evaluated and therefore replicated.
- Examine the ways in which PD motivates teachers to pursue mastery and shift that system away from one based on incentives, and towards a system based on intrinsic motivation.

When a PD structure combines the identified characteristics of authentic and effective PD with the intrinsic motivation of teachers and students to be lifelong learners, elevated and uniform achievement will be the outcome.

Concluding Thoughts

This qualitative case study was undertaken in order to answer the question, *What connections exist between high-quality professional development and teachers who continually pursue mastery in practice?* The literature review and the participating teachers identified characteristics of effective PD, and illuminated how people are genuinely and sustainably motivated. As I contemplate what this data is suggesting, two thoughts come to light. The first is the need to develop structures of PD that are job embedded. The research and the data collected by means of surveys, individual and focus group interviews, and document analysis identified two of the biggest obstacles to high-quality PD. Two obstacles, time and the need for collaboration, were cited in the data. When a PD model can be designed in a way that is job embedded, it could address and eradicate these obstacles. When PD is situated in classrooms with colleagues and students, it is an example of JEPD. When PD employs the work of coaches that provide ongoing feedback and support in the course of the school day, it is an example of

JEPD. When teams of teachers engage in Professional Learning Communities that closely observe what students already know and what they still need to learn, it is an example of JEPD, and when teachers collaborate around problems of practice and observe each other teach, it is an example of JEPD. Developing a framework for PD that is job embedded in the school district studied could begin to bring down the barriers of insufficient time and the need for more collaboration in PD.

The second thought has to do with the pursuit of mastery. Teachers generally want the best for all their students, and many teachers believe in the power of effective PD to improve their practice. It has long seemed a curiosity that many teachers are hesitant to participate in PD or engage in the very practices that research has shown to enhance teacher effectiveness and improve student outcomes. The examination of what truly motivates humans has suggested a way to address this phenomenon. Much of the PD in the district studied is incentive-based. Teachers are paid to work with their peer coaches. Teachers are paid to participate in and teach Academy of Educator courses. Teachers choose from a plethora of courses for re-licensure and to advance their career, thereby earning more money. There is very little PD, however, and certainly no comprehensive framework for PD, that teachers engage in simply to pursue mastery in their practice. The motivational theorists cited in this paper propose conditions that motivate all humans, all of which are intrinsic. When motivations are intrinsic, they become sustainable. It has been established that using rewards to get people to behave in a certain way are often successful in the short term, but actually stunt creativity and cause people to lose long-term interest (Deci & Ryan, 1985; Deci et al., 1991; Pink, 2009). Pink (2009) wrote:

Try to encourage a kid to learn math by paying her for each workbook page she completes-and she'll almost certainly become more diligent in the short-term and lose

interest in math in the long-term...People use rewards expecting to gain the benefit of increasing another person's motivation and behavior, but in so doing, they often incur the unintentional and hidden cost of undermining that person's intrinsic motivation toward the activity. (p. 37)

When teachers have autonomy, purpose, relatedness, and mastery, motivation is intrinsic and thus, their pursuit is its own reward. The engagement and fulfillment that teachers are compensated with becomes the only reward needed, creating a sustainable way to keep getting better at teaching not only because it feels good to do so, but because it fosters the development of both teachers and students. Could it be that the more PD is incentivized, the less likely teachers are to engage in the pursuit of mastery? Alternatively, when teachers are driven by the desire to reach their highest aspirations, teaching and learning become authentic. When a framework for Professional Development is developed that supports teachers as learners, high and uniform student achievement will be the result.

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APPENDIX A: Survey

Professional Learning in Sunny Valley Public Schools (Pseudonym)

The purpose of this survey is to gather teacher perceptions of their preferred methods of ongoing professional development, as well as their perceptions of professional development models that best transfer to actually teaching children.

There is minimal risk to you by participating in this survey and every effort will be made to keep your individual responses strictly confidential. Your responses will not be provided to any other person or group. Your responses are important to the scope of this research. If you have questions about participating in this survey, please contact Ann Carlson at XXX-XXX-XXXX, or my faculty advisor Karen Moroz at XXX-XXX-XXXX.

Please complete this survey by February 4, 2019

Thank you for your time!

* Required

1. I consent to participate in this survey

Yes, please proceed

2. How many years have you been working in education?

1 - 3 years

4 - 8 years

9 - 12 years

13 or more years

3. Which of the following best describes your position?

Classroom Teacher

Specialist

Administrator

Other:

4. How important do you think ongoing PD is to your professional practice?

Very important

1

2

3

4

5

Not important

5. Do you think there is a number of years experience in education when PD becomes less relevant?

No

Yes
 Maybe
 Other:

6. Which kind of PD do you enjoy the most (see definition above)?

In-district
 Out of district

7. Which kind of PD most often transfers to your classroom practice?

In-district PD
 Out of district PD

8. What are barriers to engaging in PD?

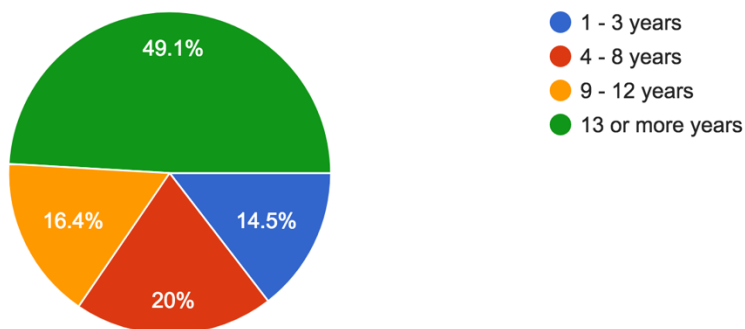
9. Please rank the following elements of PD in order of importance: *

Facilitator content expertise
 Ability to sustain practice and receive ongoing feedback
 Teacher choice of PD
 Most Important

Survey Results:

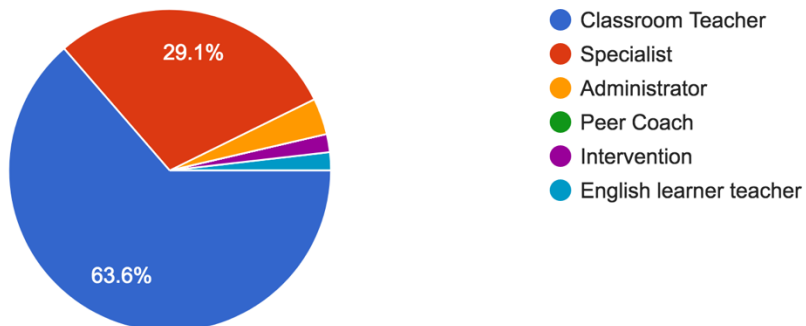
How many years have you been working in education?

55 responses



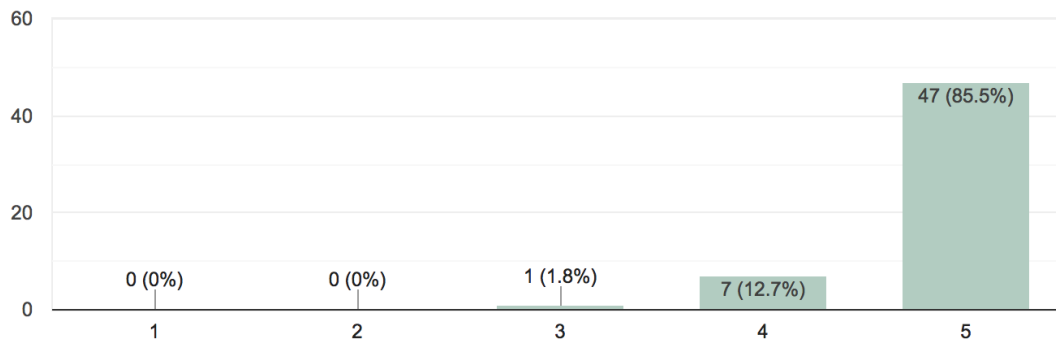
Which of the following best describes your current position?

55 responses



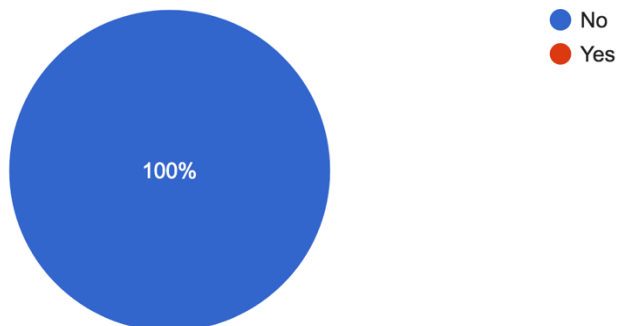
How important do you think PD is to your professional practice?

55 responses



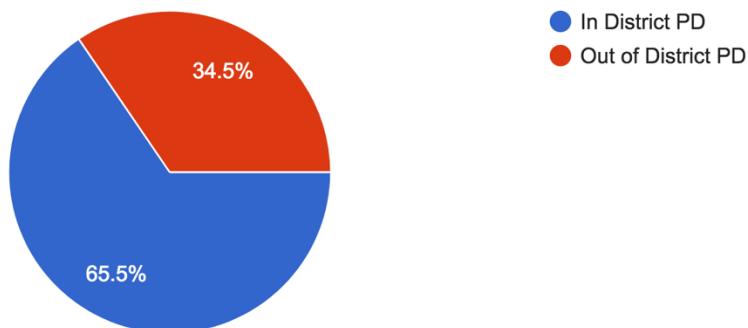
Is there a level of teacher experience when PD is no longer as necessary?

55 responses



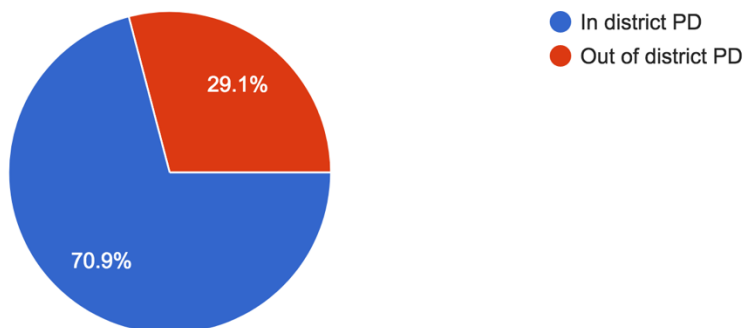
Which kind of PD ("in-district" or "out-of-district") do you enjoy the most? Examples of "in-district" PD are AWE co...te, or Jennifer Serravallo workshops.

55 responses

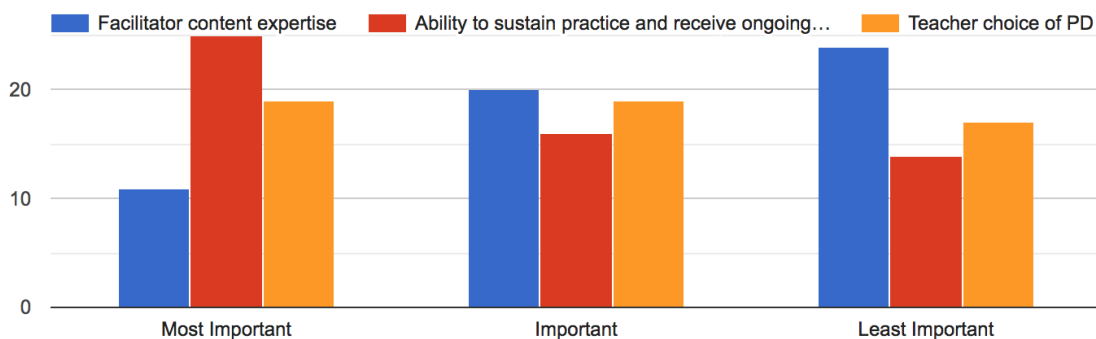


Which kind of PD most often transfers to your classroom practice?

55 responses



Please rank the following elements of PD in order of importance



What are the barriers to engaging in PD?

50 responses

Time

When the PD occurs at inopportune times i.e. right before school starts when we are excited and focused on putting our classrooms together, the day after conferences when we have little cognitive power left, at a staff meeting in a limited amount of time. If we could have specific days set aside for PD that are not connected to conference, back to school, or the day before a long break I think it would be more beneficial to our productivity.

Another barrier is when the PD does not connect to what we teach but because it connects with most, then we all get it. If I will not be using the content, then I will not be actively engaged.

Poor presenters or feeling like the topic doesn't pertain to me

Making it relevant (specialists sometimes aren't considered)
 Timing (after conferences is tough when energy is low)
 Buy-in (do we believe what we are learning about will make us better?)
 Initiative Fatigue (is it "something else" we need to do?)
 Immediacy (is there a part of this I can do now?)

The calendar and schedule of the day, competing demands for teachers' time

Time and money

Cost and enough people attending so when you share the information there are multiple perceptions.

too many initiatives, relevancy to content or experience, time to implement

Having to get a sub to cover my class while I engage in PD

Time usually—I would love to do more PD during the summer, but having the time to fit it in is difficult. Cost would also be another barrier if I was paying for it myself.

Time & money

Cost and taking time away from the classroom to attend.

I never do out of district because I don't know protocol if I want to partake in the PD. For example, do I pay for it or does the school?

The length of PD and the amount of information you receive can be daunting. As a new teacher, after all of this learning, my body is ready to get into the classroom and try everything I just learned. While my body is go go go, my brain is still trying to file the conversations, the questions and the discussions. I rarely have enough time to really turn what I learned into something that works for me and my students and that is based on the crazy amount I take in as a 2nd year teacher! I want to put everything I learned into action, but time is not always on my side.

Content area, knowledge needed at particular spots in teaching career, time, alinging with what's going on in ten building.

timina=workshop week. sometimes minimal follow-up after PD

Format of the session (lecture style versus small group tables) and time.

I am usually worried about all the things on my to do list. It can be hard to "disconnect" and avoid parent emails. I also have matured in my practice so some PD meets my needs and some PD is below my needs.

Too long, seminar, not relevant, too broad

The ability to converse with colleagues. If I can't talk to my team or process out loud what I'm learning then my engagement suffers.

The follow through. It is great to learn something at PD than I forget or it stays in my notebook. I like being held responsible to practice what I learned in my classroom whether this is teaching my grade level or having someone check-in on me.

money - getting effective outside district presenters is costly.

Repetitive Information in in-district PD workshops, when information/strategies presented seem far out of reach of being realistically applied in current class environment/pod setting

Information that we have already received makes it difficult to engage in repetitive classes. Also when strategies being represented are difficult to implement in the POD setting.

Time to apply the new information and follow up of the new information.

It is extra time and effort. It might not always align to what one one wants vs. what one actually "needs." Human nature gravitates to what is easy and what validates what we already know. However, growth and learning come out of struggle, something that is often perceived as inherently bad and therefore unintentionally avoided. People need to be willing to accept feedback and to recognize that the questions they have about something should not be avoided to truly improve. Often, PD is not aligned with building and district goals and practices. Choice is important but it often takes priority which can cause consistent PD and effective team learning to be shallow instead of deep. Districts also do not put enough time into systematic embedded opportunities to learn and rely on a full day here or there within the calendar with an imbalance of content learned with actual time to plan and implement what was to have been learned. This lack of follow up will inevitably be a large barrier in building capacity.

Tiredness. Long days followed by additional hours to engage that same evening or the following day.

time

PD that is held in the afternoon after a morning of meetings, PD, or students is challenging to engage in because I am not as productive or focused in the afternoon. To combat that barrier, I prefer morning PD sessions with time in the afternoon to work and think about how to implement my new learning. In addition, some PD is not as relevant as other PD sessions. When that is the case, I find it hard to keep an open mind and to figure out a way to make the PD more applicable to my teaching and learning.

The classic - time to bridge what you learned to what you will actually do, and consistency in your efforts to make a particular area of your teaching improve.

money, time, closed minded staff

Cost of PD/sub/mileage/lunch

Time to plan and implement.

Time, sub coverage

Being held accountable with my new learning

Time - and timing of PD in our schedules - PD should not be crammed in at the very beginning of the school year when teachers are setting up their classrooms or at a meeting before school. It's hard to focus on what is being presented when you are overwhelmed with what is waiting for you to finish in your classroom for that day/year.

We need to declutter our schedule of unnecessary meetings - such as our annual district-wide meeting at the beginning of the school year - to make room for what is really important.

Redundant, "sit and get", no choice

One and done PD without followthrough conversations, shareouts, and action as a team/PLC.

I think that sometimes the district and the teachers are not on the same page about what to focus on during PD days. I also think it would be important to possibly start differentiating PD...some teachers have a lot of experience with certain subjects and PD is often times at a more basic level.

Time, mindset, PD that might not feel relevant to my current position

As a specialist, some PD doesn't pertain to me. I appreciate the district allowing our PLC to create our own PD, when applicable.

It is hard to sit and listen for so long when we are used to moving around and talking with students. :)

Time to translate new ideas to the current flow of the school year

how applicable it is to my position

Poor calendar planning, never giving time for us to process or create a plan for implementation, presenters who don't give any hands-on application, initiative fatigue, burnout, feeling overworked, never having enough time to do our actual jobs.

When you are done learning, there is often no time to implement properly

Barriers to engaging in PD include time to attend without missing student groups, time to implement, time to reconnect with other staff to follow up about PD.

Spread out throughout the year/when it takes place.

time to put into practice

APPENDIX B: Interview Questions

1. Can you describe your teaching career?
2. Try to remember your teacher preparation program? What from that program transferred in to your professional practice?
3. Do you ever find it difficult to engage in Professional Development (PD)?
 - a. Yes: What is the biggest barrier to engaging in (PD) for you?
 - b. No : It is difficult for many teachers. Why do you think it isn't difficult for you?
4. Can you remember and describe PD in our school or district that had an impact on your professional practice? What were the attributes?
5. Can you remember and describe PD *outside* of our district that had an impact on your professional practice? What were the attributes?
6. Can you remember and describe PD in our school or district that did not impact your professional practice? What were the attributes?
7. Can you remember and describe PD *outside* our school or district that did not impact your professional practice? What were the attributes?
8. Is there PD that you know would be beneficial for you that is not attainable for any reason?
9. If you could choose PD to improve your teaching practice this year – which of these would you choose?

- a. Content specific PD
- b. Social/Emotional PD
- c. Student Engagement PD
- d. Formative/Summative Assessment PD

10. Recent research suggests that PD that is embedded in our day to day work with colleagues and students may lead to a higher level of enactment than does “outside” PD like seminars or workshops. Why or why not do you think this is so?

APPENDIX C: Focus Group Interview

Welcome: Introduce facilitator and assistant.

Topic: Explanation of how the results will be used

Guidelines: No right or wrong answers

Tape recorded, one person speaking at a time

First name basis

No need to agree, but need for respect of differing viewpoints

Rules for cellphones, etc.

Role of moderator is to guide discussion

Focus Group Questions:

1. Please share your role and your building. How long have you been in this position?
2. What do you value the most about working for Sunny Vale Public Schools (SVPS)?
3. What about working for SVPS is problematic for you?
4. Think back over the last two years of teaching. Can you identify PD that you found especially useful (you incorporated it into your practice)? Can you identify the attributes of that PD that made it especially valuable?
5. Now, over the last two years of teaching, can you identify PD that did not impact your teaching practice? What were the attributes of that PD that made it irrelevant or not useful?
6. Are you a better teacher now than you were when you started? If so, how has your practice changed to reflect this?

7. Are you more likely to try implementing a teaching strategy when it is research or evidence based?
8. Of the 4 areas that PD generally tries to address, which do you think is the most relevant for most elementary teachers in SVPS? Which is the most relevant to you?
 - a. Content
 - b. Behavior
 - c. Student engagement
 - d. Demonstration
9. Of all the things we've discussed today, which do you feel is most significant?

Brief oral summary

10. Is this an adequate summary?
11. Have we missed anything?

APPENDIX D: Letter of Informed Consent

***Informed Consent to Participate in Research*****Hamline University**

You are being asked to participate in a research study. This form provides you with information about the study. The Principal Investigator (the person in charge of this research) or their representative will provide you with a copy of this form to keep for your reference, and will also describe this study to you and answer all of your questions.

This form provides important information about what you will be asked to do during the study, about the risks and benefits of the study, and about your rights as a research subject.

- If you have any questions about or do not understand something in this form, you should ask the research team for more information.
- You should feel free to discuss your potential participation with anyone you choose, such as family or friends, before you decide to participate.
- Do not agree to participate in this study unless the research team has answered your questions and you decide that you want to be part of this study.

Your participation is entirely voluntary, and you can refuse to participate or withdraw at any time.

Title of Research Study: Finding the Connections Between Teacher Motivation and Job Embedded Professional Development

Student Researcher and email address:

Ann Carlson
xxx@hamline.edu

Principal Investigator (Faculty Advisor), Hamline affiliation/title, phone number(s), and email address:

Karen Moroz
Associate Professor, Hamline University
Kmoroz01@hamline.edu
651-XXX-XXXX

1. Who is funding this study? N/A

2. Has this research received consent from the organization/school/district where the research will be conducted? Yes

3. What is the research topic, purpose, and its rationale? This study seeks to define and describe the attributes of high quality professional development in public schools. Further it will search for the connections between teacher motivation and professional learning, since the development of teacher pedagogy is linked to raised student achievement. If we can understand what kind of professional development best supports teachers in the field, we may see uniform and high student success.

4. How many people will most likely be participating in this study? 8 – 12.

5. What will be done if you take part in this research study?

In this study, you will be asked to participate in two separate sessions. The first will be a 30 – 45 minute one on one interview with the researcher, Ann Carlson. This interview will occur at a time and place of your choosing. The second will be a focus group interview including the researcher and all those who were interviewed during the school year. This focus group interview will be held towards the end of the 2018/2019 school year, and you will be notified of the place and time in advance. Both the individual interview and the focus group interview will be audio recorded.

- **Screening to determine eligibility for the study:** Certified staff from two elementary buildings will be offered an online survey asking general questions about professional development in their profession. This survey will also invite participants to become part of the research by participating in an interview and focus group. The goal would be to have a sample size of 6 – 8 teachers. These teachers will be as diverse as possible in terms of gender, years of experience, race and ethnicity, and grade level assignment.

6. What is your time commitment to the study if you participate, and the duration of entire project? This study will be conducted (and concluded) in the winter

and spring of the 2018/2019 school year. The time commitment would be the 30-45 minute interview and the focus group interview, approximately 1 hour.

1. **What are the possible discomforts and risks?** By participating in this study, there is a small chance of loss of confidentiality, or discomfort in discussing aspects of your professional practice. Steps (in #14 below) will be taken to mitigate any of these risks.

Please contact me at xxx@hamline.edu or 612-XXX-XXXX or my faculty advisor, Karen Moroz, at 651-XXX-XXXX or xx@hamline.edu to discuss this if you wish.

2. **What are the possible benefits to you and/or to others?** This study may illuminate the way in which a learning organization can create the framework and supports that allow teachers the time and desire to continuously develop their own pedagogy in the service of raised student achievement.

3. **If you choose to take part in this study, will it cost you anything?** No

4. **Will you receive compensation for participation in this study?** No.

5. **What if you decide that you do not want to take part in this study? What other options are available to you if you decide not to participate or to withdraw?** Your participation in this study is entirely voluntary. You are free to refuse to participate in the study, and your refusal will not influence your current or future relationships with Hamline University or with XXXXXX Public Schools.

6. **How can you withdraw from this research study and who should you call if you have questions?** You are free to withdraw your consent and stop participation in this research study at any time without penalty or loss of benefits for which you may be entitled. If you wish to stop your participation in this research study for any reason, you should contact me at xxx@hamline.edu or 612-XXX-XXXX or my faculty advisor, Karen Moroz at xxx@hamline.edu or 651-XXX-XXXX. You should also call or email the Principal Investigator for any questions, concerns, suggestions, or complaints about the research and your experience as a participant in the study. In addition, if you have questions about your rights as a research participant, please contact Dr. Lisa Stegall, Chair of the Institutional Review Board at Hamline University at IRB@hamline.edu.

7. **Are there any anticipated circumstances under which your participation may be terminated by the investigator without your consent?** No

8. **How will your privacy and the confidentiality of your research records be protected?** Neither your name nor identifying characteristics will appear in the transcript or the report. All results will be confidential and anonymous. The transcript of the interview will only be seen by the researcher and the faculty/facilitators on the dissertation committee. The interview recording and written record will be destroyed

after my dissertation is complete and I have been awarded my Doctorate in Education Degree.

9. Will the researchers benefit from your participation in this study? The researchers will gain no benefit from your participation in this study beyond the publication and/or presentation of the results obtained from the study, and the invaluable research experience and hands-on learning that the students will gain as a part of their educational experience.

10. Where will this research be made available?

This research is public scholarship and the abstract and final product will be cataloged in Hamline's Bush Library Digital Commons, a searchable electronic repository. It may be published or used in other ways.

Signatures:

As a representative of this study, I have explained the purpose, the procedures, the benefits, and risks that are involved in this research study:

Signature and printed name of person obtaining consent
(Student researcher or PI)

Date

Title of person obtaining consent

You have been informed about this study's purpose, procedures, possible benefits and risks, and you have received a copy of this Form. You have been given the opportunity to ask questions before you sign, and you have been told that you can ask other questions at any time. You voluntarily agree to participate in this study. By signing this form, you are not waiving any of your legal rights.

Printed name of participant

Date

Printed name of parent/guardian if participant is under 18

Date

Signature of participant (or parent/guardian for participants under 18)

Date

Signature of Principal Investigator

Date

APPENDIX E: Sunnyvale Public Schools Professional Development Needs Assessment

Survey Questions

1. How would you rate the overall quality of the district's professional development?
 - a. Excellent
 - b. Good
 - c. Fair
 - d. Poor
2. How strongly do you disagree or agree with each of the following statements about the district's professional development training? As you respond, please think about your experiences last school year.
 - a. Accomplished workshop objectives
 - b. Were high quality
 - c. Were a good use of my time
 - d. Increased my knowledge or skills
3. How strongly do you disagree or agree with each of the following statements about the district's professional development? As you respond, please think about your experiences last school year.
 - a. The district provided sufficient funds and resources so teachers could take advantage of professional development activities.
 - b. Staff members had opportunities to learn from one another.
 - c. The district provided adequate time for professional development.
 - d. I incorporated strategies acquired in district-sponsored professional offerings into my instructional delivery methods.

e. The strategies learned in district-sponsored professional development directly improved student achievement.

4. What would improve district-sponsored professional development?

a. Higher quality

b. Increased alignment between site and district training

c. Increased district alignment of initiatives

d. More follow-up training opportunities

e. More funding for professional development

f. More ongoing training opportunities

g. More opportunities for staff to weigh in on PD offerings

h. More time for PD

5. Overall, how would you rate your learning environment during last year's district sponsored professional development offerings?

a. Overall, the environment for training is uncomfortable, unclean and/or disorganized and therefore does not support my learning.

b. Overall, the learning environment is adequate.

c. Overall, the learning environment is comfortable and supports my learning

d. Don't know

6. When thinking about future professional development training, which of the following delivery methods do you prefer?

a. After school training

b. Content area meetings

c. Blended learning

- d. Faculty meetings
 - e. Grade-level meetings
 - f. Independent action research
 - g. Job embedded during PLC time
 - h. Job embedded one-on-one training
 - i. Lecture followed by breakout session
 - j. Lecture only
 - k. Online learning
 - l. Teleconference
 - m. Weekend training
 - n. Workshop series
 - o. Other
7. When thinking about future professional development training, what time of year do you prefer?
- a. Fall
 - b. Winter
 - c. Spring
 - d. Summer
8. Please rank your preference for scheduling training when the training occurs outside the school day. Rank 1 is your most preferred and Rank 3 is your least preferred.
- a. After school
 - b. Summer
 - c. Saturdays

9. I learn best...
 - a. One-on-one
 - b. In a small group
 - c. In a large group
10. What type of support would you like to receive after a professional development session?
 - a. Time to collaborate with school colleagues
 - b. Access to additional resources
 - c. Additional support from school administrators/instructional coaches
 - d. Follow-up training(s)
 - e. Other

