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PROFESSIONAL DEVELOPMENT FOR K-6 TEACHERS

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PROFESSIONAL DEVELOPMENT FOR K-6 TEACHERS

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A Dissertation

Presented to the

Faculty of

California State University,

San Bernardino

_____

In Partial Fulfillment

of the Requirements for the Degree

Doctor of Education

in

Educational Leadership

_____

by

Rebecca S. Monroe

December 2022

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Approved by:

Dr. Michael Verdi, Committee Chair, Education

Dr. Edna Martinez, Committee Member, Education

Dr. Sam Crowell, Committee Member, Education

ABSTRACT

For over a century, educators and politicians have been working on educational reform for various reasons and with the hope of a plethora of outcomes. Since at least the late twentieth century, educational reform has been undertaken for the purpose of increasing students' academic achievement. While a shift in focus of teaching to a focus on learning has occurred, we know changes in the classroom and with classroom teaching still needs to occur. One recent incarnation of reform has been focused on the teacher and the professional development they receive.

Currently, the United States spends over 18 billion dollars annually on professional development for teachers, but we are not seeing the increase in student achievement which should come about with that sizable investment. This paper looks at the professional development offered to teachers as well as teacher responses to the training they receive, in an attempt to determine what further changes need to be made to bring about an increase in student achievement across the board for all students.

Keywords: professional development, teacher education and training, student achievement, accountability

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Dr. Sam Crowell—my committee member. You taught me to reflect more often and to look deeply into myself. You helped me find my voice as I was writing. I appreciate you so very much, and thank you from the bottom of my heart.

DEDICATION

This work is dedicated to my mother, Joy B. Pavao. Thank you for giving me life, and for teaching me so much about being a productive adult through your words and your examples. You taught me to laugh and enjoy life; to love unconditionally; to have a strong work ethic; to have faith and hope; to be responsible; and to finish what I began—which I have done today! I love you so very much. *MORE THAN ME!*

I also dedicate this work to my husband, James W. Monroe. You were the love of my life and the father of my children. You were so very patient and supportive in all my endeavors, never questioning if I was on the right path or made the best decision. You walked beside me as I earned both my MAs, and now my EdD. You have blessed me and enriched my life more than anyone will ever know. You taught me to trust, and to love deeply. My heart will always belong to you.

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CHAPTER ONE

INTRODUCTION

Opening

Educational reform has been going on for centuries. In *The Republic*, Plato

expressed the belief that mandated education was ineffective, stating,

"…compulsory learning never sticks in the mind" (Plato, 360 BCE). During the

18th and 19th centuries, classical education focused on Greek and Latin

languages and cultures (Thorton, 2013). For many decades in the 1900s, a

widespread belief of Americans was that if they implemented reform in education,

this, in turn, would bring about reform in society (Tyack & Cuban, 1995). Many

politicians and educators made such attempts, although "[a]ctual reforms in

schools have rarely matched such aspirations" (Tyack and Cuban, p. 1). In the

1980s, efforts began with the intent of moving the focus from teaching to

learning. In 2002, Richard DuFour published his work as a principal transitioning

from being an educational leader to becoming a learning leader. He shared four

questions he used as he made the transformation with his high school faculty

(DuFour, 2002). These four questions are: *What do we expect our students to*

learn? *How will we know they have learned it*? *How will we respond when some*

students do not understand? *How will we extend and enrich learning for*

students who have demonstrated proficiency?   These efforts for transformation

continue today (Bell & Mladenovic, 2015; Easton, 2011; DuFour, 2002; Trigwell,

1999). In 2022, we are still looking to make critical changes to our education

system in the United States. Educators need to discover how to make effective and lasting changes to meet the needs of every child (Bar-Yam, Rhoades, Sweeney, Kaput, & Bar-Yam, 2019; Bell & Mladenovic, 2015; Easton, 2011; DuFour, 2002; Trigwell, 1999).

Research tells us that the classroom teacher is the one most critical piece in the classroom, the one thing that makes the most significant difference, that has the most impact. So when looking to make changes, the classroom teacher is the starting point. Teacher-educators need to ensure we continue to have well-trained teachers in every classroom and ensure these teachers are providing high-quality first instruction. DuFour (2002) emphasizes the importance of teachers working in teams based on grade levels or subject matter. Another educational change brought about by DuFour's work included what he called "Professional Learning Communities," or PLCs (DuFour, DuFour, Eaker, Many, 2009). In these PLCs, teachers would collaborate to ensure their standards were aligned horizontally across a grade level and vertically through all grade levels.

We must provide ongoing professional development for our teachers, which will have lasting results. Research shows that districts and school sites have attempted to improve classroom instruction by providing various professional development sessions to teachers (Guskey, 2003). Countless dollars have been spent on conference fees and professional books to change instruction in the classroom (Desimone, 2009; Birman, 2007; Desimone, Porter, Garet, Yoon, & Birman, 2002; Garet, Porter, Desimone, Birma, & Yoon, 2001). We need to look

at the results and at how PD success is measured so we can, in turn, make needed changes, resulting in increased student achievement.

The Problem Statement

In 1957, Americans were caught off-guard by the news that Russia had launched Sputnik, a satellite, into space while their satellite launch attempt in December of that year failed. Politicians and many citizens felt this combination of success for the Soviets and failure for the United States indicated the US had fallen behind not only with their development of technology but also with the advancement of military weapons (US Department of State, 2009). After the successful launch of Sputnik, national security and public education became strongly intertwined with the global status of America. As a result, "[e]ducation would be a tool for mobilizing economic and intellectual power to advance American strengths" (Kay, p. 125, 2013). In 1958, Congress enacted the National Defense Education Act. This bill provided money for student loans, scholarships, and internships for higher education and fortified science, math, and foreign language education at the secondary level and higher education (Kay, 2013). In 1961, then-President John F. Kennedy proposed that the two countries (America and Russia) collaborate on a mission to the moon. As the Russians declined the offer, President Kennedy announced his intent to win the "space race" against the Soviets. With this renewed focus on science, technology, engineering, and math (STEM education), America soon pushed

past the Soviets and landed a man on the moon in 1969. While educational

reforms continued (Bell & Mladenovic, 2015; Easton, 2011; DuFour, 2002;

Trigwell, 1999; Tyack & Cuban, 1995), we have not seen continued growth in our

current educational system as measured by student achievement. Despite

efforts to improve student achievement by improving classroom instruction,

educators and researchers have not seen the increased student achievement

they hoped for. Efforts included training teachers on content and curriculum, and

on teaching strategies. In addition, areas such as classroom management,

differentiation, and student engagement were also included.

Districts across the nation have provided professional development to

teachers in various formats.   Schools and districts have speakers and

consultants come in, teachers attend conferences, and districts use a variety of

professional development delivery models to provide training at both the site and

district levels. If the teacher is the most critical piece in the classroom, spending

public money on professional development can be justified. However, money is

being spent, and the changes needed in student achievement remain minimal.

Purpose Statement

This case study aims to analyze the professional development provided to

K-6 classroom teachers in a large urban school district in the western region of

the United States to determine why, if at all, teachers are not implementing the

PD they receive. In addition, I aspire to examine the components that make up

effective Professional Development. Based on the literature review, I will create

a matrix for use as a measurement when observing PD sessions. Based on the interviews and PD observations, I will note any components not listed in the research which may be critical for effective PD implementation in the classroom, at least for the district where the study is being conducted. The focus of the study is to determine which elements should be included in PD, regardless of the delivery model, and to ascertain what changes need to take place for teachers to implement fully the PD they receive in the future. A key component may also be to determine if common elements contributed to the effectiveness of any one delivery model or every delivery model.

Research Questions

As the researcher, I posed three questions to understand the professional development experiences of K-6 classroom teachers, determine what is needed to ensure teachers will implement the PD they receive, and bring about changes in the classroom. They are: *What are the elements that make up effective professional development for K-6 classroom teachers*? *What, if anything, prevents a teacher from implementing the professional development received in their classroom*? And, *How do educators effectively implement professional development at a K-6 site*?

With the first question, I will examine the current research literature to determine what components presenters use in PD sessions. In addition, I will observe PD sessions and take field notes as part of my research and note the

components currently used in PD sessions for this district. Question two looks at teacher implementation, noting what they include/exclude and why, once they have received their training. The final question examines how the information gleaned from the first two questions can be melded together in order for educators to effectively implement PD at their site. Hence, the PD they receive will have the components that best meet the teachers' needs individually and collectively. Interviews, observations with field notes, and a document review will hopefully answer these questions for the researcher.

<div align="center">Significance of the Study</div>

The case study, often used in the social sciences, is frequently used in research studies where genuine life experiences are explored (EssayMin, 2018). This study will investigate the lived experiences of K-6 teachers in one cluster of schools in a large urban school district in the western region of the United States. This study will be of consequence, as it will allow the reader to hear the participants' voices as they share their experiences with the researcher. In addition, it will be instrumental in adding to the current literature discussing elements of professional development presentations. It is of import in that it reviews the variables of professional development delivery models provided to K-6 teachers to determine which elements need to be included for professional development to be effective and lasting, as measured by increased student achievement. It further seeks to determine if one delivery method is superior to

others based on the inclusion of specific elements. In addition, when presenters

incorporate these selected elements into the PD provided to K-6 classroom

teachers, it is hoped that classroom changes in instruction will occur, resulting in

increased student achievement. Because this is a case study looking only at one

school district, the researcher anticipates the results will help guide this district as

it makes decisions and possible changes regarding the PD provided to its

teachers.

Conceptual Framework

When discussing case studies and what makes them strong, Yin (2006)

tells us it is "its ability to examine, in-depth, a 'case' within its 'real-life' context"

(p. 111). While I plan to interview educators and observe professional

development sessions, the focus will not be on the educators per se, either

individually or collectively. Instead, this case study focuses on learning more

about the experiences under which educators in a given district are more likely to

implement the strategies learned in their PD.

Assumptions

As with any study, the researcher makes certain assumptions regarding

the participants and the process. One assumption of this study is that the

educators interviewed will provide honest answers to the interview questions. I

also assume participants will read the transcript used for member checking

(Glesne, 2011) and respond truthfully to what is in the text. Another assumption

is PD presenters will not change any portion of their presentation, how they

present, or what components are included due to them being observed. It can

also be surmised that participating teachers will do their best to implement the

strategies provided during the PD sessions observed by the researcher, knowing

they will need to practice and bring to mastery this implementation. A further

assumption of this study is that teachers are empowered to make changes in

their classrooms and their schools. It is assumed that teachers will be willing to

implement strategies learned under the right conditions regardless of whether the

PD was mandatory or voluntary.

It is further presumed that the COVID-19 Pandemic impacted educators,

students, and families. This impact may result in comparatively different answers

from pre-pandemic responses even though students and teachers have returned

to the classroom. It is reasonable to conclude that the results found in this study

can be generalized to the entire district involved. Finally, it is assumed that the

research provided in this study will add to the existing body of research on

professional development for teachers, bringing us closer to an understanding of

what needs to take place for teachers to bring about change in their classrooms.

Delimitations

When considering a research topic, researchers are encouraged to focus

on subject matter that ties in with their work or has meaning for them in some

other respect. I chose this topic because of my work as an academic coach at the beginning of the study. In this role, I saw a need for further exploration of classroom teachers' implementation of professional development strategies. This study will be restricted to the elementary level of our public school system. While considering a K-12 approach, it was determined that a K-12 scope was too broad as secondary teachers have different needs in their PD than elementary teachers. As a case study, this research was delimited to one cluster of schools in a large urban school district and the teachers and administrators in those schools. However, if others (i.e., district administrators) asked to be included, they would have been accepted as research participants. One possible delimitation, due to COVID-19 is that educator responses could be contrastive to pre-pandemic responses.

Further, a transition to distance teaching and learning meant interviews and observations would all be done via technology. Without in-person contact, I found it more challenging to build rapport with participants via technology in such a short amount of time. It is not yet known how this may have impacted, if at all, the results of this study. Another delimitation was the time required to transcribe the interviews, as one 15-minute interview could take up to 1.5 hours to transcribe. The challenge of analyzing and interpreting data proved to delimit this study as the population was small; with a larger population, a researcher can better see patterns and themes as they arise. In addition, the study will be limited to the PD provided by the district (or their approved representatives)

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without the possibility of understanding why a particular topic was chosen. I am also aware that responses from participants could show bias at any time. Every effort to ensure any bias, including mine, is filtered out during the analysis will be made.

Limitations

As with any study, some things may be beyond the researcher's or the participants' control. One such limitation of this study arose around the difficulty of enlisting volunteers in the categories of teachers, administrators, and PD presenters due to the COVID-19 pandemic. This resulted in a study with a convenience sample rather than a random sample. Due to COVID-19, educators and students spent one-and-one-half years on computers or other devices with distance learning/teaching. In addition to lessons they taught via various platforms, educators had to create lessons and provide materials that students could use for asynchronous learning time. The pressure of doing this extra work, along with the struggle to learn how to implement distance-teaching strategies effectively, both synchronously and asynchronously, was wearing on educators. After returning to the classroom in the fall of 2021, teachers were still exhausted and had a new set of conditions under which they had to work. While these conditions may vary from district to district or state to state, most teachers had to deal with wearing a mask while teaching and ensuring students wore their masks properly. Wearing masks minimized auditory input for both the teachers and the

students. Educators also had to learn how to teach small groups while maintaining personal space for themselves and their students. During this time, most PD for many districts was built around self-care and social-emotional learning (SEL) for the students and the teachers. Self-care and SEL for educators and students are so crucial that Fisher, Frey, and Hattie (2021) included them as their first topic in their book on distance learning. For these and other reasons, many educators had little time to commit to participating in a research study, making enlisting participants difficult. A larger population of willing participants would have provided for a random sample culminating in results with greater validity. Another limitation is the potential for poor daily attendance of students and teachers due to illness. A low attendance rate for either students or teachers could impact the success rate of a teacher's attempt to implement a given strategy. This, in turn, would increase the time spent on reteaching concepts for those students who were out. This case study is further limited by its scope of looking at one cluster of schools in one district. This may impact the generalizability of the study to other schools or clusters within that district or other districts.

Positionality

According to Malterud (2001, p. 483-484), "A researcher's background and position will affect what they choose to investigate, the angle of investigation,

the methods judged most adequate for this purpose, the findings considered most appropriate, and the framing and communication of conclusions."

As an educator in a large urban district for 36 years, I experienced professional development on many topics and formats. More often than not, the professional development I received had been site or district mandated and took the form of a 1-2 hour up to a 1-2 day delivery without scheduled follow-up.

In addition, in one sense or another, I have always been a coach or mentor to others. In the early years of teaching, I was available to others for advice and resources. As early as my second year of teaching, I demonstrated lessons for administrators who were being trained in clinical supervision. Much of my coaching experience until this point had been informal: working with teachers new to the site to help them become acclimated and successful, while supporting them with resources and strategies. Over the years, I supervised student teachers, served as a mentor teacher, and later served as a BTSA support provider. More recently, my coaching was done more formally, as I served in a position as a teaching coach for the district. In 2009, I came out of the classroom. I coached at a site for four years, supporting individual teachers and grade level teams as they worked to improve instruction in their classrooms. Then I went back into the classroom for one year, and I came out again as a coach at the district level. This position was as a Teacher on Special Assignment: Teaching Coach in a program new for the district.

I worked with teachers who self-referred for additional support and

professional development. This, in part, led to the recent interest and research questions. Another component leading to the research questions is the training provided by districts in the area. Districts were, until very recently, using the Trainer of Trainers model, which seemed at first blush to be an excellent way to go: the district trained 1 or 2 people at each site. Hence, every site had its experts to answer questions as they arose. However, the drawback was that these so-called experts were not given adequate time to present the information to the rest of the staff; they would attend a six-hour training and then have 20 minutes to 2 hours to present it. This resulted in the staff being unable to implement the new information/ program/ strategy fully. In addition, there was no consensus across the district regarding what portions of the training were to be shared and implemented at each site. Also, the expert teachers were not trained in how to present information to their staff.

After participating in PD, teachers returned to their classrooms and continued with the status quo. What they "learned" during the PD they attended was set aside for various reasons. This caused me to wonder what could be done to ensure that professional development leads to effective change in the classroom. I pondered if there is a PD delivery model that is more effective in reaching this goal. If so, I wanted to discover what it is and determine the elements of effective professional development.

Summary

Most people go into teaching because they care and want to make a difference in their students' and community's lives. Because they care, they want to do their best and apply their best strategies and techniques. However, research shows that many teachers are not implementing their learning strategies. This could appear to counter the statements about them caring and wanting to make a difference. This study inquires into the "why" of teachers not implementing these strategies to find a solution that will bring about the needed changes in classroom instruction so all students can reach their fullest potential.

Change is challenging for most people, and even after changes occur, it is easy for many people to return to what they are comfortable with, even if the changes made were for the better (Knight, 2009). In addition, change takes time, and some people need more time than others to bring about the desired changes. Knowing this, the researcher hopes this study will examine some elements of PD and find ones that will make implementing new strategies easier. In turn, this should bring about needed changes for classroom instruction when these elements are implemented.

<div align="center">Definitions of Key Terms</div>

Definitions of some of the terms used throughout this study are provided below in alphabetical order.

Asynchronous learning: learning which occurs or is able to be completed independently according to a person's own self-paced schedule or within a broad

<div align="center">14</div>

window of time, but not coordinated to be completed in real-time with another participant (Dictionary.com) https://www.dictionary.com/browse/asynchronous

Beginning Teacher Support and Assessment (BTSA): teacher induction program. A two-year program during which teachers with a preliminary credential can earn their clear credential. This state-funded program is authorized and funded through competitive grants to LEAs (local education agencies) (cde.ca.gov).

Distance Teaching: a method of teaching in which lectures or classes are conducted over the internet without the students' needing to attend a school or college. Also called distance education. (Oxforddictionaries.com)

Effective Professional Development (PD): PD in which the teachers take what they have learned and apply it in their classrooms so that instruction in the classroom changes

Good First Teaching or High-Quality First Teaching: "Inclusive quality first teaching...is about what should be on offer for all children; the effective inclusion of all pupils in high-quality everyday personalized teaching. Such teaching will, for example, be based on clear objectives shared with the children and returned to at the end of the lesson; carefully explain new vocabulary; use lively, interactive teaching styles; and make maximum use of visual and kinesthetic as well as auditory/verbal learning. Approaches like these are the best way to reduce, from the start, the number of children who need extra help with their learning or behavior" (Teachingexperts.com).

Experiential Professional Development (**EPD):** Experiential Professional Development is a study design created by Burke (2013), during which participants can take charge of their learning without leaving their classrooms.

Memorandum of Understanding (MOU): A memorandum of understanding is a document that describes the broad outlines of an agreement that two or more parties have reached. This research project references an agreement between the district and the teachers' union, communicating the mutually accepted expectations of all parties involved regarding the weekly ½ day each week used for training purposes.

(https://www.investopedia.com/terms/m/mou.asp#:~:text=Key%20Takeaways%201%20A%20memorandum%20of%20understanding%20is,a%20binding%20contract%20is%20imminent.%20More%20items...%20)

Professional Development (PD): Professional development refers to continuing education and career training after a person has entered the workforce to help them develop new skills, stay up-to-date on current trends, and advance their career (Antley, 2020).

Resource Specialist Program (RSP): a form of special education support that is available to students who have mild to moderate learning disabilities and who are having trouble in one or more areas of classroom learning, and for whom remaining in a general education classroom is the best decision. In most cases, this is a pullout program in which the students are taken to a different room for 30 minutes (or longer if needed) of small group instruction ranging from

one to five days each week, depending on the needs of the student. (InfoBloom, 2022).

Special Day Class (SDC): an intensive educational program designed for children with special needs. A child may be eligible for this program if they suffer from severe mental or emotional disorders and learning disabilities. These problems must be severe enough so as to cause a child difficulty in performing in a regular school setting or in alternative less-intensive special education programs or to be at risk for harming himself or other classmates. (Wisegeek.com) https://www.wisegeek.com/what-is-a-special-day-class.htm

Social/Emotional Learning (SEL): the process of acquiring interpersonal and emotional skills such as empathy, cooperation, conflict resolution, self-awareness, and self-control. (Dictionary.com) https://www.cfchildren.org/what-is-social-emotional-learning/

Synchronous Learning: learning which occurs in real-time, as with participants logged in at an appointed time for a live lecture or discussion (Dictionary.com) https://www.dictionary.com/browse/synchronous

CHAPTER TWO

LITERATURE REVIEW

Introduction

At one time, teachers focused on doing an excellent job of teaching, and it was the student's job to learn the material taught (Tyack & Cuban, 1995). In the 1980s, a pedagogical shift began with the intent to move the focus from teaching to learning; that is, if a student did not learn the content as it was taught, the teacher needed to find another way to present the material until all students were able to master the concepts; and these efforts continue today (Bell & Mladenovic, 2015; Easton, 2011; Dufour, 2002; Trigwell, 1999). This shift in focus was brought about to increase student achievement in the classroom (Guskey, 2002; Guskey, 1986). Guskey (2003) stated, "The recently enacted no child left behind act of 2001...stresses the importance of high-quality professional development to guarantee that all teachers are 'highly qualified' and that all students reach high levels of achievement" (p. 4). With this shift, teachers attended trainings, in-services, seminars, and conferences to develop the knowledge and skills necessary to bring about these changes (Guskey, 1986). However, the desired outcomes intended by the NCLB have not come to fruition. Not only has there been no increase in student achievement, but in many classrooms teachers still focus on teaching rather than learning (Guskey, 2002; Guskey, 1986).

This paper will first examine the topic of professional development (PD) to determine the elements that make for high-quality professional development; secondly, we will examine what barriers, if any, keep teachers from implementing the professional development strategies they have learned. Finally, this paper examines the viable options for bringing about instructional changes so these teachers can willingly begin to implement the strategies they are learning in their classrooms for the betterment of themselves and their students, resulting in increased student achievement.

Defining Professional Development

Just as with many things, the definition of PD can vary depending on who is doing the defining. Businessdictionary.com defines PD as

> [The] process of improving and increasing capability of staff through access to education and training opportunities in the workplace, through outside organizations, or through watching others perform the job. Professional development helps build and maintain morale of staff members, and is thought to attract higher quality staff to the organization. Also called staff development, (para 1).

In educational contexts, PD may be a one or two-day conference or just a two-hour training on a Monday afternoon. It could consist of several days of training spread over a semester. Another option could include a two-week workshop

during the summer. Some of the PD in which teachers participate are voluntary.

They choose to attend (or not) based on their interest in the topic(s) covered.

School districts sometimes offer monetary or other incentives to encourage

teachers to attend these voluntary inservices or trainings. More often, school

districts or the state mandate PD. While trainers often provide these PD

sessions in face-to-face settings, teachers can also complete some of them

online. Various PD trainings may take place during or outside of the regular

workday. Although some will say there is a difference between training and

development, these terms will be used interchangeably for this paper's purposes.

As we continue to review the research about professional development in

education, we will find many different types or genres, if you will, of PD offered.

We will learn about reform PD versus traditional PD (Penuel, 2007), Experiential

Professional Development (Burke, 2013), the Japanese Lesson Study (Hiebert et

al., 2002), and Action Research (Lipton & Wellman, 2018; Flessner & Stuckey,

2013), among others. Regardless of the genre of PD provided, our end goal is to

ensure it uses the elements of effective PD that will bring about lasting change in

classroom instruction. This, according to Bell and Mladenovic (2015), is the

primary purpose of professional development (p. 32).

Elements of Effective Professional Development (PD)

Pitsoe and Maila (2013) stated

Effective professional development should improve teachers' knowledge

of the subject matter that they are teaching, and it should enhance their understanding of student thinking in that subject matter….Good teachers form the foundation of good schools, and improving teachers' skills and knowledge is one of the most important investments of time and money that local and national leaders make in education (p.216).

Borko (2004) stated that quality PD should "enhance [teachers'] knowledge and develop new instructional practices" (p. 3). In this study, the researcher will review the current literature to determine the components of quality PD that will fulfill these expectations.

Communication

Listening, speaking, reading, and writing are the four language processes teachers and students use daily (Goodman, 1986; Graves, 1983). In order to understand each other and what they read, students and teachers need to master these language processes. In addition, teachers are in the people business. That is, they deal with people every day: parents, students, support staff, administration, and people in their community. Communication is vital for these relationships to be successful (Davis & Krajcik, 2005; Carlisle, Cooper & Watkins, 2004). As we look at the implementation of PD, it follows that effective communication would be critical. The presenter needs to communicate effectively as they deliver the information. The administration needs to communicate clearly the expectations regarding this professional development. The teachers need to implement the contents of the training back in their

classroom, and they need to communicate clearly with their students. Finally,

teachers must feel their voices are heard by both site and district leadership.

Woven throughout this paper, as we look from building relationships to

collaboration, to coherence as possible elements of effective professional

development, on through to considering the various reasons why teachers may

be resistant to implementing PD in the classroom, we will see that effective

communication is critical in every aspect of education.

<u>Building Relationships</u>

Dr. Hilliard Jason contributed to the Claude Bernard Distinguished Lecture

Series at the Department of Family Medicine, School of Medicine, at the

University of Colorado in Denver (Jason, 2007). In his speech addressing not

just doctors but doctors as educators, he pointed out that "…a strikingly low

percentage of medical faculty members have been adequately prepared for their

instructional responsibilities" (p. 312). Jason likens the work of a clinician to the

work of a teacher in that both have to interact with their patients/students, make

immediate decisions throughout the day, and be able to build relationships with

their constituents. While Jason was referencing college professors, what he was

expressing can easily be applied to K-12 teaching. He stated that educators

need to undertake more than merely doing "business as usual." He urged

educators to become helpful teachers, saying, "[b]eing 'truly helpful' means

providing what others genuinely need, which implies getting to know a good deal

about them: their interests, their confusions, their responsibilities, and their

hopes...." (p. 313). Student engagement and how it connects with students

taking ownership of their learning is vital, according to Jason (2007). Looking at

changes that need to be made in classroom instruction, Jason encourages us to

move from a focus on product to a focus on process. With a focus on product,

the focus is on the final results, the exam, or what the student can produce at the

end of a unit of study. What knowledge did the student accumulate? The

message here is that the important thing is to follow directions exactly to get the

one correct answer. If the shift is made to focus on the process, students are

taught to search for information instead of it being spoon-fed to them; they learn

to ask and answer questions; and there is room for error (from which students

also learn and grow.) Jason went on to say we need to ask good questions in

order to teach students to use their minds, with an end-goal of creating life-long

learners.

Living and working in the 21st century, our world is ever changing. For

our students to be successful as adults, they will need to be able to learn and

adapt their skill sets over time, both in and out of the workplace. This continuous

personal growth will benefit them personally and professionally as they seek to

achieve at high levels and acculturate to changes in the workplace. Teaching

students how to search for information, how to ask and answer questions, and

how to learn from their mistakes is part of the pedagogical shift from a focus on

teaching to a focus on learning supported by Bell and Mladenovic (2015), DuFour

and DuFour (2013), Easton (2011), DuFour (2002), and Trigwell (1999) as we

teach students to think and problem solve.

<u>Collaboration</u>

One theme that emerged from the literature review was the importance of teacher collaboration (Goddard, Goddard, & Tschannen-Moran, 2007; Davis & Krajcik, 2005). However, since collaboration is not always taught as part of teacher preparation coursework (Goddard et al., 2007), and teaching in isolation is the model with which most individuals grew up, it appears that most teachers do not participate in collaboration to any significant degree (Goddard et al., 2007). According to Lipton and Wellman (2018), beginning teachers do not ask for help as they do not want to be seen as unqualified, and more experienced teachers refrain from offering support as they do not want to come across as interfering in the new teacher's plans. It remains then for the team or site lead to take the responsibility to make certain that collaboration takes place to ensure that every teacher has the support they need right from the start.

In a three-year study, Bell and Mladenovic (2015) discussed the effect collaboration, in the form of peer observations, had on the PD of adjunct faculty at the college level. As with Jason (2007), what is being said about teaching at the college level in this study can be applied to teaching in the K-12 setting. Qualitative data collected from peer observations, participant self-reflections, surveys, interviews, and a focus group, were analyzed around the three themes of learning in context, self-reflection, and conceptual expansion (defined as a pedagogical shift away from a focus on teaching to a focus on learning). During

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this study, collaboration took place in the form of peer observations. Most

participants indicated that observing a peer who taught a similar subject greatly

benefited them. Combined with the reflective practice of assessing their

teaching, it could bring about changes in their teaching practices. If collaboration

in the form of peer observation was of "great benefit" to the teachers in this study,

then it should be looked at more closely for further applications in future studies.

It will then follow that student achievement will increase as well. Faculty

"…reported a wide range of ways in which they planned to change their teaching;

the most common intended change was increasing student interaction" (p. 29).

All faculty interviewed said the changes to their teaching had been lasting rather

than transient, with 94% of the participants saying peer observations were

advantageous. Two points noted by the researchers were that changes to

teaching practices were made immediately after collaborative peer observations

and that while the changes described "…might seem small, the shift in mindset

towards becoming a reflective practitioner is significant…." According to Bell and

Mladenovic (2015), one primary purpose of professional development is to bring

about lasting change in classroom instruction, and this seemed to be evident in

their study.

Action research is another type of PD with elements to be considered.

Noting that while there is literature extolling the benefits of action research but a

scarcity of literature reporting on the consequences of mandating it, Flessner and

Stuckey (2013) examined the mandated school-wide action research program at

Fieldstone Elementary School with the intent of studying the impact of mandating teachers to engage in action research. This study took place at a rural K-6 elementary school in southern Indiana in the United States, with an enrollment of 381 students and 29 teachers. On average, the teachers at Fieldstone had 11 years of teaching experience. However, there was a wide range of experience, with six teachers having up to 36 years and a group of teachers having five years or less. The state labeled it as failing based on standardized test scores and, as a result, the school received additional funding to make improvements. The administrators implemented action research instead of a traditional professional development format. Four classroom teachers became instructional coaches, three of whom had five or fewer years as a teacher. Substitutes were hired to cover their classrooms when they were out for action research trainings and meetings. The year before beginning the action research at their site, these coaches participated in action research projects facilitated by Flessner. This provided the coaches with experience with the process and the role of facilitator. Once they were ready to begin their action research, the site leadership team divided the staff into seven teams rather than keeping them together as a staff or working as grade-level teams, which was past practice. This decision had repercussions for the site, as did the decision to promote three new teachers to the coach position.

The themes focused on in this study were collaboration and time, with the added theme of the political landscape. Even though teachers complained about

the lack of choice, they still made growth in changing how they taught in their classrooms. The research showed, that if action research is going to be mandated, teachers still need to have a voice in how it is implemented. In their study, Flessner and Stuckey (2013) found that at least six of the 25 teachers felt they were forced to participate. Additional findings showed that the politics of choice played a significant role, and collaboration was a very political aspect of the mandated action research program. Time was—and always will be—an issue: either there is not enough, it is not spent correctly, or there is too much time away from students. It could be argued that time is a concern for teachers everywhere, especially when they are looking at being pulled from the classroom to attend trainings and have to be away from their students. However, Burke (2013) found a way around this with her EPD approach to professional development, which did not require the teachers to be out of the classroom for excessive amounts of time. Flessner and Stuckey (2013) stated it was important to examine the types of support offered to those engaged in action research and considered providing the teachers with the choice of grade-level collaboration teams and cross-grade collaboration.

A question to consider is whether the cross-grade implementation might have worked better during the second year of implementation. This would have allowed teachers the comfort of working together in grade-level teams while they learned the new process of action research. Once familiar with the concept and process, there would be less resistance as the staff moved to work in cross-

grade teams to build on what they had already learned. Other things to consider might involve which teacher choices need to be included in a mandated action research program, how one might differentiate action research at a site, and how to ensure multiple entry points into the action research process for further differentiation. Teachers will want a voice in not only the decision about whom they collaborate with because of comfort levels or because they feel they know what works best for them but also about other decisions regarding the PD scheduled for their site.

K-12 Education Team (2015) stated that over $18 billion is spent annually on PD for teachers in an effort to improve student achievement. Teachers spend countless hours in PD every year in an attempt to improve classroom instruction (Desimone, 2011). However, districts do very little to measure this PD's effects on teachers or students. Desimore (2009) cited research that supports the use of core features that can be used for such measurement and described in detail a conceptual framework that effectively applies these core features. While arguably called by various names in other studies, as noted in this paper, one core feature Desimone (2009) felt should be included in every professional development session is collective participation. This is also known as collaboration. Collaboration describes when teachers participate together by site, grade level, or department to follow up with discussions, planning, or other activities (Desimone, 2009, pp. 183-184). As Desimone defined it, collaboration is more than teachers getting together to plan lessons. They need time to

discuss their lessons after class and share how they went. Conversations need to take place between teachers about what went well or what went wrong and why. After these conversations, teachers need to discuss how they will modify their plans for the next session to improve the outcome. This cycle of conversation and open self-reflection is a critical piece that needs to take place during collaboration with one's peers if one is to grow professionally.

As we continue to look at the scope of PD for teachers and what we might need to focus on, Gengarelly and Abrams (2009) also noted that collaboration in the context of day-to-day classroom work has been shown to generate fundamental changes in teacher beliefs. Other researchers have referred to it as "collective participation" (Desimone, 2011; Desimone, 2009), and it would be a crucial element on which a new PD model could be based. Writing about an initiative in which their university took part [Partnerships for Research Opportunities to Benefit Education (PROBE)], Gengarelly and Abrams (2009) explained how graduate fellows are matched up with secondary school science teachers. They worked together for two academic years to increase inquiry-based instruction in the classroom. In the summer prior to the first year of the study, the two groups met for a week of training to build a common language and begin planning. The fellows worked two days weekly with one teacher intending to increase inquiry-based instruction. During the first year, all ten fellows were observed regularly. During the second year, five participating fellows were observed regularly. All fellows were interviewed three times during both years,

with the researchers audiotaping the semi-structured interviews. Each

researcher transcribed and coded the tapes separately, noted possible themes,

and then placed the fellows in like groups. Only then did the two researchers

compare notes and repeat the process to determine the final themes. Data

analysis showed that teachers who would not typically have provided students

with open inquiry lessons prior to participating in this initiative were doing so

regularly due to their collaboration with their science fellows. The authors of this

study noted that this model was vastly different from the PD typically offered to

most teachers in that these classroom teachers and science fellows worked

together for one or two years. Gengarelly and Abrams (2009) further noted that

this might be a successful model of PD to "create positive and lasting change" (p.

83).

In their article, Wayne, Yoon, Zhu, Cronen, and Garet (2008) consider two

questions: (1) whether PD programs delivered by others are as effective as when

they are delivered by their authors/developers; and (2) what the essential

components of effective PD might be. The authors analyzed issues faced when

designing experiments on PD. These included the treatments to be studied, the

contexts in which PD is studied, whether the randomization should be done at

the district, site, or teacher level; sample size; and what should be measured as

well as how and when it should be measured. Regarding their first question, the

authors determined that while PD delivered by its creators may have a lasting

effect on student achievement, that same PD delivered in other contexts or by

other presenters may not have the same effectiveness, and further research was recommended. This would fall under Phases 2 and 3 of Borko's (2004) professional development studies. Like Wayne et al. (2008), Borko wanted to examine how PD programs provided by various presenters at multiple sites would look compared to one program provided by one presenter at one site (Phase 1.) Phase 2 of the study would involve the same PD program implemented at several sites by several presenters. Results of teacher implementation would then be noted and compared. In Phase 3, numerous types of PD would be presented at various sites, and the researcher would look at the setting, the facilitators, the programs, and the educators. About their second question, the authors noted a consensus in the literature about the core features of effective PD. However, Wayne et al. (2008) argued that "the evidence on the specific features that make a difference for achievement is weak" (p. 470). The "generally accepted" core features were content, active learning, coherence, and collective participation (Borko, 2004). Wayne et al. (2008) found that since the cost of PD is so high and taking teachers out of the classroom is disruptive to instruction and learning, districts need to ensure that quality PD is in place, so strategies are effectively implemented in the classroom. The authors determined that further research needed to be carefully designed so we can more fully understand what PD to provide to whom, when, where, how, and how often to ensure the best benefit for all students.

In their study, Goddard et al. (2007) examined teacher collaboration. The authors noted that the literature review determined that while schools often use collaboration as one means of bringing about improvements, there is a dearth of research examining the degree to which teachers' collaboration impacted student academic gains. The purpose of their study was to determine if there was, indeed, a measurable connection between teachers' collaboration and student achievement. The setting for this study was a large urban school district in the Midwestern United States.

The researchers drew data from a sample of 47 elementary schools comprised of 452 teachers. There were 2,536 fourth-grade students in these 47 schools. There were no interventions employed. Teacher data was collected via a survey distributed during regularly held staff meetings. Half the teachers completed a survey on teacher collaboration, and half completed a survey with different questions. Surveys were handed out randomly. Student demographic data were collected from the district central office before state testing was administered in the spring. Fourth-grade students' reading and math scaled scores on the state-mandated tests were the dependent variables for this study. The authors used hierarchical linear modeling (HLM) as the primary method of analyzing data.

HLM is a statistical method of looking at various levels of data that are related. This means the researchers were looking at the variables of the student, as they are related to the variables of the classroom and the teacher, as these

are related to the variables within the school, which then are related to the district (Woltman, Feldstain, MacKay, Rocchi, 2012). Goddard et al. (2007) found that several things benefited students when teachers collaborated, the most crucial being that student achievement was moderately increased (an increase of .08 in mathematics and an increase of .07 in reading). When teachers had opportunities to collaborate, they could build their content knowledge base and their pedagogical and experiential knowledge bases, resulting in improved instruction. Improved teaching and a greater focus on learning resulted in students who were more engaged in the lesson and ready to learn. In addition, fewer office referrals for behavioral problems were written. When teachers are provided time to work together, they problem-solve and share experiences to improve classroom instruction. They share lesson plans and strategies, making their thinking more creative and engaging. Considering the cost of sending teachers to a full-day conference and paying for their substitute teachers versus paying for teachers to collaborate for one or two hours after school each week, collaboration might be one (money-saving) strategy administrators will want to employ as part of their improvement plan if improving student achievement is a goal for their site.

Wanting to find the link between PD and improvements to classroom instruction and student achievement, Penuel, Fishman, Yamaguchi, and Gallagher (2007) studied an inquiry-based science program and posed three questions. The first question addressed the type of PD associated with

increased program implementation levels. The second question focused on

teacher knowledge and changes to their teaching practices. And the third

question centered on PD provided after the initial training and how it might impact

how teachers implemented the program. The researchers used an HLM

framework (Goddard et al., 2007) to analyze survey data from teachers and PD

presenters who participated in GLOBE inquiry-based partnerships between

2002-2004. In addition, the third source of data was reported to the GLOBE

website by participating teachers and their students. The researchers

interviewed five teachers to validate teacher interpretation of survey questions.

Of the 1,467 teachers who received the survey, only 454 responded (31%). In

contrast, all of the 28 PD presenters responded to the survey (100%.) Most

teachers participating in the study received PD in a reform-oriented format, which

included collective participation (collaboration), with a focus on Professional

Learning Communities (PLCs). The researchers found that "teacher perceptions

of support for planning had a positive impact on teacher learning" (p. 947) and

that the number of hours teachers spent in PD played a role in how prepared

they felt for incorporating student inquiry. With 28 PD providers, not all teachers

received identical PD; therefore, some of the results varied depending on the PD

in which the teachers participated. The authors felt more uniformity was needed

in the presentation of PD to participating teachers. Regarding teacher

knowledge and changes to their teaching practices, Penuel et al. (2007) found

that collective participation had positive effects on teacher change. Also, when

teachers received training with colleagues from their site or the same grade level with whom they could later plan, debrief, or dialogue about the training they had received, the implementation rate was higher. These findings are similar to those of Garet et al. (2001), "in which the researchers found that teacher perceptions of support for planning had a positive impact on teacher learning" (p. 947). Suppose teachers believe they are being supported with planning and collaboration time. In that case, they are more connected with the learning taking place during their PD.

Hiebert et al. (2002) noted the need to improve classroom instruction and believed that doing so in an enduring manner required a knowledge base on which teachers can draw and which can grow and improve over time. As Hiebert et al. reviewed the United States educational history, they explored how teachers shared their expertise and learned from each other. They searched for a system allowing experienced teachers to archive their lessons and for newer teachers to draw on these resources. They defined and discussed the differences between practitioner knowledge and professional knowledge. According to Hiebert et al., practitioner knowledge is specific to a given lesson, personal, learned through individual practice and reflection, and is grounded in the setting in which the practitioner works. On the other hand, professional knowledge is "more abstract because it is designed to apply to a wider variety of potential problems" (p. 6). Furthermore, it is "…created with the intent of public examination, with the goal of making it sharable among teachers, open for discussion, verification, and

refutation or modification" (p. 7). That is not to say, however, that one is more important than the other. Practitioner knowledge is of equal, if not greater, value than professional knowledge. To grow professionally, every teacher needs to practice their craft and reflect upon their teaching, making changes and improvements along the way. Only through this personal practice and growth can teachers get to the point of being able and willing to share their professional knowledge with others, leaving it open on the table for others to examine and refute publicly. Because professional knowledge is for public examination, Hiebert et al. (2002) believe procedures for storing and sharing this knowledge must be in place. This is important because, as professionals, educators are responsible for sharing their wealth of knowledge with each other. Currently, this is only done on a small scale—within our sites or districts. An archive system would allow educators to expand this knowledge base beyond the boundaries of their district.

Not finding an archive system in the United States, Hiebert et al. (2002) looked to other countries to see what they might find. The Japanese Lesson Study is one example they encountered. Many elementary teachers in Japan participate in ongoing PD that utilizes this lesson study format. In the lesson study, teachers collaboratively design a lesson. One teacher implements the lesson while the others observe and provide feedback. The group then revises the lesson, which another teacher at that point teaches. This collaboration is repeated over several trials throughout the year. Next, the lesson is shared with

all the teachers, the district, and other districts throughout the country. The information shared includes everything a teacher will need to implement the lesson, including questions students might have and possible pitfalls the teacher should anticipate. Hiebert et al. pondered whether it would be possible to replicate this system in the United States. According to Hiebert et al., Dewey (1929) noted in his book, The Sources of a Science of Education, that one of the wastes in American education is that only the students they teach benefit from excellent teachers. An archive system would provide a means for sharing quality lessons with others. Until such a system is in place, schools can help teachers continually improve by providing time for them to collaborate. This will allow them to plan their lessons together, discuss the results, and brainstorm ways to fine-tune their lessons before they reteach them. Going through this process—plan, teach, reflect, apply (Sagor, 2000)—a few times helps teachers improve their craft, which will improve classroom instruction. In 2008, The California Commission on Teaching Credentialing (CTC) incorporated this cycle when it established a requirement for all teaching candidates to pass a Teacher Performance Assessment (CalTPA) to become credentialed to teach K-12 students in California. This assessment, which was revised in 2016 and is currently in use, adopted the "plan, teach, reflect, apply" cycle proposed by others (Commission on Teacher Credentialing, 2017). When the State of California gives merit to a process such as this, we know there is great value in it.

For a country our size, an archive system may not be feasible. A more realistic beginning might be at the district or county level. For example, in San Bernardino City Unified School District (SBCUSD), San Bernardino, California, classroom teachers identified as Common Core Demonstration Teachers are videotaped teaching short segments of lessons. They then discuss the essential pieces new or struggling teachers need to know about the how and why of implementing the lesson. The videos cover topics such as classroom management, Positive Behavior Intervention System (PBiS), writing, transitions, and centers, to name just a few. They can be viewed on the district's youtube.com website. While these videos do not include lesson plans as the Japanese Lesson Studies do, they are still proving to be a valuable resource to the teachers in their district. These videos can also be found on the SBCUSD website (https://sbcusd.com/).

Coherence

In 1965, the US Congress passed and signed the Elementary and Secondary Education Act (ESEA), designed to close the achievement gap by allocating federal monies to schools with students from low socio-economic homes (Paul, 2018). With the change in how and what students were expected to learn, changes needed to be made in what and how teachers taught (Bar-Yam, Rhoades, Sweeney, Kaput, & Bar-Yam, 2019; Bell & Mladenovic, 2015; Easton, 2011; DuFour, 2002; Trigwell, 1999). Rather than focusing on memorizing facts and getting the one correct answer, our students need to be

taught how to think deeply and understand the subject matter at hand to be 21st-century scholars (Jason, 2007). Teachers must have a deeper understanding of the subjects they teach and how students learn. When reviewing the literature on core components of PD that bring about change in teachers' classroom practices, Garet et al. (2001) examined the effects of alternative forms of PD and their impact on classroom instruction. The researchers compared them with the effects of traditional forms of PD on classroom instruction. Garet et al. used a national probability sample from the data from the Eisenhower Professional Development Program survey. This sample contained over 1,000 participating math and science teachers. The participants completed an extensive empirical study focusing on core features (content knowledge, active learning, and coherence) and structural features (format of the activity, collective participation, and duration) of PD. Garet et al. (2001) analyzed the relationship between the features of PD identified in the literature and teacher self-reports on changes in their knowledge and skills applied to their classroom teaching practices. Working with the Eisenhower program, the researchers operationalized the terms and created scales for each. Then they collected data to analyze what impact, if any, they had on teacher outcomes. They received responses from over 1000 teachers in 358 districts, which was a 72% response rate. An essential finding of the study was that when teachers experience PD that is coherent—that is, the PD is connected to the rest of their professional work—they are more likely to

implement changes in their daily instruction in their classroom (Garet et al., 2001).

The researchers found that for PD trainings to be effective, the activities must be connected, with each building upon the previous lecture(s), project(s), or learning. The activities also needed to be aligned with district and state requirements (Garet et al., 2001). If, on the other hand, the information received is not aligned with district and state requirements, teachers will feel conflicted, and efforts to grow professionally may be impeded. Penuel et al. (2007) found that cohesion was necessary regarding PD's impact on program implementation. They found that when the PD teachers received was aligned with the state standards and district expectations, it was much easier for those teachers to implement the PD in their classrooms. That is, when the training provided was aligned with the standards teachers were required to teach, teachers felt better equipped to engage students in those activities and then report the data. Educators today are using data to guide their instruction (Kekahio & Baker, 2013). When the trainings are not aligned, and teachers struggle to make the training, standards, and instruction fit together, they will not see the expected results (Kekahio & Baker, 2013). In turn, they will be reluctant to share their data with a researcher, administrator, or peers. Desimone (2009) and Wayne et al. (2008) both support Penuel et al.'s (2007) findings. These findings tell us that if the PD training does not align with the teachers' beliefs, the teachers will not be as engaged as they would otherwise be. Alternatively, suppose the PD provided

does not support the curriculum or other district or state requirements. In that case, the teachers will wonder what the point is and be less likely to actively participate or apply the training in their classrooms.

Duration

Duration includes the amount of time required to give a presentation on any given day, the range of time over which the PD is planned and presented, and all follow-up sessions which are to take place, as well as when and where. One PD model that exemplifies this concept is the Experiential Professional Development (EPD) model developed by Burke (2013). This model "moves away from simply telling teachers what to do and gives them an on-site, hands-on experience during which they are able to create innovative curriculum and practice it with support" (Burke, 2013, p. 259). Burke implemented this EPD model as a university-sponsored class at a high school in the northeast area of the United States. Burke's intention was to change how high school foreign language teachers taught their classes.   Teachers were predominantly using grammar-translation strategies rather than communicative methodologies. Teachers could increase their knowledge and understanding of communicative language teaching through this initiative. This would result in their students being able to express themselves more fully in their second language. Teachers volunteered to participate and received three graduate credits or ninety hours toward their state-mandated PD requirements. The teachers paid fifteen percent of the cost, with the school district picking up the program's remaining cost. Four

Spanish teachers from the local high school agreed to participate, and 28

students participated in discussions after school during weeks three and nine.

This 10-week course included a breakfast meeting before beginning so everyone

could get acquainted. It also included peer observations and meetings,

observations by the researcher-consultant with follow-up debriefings, and the

strategies being implemented.

During weeks five-to-eight, the researchers expected teachers to utilize at

least three communicative strategies. Data for this study were collected via three

questionnaires, participant reflections, observations, and field notes and then

analyzed. Data showed that teachers increased their understanding of

communicative methodologies. In addition, five months after the study, these

teachers continued to infuse communicative activities into their instructional

routines. Burke (2013) acknowledged there was resistance resulting in barriers

to change, but that the participating teachers "believed that the experiential

design of EPD made it successful" (p. 255). She found that change was

achieved because teachers were offered the opportunity to take leadership in

their growth and learning without leaving their classrooms. This is important

because it does not negatively impact instructional time by having the teacher out

of the classroom for PD. Burke further reported that having a participant-

observer on campus as an adviser was beneficial, as noted numerous times in

the data. Over the course of the ten weeks, the teachers had the opportunity to

try out new strategies, reflect on them, receive feedback from the adviser, and

then try them out again. This cycle of plan, teach, reflect, apply (Sagor, 2000) is

an important element that duration affords teachers (Sagor, 2000).

When Flessner and Stuckey (2013) examined the mandated school-wide

action research program at Fieldstone Elementary School, one of the themes

they focused on was time. When considering the concept of "time" in conjunction

with PD, we are not only talking about the actual amount of time spent in the

training itself. In this context, time includes the time, or duration, over which the

total amount of training will take place during the semester or school year. When

schools or districts sustain PD over time, more thorough conversations can occur

around the content and strategies covered. In addition, when PD is extended

over time, teachers can practice what they have learned, share out at the next

meeting, and receive feedback on the instruction they have provided. Flessner

and Stuckey (2013) found that how time was allocated and utilized in the

mandated action research at this site was highly controversial. Even though

teachers in this study complained about the time involved in their PD, they still

made growth in changing how they taught in their classrooms. Time will always

be an issue: either it is not enough, it is not spent correctly, or it is too much time

away from students. It could be argued that time is a concern for teachers

everywhere, especially when they are looking at being pulled from the classroom

to attend trainings and have to be away from their students. However, Burke

(2013) found a way around this with her Experiential Professional Development

model (EPD), which did not require the teachers to be out of the classroom for

excessive amounts of time. Time devoted to PD is key to success, but there needs to be a balance. Just as Goldilocks said, it needs to be, "Just right."

When Gengarelly and Abrams (2009) noted that collaboration had been shown to bring about change in teachers' beliefs, they described a study in which graduate fellows and secondary school teachers worked together for two years. While they did not directly state that duration was a key to the participants' success, it seems evident based on the other studies provided in this paper.

In addition to collaboration, Desimone (2009) stated that duration is a core feature that should be included in every PD session. Duration includes the length of presentation in hours, the range of time over which the training is scheduled, and any follow-ups that take place. For teachers to truly own PD strategies, researchers have learned that teachers need time to apply the strategies, reflect on what worked or did not and why, and then try them out again. They need to come back together as a group and discuss these experiences—both the good and the not-so-good—with the PD presenters and get feedback from them and their peers. Desimone (2009) stated that the PD sessions and follow-ups should "include 20 hours or more of contact time" (p. 184).

The study conducted by Penuel et al. (2007) focused solely on PD provided to teachers implementing inquiry-based science lessons. They found that the number of hours teachers spent in PD played a role in how prepared they felt for incorporating student inquiry into their lessons. Equally significant

was the PD provided after the initial training. This finding was in line with Garet et al. (2001). Teachers benefited from relevant, ongoing PD. The time between PD sessions allowed teachers to process and implement the information they recieved and refine their ability to practice new skills before adding new content. After the initial training, the researchers learned that teacher knowledge and data reporting relied on GLOBE equipment. Since this study focused solely on PD provided to teachers implementing inquiry-based science lessons, further studies need to be conducted on other curricular areas to determine if these findings are valid in all content areas.

Hiebert et al. (2002) also discussed the requirements for effective PD. They believed ongoing PD, which means that it is more than just a one- or two-day training provided for the staff, is vitally important. However, for it to have real value, it needs to be spread out over a few months or the course of the year. This allows teachers to implement the strategies learned, reflect on the implementation and the results, and make adjustments needed, all of which are supported by Borko's (2004) research.

<u>Situated Learning</u>

Borrowing from Krumsvik (2008), Pitsoe and Maila (2013) stated:

From a situative perspective, learning is both an individual process of coming to understand how to participate in the discourse and practices of a particular community, and a community process of refining norms and practices through the ideas and ways of thinking that individual members

bring to the discourse." (p. 214).

In their review of current literature, Pitsoe and Maila (2013) discussed the definition and importance of situated learning as it relates to education in general and teacher PD specifically. Their review of the literature showed definitions such as "learning which takes place in a social context"; "meaning which is derived from shared social interactions"; "communities of practice; and creating a shared schema." People construct meaning from their experiences. As social beings, people construct shared meanings from shared experiences. What makes sense to one group of people in a particular setting will not work for a different group in a different setting. Along with theorists who advocate for situated learning, Pitsoe and Maila contend "…that the contexts and activities in which individuals learn are fundamental to what they learn" (p. 214). If this is true, educators cannot use a "cookie-cutter" approach to PD. The PD provided to teachers needs to be tailored to meet their needs and the needs of their students. Even within the same district, sites have different strengths and growth areas, so PD should be adapted to address areas of growth specifically for each site.

Noting the evidence that teacher PD can improve classroom instructional practices that result in increased student achievement, Borko (2004) examined what is already known about PD and what is currently taking place. She then looked to the future and discussed what might be explored as the next steps in the way of changes to bring about improvements in student achievement. As

she analyzed research on PD, Borko (2004) organized the studies into three

phases. In Phase 1, research activities focused on one PD program being

implemented at one site, with only the PD program and the teachers as learners

being studied. In Phase 2, research activities focused on one PD program

implemented at multiple sites by multiple presenters. The researchers studied

the relationships between facilitators, the PD program, and the teachers. In

Phase 3, multiple PD programs presented at multiple sites would be explored,

with the researcher looking at the context in addition to the facilitators, the PD

programs, and the teachers. Borko's research in Phases 2 and 3 would serve to

support and help to answer Wayne et al.'s (2008) first question about the

effectiveness of a PD program when it is delivered by persons other than the

developers of that program. While the three phases at first may appear linear,

the implementation does not need to be so. Borko (2004) noted that the changes

teachers need to make in the classroom "will be difficult to make without support

and guidance" (p. 3). When her article went to print, Borko (2004) noted that she

was unaware of any research taking place in Phase 3 but recommended that

research continue not only in all three phases but in finding new ways to look at

PD across all disciplines. While the elements of quality PD were not the focus of

her paper, Borko (2004) touched on these in her discussion. One element she

would include is that PD is situative; that is to say, learning takes place in a social

context, so it is both individual and social in nature. At first glance, it might seem

contradictory for Burke (2004) to include situative learning as a core feature of

PD when she is proposing in Phase 2 that the same PD be implemented at two (or more) sites instead of each site's PD being tailored to meet their needs. However, suppose one wanted to determine if situative learning should be included in this core list. In that case, research in Phase 2 might provide the information needed to solidify (or dispute) this point. Another consideration is that some types of PD can be more universal or less situative, such as training on a new math or reading series adopted by a local district.

In her review of the literature, Steiner (2004) affirmed Pitsoe and Maila's (2013) belief about the importance of situated learning when she explained, "Decisions about what experiences will be most effective should be largely driven by context" (p.1). She noted that while one approach or topic may captivate a group of teachers, that same approach may do nothing for another group in the same district. One criterion Hiebert et al. (2002) listed as a requirement for effective PD is site-based learning, which is in accord with the "situational learning" other researchers discussed. Researchers noted that learning occurs in a social context and through shared interactions (Pitsoe & Maila, 2013; Borko, 2004). Because of this, it is important that the site staff be involved in making the decisions about the professional development topics that will be presented.

Self-Reflection

Through regular self-reflection, teachers can refine their craft (Lipton & Wellman, 2018; Bell & Mladenovic, 2015). This is the point, or the purpose, of professional development: for teachers to refine their craft and improve

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classroom instruction. It should then follow that student achievement will increase as well. Most participants in the Bell and Mladenovic study (2015) indicated that the combination of being able to observe a peer who taught a similar subject matter, followed by the reflective practice of assessing their own teaching, could bring about changes in their teaching practices. Taking the time to review a lesson one has taught, then picking it apart and looking at each segment honestly takes time and energy, and often a bluntness that is difficult to face. In order to improve, a teacher must be able to acknowledge where they have fallen short and what improvements need to be made if growth is going to take place. This sometimes-brutal self-reflection is a necessary part of growth for the teacher who cares about their students and wants the best for them.

Pitsoe and Maila (2013) discussed reflective practice as an approach to PD. They noted that reflective practice could be traced back to Socrates, who used an inquiry method with his students. One of the current definitions of reflective thinking they outlined was action research, which focused on a targeted problem with ongoing feedback. Another definition was that the quality of our actions depends on our thought processes both before and during our teaching. A third was that we need to analyze what and how we teach so we can describe, assess, and learn from our work. Pitsoe and Maila (2013) summed up these and other definitions by stating:

In essence, it is a readiness to constantly evaluate and review your

practice in light of new learning (which may arise from within the context of

your professional practice.)…It involves thinking about and critically

analyzing one's actions with the goal of improving one's professional

practice (pp. 212-21),

The researchers added that reflective practice and situated learning should be

implemented hand-in-hand during the PD presented, noting that teachers need to

own the process of self-reflection for it to be of real benefit. This is important

because if teachers do not own the process, they will not truly participate in self-

reflection, or they will not follow through with self-reflection for long.

Content Knowledge

Many studies cited in this paper reference "content knowledge" as a

critical element as the researchers discuss various traits of PD. For example,

when Goddard et al. (2007) summarize teachers' opportunities to collaborate,

they noted that teachers were also able to increase their understanding of

subject content matter. Also seeking to determine if there was a uniform set of

"high-quality, effective professional development" characteristics for educators,

Guskey (2003, p. 5) reviewed thirteen studies, each containing a list of

characteristics. In his review, he found that no one characteristic appeared on

every list. However, several traits appeared on most. Of the thirteen lists, eleven

contained teacher's content knowledge as a characteristic, making it the most

often trait listed. It stands to reason that if teachers have a better understanding

of what they are to teach, they will be better able to communicate this information

to their students effectively. Guskey (2003) stated there is evidence that shows

when trainers focus on higher-order thinking skills during PD, it can be effective (p. 9).

As Borko (2004) laid the groundwork for evaluating teacher PD, she stressed the importance of content knowledge, recognizing it included more than just understanding the subject matter. For teachers to be truly effective, Borko (2004) pointed out, they need to understand how students develop concepts, make connections, and approach problem-solving. The effective teacher then explicitly builds on these skills while teaching their subject matter. Borko's (2004) research is supported by Desimone (2009), who, when discussing elements of quality PD, stated that content focus "...may be the most influential feature" (p. 184), especially when it is linked with how children learn.

When discussing content knowledge, Garet et al. (2001) explained that the concept widened to include not only the subject matter the teacher was expected to teach but also teaching methods and strategies, curriculum materials used, and theories on how children learn. Not every PD session will focus on all these areas during every training. Based on the needs of the teachers, the site, and the students, a decision would need to be made as to the priority of each of these segments and to what degree they are emphasized. The authors pointed out that many researchers are still compiling data about the effectiveness of focusing on each area. At the same time, there is literature that, at least in part, supports a focus on the subject matter that needs to be taught. This focus works hand-in-hand with an awareness of how students learn that content.

Teacher content knowledge is critical to student success (Davis & Krajcik, 2005; Hiebert et al., 2002). However, PD for teachers is often separated from student learning, even if content area material is covered in the training (Davis & Krajcik, 2005). Wanting to meet the learning needs of both the student and the teacher, some publishers have created what is referred to as educative curriculum materials—a curriculum from which both the teachers and students can learn (Davis & Krajcik, 2005). Davis and Krajcik reviewed these materials. They considered how they might effectively be used in the classroom for novice and experienced teachers alike. In further discussion, the authors listed the benefits and limitations of educative curriculum materials and the following steps to be considered. Finally, they provided a "set of design heuristics" (p. 3) with support features to be considered when developing the curriculum. With the intent of bringing about educational reform, there are several possible roles educative curriculum materials might play in increasing teacher learning. These may include helping teachers anticipate student reactions to and misinterpretations of instructional materials and lessons. Curriculum materials could also support teachers as they learn subject matter and contemplate ways to connect units throughout the year.

Additionally, these materials can help to develop each educator's "pedagogical design capacity" (Davis & Krajcik, 2005, p. 5)—that is, their ability to make decisions about how and when to make changes in lessons based on the needs of their students in real-time (pp. 5-6). Davis and Krajcik stated,

"Promoting a teacher's pedagogical design capacity can help him participate in the discourse and practice of teaching; rather than merely implementing a given set of curriculum materials, the teacher becomes an agent in its design and enactment" (p. 6). To meet the needs of all teachers, alternative delivery methods, such as online sources, were discussed. With this format, teachers can choose how much support they need and at what levels, and additional media supports can be linked for easy access. Drawbacks, such as the length of the printed lesson plans, were discussed. The authors noted that further study would be required on the design heuristics in various subject matters. Recommended next steps would include developing standards for creating educative curriculum materials and evaluation criteria. The authors suggested "…case studies of how teachers use educative curriculum materials…" (p. 10) as they "could prove effective" (p. 10). Davis and Krajcik (2005) referenced Borko's (2004) three phases of research on PD, stating that studies on educative curriculum materials fall into what Borko refers to as Phase 1: exploring one PD model with one site or in one context, with the intent of providing evidence that the PD program can have a positive impact on teacher learning (p. 10).

Also, recognizing that content knowledge includes more than just understanding the subject matter or curriculum, Hiebert et al. (2002) emphasized the importance of teachers being able to share their content knowledge with others. They distinguished between practitioner and professional knowledge and explained how teachers could move from one to the other. The authors

described practitioner knowledge as being related to a problem, connected to a specific story or situation, and having all types of knowledge (i.e., content, pedagogical, pedagogical content, and student) integrated. Hiebert et al. explained that moving from practitioner knowledge to professional knowledge would be a deliberate choice on the teacher's part: the lesson must be planned with the purpose of unrestricted review by the public. Schools would need to store this knowledge conveniently where teachers could easily access it. While we do not yet have a nationwide system, some areas in the United States have established a storage system for a professional knowledge base (Hiebert et al., 2002). These would include laboratory schools and parts of Hawaii. Because of our country's size and regional differences, creating a national archive of lessons may be challenging. However, it would be reasonable for us to grow a system beginning with our local school districts. Once an archive is established at the district level, districts could develop an exchange program. An archive system can then be built/transferred to the Country Office of Education (COE). At this point, COEs can decide if they want to share information or combine it into one regional or state system, depending on the size of the state and the material involved.

As we reviewed the literature, we noted several of the same characteristics that seem to be listed across the studies. For example, when citing their results, the researchers note the success of the study (Flessner & Stuckey, 2013; Gengarelly & Abrams, 2009; Goddard et al., 2007; Penuel et al.,

2007; Garet et al., 2001), or that teachers' self-reports indicate change or growth

has taken place (Lipton & Wellman, 2018; Bell & Mladenovic, 2015; Burke, 2013;

Pitsoe & Maila, 2013; Garet et al., 2001). If this was indeed the case, it is very

puzzling to note that we have still not seen overall changes in how teachers

teach today. Nor are we seeing an increase in student achievement. Suppose

teachers are receiving PD using some of these characteristics in various

combinations and seeing success to some degree. In that case, something else

must also be going on. Something else is interfering with teachers either

receiving high-quality PD, successfully implementing the PD they are receiving,

or with students learning in the new ways teachers are now teaching. The

researcher will look at teacher responses and possible resistance to PD in the

next section of this paper.

Teacher Responses to Professional Development

Regarding PD, teachers come with their views on what it should entail and

what they should walk away with at the end of the day. Even if they are

attending a workshop voluntarily, according to Wilson and Berne (1999), they

rarely attend with the concept of changing their views on students and how they

learn, content knowledge, or pedagogical knowledge. They are, however, open

to learning a few new "tricks of the trade" (p. 199). With the pressure on teachers

today to do more than learn a few more "tricks," tension is high. There becomes

a "tug-of-war" between the PD presenters and the teachers. While the PD

presenters want to share their expertise (often sounding condescending to the teachers), the teachers resist making any changes. When administrators jump in, they are usually on the end of the rope where the PD presenters are, pulling hard against the teachers. After all, much money was spent to send the teachers to this excellent PD session. At this point, the teachers feel completely unsupported and overwhelmed, if not outright attacked (Wilson & Berne, 1999, p. 201).

The Apprenticeship of Observation

        In his book, *Schoolteacher: A Sociological Study*, Lortie (1975) examined the notion that since students spent over 13,000 hours with teachers in K-12 classrooms, instead of relying on teacher-prep courses, new teachers fell back on what they experienced and observed while in the classroom with these teachers. Lortie referred to this as the "apprenticeship of observation" (p. 61). Mewborn and Tyminski (2006) stated that the apprenticeship of observation "has been widely used to explain the apparent lack of influence of teacher education programs on teachers' beliefs and practices" (p. 30). However, they questioned Lortie's apprenticeship of observation, stating that in a traditional apprenticeship, the apprentice is coached by the master as he learns his trade. This does not happen as students learn from their teachers in a traditional classroom setting. The authors pointed out that students can not access their teachers' thought processes during instruction or their self-assessments after instruction. The apprenticeship of observation, which the authors referred to as a "cultural

transmission model" (p. 31), should describe how good teaching continues to get reproduced and how we can break the pattern of duplication of poor teaching, according to Mewborn and Tyminski. The authors spoke with pre-service teachers, who were able to reflect on their personal experiences as students. Some shared positive experiences with teachers they wanted to emulate. In contrast, others shared negative experiences they wanted to ensure they never brought to their classrooms. Mewborn and Tyminski (2006) found these pre-service teachers to be very reflective about the influence their classroom teachers had over them, noting they may intentionally choose not to duplicate the same instructional methods or models to which they were exposed. The authors cited pre-service teachers who shared stories of negative experiences of their classroom teachers but who are using those memories to keep them from replicating poor instructional routines and practices. Mewborn and Tyminski (2006) stated that the apprenticeship of observation "has been widely used to explain the apparent lack of influence of teacher education programs on teachers' beliefs and practices" (p. 30). They go on to explain how the apprenticeship of observation does not have such a strong hold on these young teachers after all.

Resisting Change: Digging Deeper

In his article "What Can We Do About Teacher Resistance?" Knight (2009) asserted that one must look at more than just the teachers involved to understand fully what hinders student achievement. He asked six questions as

he probed deeper. In doing so, he encountered elements that some scholars consider necessary to implement high-quality PD. Knight's (2009) first question addressed the powerfulness of the practices teachers are asked to implement. He stated if they are not powerful, do not meet the needs of students at the school (site based), or if the teachers do not receive adequate support so they can implement the program with high quality (duration, coaching, learning/teaching cycle) the program will be ineffectively implemented, if at all (p. 509). In his second question, Knight asked if the practices are easily implemented. He addressed the difficulties of learning new habits and suggested "...when change leaders remove barriers..." teachers will put into practice the new programs (p. 509). He reported that teachers have also stated it is easier to implement a program when they have seen it modeled (Bell & Mladenovic, 2015; Gengarelly & Abrams, 2009). Knight's (2009) third question revolved around teachers' experience, with him stating that unless teachers have experienced success, they are less likely to try something new. Because of this, administrators should change their approach of trying to talk teachers into trying new things and give them new experiences instead. Knight went on to ask if teachers are treated with respect and doing the thinking, noting that both are critical pieces. If teachers are not treated with respect while attending PD, and if someone else does all the thinking for them, they will resist change (Knight, 2009). Knight's sixth question of "What has happened in the past?" is often a great predictor of what will happen in the future. Suppose teachers have been

resistant and ineffective at implementing new strategies in the past. In that case, these behaviors will more than likely continue unless those in charge make changes ahead of time in how they are presenting the new information, how they are selecting the information/strategies to be presented, the choices they will provide to teachers, and additional training and support they will provide. Knight closed by stating that when teaching improves, so will student achievement (p. 513).

Change of Focus

Many people have heard it said over and over again, that the principal of a school is the instructional leader of that site. But in "The Learning-Centered Principal" DuFour (2002) argued the point. DuFour outlined for us his administrative journey as an instructional leader when he first became an administrator. In this new role, he embraced the clinical supervision model with gusto. After some time, DuFour recognized that while he was helping teachers to improve classroom instruction, his work was centered on the wrong questions. Instead of asking what was being taught and how it could be taught more effectively, he realized he should have been asking questions about how much the students were truly learning, and what actions needed to be put in place to support both teachers and students to enhance learning (p. 13). In 1983 DeFour became principal of a high school in Illinois. There he worked with his staff in a two-year undertaking to move from a focus on teaching to a focus on learning. He organized the teachers into teams based on what they taught; then the teams

worked together to determine essential outcomes, create common assessments, and then review the data and determine strategies to improve instruction based on the data analysis (p. 13-14). During this transition, DuFour (2002) found that, among other things, the teachers were used to working in isolation, and needed time to collaborate. They needed focus and guidelines, procedures to follow, and questions to guide them as they transitioned. They needed training, resources, and support, morale-boosting, acknowledgement, and recognition (p. 14). Most of all, they needed an effective leader. So, all of the "needs" fell to DuFour, the principal. But as the focus of the school shifted from teaching to learning, his focus as a principal shifted from educational leader to learning leader (p. 14).

The Role of Leadership

Both DuFour (2002) and Knight (2009) clarified the role of leadership in bringing about change in our schools. They indicated that change cannot be brought about without a strong learning leader who will patiently lead the way while allowing teachers to do the work and the thinking. This researcher has experienced this type of change with a learning leader at a middle school in the district in which they taught. The administrative staff was learning alongside us and were not afraid to make and admit mistakes along the way. Our faculty knew they were learning this new process of focusing on learning instead of teaching alongside us, so when they made a mistake and had to change direction, we accepted it with grace and moved forward in that new direction. This process took a few years, but each year we noticed slight changes in the

teaching going on in the classrooms and our student outcomes and behaviors. DuFour (2002) and Knight (2009) seemed to be saying it is not that the teachers are resistant; they are being approached and led in the wrong manner.

Teacher Voice

As Flessner and Stuckey (2013) examined the mandated school-wide action research program at Fieldstone Elementary School, as noted earlier in this paper, an unintended lens for them was that of the political landscape. While the average Fieldstone teacher had 11 years of experience, several teachers had been teaching for less than six years. When academic coaches were selected, three of the four came from this group of less-experienced teachers. Other decisions—to go with action research rather than a more traditional approach and how to group the teachers—were made by district or site leadership, leaving teachers with a feeling of not having a voice in this decision-making process. With some of the teachers at this site having 36 years of classroom experience, others only having 5, and everyone else falling somewhere in between, the PD needs could be vastly different for each teacher while still on the same topic or theme. When this happens, some of the participants will sit through sections of training they do not necessarily need or that do not indeed apply to them. When that is the case, time and time again, teachers are going to feel some resistance—and possibly resentment—about the training they are receiving.

Ineffective Professional Development

Citing Supovitz (2001), Wayne et al. (2008) explain there are shortcomings in studies on the effectiveness of PD. One shortcoming of PD is a poor connection between how the teachers are trained to teach and the manner in which students are asked to show they have mastered the concepts taught. The researchers go on to say there is a discrepancy between the subject matter taught and that which is tested. In addition, there was a short passage of time between when the PD was given and when the researcher measured the effect of the PD intervention. Suppose the materials and teaching methods are not aligned with students' assessments. In that case, the data for these studies will be skewed. Finally, if there is not enough lag time, if teachers have not had sufficient time to practice implementing and perfecting the strategies learned, they will not be teaching at their highest potential for the students to make their most significant gains. Teachers must have sufficient time to practice the strategy, reflect on what worked and did not, collaborate with their teammates, make necessary changes, and implement the strategy again. This process may need to be repeated over several weeks or even months for the teachers to sufficiently master the strategy and implement it at their highest potential. At this point, and not before, the researcher can come in and measure the impact of the intervention. If the researchers are coming in too early and the results show the teachers are unsuccessful, it stands to reason that teachers are going to be discouraged and unwilling to implement new strategies the next time around.

For example, Wilson and Berne (1999) reviewed research already

compiled on teacher learning, critical elements of PD, and types of PD best used.

They then published a synthesis of the information they attained. The authors

found teacher trainings to be fragmented and full of holes, leaving teachers

wanting/needing much more, which they never seemed to attain. The authors

were principally concerned that there was no accurate measure of what or to

what degree teachers were learning during any of their PD sessions. District-

provided trainings were considered least valuable by teachers surveyed (14th out

of 14), while the most valuable, teachers said, were "direct classroom

experience" (p. 174). At this point, the authors suggested that action research

may be the next step to rectify this problem. Through action research, teachers

could look at their work, analyze the data on what they are doing, find a solution

and implement it. If teachers truly own the process, they should make

measurable growth based on data. With that teacher growth, we should see

growth in the knowledge and experience of the students as well. Wilson and

Berne (1999) continued looking at various research that cited lists of elements

effective PD should include. However, they argue, "[n]ew is not always right" (p.

176). Teachers can be presented with new ideas and materials, agree to use

them, and even be excited about implementing them in the classroom. However,

suppose their ideology has not been refined. In that case, no changes will be

made in how they present the concepts they teach to their students. This may

not be an issue of teachers resisting change. It may be a matter of them not fully

understanding what is required to bring about effective change in their classroom. Alternatively, it may be, unfortunately, that they are incapable of making such a change.

Wilson and Berne (1999) also note that teachers willing to learn, grow, and change may have difficulty doing so at their home site, where growth and change are not supported (p. 187). As a result, these teachers may have to attend trainings off-site on their own time. An interesting point brought up by Wilson and Berne is that teachers are authority figures who are to have the answers when the world is at their door. Then to admit to being less than perfect, not having all the answers, and maybe not having been doing things "correctly" all along places teachers in a vulnerable position. Allowing oneself to be vulnerable in a profession where one constantly feels attacked by the public, as well as from within their ranks, is a challenging thing to do. When reading Wilson and Berne (1999), the parallel between teachers as participants receiving PD and teachers in the classroom providing instruction becomes very clear. Just as the focus was once on teaching and students were expected to "get" the information taught, in PD, conventionally, the information was provided, and teachers were expected to receive it and know what to do with it. Willson and Berne countered this assumption by stating, "...teacher learning ought not be bound and delivered but rather activated" (p. 194). They go on to say, "...in addition to asking them to reconceptualize their teaching..." we also need to "...require teachers to reconceptualize professional development" (p. 194).

<u>Audit Culture</u>

Povey, Adams, and Everley (2017) describe what they call the audit culture (p. 52) of England's education system. The research focused on students, educators, and school sites, which are measured and labeled as failing; and then closely scrutinized as they attempt to make improvements. The authors recount how teachers were "re-storying themselves" (p. 52) as they worked against the culture and tried to reestablish who or what they were as professionals. This supports the findings of Wilson and Berne (1999), who also discussed the need for teachers to redefine themselves. Povey et al. (2017) explain how the audit culture impacts teachers at high-performing schools as the performance expectation is in place for all educators at all times. Teachers are constantly worried they will not measure up to standards or will be found lacking in some way. Because of this, they put an immense amount of energy into tracking how well they execute their assigned duties. This results in very little energy left to fulfill their duties at a high level. This increases teachers' concern about failing, thereby increasing the need to put more energy into monitoring their performance, leaving even less time and energy to put into their actual teaching. This vicious cycle can become very destructive.

<u>Teacher Identify</u>

Anyone who looks at teachers who are not implementing PD or making other changes requested by their district or site admin and sees them as rebellious or defiant is looking at the surface of the problem. They need to take

time to look much deeper to fully understand the dynamics of what might be truly going on. As Zimmerman (2006) looked at teachers' resistance to change, she first wrote about administrators needing to face their own barriers to change in order to be influential leaders. Only then will administrators be able to meet the difficult task of working with teachers who resist proposed changes. As she discussed teachers' resistance, she stated the first roadblock is often that teachers do not understand the need for change; they just do not see any reason for it. To them, everything is working well, so let us leave it alone. Zimmerman (2006) stated, "Habit is a related barrier....it is simply easier to continue teaching in the same ways" (p. 239). Another point Zimmerman made is that sometimes being asked to change what they do and how they are doing it can be perceived by teachers as an attack on them personally and professionally. At other times, teachers may feel they are inadequate and will not be successful in implementing the changes effectively. Taking us to a deeper understanding of teachers' resistance to change, Zimmerman, referencing Heifetz and Linsky (2002), asserts that when we ask teachers to change, we are fundamentally questioning their personal/ professional identity. The author went on to inform administrators that "resistant" behaviors at the beginning of a change initiative may be more akin to the first stages of grief: grieving what they perceive they will be losing or have lost, and teachers are in denial of the loss and anything related to it.

Additional Barriers

In 2014, the Bill and Melinda Gates Foundation secured the Boston Consulting Group's (BCG) services to administer a PD survey for educators (K-12 Education Team, 2015). The research, consisting of surveys and interviews, was conducted between January and March 2014. The researchers interviewed over 1,300 teachers, principals, PD providers, and leaders. An additional 1,600 teachers participated in a later survey. As noted earlier in this paper, for Flessner and Stuckey (2013) and Penuel et al. (2007), a lack of time was identified by administrators and teachers alike as one of the main obstacles to implementing effective PD. Other barriers identified in this study revolve around the role of the site and district leadership and the support they provide to the teachers (Lipton & Wellman, 2018; Knight, 2009; Penuel et al., 2007; DuFour, 2002); the type of PD provided (Wayne et al., 2008; Goddard et al., 2007) and teachers having a voice on the topic of the PD (Flessner & Stuckey, 2013; Jason, 2007; Davis & Krajcik, 2005; Carlisle, Cooper & Watkins, 2004). Each of these pieces played a critical role in the success of every classroom across the country. Schools need strong, informed administrators from the very top down who can lead the way without hesitation; but who will also listen, be sensitive, and respond to the voice of every teacher and work to meet their every need by providing the PD necessary for the students in their classroom at their site. It is only by doing so that every teacher can become successful in ensuring that every student successfully reaches their fullest potential. This growth is made from the ground up and requires tremendous support.

As she reviewed the literature on effective PD design, Steiner (2004) noted several possible reasons why educators might resist implementing the PD they received in their classrooms. In reality, we could look at every characteristic listed above and say, "If this characteristic were missing from the PD received, then, of course, teachers would be resistant!" Take, for example, the core value of coherence. If the PD provided is not aligned with the state and district standards students are required to know, teachers will rarely feel compelled to implement the newly acquired skills and information in their classrooms. Many educators define PD as successful if teachers return to the classroom to change their teaching. However, the end goal, in reality, is to have changes in student learning and achievement (Steiner, 2004). Many teachers, with a focus on teaching, have received various PD sessions over the years and implemented numerous strategies, still with a focus on teaching, without seeing the desired student gains. As a result, these teachers have become resistant to trying any additional changes. Until they can see the net worth—increased student learning—they may very well remain resistant, or stagnant as it may be, as an educator (Steiner, 2004).

Summary

The researcher wrote this chapter first to examine which elements make for high-quality PD. Second, the author sought to uncover what barriers keep teachers from putting into practice new strategies they have learned while

attending site, district, or other PD sessions. While various researchers

discussed many elements and many of the lists overlapped, the research did not

show one set of elements common to them all or to a majority of them. The

elements listed most often by most of the researchers studied included (in no

particular order) collaboration, coherence, duration, self-reflection, content

knowledge, and situated learning. Nothing in the literature reviewed so far

indicated all six of these elements should be included in every PD, and if they

were, to what degree.

When it comes to implementing strategies learned, the literature studied

sheds light on a plethora of reasons why PD is not always implemented. It also

revealed that teacher resistance was not always the cause, or at least not

intentionally, of the failure of PD.   While there may arguably be educators who

refuse to make changes for a variety of reasons (the pendulum will swing back

this way, as well as other reasons), the researcher showed most were willing to

try new strategies if they understood the situation, the changes were easy to

make, and someone showed them how. However, some researchers noted that

the administrator's role is critical to the success of change being brought about.

The administrator needs to ensure they are transparent as they lead the way, be

aware of how people on their site respond to change, be able to provide

appropriate support to their staff and lead without hesitation, to name just a few

skills. As we continue to talk about teacher resistance, we come back to the

discussion of which elements of PD might have been better suited for that site or that situation so change could occur more seamlessly.

Based on these findings, there is still much work to be done in this area. The end goal is, and always will be, to increase student achievement across the board. In order to do so, we need to see changes in how content is delivered in the classrooms. This study intends to build on the body of work already published, moving forward to understand better how PD can best be delivered. When this is done, PD will be fully implemented to bring about the changes needed in classroom instruction and to increase student achievement. The research will be conducted with K-6 classroom teachers, PD presenters, and site administrators to gain a deeper understanding of educators' experiences with professional development, as well as their thoughts and feelings surrounding those experiences.

The author will also sit in on PD sessions at both the site and district level and observe the implementation of new strategies in the classrooms. The researcher will review at least two sites' school plans and PD binders for the year. Documents such as calendars, agendas, and fliers can provide pertinent information about trainings provided or offered to the staff. While communication was not an element listed by researchers or PD presenters, it was a theme that flowed through the conversations and applications of the other elements in the various studies. As we delve deeper into research, it is this author's belief they will find that leaders and their staff will need to learn to listen with their hearts and

their eyes, not just their ears, if they genuinely want to break through the barriers

to bring about change.

CHAPTER THREE

RESEARCH DESIGN AND METHODOLOGY

Introduction

Student achievement is dropping, and the achievement gap still needs to be addressed (Burke, 2013). Teachers are provided professional development to improve instruction in the classroom. However, they still have not seen the changes they had hoped to see (Borko, 2004). Even with the pedagogical shift from a focus on teaching to a focus on learning, expected improvements have not been met. The format of the PD provided also changed over the years, although most models can still be found in use today. In the 1980s, there were many "sit and get" presentations. During these presentations, teachers would sit and listen to the presenter for anywhere from three hours to a full day, or even 3-5 days. On more than one occasion, teachers were told, "If you get just one thing from this session...." However, too much money was being spent on "just one thing" for teachers to take back to their classrooms. Some of the changes in PD over the years included making the sessions more participatory. This meant teachers would complete the same learning activities as the students to more fully understand what the students would be experiencing during instruction. Group discussions also allowed teachers to share the results of implementing the strategies learned. Most recently, a "Trainer of Trainers" model of PD delivery was adopted by local districts. In this model, the district (or an outside) expert

would train two teachers per site. Then they would go back and train the staff but in a much more condensed format. Although teachers were exposed to various PD delivery models, how much they implemented in their classrooms did not necessarily change (Borko, 2004).

The purpose of this instrumental case study is to analyze the professional development experiences of K-6 classroom teachers. The research questions to be answered are: What are the elements that make up effective professional development for K-6 classroom teachers? What, if anything, prevents a teacher from implementing the professional development received in their classroom? And, How do you effectively implement professional development at a K-6 site?

Positionality

Having been an educator in a large urban district for 36 years, the researcher experienced professional development (PD) on many topics and formats. Often, the PD was beneficial and applicable to the classroom. For example, while teaching middle school, PD was provided on content area comprehension strategies, which teachers in any content area can use to help students better access the information in their textbooks. On other occasions, however, the PD was not beneficial: as kindergarten teachers, participants were told, "Thank you for being here; this does not apply to your grade level." Teachers found it frustrating to sit through trainings that did not apply, which was a complete waste of their time. More often than not, the PD most teachers

received had been site or district mandated and took the form of a 1-2 day delivery, without thought to whom specifically should attend (i.e., will it benefit a specific grade level, subject area, or support staff) and without scheduled follow-up.

In addition, in one sense or another, the researcher has always been a coach or mentor to others. In the early years of teaching, availability to others was consistent for providing advice and resources. As early as the second year of teaching, demonstrated lessons were taught to administrators who were being trained in the clinical supervision of teachers. Over the years, positions worked included supervising student teachers, serving as a mentor teacher, and later serving as a Beginning Teacher Support and Assessment (BTSA) provider (now known as Teacher Induction Program: TIP.) Much of the coaching was done informally: working with teachers new to the site to help them acclimate and become successful. Additionally, coaching more formally took place, such as serving as teaching coach for the district. In 2009, the researcher came out of the classroom and coached at an elementary site for four years. During this time, working with teachers individually and by grade level took place with the intent of helping them improve instruction in the classroom. After a return to the classroom for one year, the researcher became a coach at the district level in 2014. The position was as a Teacher on Special Assignment: Teaching Coach in a unique program for a large urban school district in the western United States. Working with teachers who self-referred for additional support and professional

development was the focus of this unique program. This position transitioned to include being a K-12 academic coach for the district. While working in these coaching positions, the researcher became aware that not all teachers were implementing the professional development they received, which in part led to the questions and research interest: *What are the elements that make up effective professional development for K-6 teachers*? *What, if anything, prevents a teacher from implementing PD received in their classroom*? And *How do you effectively implement professional development at a K-6 site*?

Another component that led to this research interest is the training provided by the district. The district was currently using the *Trainer of Trainers* model, which seemed at first blush to be an efficient way to go. One or two people at each site were trained, so every site had its experts to answer questions as they came up. With experts at each site, there would be fewer questions that downtown would have to answer, as the problems could be resolved at the site level. The drawback to this training was the implementation of the model. The so-called site experts were not given adequate time to present their new information to the rest of the staff. They attended a six- to eight-hour training and then had 20 minutes to 2 hours to share this information with their staff. This resulted in the staff being unable to implement the new information or program fully. Another drawback was that the site experts were not always trained to present the information to the staff. In turn, while they may have understood the information, they may not have been able to communicate the

details to the rest of the staff. This resulted in the strategies or programs not being implemented fully or correctly. Also, there was no way to guarantee that the selected portion(s) of information shared was the same from one site to the next. This, in turn, would impact instruction in the classroom, which impacts student achievement across the district.

After participating in PD, some teachers appeared to return to the classroom and continued with the status quo. What they "learned" during the PD they attended was set aside for various reasons. Maybe the strategies did not make sense or were not fully understood. Possibly the teacher felt they did not have time to learn to implement something new with the pressure of raising test scores already pressing down on them. Perhaps they knew no one would check up on them, so they were not going to bother with anything new. So what can be done to ensure that PD leads to effective change in the classroom? What PD delivery model(s) will effectively reach this goal? And what are the elements that make them effective?

Research Design

The researcher wanted to explore the professional development (PD) experiences of K-6 classroom teachers in a large urban school district in the western region of the United States and thereby gain a deeper understanding of these experiences. Semi-structured interviews were utilized to gain an understanding of K-6 classroom teachers' PD experiences. Site principals were

also interviewed to provide a broader view of PD provided to the teachers. Semi-structured interviews were held with the PD presenters to determine what elements were being used during PD, and why. In addition, observations of the process of professional development delivery were conducted; as was the current mode of PD delivery in this district, the PD session was held virtually. Once the teachers had the opportunity to implement the strategy(ies) learned and build towards mastery of this strategy(ies), follow-up interviews were held with some teachers to learn about their process of implementing the professional development in the classroom. The third source of data collection was a review of a school site's School Plan. This included their PD calendar, agendas, and other pertinent documents. While it was hoped district documents would also be analyzed, the research did not have access to all of these materials. Interviews with teachers, administrators, and PD facilitators were the primary format for data collection; combined with observations and a review of documents, a qualitative case study was conducted.

Research Methodology

Yin (2006) tells us that analyzing a "case" in a genuine setting is what gives it its strength, then goes on to say, "...the strength of the case study method is its ability to examine, in-depth, a 'case' within its 'real-life context' " (Yin, page 111, 2006). This research project looked at participants and examined the professional development provided in one school district in the

western region of the United States. The researcher conducted interviews and analyzed school documents. In addition, observations of PD presentations and follow-up interviews with classroom teachers were conducted in a genuine setting within the school and district. For these reasons, a case study was used to gather data.

Research Setting

The research was conducted in a large urban school district in the western region of the United States. Schools in this district are grouped in clusters for meetings, trainings, and instructional-rounds walk-throughs. All the elementary sites that feed into the middle schools and the middle schools that feed into a high school belong to the same cluster. Teachers from elementary schools in one of the clusters were invited to participate. Emails introducing the researcher and the research proposal were sent to all certificated staff at these eleven sites. The email included a recruitment flier, the questions to be utilized, and a consent form. Administrators from these sites and district PD presenters were sent a similar email with the appropriate questions and consent forms. Of the 238 teachers emailed, only 10, or 4% of the total population, responded with an affirmative answer. This changed the sampling process from a random sample to a convenience sample. As a result, all ten teachers were interviewed. Two site administrators and four PD presenters also agreed to participate in this research project. The participating teachers represented six district sites, grades

K, 1, 2, 4, special education classes (grades 3-6), a TK-6 content specialist

teacher, and RSP (Resource Specialist Program.) The researcher conducted

semi-structured interviews with teachers and administrators at the selected

elementary sites. Semi-structured interviews allowed the researcher to add

questions to the interview based on the participants' responses. Additionally, the

researcher observed Professional Development sessions presented to the

elementary teachers. Once teachers had time to practice the strategies learned,

a follow-up interview was conducted with two teachers from the group. During

the PD sessions, the researcher served as an outside observer (Glesne, 1999).

<center>Research Sample</center>

Teachers from eleven district elementary sites were invited to participate.

Those invited to participate totaled 216 classroom teachers and 22 support

teachers. The researcher conducted research at six of these elementary sites in

a large urban school district. These sites were a part of a district "cluster" made

up of elementary schools that fed into middle schools and then into a high

school. The cluster was chosen because the schools vary: some were high

performing (based on test scores) while others were low performing; some had

high SES students while others had low SES students. All teachers at these

sites were invited to participate; of the 238 invited, ten agreed to participate.

Because of the low number of participants, the study used a sample of

convenience rather than a random sample. The administrators at these sites

were invited to participate in interviews; two administrators chose to participate in this study. In addition, eight professional development presenters in the district were invited to interview; of the eight, four volunteered to be included. Observations of two professional development sessions were conducted. Presenters at each session varied, while the facilitator remained the same. All observations were conducted electronically.   In order to maintain student confidentiality, classroom observations were not allowed. Instead, two teachers volunteered to implement their learned strategies and then participate in a follow-up interview.

Data Collection

Once university IRB and district IRC approval was granted, a cluster of schools in the district was selected based on the student population at the sites in the cluster. The cluster studied was chosen because the schools in it vary: some were high performing (based on test scores) while others were low performing; some had high SES students while others had low SES students. Recruitment fliers describing the research project were emailed to all credentialed personnel at the elementary sites in the cluster. In addition, a consent form and list of sample questions were provided for the teachers simultaneously, along with an introductory note. These items were provided in advance to provide teachers with as much information as possible so they could make an informed decision about their commitment if they chose to participate in

the study. Initially, nine (9) teachers responded by affirming their willingness to participate, and one (1) declined. However, as interviews were conducted, one (1) of the original nine (9) participants withdrew; and two (2) new teachers committed to participate in the research project, providing for ten (10) classroom teachers in total.

Each participating teacher filled out the consent form and used an electronic signature; or they printed, signed, scanned the forms, and returned them via the personal email address provided. In doing so, the district would be unable to track who was selected to participate in the study. Because of the low number of responses, the sample changed from random selection to a convenience sample, and all persons who agreed to participate were included. Working around the participants' work and personal schedules resulted in the interviews taking several weeks to complete. Administrators from each site were also invited to participate. As with the teachers, they were sent a flier describing the study, a consent form, and a list of potential questions. Initially, none of the principals responded in the affirmative: one said they would encourage their teachers to participate, and one acknowledged they had received the request. A second request was sent to the administrators at each of the eleven sites. At this time, two (2) volunteered to participate. Each participating principal filled out the consent form and used an electronic signature; or they printed, signed, scanned the forms and returned them via the email address provided, just as the teachers had done. Interviews were then scheduled.

The district has program specialists (PS) who provide training at both the site and district levels. Following the same procedure used with teachers and principals, eight (8) PS were sent fliers, consent forms, and potential questions, and four (4) made themselves available for interviews.

Due to COVID-19, the researcher conducted Zoom video-conference semi-structured interviews with teachers, administrators, and PSs to determine the interviewees' experiences with PD, what types of PD had been provided in prior years and the professional development plan for the time frame of this study. Each interview was recorded via Zoom with the participants' permission. After each interview was conducted, the researcher transcribed the conversation. Each transcription was double-checked against the recordings for accuracy; then sent to the corresponding participant for member-checking (Glesne, 1999). Glesne describes member checking as "sharing interview transcripts, analytical thoughts, and/or drafts of the final reports with research participants to make sure you are representing them and their ideas accurately" (p. 32). Any information which might have been incorrectly transcribed was corrected. Participants were again provided copies of the transcription for review. Once the participants approved the transcriptions, the researcher uploaded the data into an Excel sheet for analysis.

Matching the PD calendars for the sites and the district with the current time frame, it was determined that two (2) PD sessions would be observed. Before observations, zoom video-conference semi-structured interviews were

conducted with PD presenters to determine what elements they would include in their presentations, why those elements were used, and why others were not. With participants' permission, interviews were recorded and later transcribed following the process outlined above. In addition, member checking (Glesne, 1999) was conducted to ensure the accuracy of the data collected. Presenters interviewed may or may not have been those observed.

Professional development sessions were then observed. Based on the literature review, an observation protocol of possible strategies or PD elements that could be incorporated was developed and used. Based on the presenter's interview responses, additional elements were added to the observation sheet. (Desimone, 2011; Desimone, 2009; Wayne, Yoon, Zhu, Cronen, & Garet, 2008; Penuel, Fishman, Yamaguchi, & Gallagher, 2007; Guskey, 2003; Desimone, Porter, Garet, Yoon, & Birman, 2002; Guskey, 1994). After allowing time for the classroom teachers to practice the strategies learned during these PD sessions, two (2) classroom teachers agreed to a follow-up interview regarding the implementation of the strategy in their classrooms. This allowed for teachers to practice to mastery the strategies learned and make any necessary changes for the strategies to fit the classroom's needs. During the PD observations, the role of the researcher was that of an outside observer taking field notes (Glesne, 1999).

Artifacts were collected. One (1) of the principals interviewed agreed to share their school PD calendar for the research project. The selection of sites for

artifact collection was intended to be a random selection; however, only two (2) of the eleven (11) administrators invited agreed to participate in the research project. Only one (1) of them agreed to share site documents. Documents such as calendars, agendas, and fliers provide pertinent information about trainings provided or offered to the staff, which may not be revealed through the interviews. Copies of the school site plan and calendar were emailed to the researcher by the administrator. These items were used to determine what PD was scheduled for the school site as a whole and various groups based on interest or need. Two (2) questions were added to the administrators' semi-structured interviews. These were "Are there any consequences if teachers do not attend the optional training?" and "Are there any benefits or favor of any kind shown to teachers who participate in the optional training?" Participating Program Specialists (PS) could not provide similar artifacts from their respective departments as they did not have access to those materials.

As data were collected throughout this study's duration and afterward, all data were securely stored on the researcher's laptop. When not in use, the laptop and all data were secured in a locked filing cabinet in the researcher's home. Not at any time was the research data made available to any other persons. At all times, only the researcher had access to the laptop and locked filing cabinet.

Data Analysis

Once interviews were transcribed and approved by the participants, the data was placed in an Excel sheet. The researcher analyzed the data, looking for common terms or concepts, discrepancies, and outliers. Next, descriptive coding was used to summarize the texts' essential concepts (Saldana, 2013). The data analysis determined over 30 concepts. The codes were then grouped into categories and further organized into related themes (Saldana, 2013).

Trustworthiness

Researchers use triangulation (Creswell, 2013; Glesne, 1999) to bring trustworthiness to their work. Data collected through interviews, observations, and the review of artifacts allowed for triangulation during this research project. When data sources back each other up and document your findings, "they are triangulating information and providing validity to their findings" (Creswell, p.251, 2013).   Member checking, as described by Glesne (1999), is "sharing interview transcripts, analytical thoughts, and/or drafts of the final reports with research participants to make sure you are representing them and their ideas accurately" (p. 32) and was used as a means of bringing trustworthiness to this study.

Glesne (1999) talks about the use of rich, thick descriptions, which she describes as "writing that allows the reader to enter the research context" (p. 32) as another method of trustworthiness. This was built into the research as well. The write-up of the results tells the participants' stories. This enables the readers

to hear each individual's voice and see each teacher's experience shine through as if the reader were in the room when the interviews were being conducted.

An additional means of building trustworthiness was the use of pseudonyms. Therefore, all participants, the schools, and the district were given pseudonyms for this study.

Participants were informed of the purpose of the study before they decided to partake in the study, and they knew they had the freedom to withdraw from the study at any given time. Interview questions were provided to all participants before they agreed to participate. The researcher was the only one to have access to the data during and after the research was conducted and data was collected. All materials were securely stored in a locked filing cabinet in the researcher's home when not being utilized by the researcher.

Role of the Researcher

For the participants to be willing to talk to the researcher, participants needed to trust the researcher. This meant rapport needed to be built with the participants in a concise amount of time. The researcher needed to be open and genuine with them, letting them know the purpose of the research and the intended outcome, and what their role was going to be in doing so. During the interview, the researcher used their names, actively listened to what they had to say, and showed empathy. Once rapport was built (or as it was being built), the researcher and participants could move forward.

During the PD observations, the researcher's role was that of an outside observer taking field notes. Once the notes were typed up, the participants had the opportunity to verify the data collected through member checking. Throughout the interviews and observations, the researcher intended to remain impartial and non-judgmental and collect the data provided. Semi-structured interviews allowed additional questions to be asked as the researcher moved through the interview, and member checking was used to verify the accuracy of the data collected.

CHAPTER FOUR

RESEARCH RESULTS

Introduction

This instrumental case study was undertaken to understand K-6

classroom teachers' experiences with professional development, as well as other

factors that may or may not impact the teachers' implementation of the strategies

learned during professional development (PD) sessions. It is the hope of the

researcher to find answers and offer solutions to the problem of teachers not

making changes in the instructional practices used in their classrooms.

Questions posed in this study are: *What are the elements that make up effective*

professional development for K-6 classroom teachers? *What, if anything,*

prevents a teacher from implementing professional development in their

classroom? And, *How do educators effectively implement professional*

development at a K-6 site?

All interviews were individually conducted via Zoom video conferencing.

The identity and confidentiality of each participant was protected through

pseudonyms, and by the researcher keeping all data and documentation secure

in a locked file cabinet in their home. Teachers, administrators, and professional

development presenters were interviewed (see Tables 1 and 2 below.)

Professional development presentations were observed to note which

elements of professional development were implemented by presenters in the

Table 1

Participant Demographics: Personal Data

	Participant Demographics												
Position	**Gender (self-identified)**			**Ethnicity**					**Age Range**				
	Male	Female	Other	White	Hispanic /Latino	African American	Other	Not Stated	25-35	35-45	45-55	55-65	65 +
Teachers	2	8	0	6	0	2	1	1	3	1	3	3	0
Site Administrators	0	2	0	2	0	0	0	0	0	0	1	0	1
Professional Development Presenters	0	4	0	2	1	0	0	1	0	1	2	0	1

Table 2

Participant Demographics: Professional Data

	Participant Demographics														
Position	**Program**			**Current grade level**							**Years of Experience**				
	Regular Education	Special Education	Other Programs	K	1	2	3	4	5	6	0-5	5-10	10-20	20-30	30-40
		K-3 4-6													
Teachers	7	1 1	1	1	2	2	0	2	0	0	2	2	1	2	3
Administrators	2	0	0	N/A							0	0	1	0	1
Professional Development Presenters	4	0	0	N/A							0	0	2	1	1

district where the research was conducted. The purpose of these observations was to ascertain which elements, if any, aided the implementation of strategies presented during the PD sessions.

School site documents were examined to provide triangulation. The researcher hoped these materials would provide further insight into PD opportunities offered to teachers during the school year and beyond. For example, one principal interviewed shared that every site administrator writes a Professional Learning/Instructional Plan and submits it to the district office. She added that her staff also created one as their plan of action for the year (or years span) in which they worked. This document replaced the Single Plan for School Improvement previously used by school sites in this district. Andre'a, the principal at this site (a pseudonym used,) shared her site's Professional Learning/Instructional Plan with the researcher. This data will be discussed later in this chapter.

Results of the Study

Administrators and K-6 teachers from elementary sites in one cluster of K-12 schools in the district were invited to participate in this study. In addition, professional development presenters were also invited to participate. An introductory letter stating the purpose of the study was sent to the potential participants (see Appendix A). As we were still in the midst of a pandemic and educators were feeling overwhelmed, the response for participation was smaller

than anticipated. For this reason, a convenience sample was used, and all

respondents were included in the study. Pseudonyms were used for all

participants, school sites, and the district to protect the identity of everyone

involved in this research project.

<u>Teacher One-On-One Interviews</u>

Educators who teach students how to conduct research for a paper

emphasize the importance of primary sources. In any research, those first-

person accounts are invaluable. For this reason, this researcher conducted one-

on-one interviews with participants in all three categories being examined:

classroom teachers, site administrators, and professional development

presenters. Once teachers were assured of their anonymity and rapport was

built between the researcher and the participants, they were willing to share their

experiences. Two of the participants did question the researcher to verify that

their information would be confidential before answering some of the questions.

However, they were willing to continue with the interview once they were

reassured that the researcher would be the only person to see their data and

know their identity. A consent form (see Appendix B) and a list of potential

questions (see Appendix C) were provided to all potential teacher participants at

the same time the letter of introduction was sent. Initially, teachers were told the

interview would take 15-30 minutes, depending on their responses. Long

responses would take more time, and questions asked by the participant or the

interviewer for clarification could increase the amount of time consumed for any

given interview. The average teacher interview lasted 18.5 minutes, with a range in time from 11 minutes to 30.25 minutes. Questions added by the researcher were added to each individual's data collection sheet.

The first few questions posed inquired about each participant's background and experience. Then, when asked about a time when they received training and followed through with implementation in the classroom, each participant could readily recall and share their experiences. Some teachers discussed what they were currently working on at their site, such as Social Emotional Learning (SEL) during and through the pandemic. In contrast, others considered the training they received prior to the COVID-19 pandemic. One teacher shared, "It was much easier pre-COVID-19 because we didn't have to worry about social distancing, and the kids could interact more." Olivia, a 20+ year veteran teacher, shared that she uses Kagan structures she learned over 15 years ago in another district. She added, "I will use them until my last day in the classroom because they work." Six of the ten participants indicated they were still using the particular strategy they just discussed. The four who were no longer implementing it said it was due to grade level or program changes (i.e., special education class, RSP teacher, or content specialist.) Edna, with 14 years of experience, including her work as a designated substitute teacher for the district, shared, "I had the opportunity to attend New Teacher Academy, and to me, this past year was most beneficial because it was on what the special education population was asking for. They squeezed in a PD for current RSP

demonstration teachers and mild/mod SDC teachers to share what works for them. That was beneficial because for a long time, just working in special ed, you go to the gen ed PD, and you listen and take in the information. However, it doesn't really apply to you and your population of students. So to have them focus on OUR kids was helpful. I was able to take that information right away and use it for my students' benefit." Georgia, a teacher with over 25 years of teaching, informed the researcher that she "[always tries] to do that with all the trainings I attend. Probably the most recent one is the Positive Behavior and Intervention System (PBiS) reward system that we are using. Implementing it has been a little bit of a challenge because the kids still want [things the way they were before COVID-19] when paper tickets were handed out. Now everything is on the computer. I have implemented it fully with intervention strategies.... And it is a bit challenging this year with the students—they have been out of school for one-and-one-half years, and they are [having difficulty transitioning back to the classroom setting]."

"We did a 'number talks' training when I was an intern (in Kinder), which I was able to implement. We planned a lesson with our colleagues, went to our classrooms & taught the lesson. We then came back together to talk about it— the pros and cons of what worked or what didn't. Then we made adjustments to the strategy and implemented it again," stated Frank, a first-year teacher with a few years of subbing experience. He went on to say, "I'm using some of the strategies, but not as fully as I would like, as I don't feel I've had enough training

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for it for this grade level." When asked about her experience, India, a teacher of five years, shared, "I remember one that always stands out that was really helpful for me. I was able to use it right away. Someone came to our site to present a math training, and we were paired with different grade levels. I was in first and paired with Kinder. First, we discussed our lessons, and we planned with the expert in very explicit detail. Then we discussed how the two grades would relate; planned what we would say, how we would use the manipulatives, and all [our other resources.] Then we observed each other teach the lesson and provided feedback; it was nice because it was instant feedback! It was like real life—'oh! That didn't work! Now what?' And then we had follow-up conversations after to determine what needed to be changed, and then we planned again." India further explained that while the school was no longer using this type of lesson study, she was still using components of it in her classroom now.

Overall, eight of the ten participating teachers indicated they were still using some of the strategies they had recently learned. Of the two that indicated they were no longer using that strategy, one said it was because of a change in focus at the district level. The other reported they were attempting to implement the training, but classroom behaviors were sometimes very challenging.

The teachers were then asked to share about a training they received which they did not implement, to explain why they did not implement the training, and to tell what the aftermath was. Mother Nature has taught for 30+ years. Her

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response of, "Oh my gosh! So many times. I'm so sad!" came very quickly, and

was echoed by Henri', a veteran teacher with 25+ years experience, who stated

with a big laugh, "There's too many to list!" Both of these educators went on to

explain that due to their unique circumstances (i.e., the programs in which they

work,) many of the site trainings they attended over the years had not been

applicable to their students or their curriculum. Although Sofia, a teacher with 39

years of experience, responded earlier by explaining that she was still using the

technology training she received last year and was implementing choice boards

with her students, and Olivia shared, "The strategies and structures I am using

are beneficial across all grade levels, so I will continue using them no matter

what I teach," these two educators were also able to share about strategies they

did not implement. Olivia stated, "I think if you've been teaching long enough,

you can tell what isn't going to last—we're going to get a new superintendent, or

we're going to get a new admin, and we're going to be jumping on another

bandwagon soon; and things change so much from year to year. The ones I

have chosen for myself (when I get to pick the PD I go to) and that I like because

I'm picking something important to me, and [for that reason] I'm probably going to

implement it more than something else." Only two of the ten participants stated

they could not recall a time when they did not implement the training they

received. Frank stated, "I can't think of a time. If I'm going to the training, then I

usually try to implement the training all the time, if it works for my class. But if it

doesn't work for my class, I 'put it in my pocket' so I have it for later. Then I'll try

it again later as each grade is different and each year is different—it just depends on what works for your kids and what doesn't." India indicated she always applies the training, but there are times it is not geared for her grade level, so she has to figure out how to modify the training to meet the needs of her students. Each of these two teachers has five years or less of teaching experience. The remaining six teachers indicated they either had a grade level change and did not receive the training required for them to apply the strategy to the new grade level (two teachers), or they felt the information shared was not appropriate for their students at this time (four teachers.)

Regarding what happens afterward when PD is not implemented, the responses varied from "Nothing" to "I don't want to find out!" Six participants indicated that nothing that they knew of would happen if they did not implement the strategies covered. On the other hand, Kendra, who has been teaching for six years, shared, "I would probably be called into [my administrator's] office and questioned about why I wasn't using the strategy."

"I would be asked probing questions," responded Georgia, adding, "So then I think, 'Okay, I'll do it; I'll behave; I'll be compliant.' And I do as much of the strategy that I can with my group of students." India pointed out that whether something happened or not depended on the site administrator at the given time. She shared, "[It] depends on...the different principals; we did have a principal that was pretty good. She wanted proof that you were implementing what you learned or at least trying part of it and learning something new; she would circle

back and ask us to discuss what we were doing and to bring evidence. We would then discuss it with our grade level or a couple of different grade levels. Our previous administrator did not do this; the accountability piece was not there previously." Sofia added that most of the time, she already knew most of the information shared and was implementing the strategies already. At the same time, Kendra informed the researcher that sometimes the material presented did not fit for her grade level, so she would try to adapt it, although that did not always work. Olivia pointed out that the inservices were not differentiated. "The PD we received should have been differentiated so those of us with lots of experience didn't have to sit through the basics of the information all over again," she asserted. "That way, the needs of everyone can be met much better." Another concern shared by Olivia was time. She added, "We are not given enough time to practice what we are learning and to really plan how we are going to incorporate this new information; they say we will get planning time but then things run long and we end up with 10 minutes."

The teachers were then asked what they liked about the PD they had received, as well as what they would like to change about their trainings. Of the ten participants, eight could share something they liked, while two indicated that PD in an online format did not work for them. Mother Nature stated, "I really appreciated some training we did on the *Distance Learning Playbook*, which is a Fisher, Frey, and Hattie book. We went through it as a staff, and I felt like it affirmed what we are already doing, and it also gave us some strategies that we

could use with our kids online right away." Two teachers expressed their concerns about having PD online instead of in person. Frank's concern was, "It goes too fast. I can't go back and forth with the changing of screens to follow as well as I would like." Georgia's issue was a little different. She shared, "I don't find [the online trainings] to be effective. We are only getting the 'basics' of a training. I don't see how you can do more than just the basics online. There just isn't enough depth for someone who has been teaching for 20+ years." Sofia, on the other hand, had a positive response to the online meetings they were having. She shared, "I can pay closer attention now that the trainings are online. There are fewer distractions, and the training allows more time to reflect." Kendra did not discuss any trainings directly; rather, she discussed her supervisor's approach to the training they were being provided. "I feel this year the supervisor is really trying to help us or encourage us to develop our relationships as a staff. I feel like she is giving us time to interact and to create things together, as opposed to just saying, 'These are the rules; do it.' So we are creating the rules together," Kendra stated. Henri' and Edna both discussed the focus on aligning instruction to student learning goals and how valuable they found this. Henri' mentioned a book his department was using (The Goal Book) which helped guide teachers as they aligned instruction to student learning goals. And Edna added excitedly, " I can also say they have asked us [to share] some things we would like to get PD on!" India shared, "Collaboration with grade level teams is

where I learned the most. Also, we are given time when we are learning something new; we ease into it by layering in the pieces."

When considering what they would like to see done differently regarding the PD they are currently receiving, one teacher did not see a need for any changes to be made to the trainings taking place. Three teachers indicated they wanted to go back to in-person meetings as soon as possible, with Frank sharing, "I just think that having us isolated is not a good way to have us learn. I feel like we as educators feed off each other, and we are there for each other, and we learn from each other. I think distance learning is not fully successful." In addition to concerns about what they receive through virtual trainings, several teachers noted the tendency for most people to be distracted by the work in front of them when they were isolated in their classroom and connecting via a digital platform. "...[A]nd quite honestly, if I am sitting here on my computer and I have all this work in front of me, what do you think I am really going to be doing?" asked Georgia. Three teachers said they feel collaboration time during PD needs to be increased, while addressing the need for more conversation and interaction with peers and materials. Georgia echoed Frank's earlier remarks when she stated, "[W]e learn from each other when we are able to meet face to face." Two teachers shared their desire to have more application during PD sessions; Edna described this as, "Time for discussions about how we would apply the strategies in the classroom." So while it may be stated in a variety of ways, based on what these teachers shared, conversation and application tied in

with more collaboration, making it a total of seven teachers who said more collaboration would be a change they would like to see implemented. Five teachers stated that they believed PD needed to be differentiated to meet the needs of all teachers at a site. Henri' expressed this idea fully when he stated, "I think we need to really understand students better; I think we need to understand how the students work in each individual class, grade, and specialty. I think by planning PD according to grade level, where teachers know their students the best, is to make it relevant. I think we need to focus on taking each grade level and making them their own 'small group.' And then have the PD focused around their grade level rather than a big whole-group PD. I think if we were to do that we would get a lot more out of it." Sofia suggested that breakout sessions would be another way to differentiate PD for educators.

The next question the researcher asked each teacher was, "What makes professional development of value to you?" While there was some overlap between the responses to this question and the earlier query regarding what teachers liked about the PD they were receiving, a wider range of responses were provided. Mother Nature and Olivia agreed that the training has value if it can be brought back and implemented the next day or week. Mother Nature stated, "It has to be something I can implement right away. Something that doesn't take a lot of time, structure, or money to implement." Kendra and Frank shared that almost everything is relevant to them at this point as they are both in the early years of their careers. Kendra said, "I'm still a new teacher, so that

development is important. I am building my conceptual knowledge of how to be a better teacher, of what my students need from me." At the same time, Frank shared, "I want to continue to grow. I want to keep pushing forward and not go backward." Connecting with the PD implementation being straightforward, seven teachers spoke on the importance of it being relevant. Henri' shared, "If it is relevant and current, it helps me stay on top of...the 'latest and greatest' strategies and techniques to use in the classroom. Other than that, it is just a time filler." Georgia and Jaclyn stated PD needed to be relevant and applicable to their current grade level. Olivia added, "It needs to be something that is going to increase engagement and increase the rigor for my kids." Sofia restated this need when she spoke of "...new, innovative ideas on how to help my scholars." Edna expressed the need for the PD to be "...something I can use for any child. All our kids have diverse needs. But if I can see how it can be used regardless of the grade level, regardless of the ability level, I think it is beneficial to me." Mother Nature stated, "If the professional development is geared towards something I have a buy-in for, then [it's relevant for me and has value for me]." While most participants mentioned one or two elements that make PD of value to them, India had several to share. She began with, "Working by grade level and being able to collaborate with my team is where I learn the most. Also, when we are given more time when we are learning something new; we ease into it by layering the pieces so we implement it in steps instead of it being thrown at us all at once. But really, when someone observes me and provides feedback,

whether it is a peer or a district program specialist, I feel like that is the greatest way for me to learn." Among her other ideas, Kendra mentioned a specific content training she found of value: "We are all going through this uncharted space after the pandemic close-down, so the SEL lessons are important. I don't think they are giving us enough time to do it all, but it is important. It has definitely helped."

Just as the researcher reversed the question on what teachers like in order to discover what they did not like, they again reversed the question on what is valued. Henri's and Edna's responses were almost identical when they responded, "When is it the complete opposite of what we just discussed of it being of value." So if it is not relevant and current and is so specific that the application is limited to a small group of students, these two educators find PD to lack value; or, in the words of Henri', "...it is just a time-filler." The concern of PD being repetitive or something the educators already know arose again in this section of the interviews, with four teachers expressing this consternation. India was one of these four, along with Jaclyn, who stated, "When it is repetitive, and you feel like, 'Haven't we learned this already?'" When a teacher of only five years expresses this, it may indeed be a concern. Along with India, Georgia and Frank discussed how PD, which is not appropriate for their grade level, has little or no value to them. Frank offered a solution: "I would like them to split them up a little better, maybe by grade level, and give us more time to collaborate with our grade level team. Even being able to collaborate with teachers at other sites

would work but on a greater scale." Mother Nature's main concern was a presenter who would read right off their presentation slides. She said, "I do not need you to read to me. I can read! I need you to show me, and tell me. Tell me about your experiences, show me how it worked, and then give me some tips on how to implement it right away at my own school." Kendra brought up the subject of time, which was also mentioned in response to earlier questions. She elaborated, "If it is just a quick fly-by-night meeting where they say, 'Do this,' but you don't know what 'this' is! They have gone over the material too fast, and then we are lost and have a lot of unanswered questions." She amplified this concern with a specific example about a training on how to complete report cards during their first year back in the classroom after COVID-19 hit. "One of the things I don't like, too," she elaborated, "is when they hand you a 60-page document and you're told to figure it out: 'You should have gotten your report cards done, because you have that document. And they should be right.' Really? I have time to sit down for a 60-page document? Now, [the supervisor] did end up coming back out and did an impromptu training at one of our meetings, and clarified [some of the process], which I can say helped a lot more, but it was a day before [report cards] were due. Like, how can I really get them done in that time frame? Now in her defense, [the supervisor] did say she would give us extra time, but for my personality, extra time signals [teacher gestures "brain exploding"] like I messed up; if not, why am I asking for extra time? Instead of just saying she would give us all an extra four days, we had to reach out to her specifically and

request the extra time, which also added an extra 'ack! Did I do something wrong?' So that, with the Memorandum Of Understanding (MOU) process isn't working."

The last two questions for the teacher interviews dealt with change: How has PD changed during COVID-19? Furthermore, How has PD changed over time since you first started teaching? All teachers expressed concern about PD being virtual even though they are now back in their classrooms with face-to-face teaching. While many decried this change, saying it was difficult, Sofia indicated it was a better format for her learning style. Even with the unease they felt regarding virtual PD, a few teachers did point out some positive aspects of it. Henri' acknowledged, "It's now online, which can be a good thing as you can be anywhere and still participate."

Moreover, Georgia granted, "I believe they really are trying to do their best." Regarding other changes since/during COVID-19 or changes connected to virtual PD not discussed earlier, two teachers indicated they believe the PD they have been receiving is at a lower caliber than what they received prior to the pandemic. Mother Nature's response was, "The PD loses its integrity when it is virtual. Because you don't have the interaction of people, the dialogue is different. When you talk to someone online, a lot of times people just check out. I'm even guilty of it." Henri' shared, "I think the quality of PD has changed with us being online. It is not the same caliber as it was prior to COVID-19 when we were able to meet in person. So the presenters create a beautiful slide

presentation and throw it up on the screen, but that's about it. And yes, the

presenters do talk about it, and all we are doing is watching what is on the

screen. I feel like there is a big gap we are missing in our trainings right now,

and I think it can be filled if we go back to in-person PD." A change noted by

Edna is the number of PD sessions being held: "Maybe we are having PD less,

so it is more focused on specific things. Let's say there were 5 PDs that were

planned, but now we just have three because it is very taxing to sit in front of a

computer for so long. We are [teaching] as well as meeting online, so I think they

have just become more intentional about what it is we are going to be doing." As

a first-year teacher, Frank expressed frustration when he said, "We no longer

collaborate in person as a staff. They are pushing so much stuff on me right

now, and it is getting overwhelming." He pondered whether he would feel this

way as a first-year teacher anyhow or if it was something compounded by the

pandemic. India pointed out that some things with PD stayed the same at her

site while others changed. "So last year we continued to do a whole series on

AVID, which was hard to do virtually. But some training changed: for example,

we had an emphasis on SEL, which the students and the staff all needed. This

year we have done PBiS, which is something we were working on before."

Kendra pondered the question a moment before answering, then shared,

"With my colleagues, building relationships is almost impossible. Having

discussions on a zoom call where only one person can interact while the rest of

us sit is just not engaging; it's not stimulating enough to keep everybody involved.

And that's what leads to the obvious, kinda like our kids. If they don't have something keeping them engaged, they're like 'poof,' gone!" Mother Nature and Olivia shared the same consternation, pointing out that they have been guilty of turning off their cameras and working on other projects in their classrooms. "It's all virtual, and I think we are just like our students; we're just big kids, and we have the same learning styles as our students do. And this is not the ideal platform for me because I am just a big kid who will turn my camera off and grade papers. Or I'll do something in my room that is of more value to me," shared Olivia. She went on to say, "I think our virtual PD is super-super ineffective. We had a district-wide training, and I don't know that even two-thirds of the primary team [at my site] can tell you what happened. We're all walking around and doing stuff; we're not any different than the kids."

Regarding changes in PD over the last five, ten, or more years, some teachers felt a lot had changed while others said PD had not really changed much. Some saw these changes for the better while others claimed they were for the worse. Jaclyn stated, "I don't think our PD has changed *over time*. I think when it changes it is because of a new administrator, not because there is 'new' way of doing PD." Kendra reiterated this thought with her statement of, "We didn't really have a lot of PD under a previous supervisor. When [a new supervisor] came in, the first year got off to a rocky start. She was trying, but she had to get her bearings on what we were doing, and obviously we also had to come up with goals for the year. Once all that happened, it kind of got better."

Mother Nature's account covered several ways in which PD has change: "It has definitely been more fine tuned to hands-on learning, and to meeting students' individual needs. PD is now incorporating not just the educational component but the social-emotional component as well. I find it is not as broad. When you go in, you are going to learn a strategy, and you are going to practice that strategy. For some of the trainings we've had, we go back and do homework so that we practice the skills presented. Then we come back [to the next meeting] to show how it worked in our classroom. Which I do feel like that is a much better use of my time, and a better structure for professional development. If there is some homework required at the end, you are going to have more people try it out. This gives us accountability." This process is the Plan, Teach, Reflect, Apply (PTRA) cycle of Action Research (Lipton & Wellman, 2018; Sagor, 2000).

Georgia touched on another issue. She shared, "Now, I feel as if the site has some say in which PDs are going to be beneficial for THIS SCHOOL, as opposed to the total district [doing the same thing.] I think this is important because every school climate and culture is going to be different. The needs are different at every site depending on the level and mindset of the students, the number of years of teaching for the staff, etc." This connects to situated learning as defined by Pitsoe and Malia (2013) as "learning which takes place in a social context" (p. 214). Because each site functions as a separate PLC, it makes sense that the PD implemented should be designed for each specific site rather than having one plan for all sites. Georgia's most significant change over time is

that when she first started teaching, she does not recall having PD in either of the

districts where she worked previously. Sofia felt, "It was less painful 39 years

ago," although she did not elaborate. She added, "Our PD is more focused now.

And they have added in collaboration so it is a shared experience with our teams.

They are giving us more information and materials on fewer topics. The use of

manipulatives is a positive change because all students need to use them

throughout their years of learning." Olivia also mentioned collaboration as a

change she experienced, stating, "There's a little more collaboration time with

your peers, and a little more planning time that is actually built into the PD. Also,

we have more technology, which allows us to meet the needs of more students.

At the district level, there has been a push to use John Hattie's research on the

most effective teaching practices. I really like that; that is something I have

bought into." At the beginning of her career, Edna was a resident sub at one site

for several years, and was not required to attend PD. Regarding the PD she

received prior to the interview, she shared, "As a staff, we are given books to

read, and then we share the information with our team. They are putting the

responsibility of learning in our hands. They are making us be involved and

responsible for it and holding us accountable for it. Some of the strategies we

use in PD, like exit tickets, are the same strategies we are using in our

classrooms with our students." The *putting the learning* into the teachers' hands,

connects with Knight's questions for administrators when he asks, "Who is doing

the thinking?" As a novice, Frank also spent time as a resident sub in the district.

He indicated the changes he experienced were due to the differing administrators at his work sites. Frank declared, "During my tenure, I changed schools, and I think the principal at the new school was more communicative and more on top of PD. I felt I got a lot more out of the sessions because she was more hands-on and more strict with our PD than the previous principal I had. She would list out her expectations—what she wants, and we were held accountable for making sure it got done. At the new site, I was included in everything and treated like a regular teacher, not just a sub."

Henri' was one participant who believed PD today was not as valuable as it was in the past. He connected this with the COVID-19 pandemic and distance learning. He told the researcher, "I think it has gotten a bit more—I don't want to say 'dummied down'— but it is not the same as it was." This supported Georgia's earlier statement about PD only being focused on what she termed "the basics." Henri continued, "One thing I find very valuable in PD is the hands-on activities...I don't think the collaboration is all that great with our online PD right now." India's experience has been challenging but positive. She asserted, "I think it is all more valuable now. It's hard in the beginning, during the first two years when you are learning so much! And I wanted to sign up for every PD I could because I wanted to learn it all. But it takes time, and then you discover, 'Oh! That's what they meant!' So after you've been in the classroom for a bit, it all starts to make sense. I wish I could go back to some of those [trainings] and take them again." At this point, the researcher added two questions to India's

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interview: *Was it the PD that changed, or was your perspective*?   and *Is what the district has been doing over the last five years been consistent*? India smiled as she responded, "It was probably that my perspective and experience have changed." This second question was followed with, "Yes, I guess the district has been very consistent."

During their interviews, these educators mentioned over 30 concepts or elements related to the PD they had received, ranging from accountability and application to understanding student needs and the value and purpose of activities presented. The element mentioned the most often, over 20 times, was that of collaboration. Teachers spoke of needing more time to collaborate, the importance of working in grade level (or same subject) teams, the importance of dialogue between colleagues, and how much they learn from each other when these things are in place. Differentiation was mentioned at least 12 times. In a profession where the need to differentiate for the student population served is highly stressed by all stakeholders, one might think it would be of value to differentiate the training provided for the professionals. Working in grade level teams, having break-out sessions, and taking into account the personal learning styles of the participants were some suggestions made by those interviewed. The third component mentioned at a high rate was connecting to the students' needs. Since the purpose of the PD is to improve instruction and thereby improve student success, there is little wonder why this was deemed essential. The participants discussed the need to understand each student individually; to

have engaging, inventive, rigorous, new ideas to meet student needs; and the importance of having strategies that can be effectively applied at multiple grade levels.

Individually and as a staff, teachers want a voice on that which they will be working, and these teachers mentioned this at least six times. They spoke of having buy-in on the training they received and noted that teachers are less likely to implement the presented strategies without that buy-in. While relevance was only mentioned a couple of times, it is associated with teacher choice and buy-in, raising this element's importance. Two other elements mentioned six or more times include accountability and time. When discussing accountability, teachers indicated that if they were not held accountable by their administrators, they were less likely to implement the new training. As noted previously, time will always be an issue for educators.   The fourth element mentioned six times was that PD today is of a lower caliber than PD teachers have received in the past. This was mostly, if not wholly, attributed to the COVID-19 pandemic and continued even once they returned to their classrooms. Other elements mentioned in the interviews included application (including self-reflection), peer observation and feedback, situated learning, and the learning/teaching cycle used in action research, all discussed in the literature review. While the term coherence, when the learning makes sense and connects with the other factors in a professional's life, was not mentioned directly, it can be inferred through the participants'

discussions of teacher choice, relevance, applying to their grade level, and subject content, and meeting the needs of all students.

Site Administrator One-On-One Interviews

As with the teachers, administrator interviews were conducted individually via Zoom Video Conferencing. These interviews averaged 35 minutes, ranging from 31 to 39 minutes. A consent form (Appendix D) and a list of possible interview questions (Appendix E) were sent to administrators in the elementary sites in the designated cluster at the same time the letter of introduction was provided. Two administrators in this cluster agreed to participate in the study, one of whom declined to be video or audio taped. Prior to starting with the interview questions, the researcher gathered background information. Andre'a taught in the district, became a Program Specialist, and then a Vice Principal (VP.) She left to take a position as a Principal in another district. A short time later, she returned to the district as a Principal of a K-6 site. She has been in education for 24 years. Paula also taught in the district, then at various times she served as coordinator of two different programs prior to becoming an administrator. She has 35 years of experience in education.

The first three questions posed solicited information about the process used to determine the professional development at their site, who did the presenting, and what happened after the staff had received the training. Andre'a shared the process implemented by an assistant superintendent in the district. "[One assistant superintendent] had the greatest impact on our district as a whole

when they came along and taught us how to create a principal work plan, or a site work plan. The process begins with us looking at data, having the teachers do data analysis, and then doing a survey on what the teachers believed the gaps were. It has to be based on data; it can't just be based on, 'I want to learn about math.' It is all staff driven." Paula indicated the procedure at her site was very similar, saying, "The Professional Development Team (PDT) noted the strengths and weaknesses of our staff, and looked at testing data. They analyzed this information, created a plan, and took it back to grade-level teams to verify that the team would best benefit from it. It was a comprehensive and living document, which means it changed over time as we continued to move forward. We refer to it often. We want to ensure what we were doing would strengthen classroom instruction and student achievement."

Regarding who presents and when, Andre'a stated that she and her staff has handled it differently over the years. She pronounced, "We've split into groups and had a couple of leaders from the PDT present. Sometimes it's me; sometimes, it's members of the PDT or some of the other staff members. We also have district program specialists come in; now we have cluster specialists assigned to us for English/Language Arts (ELA), math, and English Language Development (ELD.)" While the district MOU has weekly training in place, their contract also allows for staff meetings once or twice a month at the end of the school day. Andre'a only uses the Monday MOU time as she feels the teachers need to collaborate in their teams as much as possible. This is supported by the

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work on collaboration found in the literature review (Goddard, Goddard, & Tschannen-Moran, 2007; Davis & Krajcik, 2005). She continued, "And I don't move on unless they are ready. We adjust our calendar if they need another week or two on a strategy we are working on." This concept of giving teachers the time they need, or duration, is supported by the work of Burke (2013), Flessner and Stuckey (2013), Desimone (2009), and Gengarelly & Abrams (2009) and helps to provide the extra time teachers have been asking for. Just as Andre'a felt staff input to be necessary, Paula stated she wanted, "...the teachers to be the voice, as the presentation would be more genuine coming from colleagues. Sometimes the teachers presented together with the admin. We work to build confidence and trust, and to receive input as a whole." Both administrators indicated that once the information is presented, the teachers work in grade teams to create lesson plans, which they implement in their classrooms. They meet again to discuss the process, the strengths and weaknesses of this implementation, and what changes need to be made before they apply the strategy again. At the next staff meeting, teams would share this data with the group, and as a staff, they would brainstorm possible solutions to the weakness described. This cycle of plan, teach, review, apply (PTRA) (Lipton & Wellman, 2018; Sagor, 2000) continued until the teams sensed they had mastered the strategy. Paula proclaimed, "Teachers have to have professional freedom as they are the experts. Not every group of students is the same;

different groups have different needs. Nevertheless, the goals of the school

should be the same."

The researcher next asked administrators to describe the accountability

system for their site and explain how it worked. Paula discussed the timelines

they put in place. Teachers would teach lessons, then analyze the instruction

and student data. Next, they would follow up with a team meeting to share their

findings and make adjustments. Administrators carried out classroom walk-

throughs to validate the implementation of the strategy and look at student work

samples, grades, and other items. "Not to micromanage," she stated, "but admin

has to have a hand on things. Teachers collected agreed upon data and knew

when it was to be submitted." Andre'a responded, "Originally, the district told us

what our goals would be and on what we would work. I would share this

information with my teachers, who were like, 'Are you crazy? This doesn't even

apply to us!' At that point, I realized the teachers needed to create their own

'look fors' or goals. Once they have created it, they own it. However, it is a living

document; they have time to go back and tweak it when they see, 'You know

what, this is not working.' Teachers hold themselves to higher standards as they

are living it; I am not living it—they are." Andre'a went on to discuss the process

she implemented to communicate with the teachers. She had one continuous

Google doc for each teacher, which she referenced when she would go into the

classrooms for an observation. She would only record what she observed

regarding the goals for that particular teacher. Then she and the teacher could

communicate back and forth throughout the year. "If I see what I'm looking for, I highlight it; if not, it is not a big deal. They know I will not see everything every time, but I will ask questions about it. It took me a long time to learn how to ask those questions. You have to build [the teachers] up, give them encouragement; stretch them in a non-threatening way, ask questions in a non-threatening way. Give them kudos for what they are doing well. My staff knows, because I have created this with them, if there is a problem or concern, I am never putting it in their Google walk-through doc. I don't even put 'see me' at the bottom of the doc. I don't do that. Those concerns are shared face to face. Teachers need to see on my face that it is not a big deal. I don't want this process ever to be tainted; the walk-through, feedback, and coaching process need to be safe. If not, then I've lost them."

Concerning PD which has not been implemented at their sites, Paula and Andre'a indicated this only happened with district-level trainings that were disconnected from what was currently being implemented at the site level. Because of not only what they were implementing, but how it was being presented and managed, site trainings were usually not a concern. Andre'a reiterated, "I can't think of a time at our site where something was not implemented because the whole year revolves around what we are doing. You would have to be on maternity leave not to have been involved in the site focus because my instructional rounds are based on it, and my formal observations are based on it. Everything revolves around the focus." With at least ten years of

additional experience as an administrator, Paula shared differing experiences

stating, "Some teachers are resistant. They have been doing this forever, but

has it been successful? Now they need to do something different. As an

administrator, you need to figure out why teachers are resistant. Maybe they no

longer trust anyone because they have been burned or another administrator has

hassled them. You need to start by validating everyone's strengths; sit and talk

with them to find strengths and build trust. If they are still unwilling or unable to

make the necessary changes, you may then need to document your concerns.

Maybe you will give them more PD to help develop their understanding of the

concepts. Or you create a timeline with them outlining your expectations as well

as your support. Then go in once a week to do an observation. This process

can be very time-consuming and to the detriment of others. However, it is

important for this one teacher and their students." What both Andre'a and Paula

are discussing speaks directly to what Jason (2007) pointed out regarding

leadership providing what others sincerely need, and the importance of building

relationships.

        Next, the administrators were asked to discuss what they liked about the

PD they had in place for their teachers. "What I really like about our PD,"

Andre'a began, "is the teachers own it. It is what they feel they need based on

our data. Our focus was slightly larger this year as we had to add in English

Learners." Paula commented, "I enjoyed the teachers' eagerness and the

camaraderie they shared. Our site has implemented many strategies for the

kids. Our staff was cohesive, with a lot of support staff, and we could bounce more ideas off each other." When asked what they would like to see done differently regarding PD, Paula noted with the students now back in the classroom, "With COVID-19, it is tricky. Teachers have lost ground. We will need to take a step back, really analyze the data, then do constant progress monitoring. Students will not be functioning at grade level; Teachers need to know skills from lower grades & PD needs to be geared toward those skills (i.e., second-grade reading and basic math skills.)" Andre'a's perspective was a little more specific; she shared, "I am ready to get past the things that have taken our focus away so we can get back to where we were. It is so different now due to COVID-19. We need to get back to instructional rounds. We stopped when we looked at which instructional strategies would help students develop their conceptual knowledge in math. We were at the point where my PLC teams were creating their own action research, such as number talks, or counting collections, because they could! I didn't have to be on top of them because the trust was there. So different grade levels went off in different directions, but still with the focus on conceptual knowledge in math. I want to get back to that."

The researcher extended the question by asking if their site PD was differentiated. Andre'a replied, "Yes, it is differentiated PD. It's more inquiry-based, more on action research. It wasn't someone coming in and telling us what to do. Teachers were seeking out best practices, looking online, researching things, working with our district PS, trying new ideas, etc. This has

pretty much been my vision all along, but the teachers had to get there. This is

what really makes PD of value to me at my site." What can be heard at this point

is the importance Andre'a (and later Paula) puts on collaboration and teacher

voice. Lipton and Wellman (2018) speak to the significance of site leaders

ensuring collaboration takes place. The result is that every teacher has the

support they need. Flessner and Stuckey (2013) found teacher voice to be of

critical import in their two-year study on mandated action research. Paula

shared, "What makes PD of value to me and my site is the mutual respect we

build as we plan our PD together and as the staff becomes the experts. It

validates who they are as an educator; helps them become a leader. It has to be

relevant to the staff, the school, and grade levels, as well as the individual

teachers." As they continued discussing what makes PD of value or not of value,

Paula shared, "When there is a lack of continuity, PD has little value to me. It

becomes easy to fall back into old habits. A lack of leadership is also a concern;

teachers feel they are just being bossed around or micromanaged. It's difficult to

make growth in situations like that." Andre'a asserted, "I think you can always

get something from any training. It just depends on how you are asked or

directed to do so. [One of our assistant superintendents] talked to us about a 1-

7-30 approach to PD. [They] asked us 'What will you take from today that you

can implement tomorrow? What will you take from today that you can implement

in 7 days? What will you take from today that you can implement at the end of

the month?' Admin has to follow through for PD to have any import." During this

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part of the interview, Andre'a mentioned admin follow-through three times, stressing its importance each time.

At various points throughout the interviews, both administrators commented on the impact the COVID-19 pandemic has had on their staff, and the professional development presented. They acknowledged it was difficult having teachers meet virtually for PD, knowing that many were disengaged and focused on writing lesson plans or grading papers rather than on the information being presented. Andre'a shared, "The time when teachers are the most engaged is when they are working in their PLCs doing action research. Right now, they cannot meet face to face, so there's a disconnect at the moment." Paula added, "One positive outcome from the pandemic is our focus on SEL for our staff and students. However, now that we are back on campus, there is work which needs to be done."

When asked how PD has changed over the past five years, Andre'a focused on one positive aspect. She stated, "Technology has probably been one of the biggest changes over time for us. We went from PowerPoint slide presentations to today, where technology offers many different opportunities. Just look at what can be done with jam boards, Kahoot, and many other apps and programs to engage the participants! Of course, it can also be a curse as things can go wrong with technology, and you have to change plans at the last minute. Right now, even with the advances made in technology, it is hard because we cannot be in the same room together for a presentation." With more

time in the district than Andre'a, Paula shared, "We were a smaller, more intimate district at one time, and now we are more like a large bureaucracy. At times the left hand doesn't know what the right hand is doing. It is more top-down than it used to be. It used to be that the principal was more empowered; now, they are too scared to say, 'No.' A lot of power was at the site: we made learning plans and met with the superintendent at the beginning of the year to discuss goals and how we would meet them. The superintendent would meet with us throughout the year. At the end of the year, we had to share what goals were met and what goals were not met and be able to explain why not. Admin does not have the same relationship with the superintendent we once had. Principals are not being heard, which in turn means the teachers are not being heard. I was at a site for five months and never heard from my district supervisor. New administrators are floundering, especially if hired from outside the district."

Just as teachers want a voice in the PD being presented, both site administrators interviewed expressed the importance for teachers to have their voices heard. They discussed the importance of teacher buy-in and teacher-created, teacher-led PD sessions. The administrators spoke about the staff guiding the PD sessions during their interviews. Andre'a shared how her grade level teams led with their own action research based on their student data, thereby differentiating PD at her site. When thinking about what makes PD of value or not of value, Andre'a stated, "It has to be pertinent to the teachers at this time; it has to be relevant." In addition, both administrators discussed the

importance of following up to ensure teachers implement the strategies they are supposed to implement. They noted that if there is no follow-through on behalf of the admin, there is no guarantee that the teachers will implement the strategies learned. Andre'a and Paula both expressed concerns about the quality of the PD presented and implemented during the COVID-19 pandemic, just as the teachers did. They conveyed the urgency of returning to face-to-face meetings for their staff to move forward with PD that benefits their staff and students. Through their responses to various questions, each principal indicated the differing needs of each campus and staff. From their statements, it can be argued that situated learning, or PD provided and differentiated for each site (Pitsoe and Maila, 2013), is another critical component to quality and lasting PD. Giving teachers time to collaborate was emphasized when Andre'a shared that she did not hold any after-school staff meetings as she felt the teachers needed that time to work together. Andre'a had one closing remark: "I think a lot of the principals can be, not disconnected, but delusional, maybe. They think they know what their staff needs, but if you give it to them and they do not see the need for it or see the connection, it doesn't go over well."

Professional Development Presenters' One-On-One Interviews

The professional development presenters interviewed fell into two categories: one was the position of program specialist at the district level. These educators were no longer in the classroom and served to support and train elementary classroom educators throughout the district. While there were

circumstances when the PD was already written, such as when a new curriculum was adopted, often the presenters would plan and write their own PD based on the topic and the audience's needs. The second group of presenters were full-time teachers who were still in the classroom. They took on the role of "expert teachers" for the district. Beginning or struggling teachers often observe in their classrooms to see strategies effectively implemented. In addition, these expert teachers presented PD in a variety of settings.

Interviews were conducted with these presenters via Zoom Video Conferencing to gain an understanding of the components they considered critical to the success of PD. A consent form (Appendix F) and a list of possible interview questions (Appendix G) were sent to these presenters at the same time the letter of introduction was provided. The average presenter interview lasted 42.75 minutes, with a range in time from 19 minutes to 65 minutes. The interviewees listed a wide range of components they considered essential to include in their presentations or used to help them succeed with their presentations. Some of the elements enumerated were undertaken prior to the presentation, as the presenters planned and prepped. These included activities such as backwards mapping to ensure nothing was omitted; practicing/ rehearsing the presentation before presenting, especially in front of their peers who could provide feedback; and teaching the content/strategies themselves in a classroom before presenting to teachers. Components listed for use during the presentation included collaboration, time for participants to reflect and process,

application, being clear and concise with what was communicated, and being intentional. Having the audience take an active part by completing the activities their students would be completing, being approachable, and building relationships, were additional components. Some pieces, such as collaboration, reflection, application, and building relationships, could be ongoing between the presenter and the audience as the participants moved forward with implementing the strategies learned. Some of these components reflected the findings of the literature review, such as collaboration, communication, and relationship building.

Three PD presenters stressed that communication was key to a successful presentation. If the information conveyed was not apparent to the audience, participants would not be successful in implementing the training in their classrooms. When the teachers returned to their sites, the strategies learned would be implemented incorrectly or not attempted at all. This not only supports what Goodman (1986) and Graves (1983) observed about communication, it ties in with many of the other researchers who studied the importance of communication in professional development (Davis & Krajcik, 2005; Carlisele, Cooper & Watkins, 2004). Nancy, an educator with 22 years of experience, shared, "In the role I am playing when I do PD, [one of] the critical pieces [is] having that intention—being clear with it, having an agenda & making sure everyone understands what that agenda is." She pointed out that every part of the presentation needed to be understood by all participants. Kelli, with 42 years of experience, added, "One of the best ways to ensure what I am

presenting is clear is to practice ahead of time in front of my teammates and have them give me feedback. I have found that through practicing, rehearsing, and modeling, I can ensure I am stating things in such a way that it is understandable for the entire audience."

Building relationships with an audience was another critical component of good presentations discussed in the literature review (Jason, 2007). Even an outside presenter needs to build rapport with their audience. Presenters working within the district have an even greater need to build relationships with their peers as they will see them repeatedly. During her interview, Kelli talked about the need for presenters to be approachable. She opened her response to this question with, "The first thing I think is to have people feel that you are there for them: you greet them...so you build credibility with them." She later stated, "the last thing is to end the meeting in such a way that any teacher in there feels, 'I can call her if I get confused; I can get help from this presenter; if I do not remember something, it will be okay for me to call her.' Many of [the participants] need the reassurance that [calling] downtown to ask questions is all part of the learning process." With six years as a presenter and many more years in the classroom, Marilyn's interview responses echoed this belief when she talked about teachers speaking up and saying they did not understand something. Making such a statement, especially in front of one's peers, is a tremendous risk for any educator. Suppose Marilyn and the teachers had not had a strong and comfortable relationship. In that case, it is unlikely such an utterance would have

been shared. "Knowing which teachers are comfortable or uncomfortable with what we are doing helps me better understand their needs," added Marilyn. Another presenter shared that current PD, from her perspective, has become more of an "assembly line" process in which the participants come through and are provided information. They move on, and the next group comes in. When asked what she wants to change regarding PD, she believes building relationships is crucial. She said, "I would like to see much more of a cohort type of PD where I am following a certain group of people, and we are growing as professionals together."

All of the presenters interviewed discussed the importance of providing teachers with time to collaborate as part of the PD session and the impact it can have on the planning and implementation of lessons in the classroom. Lova, with 14 years in education, shared that there are many ways in which teachers can collaborate. She explained that a quick and easy way to bring this into a PD session was to have the teachers discuss what they just learned or how they thought they might apply it. She added that sharing their ideas and receiving feedback helped teachers process the learning taking place and that they could gain new ideas and perspectives by listening to others. Collaboration can take many forms. It can be in the form of peer observations (Bell and Mladenovic, 2015), problem solving, sharing experiences, and lesson planning (Goddard et al., 2007), as well as discussions with peers (Desimone, 2009). Additionally, while each interviewee agreed on its importance as part of PD, they also

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acknowledged that collaboration must continue after the training. Therefore, collaboration is a component that needs to be ongoing.

Interviewees made use of the terms "connecting," "relevancy," and "being meaningful" as they thought about what was of value or not of value for them regarding PD. While the term "coherence" was not used, it was the reference the PD presenters put forth as they discussed the gravity of the information presented needing to be of value to the participants. They noted that if what was shared was not relevant, those receiving the information would not apply it. A study conducted by Garet et al. (2001) found that when PD connected with teachers' professional lives, that is, when there was coherence between their work and the presentation they were receiving, teachers were more likely to put their new learning into effect in their classrooms. Penel et al. (2007) also found cohesion necessary in professional development for educators. They noted that educators considered themselves better prepared to implement their new strategies in classroom activities when there was cohesion. These findings are further supported by the work of Desimone (2009) and Wayne et al. (2008).

Each of the PD presenters interviewed commented on the significance of providing time for teachers to self-reflect on or process the information they were receiving. According to Nancy, "One of the critical pieces [of a PD session] is giving reflection time to everyone who is participating." Lova shared, "We have them reflect or think about something independently, then we have them process with a group in the middle [of the presentation], and then they go back for

closure, and we have them reflect independently." Marilyn echoed these

thoughts about not allowing for enough reflection time, but tied them directly to

the participants when she stated, "...or the ultimate results are [the teachers] feel

rushed and like they don't have time to process." When this happens, teachers

are less likely to implement their new learning. Bell and Mladenovic (2015) state,

"Regular, purposeful reflective practice is a key characteristic of excellent

teachers...." (p. 25) while Lipton and Wellman (2018) pointed out that teachers

can hone their skills by practicing regular self-reflection. As with many things in

education, self-reflection cannot be forced. Pitsoe and Maila (2013) noted that

teachers need to own this process as, "It involves thinking about and critically

analyzing one's actions with the goal of improving one's professional practice" (p.

213). Ownership was also stressed by the administrators interviewed in this

research project.

In addition to the components already listed, the presenters shared other

pieces they felt were essential to incorporate into their PD presentations. One

element shared by Kelli and Lova was for the participants to have time to practice

what they are learning during the training. This allowed teachers to understand

better what their students would be experiencing and helped them troubleshoot

the strategy before using it in the classroom. According to Kelli, "Having the

teachers practice helps to bring clarity as they walk through the implementation

of the strategy presented." Marilyn pointed out that this processing time was

critical, stating, "The old model was 'I'm going to keep talking, you're going to do

some activities, and good luck.' Now they have processing time, which is a big thing for me. And then we provide some application at the end, whether it is the opportunity for them to dig out what I'm doing or build something for the next week."

Kelli, Marilyn, and Lova stressed the need for the audience to know the "why" of the presentation, sharing the research behind the strategy. "Research. Lots of research so they can know the reasoning behind it," was Kelli's response. Marilyn gave a fuller reply telling the researcher, "For me, personally, I think the 'why' behind it is critical. About 50% of the time, the site admin has not told the staff why I am there or what I am going to do, so I try to cover that right away when I first start." Lova shared, "Another thing I would add is giving the 'why' rational: why is it important for me to learn this as a teacher? And giving real-world examples, relevant, realistic connections, real things they may experience."

Marilyn shared, "Another piece is the relevancy piece. That is, making sure whatever topic I am addressing, that I bring in whatever content the teachers are coming up on." Relevancy or cohesion, that is, connecting the presentation to the teachers' current work, standards, or site expectations, is supported by the work of Goddard et al. (2007), Guskey (2003), Borko (2004), and Garet et al. (2001), all of whom noted the importance of including content knowledge when conducting PD. Kelli and Marilyn discussed the importance of teaching the content in a classroom before giving a presentation. "Under a previous Director of Elementary Instruction, we had to go into a classroom and

teach the new content for two weeks before we put together our presentations," stated Kelli. Marilyn indicated she would "borrow" someone's class to teach her content prior to presenting it. This allowed the presenters the opportunity to find students' misinterpretations, as well as any other pitfalls teachers may encounter when teaching the subject matter.

Differentiation was another point touched on by some of the presenters. "You want the person with the least experience to walk out of there feeling like they really understood; and the person with the most experience in the room to walk out feeling that they learned something," was a statement Kelli made during the interview. However, Marilyn pointed out, "This gets a little tricky. Normally when you are asked to do [a site presentation, the teaching range is] K-6, and everyone is there. So it is not differentiated. This makes it difficult for the presenter. You're almost aiming for the middle because you can't differentiate with that many grade levels all together."

All of the PD presenters acknowledged the importance of asking for participant feedback. In doing so, the presenters can apply the information gleaned to improve their presentation and become aware of any points that may have been unclear or misunderstood. This also gives the teachers a voice in their learning process. Principals also noted the importance of ensuring the teachers have a voice in their professional development.

Communication, building relationships, collaboration, coherence, self-reflection, content knowledge, and situated learning were some of the PD

elements discussed in the literature review and the presenter interviews. Both

researchers and practitioners analyzed the critical role each of these elements

play in PD if teachers are going to implement what they are learning back in their

classrooms. The teachers and administrators interviewed agreed with this list of

elements. In addition, teachers and administrators stressed the importance of

teachers' voices being heard which builds in teacher buy-in. Accountability

weighed heavily in the interviews with all three groups in this study, even though

it was not discussed in the literature review. PD Presenters indicated that they

rarely, if ever, have any follow-through on holding teachers accountable and

indicated it all falls to the site principals. Administrators, and teachers, stated

that if the administrator does not follow through and hold teachers accountable,

the work will not get done. Further, some teachers expressed concern about

their site administrators not holding them accountable. Andre'a, a site principal,

shared that by following through with walk-through observations, planning time,

grade level and whole staff discussions, she was able to build trust with her staff.

They have grown to the point of grade-level teams putting together their own

action research plans. Andre'a shared, "It is all staff driven, so [my] first couple

of years as a principal in this district, it was very much the teachers hiding and

writing; they were scared of teaching reading, and they felt secure in teaching

writing. So we stayed there for a long, long time; until they knew me and were

comfortable moving to where we were looking at our data and using our data.

Once they became comfortable with me as a new administrator, we were able to

move on. The first place we moved to was based on the data for our English Learners, and the speaking/listening wasn't where we wanted it, so we moved to collaborative conversations. So again, the process begins with us looking at our data analysis and then a survey on where we need to go; then, we come together as a staff...and have discussions. This shows us where we need to zero in." All three groups in this study discussed differentiation, and PD presenters shared how difficult it is to do as a presenter when working with a K-6 site. Differentiation, both at the site and the individual level, ties in directly with situated learning. This means the learning will be based on each site's needs rather than a one-size-fits-all PD for the district. One final over-arching concern, which could not yet have been discussed in the literature reviewed, is the effect that the COVID-19 pandemic has had on education in the last two years. All the study participants discussed how difficult it has been to present and receive virtual PD and the necessity of getting back to face-to-face presentations as quickly as possible.

Kendra's final statement fits perfectly for the end of this section. She sounded really heart-felt as she declared, "I want [the district] to hear this kind of stuff. They need to think, is it practical—what we are putting into our PD—for what we are getting out of it?" She went on to compare staff PD to classroom instruction, using a statement her supervisor would often use, "If you are just giving them a worksheet to give them a worksheet, then you really aren't getting anywhere."

<u>Professional Development Observations</u>

As part of this research project, the researcher observed two PD sessions via Zoom Video Conferencing. In addition, the researcher created an observation protocol of PD elements found in the literature (see Tables 3 and 4) and from information gleaned during the interviews (see Tables 5 and 6). The purpose was to ascertain which elements, if any, aid the implementation of strategies presented during the PD sessions.

The presenter and their slide presentation could be seen and heard in the center portion of the screen. Observers and other presenters could be viewed via thumbnail pictures, or they had the option of turning their cameras off and not being seen. The first session, with a facilitator and four presenters, was on Checking For Understanding (CFUs) during and after a lesson is taught. It began with the facilitator welcoming people as they logged in.   She reminded participants to sign in and let them know the start time was 4:15. She continued to welcome participants as they logged on. At 4:15, the facilitator began by welcoming everyone and giving them the presentation title. She then shared the norms for the session. These were to take care of yourself (i.e., take a break when you need to,) be fully engaged in the learning, be mindful of others (i.e., stay muted unless you were addressing the group,) and have fun. The facilitator then asked participants to think about what they already knew about the topic and what they used in their classrooms. She provided "think time" and asked the participants to drop their responses into the platform's chat feature. As answers

Table 3
Elements of Professional Development: Literature Review, First Observation

PD Elements from Lit Review	First Observation of PD presentations				
	Facilitator	**Presenter 1**	**Presenter 2**	**Presenter 3**	**Presenter 4**
Communication	Chat feature on Zoom	Chat feature on Zoom Teachers were able to share out verbally as well as through the chat			
Building Relationships	Greeted Teachers as they entered; reminded them to sign in & of 4:15 start time; Began on time which builds credibility	Thanked teachers for coming; thanked again at end for participation	Thanked teachers for coming; thanked again at end for participation	Thanked teachers for coming; thanked again at end for participation	Thanked teachers for coming; thanked again at end for participation
Collaboration		Coming up with ideas for TPR	Think-Pair-Share; worked with a partner	Bag of Knowledge activity Quiz-Quiz-Trade	Sage and Scribe
Coherence	Asked participants to think about what they already know about the topic Research background was provided	Acknowledged what participants were already doing Connected to and built on this knowledge	Acknowledged what participants were already doing Connected to and built on this knowledge	Acknowledged what participants were already doing Connected to and built on this knowledge	Acknowledged what participants were already doing Connected to and built on this knowledge
Duration		Single event; follow-up would be with participants' principals and/or TIP coaches	Single event; follow-up would be with participants' principals and/or TIP coaches	Single event; follow-up would be with participants' principals and/or TIP coaches	Single event; follow-up would be with participants' principals and/or TIP coaches
Situated Learning		This training was designed for teachers in the first or second year of teaching	This training was designed for teachers in the first or second year of teaching	This training was designed for teachers in the first or second year of teaching	This training was designed for teachers in the first or second year of teaching

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Table 3 (cont)
Elements of Professional Development: Literature Review, First Observation

PD Elements from Lit Review	First Observation of PD presentations				
	Facilitator	**Presenter 1**	**Presenter 2**	**Presenter 3**	**Presenter 4**
Self Reflection		Which of these strategies would you use and why?	Time to respond to questions in Pear Deck	Use of Exit Tickets	
Content Knowledge	Strategies rather than curriculum; Asked participants what they already knew	Some strategies built on what participants said they were already doing; Extended learning by providing different applications	Applicable to any content area	Applicable to any content area	Applicable to any content area

Note: This table reflects data from literature review as applied to Observation 1

were typed in, the facilitator read them aloud to the group, then stated, "We will give you new things today. And we will talk about what you are already using and how you can use it differently--how you can take it up a notch." In these first five minutes, the teachers had been made to feel welcomed and acknowledged, were given the expectations for the session, and felt they had a voice in the presentation as they shared what they are already using, they were given think time, and they were told about the topic.

All four of the presenters were "expert teachers" in the district. They were in the classroom fulltime at the time of this study, but also did presentations and opened their classrooms for new or struggling teachers to come in and observe. The presenters shared routines and procedures to ensure successful

Table 4
Elements of Professional Development: Literature Review, Second Observation

PD Elements from Lit Review	Second Observation of PD presentations	
	Facilitator	Presenter 5
Communication	Chat feature on Zoom	Chat feature on Zoom Teachers were able to share out verbally as well Break-out Rooms
Building Relationships	Greeted Teachers as they entered; reminded them to sign in & of 4:15 start time; Began on time which builds credibility	Topic focused on how to develop a mindset which enhances teacher relationships with students Shared own background to build rapport with participants
Collaboration		Jam Board Discussion on types of assessment Break-out Rooms
Coherence		Ties directly to teacher-student interactions in the classroom Research background was shared
Duration		Single event; follow-up would be with participants' principals and/or TIP coaches
Situated Learning		This training was designed for teachers in the first or second year of teaching
Self reflection		Self-assess on Gap-closing Rubric Whip Around with closing question
Content knowledge		Gap-closing Rubric was shared

Note: This table reflects data from literature review as applied to Observation 2

implementation of the strategies, and/or different techniques on how and when to

implement them. The first presenter (P1), a first grade teacher with 20 years of

experience, stated she would be sharing two strategies for CFU. The first one

was "Total Physical Response" (TPR) in which children use movement and

actions to help remember what they are learning. P1 gave some background

and shared the importance of this strategy, and provided a template as an

Table 5
Elements of Professional Development: Interviews and Observations,
First Observation

PD Elements from Interviews, or noted during PD observation	First Observation of PD presentations				
	Facilitator	Presenter 1	Presenter 2	Presenter 3	Presenter 4
2-minute warning	Provided				
Hands-on Activities	Teachers were asked to type responses into the chat feature	TPR White boards Virtual whiteboard in Zoom platform	Think-pair-Share Pear Deck	Use of Exit Ticket	Near Pod
Application		Provided example of chant to use	Consider how to use Pear Deck in the classroom tomorrow	How/When would you use a Bag of Knowledge?	How/When would you use Near Pod?
Teacher Voice	Teachers were made to feel welcomed and heard Which strategy do you see yourself using?	Through the use of virtual white board	Through the use of Pear Deck responses	Feedback through the use of exit tickets	Chat Feature
Presenter is available/ approachable	Facilitator and presenters remained after presentation to speak with participants and respond to any questions or concerns				

Note: This table reflects data from interviews as applied to Observation 1

example on how the movements for certain words or poems could be created.

The importance of having students create the movements was emphasized. A

video was shown of another expert teacher using this strategy in their classroom,

and a group discussion followed. P1 shared a chant with the group, and together

they brainstormed movements for the words and phrases. The second CFU

strategy shared by P1 was the use of white boards, a common tool in most

classrooms today. She shared how to be explicit when giving the directions on

Table 6
Elements of Professional Development: Interviews and Observations,
Second Observation

PD Elements from Interviews, or noted during PD observation	Second Observation of PD presentations	
	Facilitator	Presenter 5
2-minute warning	Provided	
Hands-on Activities	Teachers were asked to type responses into the chat feature	Jam Board Whip Around
Application		Whip Around Near Pod
Teacher Voice		Response to quote; shared out in chat Whip-around; No Opt Out Jam Board
Presenter is available/ approachable	Facilitator and presenter remained after presentation to speak with participants and respond to any questions or concerns	

Note: This table reflects data from interviews as applied to Observation 2

how and when to use the markers, how to care for the markers, and then

suggested a routine be put in place to deal with markers which no longer worked.

After participants shared the ways in which they use whiteboards, P1 provided

variations on how to use this tool throughout the school day. Participants had a

virtual whiteboard on which to record responses. At the end of the presentation,

the facilitator thanked P1 for her presentation, and complemented her for using

the chant as an example and having teacher participation as part of the

presentation.

The next presenter (P2) was a classroom teacher with 17 years of

experience. She began by stating the expected outcomes, then shared three

strategies with the group. "Think, Pair, Share" was the first strategy shared. The

primary focus for this presenter was routines and procedures to have in place each time you use this strategy. First, teachers were given a topic about which to think. Next, they paired up and shared their thoughts with a partner via the chat feature of the Zoom platform, and finally, they shared out verbally with the whole group. The presenter noted the difficulty of having participants—and students—pair up when using distance learning but showed it could be done. The second strategy was "Four Corners," which gets students up and moving around the classroom. Again, the presenter discussed procedures, as they are critical to the success of any classroom strategy. The presenter then showed a video of her implementing the strategy in her classroom. The final strategy shared by this presenter was a website called "Pear Deck" (https://www.peardeck.com), where the teacher can use or create a presentation and insert interactive assessment questions in the presentation. Students can respond to the questions or prompts and receive feedback in real-time. The presenter had the audience participate by answering a question in three different formats: a write-in response, a multiple-choice question, and a drawing response. This allowed the teachers to experience what the students would be experiencing when they used the program in class. In doing so, the educator can better understand students' anxieties, questions, or concerns as they work with this program and then be better prepared to address these issues before they occur in the lesson. Next, the participants took a short break, which allowed them to stand and stretch, get something to drink, or take care of other personal

needs. A timer was set, and once it went off, the facilitator called everyone back from their break, asking them to turn on their cameras so she could verify they all had returned.

The third presenter (P3) was an educator with 32 years of experience. She discussed three strategies with the participants. The first was an "exit ticket," which is a student's "ticket out the door." The teacher provides a question or prompt, and students must write a response and hand it in before leaving the classroom. This helps teachers assess misconceptions students may have, know how many students understood the topic presented, and can help them teach students to think critically. An exit ticket is also a means of having students self-reflect. The presenter stressed the importance of setting expectations prior to starting this activity. She then showed a video of a teacher implementing the strategy in a classroom. In addition, she discussed how this exit ticket could be incorporated with Pear Deck or other apps, how students can use their phones to text a response, and even how students can "tweet" a response. Another twist to this strategy was for the teachers to use an "entrance ticket" with a question at the beginning of the period. The second strategy shared by P3 was the "Bag of Knowledge," in which items are placed in a brown paper (or other) bag. As students draw items out of the bag, they are expected to explain, describe, or solve the problem. Teachers at any grade level can implement this strategy with any content material. The presenter then showed a video of kindergarten students completing this activity; they pulled letter cards out of the bag and had

to name the letter and give the sound it represented. Quiz-Quiz-Trade, a Kagan

Strategy (www.kaganonline.com), was the third one shared by P3. In this

strategy, every student is given a card with a question. They stand up and find a

partner with whom to work; Student A asks Student B their question, and B

responds. Then B asks A their question and waits for a response; the two thank

each other, exchange cards, and move on with their hand raised to find a new

partner to quiz. This strategy helps students review information by working with

a variety of peers in a non-threatening manner. This helps to build confidence,

engages more students through participation, and results in more profound,

thoughtful discussions. Like with Four Corners, this strategy gets students up

and moving around the classroom. P3 shared a video

(https://www.theteachertoolkit.com/indez.php/tool/quiz-quiz-trade) allowing the

participants to view the applied strategy. This was followed by a discussion of

how the participants might use it in their classrooms. Responses were typed into

the chat feature and read out by the presenter.

The fourth presenter (P4), who has taught for 24 years, presented two

final strategies. She shared "Sage and Scribe," another Kagan strategy, and

Near Pod, an add-on feature for the Google platform. In "Sage and Scribe,"

students again work with a partner. The sage explains a problem or sequence to

the scribe, who records what the sage tells them; the scribe then solves the

problem. Students then change roles for the following problem and repeat the

activity. Again, this can be used with any grade level or content material. Near

Pod has slides already created for teacher use. P4 discussed the options available with Near Pod, explained to the participants how it could be used, and walked them through an activity so that they could see the strategy from a student's perspective. The presenter also discussed collaborative conversations and how these tie in with Near Pod or some of the previously shared strategies.

The facilitator then returned to the screen and asked the group how they thought they would use some of the strategies to CFU. She had them think for a moment, then told them that the next time they met with their mentors, they would need to know which strategy they would implement. They then asked the participants to thank the presenters. The final activity for this presentation was for the facilitator to ask the participants to complete a CFU before leaving. Each person was asked to write one question or make one positive comment from each presentation, placing it in the chat, before leaving.

The second PD session observed by the researcher was on "Mindsets with Positive Impacts on African American Students" and presented by one person, with the same facilitator from observation one. As with the first observation, the facilitator welcomed participants by name as they logged in for the session. She reminded participants to sign in and that the session would begin at 4:15 sharp.   As additional people logged on, the facilitator welcomed them. At 4:13, she gave a two-minute warning so participants could finalize anything they were working on and be ready for the session to begin. At 4:15 sharp, the facilitator welcomed the whole group, discussed the norms for the

sessions (see observation one above), and then introduced the speaker. The PD

presenter (P5) welcomed everyone and thanked them for attending. She stated

that equal is not the same as equitable, then shared two quotes on this topic.

She asked the participants to share in the chat feature which quote spoke to

them; she then called on various participants to share their responses. When

participants (students) are called on and expected to respond, this is known as

"no opt-out." In other words, the participant must respond; they may be given a

little more time or can talk to a peer for support. The teacher will return to them,

but every student is held accountable for all the information shared (Lemov,

2014).

P5 is an educator with 32 years of experience as a teacher and now as a

program specialist in the district. She took a moment to share information about

herself and her teaching career with the participants. P5 defined "mindset" for

the group as "The values and judgments that drive your action," so all

participants would have the same focus in mind. She then shared four mindsets

with the group. These were (1) All students can learn; no exceptions; no

excuses. (2) The classroom is to be student-centered. The teacher is a

facilitator, asking questions and clarifying information for the students. (3)

Connect before you expect. Positive relationships need to be built with our

students and their families. And (4) Learning is non-negotiable. Make learning

the only constant; everything else is a variable. As she spoke, she provided real-

life examples and explained why this is important to the students. She used a

jam board activity (jamboard.google.com), a cloud-based collaboration tool.

Participants could post their responses to a question or prompt and see other

responses in real-time. By demonstrating this tool, the presenter provided for

teacher voices to be heard and for the teachers to engage in an activity to

understand better how their students might feel when asked to do the same.

Another real-life teaching moment occurred when there were technical difficulties

with the jam board. The presenter gave the teachers who were successful on

jam board a task to complete. At the same time, she helped other participants

problem-solve and get logged on. As participants typed in answers to their

prompt (What is the difference between summative and formative assessment?),

P5 gave time warnings throughout the allotted time. These time warnings are not

pertinent to education alone. The researcher recently attended a military event

for soldiers graduating from Jump Master School. The Captain in charge gave a

five-minute, two-minute, and 30-second warning to mark the beginning of the

ceremony. With the time warnings given, people feel they have time to prepare

for the beginning of the meeting, and are not caught off-guard. Once the PD

participants typed their responses, they discussed different assessments and

how and when they would be used. This verbal discussion occurred as teachers

unmuted their devices and shared with others. Breakout rooms, another feature

of the platform, allowed teachers to converse in smaller groups, allowing each

participant more time to articulate their thoughts and reasoning. A "Gap-Closing

Teaching Rubric: Instructional Practices" was shared with the participants

(see table 7). By implementing this tool, the presenter modeled for the participants how to introduce and apply a learning rubric to students in the classroom. For part of her presentation, P5 presented a video clip of a district teacher modeling one of the strategies discussed, allowing participants to see the complete application of what the presenter was discussing. As she prepared to close out her presentation, P5 asked participants, "How might today's learning impact your classroom practice moving forward?" She then did a quick whip-around (https://www.theteachertoolkit.com/index.php/tool/whip-around) so every teacher could share verbally with the group. The presenter ended her presentation and thanked the group for their participation; the facilitator returned on-screen. She thanked everyone for attending and participating and reminded participants to sign in if they had not done so already. The facilitator and the presenter were available for questions after the session ended. Being available to teachers was a point stressed by at least two of the PD presenters during the interviews.

While this session had more time with the presenter speaking than the first observation, many techniques and strategies were shared with the participants. The presenter explained and modeled each activity and had teachers complete the activities their students would be asked to complete. Discussion time and collaboration time were both provided throughout the session. Background, or the "why" of things, was provided so teachers could make connections between this learning and prior knowledge.

Table 7   Gap-Closing Teaching Rubric: Instructional Practices

██████████████████ **School District**

Department █████████████████

Category	Beginning (1)	Progressing (2)	Exemplar Teacher (3)	Teacher Leader Coach (4)
	● Instructional content is far below grade level standards.	● Instructional content is below grade level standards.	● Instructional content meets grade level standards.	● Instructional content exceeds grade level standards.
	● Assessments are select response.	● Assessment is below the demands of grade level standards.	● Assessment meets the demands of grade level standards.	● Assessment exceeds the demands of grade level standards.
	● Assessment is far below the demands of grade level standards.	● Assessments are enhanced select response.	● Different assessment types are used (e.g., enhanced select response, constructed response).	● Different assessment types that reflect higher levels of depth and complexity are used (e.g., performance- or project-based).
High Expectations	● AA students do not appear to be held intellectually accountable (e.g., they are not called on).	● AA students are rarely held intellectually accountable (e.g., they are rarely called on).	● AA students are sometimes held intellectually accountable (e.g., they are called on; given wait time; "I don't know" is not allowed).	● AA students are routinely held intellectually accountable (e.g., they are called on; given wait time; "I don't know" is not allowed; they are given descriptive, task-related feedback; they are implored to turn in work above grade level).
	● AA students describe their dislike of the class. They are highly critical of their teacher.	● AA students describe the class as easy. They may have some appreciation for their teacher but may readily point out (unprompted) ways they feel he/she can improve.	● AA students describe the class as challenging and show some appreciation for their teacher.	● AA students describe a high level of academic press, challenge, and support from the teacher. They say this pushes them to do their best, and in turn, they appreciate the teacher for this.

Note. AA refers to African American. Evidence should come from multiple sources. These may include teacher self-assessments and self-reflections, announced and unannounced class visits, peer observations, administrator observations, teacher interviews, student interviews, and parent interviews.

　　　In the space below, describe your current skill level with this practice. How did you rate yourself? Why? If less than a 4, what steps might you take to move one level ahead this year?

Follow-Up Interviews With Teachers

Initially, the researcher had planned to observe the teachers implementing the strategies learned in their classrooms. However, with COVID-19, visitors were not allowed on campus at the time of this study. Therefore, the researcher and teachers discussed the possibility of teachers video-taping themselves teaching a lesson, although the teachers were not comfortable with that suggestion. Therefore, a different route would have to be taken.

After further discussion, it was determined that follow-up interviews would be conducted with the participants. After participating in Professional Development sessions, two research participants were willing to participate in follow-up interviews regarding their implementation of the strategies learned during the PD they attended. They went back to their classrooms to implement one of the strategies learned. Six weeks was the amount of time allotted for them to practice to mastery the skills they were implementing. It was agreed that if they needed more time, it would be provided. At that point, a follow-up interview was conducted with each of these participating teachers.

Frank, our first-year teacher with a few years of subbing experience, wanted to implement the TPR strategy learned in Observation 1. He had used it successfully in primary grades but had not yet attempted it in his fourth-grade classroom and was hesitant to try it. Frank was dealing with more behavior issues than usual with the students returning to the classroom after a year-and-a-half of online learning. He was also concerned with whether or not his students

would have buy-in with this strategy. Frank indicated that the first week was a bit

shaky. As he introduced the vocabulary words for the week, he explained TPR

and how they would use it in the classroom. Frank provided motions to go with

the vocabulary for the first three or four words. Then he asked students to think

of motions, gestures or movements for the remaining words. Most students were

quiet, with only four or five participating. As they worked with their vocabulary

throughout the week, students groaned when asked to practice the movements

decided upon by the class. Frank shared that the students using the TPR when

practicing scored higher on their vocabulary test than average and higher than all

the other students. That handful of students was walking tall all day long! The

following week, when they started working with vocabulary, most students

participated by making meaningful suggestions for TPR with the words for the

week. Most of them scored higher than usual on their Friday vocabulary test.

Frank and the students were encouraged by these results. Next, Frank started

using TPR in other content areas, not necessarily with every lesson, but he

gradually increased usage over the following four weeks. At the end of six

weeks, all students participated in the TPR activities in each content area in

which they were applied. When meeting with the researcher, Frank could

scarcely contain his excitement. "They all love it!" he shared. "All my students

are participating more now that I am using TPR, and even in lessons where we

do not yet have TPR implemented, they participate more, stay on task more

often, and complete most of their work on time. And," he paused, "there are fewer classroom disruptions for me to deal with!"

Kendra, a teacher with six years of experience, also agreed to a follow-up interview after having time to practice a new strategy with the students. After some consideration, she chose to use NearPod (www.nearpod.com). Nearpod is an online tool that allows educators to use slides-based teaching in the classroom and works well for remote teaching. Nervous to start, Kendra began with a slide presentation that was already created and available through the Nearpod site. This allowed her to chunk her instruction and to check for understanding using the Nearpod CFU slides throughout her lessons. Some questions required written responses, while others required matching, true/false, or multiple-choice responses. As a result, the students enjoyed using their devices for an extra part of the day. In addition, Kendra enjoyed having immediate feedback from students so she would know how to adapt or move forward with her lesson(s) based on student mastery of concepts. At first, Kendra used this technology only once or twice each week, drawing from the lesson plans provided on the website. Then, as she became more comfortable with the app, she started creating her own slide presentations for her lessons with CFUs built-in. As Frank noted, Kendra was pleased to discover that students were more successful with lessons taught with Nearpod. "I never did CFUs throughout my lessons before; I only checked at the end of a lesson to see if students learned the concepts. Now that I am using CFUs throughout my

lesson, the students are less frustrated and more willing to respond to the questions. This has been a great learning time and tool for the students and for me."

As stated earlier in this paper, the goal of PD is for teachers to take strategies back to their classrooms to use them with children, with the ultimate goal of increasing student achievement. The follow-up interviews with these two educators indicated that implementing the strategies in the classroom resulted in changes in how the teachers taught and increased student learning. Both teachers stated that students were learning at higher levels, were more engaged, and had fewer classroom disruptions.

Document Analysis

One site administrator gave the researcher a copy of her Site Work Plan for the 2019-2020 school year. This plan contains the current student data, a growth target, a professional learning plan, capacity-building systems, a performance management system, and a professional learning and collaboration calendar. It is important to note that due to the onset of the COVID-19 Pandemic in March 2020, no final analysis of student progress was completed at this site's end of the 2019-20 school year. Additionally, no follow-up plan for the 2020-21 school year was produced. As a result of the pandemic, students and educators were off-campus for one-and-one-half years, returning to the classrooms in the fall of 2021.

Current student data in the work plan focused on math scores from the California Assessment of Student Performance and Progress (CAASPP) for all students, as well as two subgroups: African American (AA) students and English Learners (EL.) While site scores in all three areas were higher than district scores, they still lagged behind site ELA scores. In addition, scores for the two identified subgroups were lower than the math scores for the overall student levels. Therefore, the staff used this data to set growth targets to raise overall math scores by three scale points and to increase scores for each subgroup by 15+ scale score points to help close the gap between the subgroups and the overall student population.

The second section, the Professional Learning Plan, listed the foci for the year and provided a description, rationale, and teacher outcomes. The foci were to determine the most effective pedagogical approach to increase students' conceptual understanding and achievement in mathematics and then to use success criteria to increase student and teacher clarity. These foci were decided upon by looking at CAASPP data in math, the number of site awards given each year in math versus ELA, and the fact that the staff was moving away from traditional planning and focusing more on teacher clarity, success criteria, and cognitively preparing for lessons. Stated teacher outcomes included teachers using action research to investigate the problem, determining what changes to introduce, and then noting how the staff would know the changes introduced

were improvements. Additionally, it was determined that teachers would be creating a deeper understanding of the Common Core State Standards (CCSS) and the application and demonstration of mastery of the whole/part of the standard.

The system used (i.e., coaching, teacher planning, instructional rounds, and observations and feedback), the focus (conceptual understandings in math, success criteria, and teacher clarity), the interval or time allotted, and teacher outcomes (backwards mapping, creating common formative assessments, coaching, PLC instructional rounds, and feedback) form the structures of the Capacity-Building Systems. The Performance Management System consisted of site and district assessments for each grade level or grade cluster, the data protocol used, and the interval for each assessment.

The Professional Learning and Collaboration Calendar consisted of six components. These included the date(s), the professional learning foci, expected outcome, activity, monitoring and support provided, the resources and tools, and the "deliverables." The dates were decidedly straightforward: most of the dates were for the site's Monday MOUs, the half-day the district had set aside for PD each week. Four dates were for PLC or site planning; the rest were one-to-four week blocks of implementing the strategies. The Professional Learning Foci enumerated the focus for the training or instruction during the specified date(s). Some of these included backwards mapping, creating success criteria, teacher clarity, scope and sequence, and data analysis, to name just a

few. The Outcome column listed the scheduled activities, learning, and

outcomes for the whole staff, grade level PLCs, or teachers. Finally, the Activity

section contained the labels of learn, plan, practice, refine, or analyze. This

process resembles the PTRA Cycle of action research discussed earlier by

administrators interviewed (Lipton & Wellman, 2018; Sagor, 2000). Each activity

was color-coded in the calendar, allowing teachers to see at a glance the part of

the cycle on which they were working.

The Monitoring/Support column of the calendar showed how support

would be provided. It could be through observations and feedback, coaching,

data analysis, instructional rounds, and other means. The last column,

Resources/Tools/Deliverables, listed book chapters to be referenced,

assessments to be provided or analyzed, learning progressions, and scope and

sequences, as well as items to be turned in, such as a grade level's common

formative assessment schedule for the trimester.

Because this staff and principal had been working together for a few

years, the process of creating and following a Site Work Plan was firmly

engrained in them. They had moved forward to the point of the grade level

teams branching out independently to create their own action research projects.

Because of this personal and professional growth, teachers were confident and

comfortable with the process, and the site administrator trusted them with the

tasks. They still moved forward as a staff by having the same foci for everyone

for the year while allowing for differentiation by grade level based on standards taught and student needs.

The researcher hoped that a document review would shed further light on the PD process and options for the sites/teachers in the study. Again, due to COVID-19, administrators' response to participate and share their site documents was limited. It is reasonable for the researcher to assume that had the pandemic not occurred and additional administrators had been available to participate in this research project, additional documents for this review would have provided such insights. However, the Site Work Plan reviewed did support the information gleaned from the administrators' interviews. The document substantiated the site administrator's statement about differentiation being a part of their regular staff development and that the staff had worked in this direction for several years with the same administrator.

Summary

This case study began with the researcher's concern about the lack of Professional Development (PD) implementation in K-6 classrooms. The researcher hoped to find and offer solutions to the problem of educators not making necessary changes in their classroom instructional practices. They posed three questions to determine a possible solution for this concern. These questions are: *What are the elements that make up effective professional development for K-6 classroom teachers*? *What, if anything, prevents a teacher from implementing the professional development received in their classroom*?

And, *How do educators effectively implement professional development at a K-6 site*? In an attempt to answer these questions, three groups of educators participated in one-to-on interviews with the researcher. These groups are K-6 classroom teachers, elementary site administrators, and district personnel who provide PD sessions for sites and the district. There were, respectively, ten, two, and four participants, for a total of 16 participants in this study. Due to the COVID-19 Pandemic, participation response was lower than expected, so a convenience sample was used. In addition, the researcher observed and transcribed two PD sessions, and two teachers participated in follow-up interviews to discuss their implementation of the PD they had received. Finally, school site data was reviewed, providing triangulation for the study.

The researcher believed it critical that classroom teachers not be the only group or factor considered when addressing these concerns. For that reason, the first research question addressed professional development with the intent of ascertaining if certain elements contributed to the effectiveness of PD regarding teacher implementation. Through the interviews with three educator groups, the researcher found collaboration, teacher voice, differentiation, understanding and meeting student needs, and accountability to be highly valued as elements of PD.   All three groups acknowledged that the accountability piece falls strictly to the site administrators rather than the PD presenters. In addition, all three groups spoke to the importance of a teaching/learning cycle in which teachers would plan, teach, reflect, and apply (PTRA) (Lipton, & Wellman, 2018; Sagor,

2000) what they learned as they continued to implement the strategies. This cycle, which incorporates collaboration, proved to be successful at the sites of both principals interviewed. Time, elusive at best, was repeatedly mentioned by the participants. While administrators could not always provide extra time, they knew the value of allowing teachers to linger over a strategy until they felt entirely comfortable applying it in their classrooms. This aspect of duration paid off well at the sites where this was implemented.

The second research question pondered what, if anything, may have obstructed teachers' implementation of what they had learned during their PD sessions. At least one teacher stated she did not consistently implement the training because she, "knew what was going to last and what wasn't." Additionally, most teachers shared that when the information was not of value to them or relevant to their students, they did not implement the strategies learned. Administrators echoed this as they talked about district trainings being disconnected from what was happening at the school sites. Furthermore, all three groups agreed that if the training was not differentiated, it would not (or possibly could not) be implemented across the board. By differentiating the training teachers receive, the relevance for each teacher increases, thereby increasing the likelihood of the teacher implementing the training. The bottom line, though, was the administrator's follow-through. The training was less likely to be implemented if the site admin did not hold teachers accountable. It is essential to know that the essence of the research points to multiple reasons why

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PD is not always implemented in our classrooms. It is important to note that the teacher is not solely to blame for this fact.

Suppose educators had an understanding of the critical elements of PD and possible reasons why PD had not been implemented in the past. In that case, they could then look at what needed to be done to implement PD effectively at their elementary sites. Action research with its teaching/learning cycle (Lipton & Wellman, 2018; Sagor, 2000) was mentioned at various points. For example, Andre'a, a site administrator interviewed, spoke of the cycle her teachers used and the labels of learn, plan, practice, refine, or analyze used in the site documents reviewed. Overall, the importance of the cycle, was for teachers to have time to practice the strategy learned, dialogue with grade level teams as well as the whole staff about what worked and what did not work, refine their instruction and repeat this process.

With the information extracted from the research, the researcher is confident she can move forward and address the third interview question more fully on how educators can effectively implement PD on their K-6 school sites.

CHAPTER FIVE

CONCLUSIONS AND RECOMMENDATIONS

Introduction

When adults ask young children what they want to do or be when they

grow up, most can respond with enthusiasm, but few follow through on that first

notion. As children grow into teenagers, their desires change over time; even as

young adults, their college majors change at least once, if not three or four times.

For me, this was not the case. Education, being a teacher, and working with

children, has always been my goal, even from a very young age. Like most

individuals who enter the teaching profession, I did so with a desire to make a

difference in the lives of my students. Entering the workforce in the 1980s, when

the pedagogical shift from focusing on teaching to focusing on learning was

taking place, I felt right at home with the direction education was taking. This

desire on my part, in no small way, led to the research questions for this study

and the aspiration to find answers. Chapter five provides a brief discourse on the

questions on which this study is focused, the purpose, the problem, and how they

combine with the outcome and recommendations of this research project. It

further provides a concise overview of the study, contributions to the current body

of research, recommendations for educators and the professional development

process, and recommendations for future research on this topic. Limitations of

the study are also discussed.

Overview

The purpose of this case study was to attain a deeper understanding of the experiences K-6 classroom teachers have regarding the professional development they receive. In addition, I hoped to determine what additional factors may or may not affect teachers' implementation of strategies learned during PD sessions. Finally, it was my goal to obtain answers and proffer solutions to the problem of educators not generating instructional changes in their classrooms. The research questions that guided this study are: *What are the elements that make up effective professional development for K-6 classroom teachers*? *What, if anything, prevents a teacher from implementing the professional development received in their classroom*? And, *How do educators effectively implement professional development at a K-6 site*? These questions were examined through the triangulation of interviews, observations and field notes, and document analysis.

Problem

Despite the many educational reform efforts over several decades, educators and researchers have not seen the increase in student achievement to the degree they believed would take place (Bell & Mladenovic, 2015; Easton, 2011; DuFour, 2002; Trigwell, 1999; Tyack & Cuban, 1995).

Purpose

This case study aimed to examine the PD provided to K-6 classroom teachers to ascertain why, if at all, educators were not putting into practice the strategies learned in PD sessions they attended. A second purpose was to determine the elements that make up effective PD and to discern what changes need to occur in the training for teachers to implement fully the PD they received.

Contributions to Research

A review of the literature revealed many elements being used in PD sessions. These ranged from communication to duration to situated learning. Of these, eight stood out as the most common across all the studies. These elements were building relationships, coherence, collaboration, communication, content knowledge, duration, self-reflection, and situated learning. The researchers noted the success of the studies in the literature review (Flessner & Stuckey, 2013; Gengarelly & Abrams, 2009; Goddard et al., 2007; Penuel et al., 2007; Garet et al., 2001). Additionally, the studies which used teacher self-reports indicated that change had been implemented (Lipton & Wellman, 2018; Bell & Mladenovic, 2015; Burke, 2013; Pitsoe & Maila, 2013; Garet et al., 2001). However, despite these efforts, the hoped-for increase in student achievement was not realized. While some elements of effective PD were evident across multiple studies, the current body of literature did not prove that one element was more effective or necessary than others. Nor did it show any combination of elements to be ideal. One contribution this study makes to the current body of

research is to show how collaboration, time, and reflection work together to improve instruction and thereby increase student achievement in the classroom. Andre'a, a principal interviewed, discussed the learning cycle used at her site. Teachers learned, planned, practiced, analyzed, and refined as they implemented the focus strategy. This resembles the plan, teach, reflect, apply (PTRA) cycle used in Action Research (Lipton & Wellman, 2018; Sagor, 2000) and discussed in the administrators' interviews.

When analyzing the research data for this study, I found that while there were over 30 concepts, or elements, mentioned by teachers alone, some commonalities were shared between the three groups of educators interviewed. For example, all three groups, classroom teachers, site administrators, and PD presenters, stressed the importance of the teachers' voices being heard, along with relevance or coherence, collaboration, time, reflection, and differentiation.

Administrators, like the teachers, expressed the significance of teachers' voices being heard. They expanded the concept by discussing the importance of teachers doing some of the presentations or trainings for the staff. Both administrators noted the influence teachers guiding the PD sessions had on the staff. Relevance, accountability, differentiation, and collaboration were other elements of quality PD discussed by the administrators.

Echoing much of what teachers and administrators shared, PD presenters also discussed the importance of teachers' voices, collaboration, giving and receiving feedback, coherence, and differentiation. Other elements addressed

by this group were clear communication, building relationships, self-reflection, time to practice the strategies, and understanding the "why" of the presentation and the research behind the strategies.

In the literature review, researchers and practitioners alike examined the import each of the elements noted above had on the implementation of PD received by educators. While not discussed in the literature review, all three groups stressed accountability in the interviews. In addition, all stakeholders identified the administrator as the only one with authority to hold teachers accountable.

As stated above, eight PD elements were shared across all the studies in the literature review. This study's second significant contribution to the current body of research is to narrow the focus of these eight elements (building relationships, coherence, collaboration, communication, content knowledge, duration, self-reflection, and situated learning) to four elements. Because part of this process is learned during the PD session and a more significant portion takes place on-site as teachers implement the strategy learned, I recommend Monroe's Tandem Learning Cycle (MTLC) be implemented. In an MTLC, teachers would learn during the PD session, then collaborate, teach, reflect, and adapt, what they are teaching once back on campus. Teachers would repeat this cycle as needed for the success of the students and themselves. It is a "tandem" learning cycle for two reasons. One, the teachers are learning and working together as they implement the strategies on which they are focused. And two,

the process of learning, collaborating, teaching, reflecting, and adapting are used together; they are not as effective individually as they are in tandem with each other. In addition, this research shows how, by using a learning cycle, the elements of collaboration, planning time, and self-reflection are critical components for the PD to be implemented. This was evident in the follow-up interviews I conducted with classroom teachers in this study. Two teachers who had time to implement and refine the strategy learned participated in follow-up interviews. They noted that in addition to making changes in how they taught by fully implementing the strategy, they also saw changes in students' attitudes and behaviors and in increased academic achievement. The teachers also noted that students were more fully engaged in the lessons. Additionally, this is supported by a survey given to teachers by Wilson and Berne (1999) in which teachers stated that the most worthwhile trainings were "direct classroom experience[s]" (p. 174.) When a site implements Monroe's Tandem Learning Cycle (MTLC) for their staff, they can layer in differentiation as the grade level teams become more proficient and independent with their MTLCs. Accountability, which was not discussed in the current body of research, is a final element that must be present at all times regardless of the PD content or format. If administrators do not follow through and hold teachers accountable, the PD will not be successful at the site. It became evident through the interviews that once grade level teams become proficient with their learning cycles, they began to hold each other accountable for quality planning and instruction as well as student achievement.

Recommendations for Educational Leaders and
the Professional Development Process

When looking at test scores across the nation, many people believe
teachers to be at fault, and they voice their concerns about the quality of the
educators we have in place. As I examined the literature regarding teacher
responses to PD, I found there are a multitude of reasons why teaching in our
classrooms is not changing. While there is actual teacher resistance to some
degree, I recommend administrators look deeper to understand why this is taking
place (Knight, 2009). Knight points out that principals and other administrators
need to "…remove barriers…." for teachers to implement changes (p. 509). He
had six questions he asked regarding the PD principals plan or implement, and it
is recommended that administrators keep these or similar points in mind. In
addition, administrators need to remember that change happens slowly, requires
time, and the road to mastery is often bumpy with many curves and switch-backs
(Knight, 2021). It is recommended that administrators familiarize themselves
with change theory to understand more clearly what to expect from their
teachers. In addition, trust should be built with the staff before initiating any
significant changes or presenting new information and strategies to be
implemented.

Another reason for teacher resistance is that teachers sometimes feel
overwhelmed and unsupported in their positions (Wilson & Berne, 1999).
DuFour (2009) found in his work that administrators need to amend their focus so
educators would be looking at student achievement rather than what the

teachers were doing. With this change in focus, DuFour (2009) saw the

transition in how the teachers at his site were teaching. Other factors possibly

influencing teachers' implementation (or lack thereof) of the PD they received

include the lack of time (Flessner & Stuckey, 2013; Penuel et al., 2007) and lack

of support by administrators (Lipton & Wellman, 2018; Knight, 2009; Penuel et

al., 2007; DuFour, 2002), the style of PD provided (Wayne et al., 2008; Goddard

et al., 2007) and teacher voice (Flessner & Stuckey, 2013; Jason, 2007; Davis &

Krajcik, 2005; Cooper & Watkins, 2004).   Additional factors played a role in why

teachers are not implementing the PD they have received. Some of these

factors are the cultural and political landscape (Flessner & Stuckey, 2013);

trainings that are not aligned with the teacher's grade or program (Wayne et al.,

2008); trainings which are often fragmented and full of holes, so teachers are not

receiving everything they need to implement the trainings (Wilson & Berne,

1999); and if teachers do not see success, they are more hesitant to attempt

anything new; as well as other factors.

Adding to the cause of teachers feeling overwhelmed is the number of

things they are asked to do and the variety of strategies they are asked to

implement. Martin (2012) tells us, "When everything is a priority, nothing is a

priority." This researcher proposes that a site concentrate on only one or two foci

at any time. This narrow focus will allow sites to hone in on and perfect what

their foci are, and it will, in turn, aid teachers in keeping them from becoming

overwhelmed.

Too often, the PD is designed to change a teacher's behavior without having any change in the teacher's ideology (Wilson & Berne, 1999). Zimmerman (2006) pointed out that teachers' resistance is often because they do not understand the need for change; they simply do not see any reason for it or how they or their students will benefit from it. Zimmerman (2006) also stated that those who look at teachers' lack of implementation of PD only look at the surface level. She states they need to make an effort to dig much deeper if they are going to grasp fully the dynamics of what is truly happening. Principals would be well rewarded for investing this time in their teachers.

Another recommendation I make is for administrators to hold themselves and their staff accountable. Both DuFour (2002) and Knight (2009) made clear the role of the administrator in generating change in our schools. They indicated that change cannot be brought about without a strong learning leader who will patiently lead the way while allowing teachers to do the work and the thinking. Interviews with teachers and administrators supported this. Both groups said that if the administrator did not follow through and hold teachers accountable, the PD would likely be set aside. DuFour (2002) and Knight (2009) appeared to be indicating that it is not that the teachers are resistant; instead, it is that teachers are being approached and steered in the wrong manner or not at all. Zimmerman (2006) states, "...in addition to being sensitive to teachers' potential change barriers, principals must also consider their own leadership skills and types" (p. 241). She goes on to point out that principals need to work on their

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own change and their understanding of change theory; she indicates this can be done by working on their skills as a leader, demonstrating risk-taking behaviors, earning the trust of the teachers, and having a willingness to change (p. 241).

Interviews with all three groups indicated that teacher voice was critical. One recommendation is for administrators to listen to what their teachers are saying and what is not being said. In her interview, Andre'a indicated that most principals thought they knew what their teachers needed when they did not. Taking the time to listen to teachers, having conversations with them as a staff, in small groups, and individually, and hearing what teachers have to say about PD and other issues will make them feel heard and valued. This in turn will increase the likelihood of them implementing the PD provided. When Andre'a pointed out that most principals did not really know what their staff needed, this was supported by teacher interviews about their voices not being heard and by my personal experience with some administrators. Zimmerman (2006) states, "...it is critical that principals respond with the necessary feedback and reassurance....A supportive environment is necessary for change to happen..." (p. 243). For this reason, it is also recommended that administrators return to the classroom for one school year after every five years of being out of the classroom. This "refresher" will help the administrators reconnect with the issues teachers are facing at their sites and assist them in seeing things from a (re)new(ed) perspective.

An additional recommendation would be for administrators to maintain a

running inventory of all trainings staff members have received for the year (or as

needed over time.) This inventory would serve as a checklist and include the list

of staff and grade level(s) taught, the trainings for the year, and notations on who

has received and missed the training (see Table 8.) When planning for the next

year, the principal would create a second inventory sheet, adapting staff names

and grades taught to reflect any changes (see Table 9.)   Based on the sample

data in Table 8, two teachers were absent and needed to attend the PBiS Day 2

training. If the teachers can make up this training during the school year, the

administrator can then mark they have had the training. If not, they will need to

take the training during the following school year. All other teachers attended all

the required trainings for the year. The data in Table 9 shows two teachers with

grade-level changes (Olivia and Sofia) and one teacher who will be teaching a

combination class (Kendra.) Because teachers with the grade level changes are

already familiar with the basics of TPR, the district's math adoption, and CCSS,

they may only need an abbreviated version of those trainings.   As Kendra will be

teaching a fourth/fifth combo, she would not be required to retake the TPR

course, as how she uses the strategy for fourth will still apply to her fifth-grade

Table 8

Sample of Administrator's Training Inventory, Year One

EXAMPLE: Site PD Year 1														
Teacher	Grade/ Program	Trainings provided * = by grade level												
		SEL days 1-3			* TPR	PEAR DECK	PBIS days 1-3			AVID		* MATH Adoption	* CCSS	Backwards Mapping
Sofia	K	X	X	X	X	X	X	X	X	X	N/A	X	X	X
India	1	X	X	X	X	X	X	X	X	X	N/A	X	X	X
Georgia	1	X	X	X	X	X	X	**A**	X	X	N/A	X	X	X
Olivia	2	X	X	X	X	X	X	X	X	X	N/A	X	X	X
Frank	4	X	X	X	X	X	X	X	X	X	X	X	X	X
Kendra	4	X	X	X	X	X	X	**A**	X	X	X	X	X	X
Edna	3-5 SDC	X	X	X	X	X	X	X	X	X	X	X	X	X
Julia	6	X	X	X	X	X	X	X	X	X	X	X	X	X
Henri'	4-6 SDC	X	X	X	X	X	X	X	X	X	X	X	X	X
Mother Nature	K-6 Art	X	X	X	X	X	X	X	X	X	X	N/A	X	X
Code	**Meaning**													
X	Completed training (at grade level shown if grade level specific)													
A	Absent; still needs training (at grade level shown if grade specific)													
R	Redo training at new grade level shown													
M	Missing assignment; still needs training (at grade level shown if grade specific)													
+	Needs additional training due to grade level change, program change, or combo class													

Table 9

Sample of Administrator's Training Inventory, Year Two

EXAMPLE: Site PD Year 2													
Teacher	Grade/ Program	Trainings provided * = by grade level											
		SEL day 1-3			* TPR	PEAR DECK	PBIS days 1-3			AVID		* MATH Adoption	* CCSS	Backwards Mapping
Olivia	K	X	X	X	R	X	X	X	X	X	N/A	R	R	X
India	1	X	X	X	X	X	X	X	X	X	N/A	X	X	X
Georgia	1	X	X	X	X	X	X	A	X	X	N/A	X	X	X
Sofia	3	X	X	X	R	X	X	X	X	X	N/A	R	R	X
Frank	4	X	X	X	X	X	X	X	X	X	X	X	X	X
Kendra	4/5	X	X	X	+	X	X	A	X	X	X	X	+	X
* TBD	6	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD
Edna	3-5 SDC	X	X	X	X	X	X	X	X	X	X	X	X	X
Henri'	4-6 SDC	X	X	X	X	X	X	X	X	X	X	X	X	X
Mother Nature	K-6 Art	X	X	X	X	X	X	X	X	X	X	N/A	X	X

Code	Meaning
X	Completed training (at grade level shown if grade level specific)
A	Absent; still needs training (at grade level shown if grade specific)
R	Redo training at new grade level shown
M	Missing assignment; still needs training (at grade level shown if grade specific)
+	Needs additional training due to grade level change, program change, or combo class
TBD	To Be Determined

students. Since the staff works vertically with each other throughout the year to ensure the teaching is aligned from one grade level to the next, she will have the option of taking the fifth-grade training for Common Core State Standards (CCSS,) but again, it will not be required as she should already be familiar with those standards. Ideally, this training would be made available so she can decide to attend if she does not feel as strong with those standards as she would like. These decisions would need to be made by the site administrator and the individual teachers involved. Table 8 shows a fourth change to the staff, with that being an unknown addition. Once the position has been filled either through the district's transfer process or with a new hire, the principal can fill in the inventory with completed trainings and those still needed. Again, a conversation between the principal and the new staff member would need to occur.

Situated Learning, that is, learning that is based on the needs of a particular group or site, was discussed in the literature review and the interviews. The interview participants felt strongly that the sites' needs could vary considerably, and those needs must be met. Regarding recommendations for the professional development process, I believe PD should be differentiated based on the needs of the individual sites participating in the training to meet the learning requirements of each site. All stakeholders must realize that participating in a PD session is just the first step in the PD process, which will continue once the teachers return to their sites. PD presenters may or may not continue to provide support depending on the topic and level of proficiency of the

administrator and staff members. PD should continue with an MTLC or similar

cyclic process until teachers reach mastery of the strategy implemented. This

may mean the PD calendar will need to be adjusted if teachers need more time

with the concept on which they are working.

 As noted previously in this paper, teachers' time outside the classroom

can be detrimental to their instruction and student learning. For this reason, it is

recommended that teacher time outside of the classroom for PD be minimal and

greatly scrutinized to ensure the benefits from said training will outweigh the

disadvantages. Wayne et al. (2008) suggested that districts ensure the PD

provided was of high quality to counter the high cost of taking teachers out of the

classroom. Burke's research (2013) outlines a PD approach that limits the time

teachers are out of their classes. An alternative to pulling teachers out of the

classroom for PD is to ensure they have time to collaborate (Goddard et al.,

2007). This time would permit them to problem-solve, plan, and share insights

on improving instruction in the classroom. Paying teachers for their collaboration

time could be one strategy administrators will want to implement as part of their

instructional plan. This would not only benefit the teachers, but it could also save

the district a great deal of money.

<center>Recommendations for Future Research</center>

 Just as I hope my work will make a notable contribution to the current

body of research, I hope others will pick up the baton and keep moving forward

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so the information regarding desired outcomes for students and teachers can become more refined over time. Doing so will assist educators as they seek answers to these tough questions regarding effective PD in their classrooms.

The hope is that educators wanting to replicate this study or to use it as a springboard for their research would be doing so post-COVID-19. Once the schools and classrooms have opened back up and the teachers are meeting face-to-face again, stress levels for all stakeholders should begin to drop. This would allow the researchers to physically observe lessons being taught rather than relying on teacher interviews after the teachers have implemented their new strategies. Classroom observations are highly recommended. Based on the results of this study, another recommendation would be to include a more significant number of educators and a greater number of schools. By doing so, future researchers would potentially have enough volunteers to provide a random sample for their study. This would ensure greater validity.

I relied on teacher follow-up interviews regarding student growth and achievement as I could not enter the classrooms due to COVID-19. I recommend that future researchers collect hard data on student growth and achievement. This could be done via student work samples, pre-and post-assessments, student inventories, and anecdotal records collected during the observations. One consideration would be to conduct observations before the teachers implement their strategies and take field notes on behaviors, attitudes, and engagement, as well as achievement. Then follow-up observations could be

completed once the teachers have had time to implement and practice the strategies. These field notes, combined with student work samples and pre-and post-assessments, should provide valuable data for the researchers. Researchers should reflect on the option of following teachers over a more extended period with several observations conducted.

As stated earlier, Knight (2009) asked six questions when discussing teacher PD. These were 1) Are the teaching practices powerful? 2) Are the practices easy to implement? 3) Are they experienced? 4) Are teachers treated with respect? 5) Are teachers doing the thinking? 6) What has happened in the past? Administrators may want to keep each of these points in mind when planning and implementing their PD for the year.

This study focused on K-6 teachers. Additional research needs to be conducted on middle and high school teachers. While their PD needs differ from those of K-6 teachers, this researcher believes that they would benefit from implementing some of the recommended strategies for educational leaders and the professional development process in this study.

<center>Limitations</center>

At the beginning of this study, I worked as an academic coach. In this role, I saw the need to explore further the topic of PD for classroom teachers. While I initially considered a K-12 focus, I realized a K-12 scope would be too broad as middle- and high school teachers have different needs than elementary teachers.

For that reason, this study focused on K-6 teachers.

Some situations are beyond a researcher's control, which is true of any study. This study was conducted during the COVID-19 Pandemic, during the first year teachers and students were back in classrooms with face-to-face teaching. Prior to that, all stakeholders conducted business via virtual platforms. For students and teachers, this meant one-and-one-half years of interacting via computers, laptops, or other devices. Teachers struggled with planning virtual lessons for synchronous and asynchronous learning and figuring out the best way to present these lessons virtually. While students may have been learning, social interactions and appropriate school behaviors were not acquired during this time. Teachers taught via various platforms, and the pressure of doing this extra work was wearing on them. When they returned to the classroom in Fall 2021, teachers were exhausted. For this reason, teacher responses while working through a pandemic could be dissimilar to their responses in a post-pandemic study.

For this study on professional development for the K-6 teacher, I faced difficulties recruiting teachers, administrators, and PD presenters to participate in interviews and observations. This was primarily due to the COVID-19 Pandemic and the educators' stress levels. Although students and teachers were back in their classrooms meeting face-to-face, schools were still closed to all non-essential personnel, and all teacher PDs were conducted virtually. In addition, as previously stated, educators were exhausted. Teachers also had a new set of

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conditions under which they had to work. One new condition was that teachers had to wear a mask while teaching and ensure students wore their masks properly—this diminished auditory input for teachers and the students. In addition, teachers had to learn to work in small groups while maintaining personal space for themselves and others. During this time, most PD at district schools centered on self-care and social-emotional learning (SEL) for the students and the teachers. Due to the population size of educators who volunteered, this study used a sample of convenience. Once the COVID-19 Pandemic has run its course and researchers can recruit a larger population of participants, they will be able to have a random sample for their research. The COVID-19 Pandemic also impacted the daily attendance of students and teachers. To a lesser degree, low attendance rates impacted the results of the teachers' implementation of a given strategy and the students' learning of the concepts taught. In addition, they caused a slight increase in the time required for reteaching standards to students who had been absent.

This case study is further limited by its scope of looking at one cluster of schools in one district. This may impact the generalizability of the study to other schools or clusters within that district or other districts. In addition, with only two principals participating, access to site documents was limited.

Conclusion

People have been reforming the structure and instruction of schools for over a century, and the hunt for answers and reform is not yet over. When this study began, I was hoping to find answers to my questions about PD implementation, and I believe that, to a degree, this research project has done so. This research project shows that some PD elements such as collaboration, planning time, and self-reflection work in tandem for teachers to implement better what they are learning in PD. It also shows through interviews, observations, and data review that by implementing a learning/teaching cycle such as MTLC, teachers are more willing and able to apply their learning strategies.

The literature recapitulates that while some teachers resist changing their classroom instruction, most are willing to do so under the appropriate conditions. This would include having administrators that lead the way and hold teachers accountable. In addition, administrators need to look deeper into why teachers resist change in order to better understand their staff and needs when met with resistance. In turn, teachers must speak up more often and louder, learning to advocate for themselves and their students. It falls to them to ensure their voices, individually and collectively, are heard.

It appears evident to me that when looking at the elements of successful PD, we cannot separate the PD session from the events which transpire once teachers return to their sites. For example, a PD session might have all the elements deemed essential. However, if the conditions at the school site or with the teacher(s) are not appropriately aligned, then the PD learned could be

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shelved indefinitely. For this reason, the researcher believes the definition of "professional development," as discussed in this paper, needs to be broadened beyond the time allotted for presenting the information. It needs to include a discussion of which elements must be incorporated after teachers return to their sites and classrooms, as professional growth is or should be an ongoing venture.

APPENDIX A

CSUSB IRB LETTER OF APPROVAL

August 27, 2021

CSUSB INSTITUTIONAL REVIEW BOARD
Expedited Review
IRB-FY2021-249
Status: Approved

Prof. Michael Verdi and Ms. Rebecca Monroe
COE - Doctoral Studies, COE - TeacherEduc&Foundtn TEF
California State University, San Bernardino
5500 University Parkway
San Bernardino, California 92407

Dear Prof. Verdi and Ms. Monroe:

Your application to use human subjects, titled "Professional Development for K-6 Classroom Teachers" has been reviewed and approved by the Institutional Review Board (IRB) of CSU, San Bernardino. The CSUSB IRB has not evaluated your proposal for scientific merit, except to weigh the risk and benefits of the study to ensure the protection of human participants. The study is approved as of August 27, 2021. The study will require an annual administrative check-in (annual report) on the current status of the study on August 26, 2022. Please use the renewal form to complete the annual report.

This approval notice does not replace any departmental or additional campus approvals which may be required including access to CSUSB campus facilities and affiliate campuses. Investigators should consider the changing COVID-19 circumstances based on current CDC, California Department of Public Health, and campus guidance and submit appropriate protocol modifications to the IRB as needed. CSUSB campus and affiliate health screenings should be completed for all campus human research related activities. Human research activities conducted at off-campus sites should follow CDC, California Department of Public Health, and local guidance. See CSUSB's COVID-19 Prevention Plan for more information regarding campus requirements.

If your study is closed to enrollment, the data has been de-identified, and you're only analyzing the data - you may close the study by submitting the Closure Application Form through the Cayuse Human Ethics (IRB) system. The Cayuse system automatically reminders you at 90, 60, and 30 days before the study is due for renewal or submission of your annual report (administrative check-in). The modification, renewal, study closure, and unanticipated/adverse event forms are located in the Cayuse system with instructions provided on the IRB Applications, Forms, and Submission Webpage. Failure to notify the IRB of the following requirements may result in disciplinary action. Please note a lapse in your approval may result in your not being able to use the data collected during the lapse in the application's approval period.

You are required to notify the IRB of the following as mandated by the Office of Human Research Protections (OHRP) federal regulations 45 CFR 46 and CSUSB IRB policy.

- **Ensure your CITI Human Subjects Training is kept up-to-date and current throughout the study.**
- **Submit a protocol modification (change) if any changes (no matter how minor) are proposed in your study for review and approval by the IRB before being implemented in your study.**
- **Notify the IRB within 5 days of any unanticipated or adverse events are experienced by subjects during your research.**
- **Submit a study closure through the Cayuse IRB submission system once your study has ended.**

The CSUSB IRB has not evaluated your proposal for scientific merit, except to weigh the risks and benefits to the human participants in your IRB application. If you have any questions about the IRBs decision please contact Michael Gillespie, the IRB Compliance Officer. Mr. Michael Gillespie can be reached by phone at (909) 537-7588, by fax at (909) 537-7028, or by email at mgillesp@csusb.edu. Please include your application approval number IRB-FY2021-249 in all correspondence. Any complaints you receive regarding your research from participants or others should be directed to Mr. Gillespie.

Best of luck with your research.

Sincerely,

Nicole Dabbs

Nicole Dabbs, Ph.D., IRB Chair

CSUSB Institutional Review Board

ND/MG

APPENDIX B

LETTER OF INTRODUCTION

Letter of Introduction

Email: **Request# IRC 2020-108**
Dear (Teacher, Admin, Presenter—**insert name or title here**),

You are being invited to participate in a research study conducted by Rebecca (Becky) S. Monroe, a student in the doctoral program at California State University San Bernardino (CSUSB). The study is being conducted with the approval of the Institutional Review Board (IRB) of CSUSB, and your district, ███████████████████████████████████ This study will be conducted using all the procedures and guidelines set by the IRB and ██████.

This study is being conducted to gain a better understanding of the experiences of K-6 classroom teachers as they receive professional development at the site and district level. In addition, the study will examine why some teachers implement some professional development strategies but not others. An exploration of the components of professional development sessions will also be conducted to see if it can be determined what criteria make up for quality professional development. The goal is to examine viable options for bringing about change at the site and district level so that only appropriate, high quality PD will be presented at each site. When this occurs, teachers will be better able to make instructional changes and begin to implement the strategies they have learned into their classrooms for the betterment of themselves and their students. The hope is this will result in increased student achievement throughout the district. Ultimately, this research *may* be shared with the School Board. All participants will remain anonymous. Pseudonyms will be used for all participants, all schools, and for the district.

A consent form for this study is attached, and contains more information about the study. Before you decide to participate, it is important for you to understand why the research is being done and what it will involve. Please take the time to read the information in the attached form carefully. If there is anything that you do not understand or anything on which you would like more information, please ask questions and the researcher will try their best to answer them.

The plan is to begin the research September 1, 2021 and it should be completed within eight (8) months. Your personal commitment would be one (1) interview

session of 30-60 minutes.   After the professional development observations are completed, it may be determine that some follow-up interviews are necessary. If that is the case, then for some of you, the researcher will ask for a commitment of two (2) sessions totaling no more than 60-90 minutes of your time. If you are willing to participate, all communication from this point forward will be done using your personal email address, text, or Personal Messaging to further protect your confidentiality.

Respectfully,
Rebecca S. Monroe
████████, retired
(909) 936-6480

APPENDIX C

TEACHER CONSENT FORM

CALIFORNIA STATE UNIVERSITY, SAN BERNARDINO
5500 University Parkway, San Bernardino, CA 92407
www.csusb.edu

Teacher   Informed   Consent

Title of Study: Effective and Lasting Professional Development for K-6
Classroom Teachers
Researcher: Rebecca (Becky) S Monroe   **Dept.:** Education   **Phone:**
(909) 936-6480
                    Educator, ███████ retired 2020   **email:**
ayeteach@earthlink.net

Introduction

You are being invited to take part in a research study. The study is being
conducted with the approval of the Institutional Review Board (IRB) of California
State University San Bernardino, and your district,
██. This study will
be conducted using all the procedures and guidelines set by the IRB and
███████. However, before you decide, it is important for you to understand why
the research is being done and what it will involve. Please take the time to read
the information in this form carefully. If there is anything that you do not
understand or anything on which you would like more information, please ask
questions and the researcher will try their best to answer them. Once the study
has been explained and you have had all your questions answered to your
satisfaction, you will be asked to sign this form if you agree to participate. Before
anything is done for this study, you must sign this form. A copy of this signed
form will be given to you. You do not have to take part in this study. If you do
agree to participate, you are free to withdraw from this study at any time you
choose without giving a reason, but you may be asked to assist with finding a
replacement. The plan is to begin the research September 1, 2021 and it should
be completed within eight (8) months. Your personal commitment would be 30-
60 minutes; an additional session of up to 45 minutes may be added for teachers
who agree to video tape a lesson they are teaching.

Why are you being invited to participate in this study?

You are asked to participate in this study because you are a teacher in the
district who has received professional development either as a first year teacher,
or over the years as an experienced teacher. As a classroom teacher, you may
be able to provide information that might prove insightful as we look deeper into
how to ensure the professional development the district provides in the future is
of high quality and has lasting benefits to both our teachers and our students.

Your participation is voluntary, and if you choose not to participate there will not be any consequences from the researchers nor from site or district administrators.

What is the purpose of this study?
This study is being conducted to gain a better understanding of the experiences of K-6 classroom teachers as they receive professional development at the site and district levels. In addition, the study will examine why some teachers implement some professional development strategies but not others. An exploration of the components of professional development sessions will also be conducted to see if it can be determined what criteria make up for quality professional development.
The goal is to examine viable options for bringing about change at the site and district level so that only appropriate, high quality PD will be presented at each site. When this occurs, teachers will be better able to make instructional changes and begin to implement the strategies they have learned into their classrooms for the betterment of themselves and their students. The hope is this will result in increased student achievement throughout the district. Ultimately, this research will be shared with the district's Department of Accountability and Educational Technology, as it is their responsibility to ensure all district students are protected. All participants will remain anonymous. Pseudonyms will be used for all participants, all schools, and the district.

Who is participating in this study?
Participants in this study will include classroom teachers, PD presenters, and site administrators. If others offer/ask to participate (i.e., district administrators) they will be considered. Because of COVID-19, the number of participants may be decreased from the original number desired, but the researcher is still hopeful about having enough participants for a quality study.

What will happen if I take part in this research study?
The conversations will be held via Zoom Conference meetings. This is a free software (www.zoom.us) that can be downloaded through your mobile phone/device or personal computer/laptop. If you agree to be in this study, you will be asked to do the following things:

- Participate in a semi-structured interview in September 2021 – April of 2022.

- Give your permission to have the interview recorded.

- Allow for a follow-up interview if required, and based on your responses to the questions.

- A few teachers will be asked to video-tape themselves teaching as they implement a new strategy learned during a recent PD session

The interviews will be held via Zoom and require approximately 30-60 minutes. A follow-up interview would add 30 minutes to your time commitment. If you are asked and agree to video-taping yourself teaching, an additional 30-45 minutes could be added, making your total *possible* time commitment 2 hours and 15 minutes.

Consent to Recording:

Each party consents to the monitoring or recording of the zoom conference of the parties in connection with this Agreement or any potential transcription; agrees to obtain any necessary consent of and give notice of such recording to such personnel of it; and agrees that recordings may be submitted in evidence in any Proceedings relating to this Agreement.

Please sign below if you are willing to have this interview recorded via video. You may still participate in this study if you are not willing to have the interview recorded.

☐ **I do not want to have this interview recorded.**

☐ **I am willing to have this interview recorded.**

☐ **If asked, I am willing to video-tape myself implementing a new strategy learned during PD**

Signed: _____

Date: _____

Home email: _____

What are the possible risks of the study?

There is no physical risk to you in this study. However, some participants may feel there is a risk of retribution if responses provided are not positive or in keeping with "company policy." For this reason, all participant information is confidential. Participants' and schools' identities will be protected through the use of pseudonyms; and all data collected will be safely secured in a locked filing cabinet in the researcher's home unless being used by the researcher. In addition, there may be potential discomfort on the part of the participant of being audiotaped, videotaped, or interviewed. Participants have the right to refuse to be audiotaped or videotaped; they also have the right to review the recordings

and the transcriptions made as part of the study to determine whether they should be edited or erased in whole or in part. During interviews, participants may refuse to answer any question(s) they do not want to answer and still remain in the study. At any point, participants may withdraw from the study without repercussions. Once their interview has been transcribed, the participant will have the opportunity to review the transcript to verify its accuracy, as well as to determine if any information needs to be omitted and/or changed.

What are the benefits of being in the study?
Participants may benefit from the study as districts improve the process by which sites determine the focus, delivery, and implementation of professional development provided to their K-6 teachers. In addition, participants may benefit as they have the opportunity to reflect further about their PD and teaching experiences; and it may lead to a deeper understanding of the purpose and process of professional development. These benefits would have lasting, long-term effects on the participants and their work performance. If this occurs, classroom instruction should improve resulting in better student performance.

Confidentiality
The records of this study will be kept strictly confidential. Research records, including notes, transcripts, video records, or audio recordings will be kept in a locked file, and all electronic information will be coded and secured using a password protected file. We will not include any information in any report we may publish that would make it possible to identify you.

Right to Refuse or Withdraw
The decision to participate in this study is entirely up to you. You may refuse to take part in the study *at any time* without affecting your relationship with the investigators of this study or CSUSB or the district in which you work. Your decision will not result in any loss of benefits to which you are otherwise entitled. You have the right not to answer any single question, as well as to withdraw completely from the interview at any point during the process; additionally, you have the right to request that the interviewer not use any of your interview material after the interview is completed.

Right to Ask Questions and Report Concerns
You have the right to ask questions about this research study and to have those questions answered by me before, during or after the research. If you have any further questions about the study, at any time feel free to contact the researcher at ayeteach@earthlink.net or via the phone number listed below. If you would like, a summary of the results of the study will be sent to you upon request. If you have any other concerns about your rights as a research participant that have not been answered by the investigators, you may contact CSUSB Institutional Review Board. If you have any problems or concerns that occur as a result of

your participation, you can report them. Alternatively, concerns can be reported by completing a Participant Complaint Form, which can found on the IRB website at https://www.csusb.edu/institutional-review-board.

By signing below, you are consenting to participate in this research study. You have read the information given or someone has read it to you. You have had the opportunity to ask questions, which have been answered satisfactorily to you by the researcher. You do not waive any of your legal rights by signing this consent form.

SIGNATURE BY THE SUBJECT:

_____   _____   _____
 Name of Participant   Signature of Participant   Date of Signature

SIGNATURE BY THE INVESTIGATOR/INDIVIDUAL OBTAINING CONSENT: I attest that all the elements of informed consent described in this consent document have been discussed fully in non-technical terms with the participant. I further attest that all questions asked by the participant were answered to the best of my knowledge.

_____   _____
Signature of Individual Obtaining Consent   Date of Signature

☐*Check here if the Individual Obtaining Consent observed the signing of this consent document and can attest, to the best of their knowledge, the person signing the consent form is the subject or the subject's legally authorized representative and the person signing the form has done so voluntarily. By checking this box, the Individual Obtaining Consent does not need to sign on the Witness signature line (below)*

_____   _____
Signature of Witness   Date of Signature

APPENDIX D

TEACHER INTERVIEW QUESTIONS

CALIFORNIA STATE UNIVERSITY, SAN BERNARDINO
5500 University Parkway, San Bernardino, CA 92407
www.csusb.edu

Semi-Structured Interview Questions

Title of Study: Professional Development for K-6 Classroom Teachers

Researcher: Rebecca (Becky) S Monroe   **Dept.:** Education
Phone: (909) 936-6480
     Educator, ██████, retired 2020   **email:** ayeteach@earthlink.net
Teacher: Site   Date
Intro: # of years; what taught; which districts;

* Prior to COVID-19:
1. How is the professional development presented? (When? By whom?)

2. And then what happens?

3. Describe to me a time when you were able to take a training from presentation to implementation.

4. Are you still using the information/techniques/strategies?

5. Why or why not?

6. Tell me about a time, if at all, when you received professional development, which you did not implement in the classroom?

7. Why did you not?

8. And then what happened?

9. What do you like about professional development you have received during this school year?

10. What would you like to see done differently regarding the professional development you will receive in the coming year?

11. What makes professional development of value to you?

12. What makes professional development not of value to you?

13. How has PD changed since COVID-19 hit this past March 2020?

14. How, if at all, has PD changed in the last five (5) years? 10 years? Since you started teaching?

APPENDIX E

ADMINISTRATOR CONSENT FORM

Administrator's Consent Form

CSUSB IRB #FY2021-249 ▮▮▮▮▮▮▮ IRC #108-2020

Administrator   Informed   Consent

Title of Study: Effective and Lasting Professional Development for K-6 Classroom Teachers

Researcher: Rebecca (Becky) S Monroe   **Dept.:** Education   **Phone:** (909) 936-6480

Introduction

You are being invited to take part in a research study. The study is being conducted with the approval of the Institutional Review Board (IRB) of California State University San Bernardino, and your district, ▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮. This study will be conducted using all the procedures and guidelines set by the IRB and ▮▮▮▮▮. However, before you decide, it is important for you to understand why the research is being done and what it will involve. Please take the time to read the information in this form carefully. If there is anything that you do not understand or anything on which you would like more information, please ask questions and the researcher will try their best to answer them. Once the study has been explained and you have had all your questions answered to your satisfaction, you will be asked to sign this form if you agree to participate. Before anything is done for this study, you must sign this form. A copy of this signed form will be given to you. You do not have to take part in this study. You are free to withdraw from this study at any time you choose without giving a reason, but you may be asked to assist with finding a replacement. The plan is to begin the research September 1, 2021 and it should be completed within eight (8) months. Your personal time commitment would be 30-90 minutes.

Why are you being invited to participate in this study?

You are asked to participate in this study because you are an administrator in the district who has provided professional development either at the site or district level. As an administrator, you may be able to provide information that might prove insightful as we look deeper into how to ensure the professional development the district provides in the future is of high quality and has lasting benefits to both our teachers and our students.

What is the purpose of this study?
This study is being conducted to gain a better understanding of the experiences of K-6 classroom teachers as they receive professional development at the site and district level. In addition, the study will examine why teachers implement some professional development strategies but not others. An exploration of the components of professional development sessions will also be conducted to see if it can be determined what criteria make up for quality professional development. The goal is to examine viable options for bringing about change at the site and district level so that only appropriate, high quality PD will be presented at each site. When this occurs, teachers will be better able to make instructional changes and begin to implement the strategies they have learned into their classrooms for the betterment of themselves and their students. The hope is this will result in increased student achievement throughout the district. Ultimately, this research will be shared with the district's Department of Accountability and Educational Technology, as it is their responsibility to ensure all district students are protected.. All participants will remain anonymous. Pseudonyms will be used for all participants and for all schools.

Who is participating in this study?
Participants in this study will include classroom teachers, PD presenters, and site administrators. If others offer/ask to participate (i.e., district administrators) they will be considered. Because of COVID-19, the number of participants may be decreased from the original number desired, but the researcher is still hopeful about having enough participants for a quality study.

What will happen if I take part in this research study?
The conversations will be held via Zoom Conference meetings. This is a free software (www.zoom.us) that can be downloaded through your mobile phone/device or personal computer/laptop. If you agree to be in this study, you will be asked to do the following things:

- Participate in a semi-structured interview in August 2021 – March of 2022.

- Give your permission to have the interview recorded.

- Allow for a follow-up interview if required, and based on your responses to the questions.

If we are able to meet in person rather than through zoom, the interviews will be held in a space chosen by you and require approximately 30-60 minutes. A follow-up interview would add 30 minutes to your time commitment.

Consent to Recording:

Each party consents to the monitoring or recording of the zoom conference of the parties in connection with this Agreement or any potential transcription; agrees to obtain any necessary consent of and give notice of such recording to such personnel of it; and agrees that recordings may be submitted in evidence in any Proceedings relating to this Agreement.

Please sign below if you are willing to have this interview recorded via video. You may still participate in this study if you are not willing to have the interview recorded.

☐ **I do not want to have this interview recorded.**
☐ **I am willing to have this interview recorded.**

Signed: _____

Date: _____

What are the possible risks of the study?

There is no physical risk to you in this study. However, some participants may feel there is a risk of retribution if responses provided are not positive or in keeping with "company policy." For this reason, all participant information is confidential. Participants' and schools' identities will be protected through the use of pseudonyms; and all data collected will be safely secured in a locked filing cabinet in the researcher's home unless being used by the researcher. In addition, there may be potential discomfort on the part of the participant of being audiotaped, videotaped, or interviewed. Participants have the right to refuse to be audiotaped or videotaped; they also have the right to review the recordings and the transcriptions made as part of the study to determine whether they should be edited or erased in whole or in part. During interviews, participants may refuse to answer any question(s) they do not want to answer and still remain in the study. At any point, participants may withdraw from the study without repercussions. Once their interview has been transcribed, the participant will have the opportunity to review the transcript to verify its accuracy, as well as to determine if any information needs to be omitted and/or changed.

What are the benefits of being in the study?

Participants may benefit from the study as districts improve the process by which sites determine the focus, delivery, and implementation of professional development provided to their K-6 teachers. In addition, participants may benefit as they have the opportunity to reflect further about their PD and teaching experiences; and it may lead to a deeper understanding of the purpose and process of professional development. These benefits would have lasting, long-term effects on the participants and their work performance. If this occurs, classroom instruction should improve resulting in better student performance.

Confidentiality
The records of this study will be kept strictly confidential. Research records, including notes, transcripts, video records, or audio recordings will be kept in a locked file, and all electronic information will be coded and secured using a password protected file. We will not include any information in any report we may publish that would make it possible to identify you.

Right to Refuse or Withdraw
The decision to participate in this study is entirely up to you. You may refuse to take part in the study *at any time* without affecting your relationship with the investigators of this study, CSUSB, or the district in which you work. Your decision will not result in any loss of benefits to which you are otherwise entitled. You have the right not to answer any single question, as well as to withdraw completely from the interview at any point during the process; additionally, you have the right to request that the interviewer not use any of your interview material after the interview is completed.

Right to Ask Questions and Report Concerns
You have the right to ask questions about this research study and to have those questions answered by me before, during or after the research. If you have any further questions about the study, at any time feel free to contact the researcher at ayeteach@earthlink.net or via the phone number listed below. If you would like, a summary of the results of the study will be sent to you upon request. If you have any other concerns about your rights as a research participant that have not been answered by the investigators, you may contact CSUSB Institutional Review Board. If you have any problems or concerns that occur as a result of your participation, you can report them. Alternatively, concerns can be reported by completing a Participant Complaint Form, which can found on the IRB website at https://www.csusb.edu/institutional-review-board.

By signing below, you are consenting to participate in this research study. You have read the information given or someone has read it to you. You have had the opportunity to ask questions, which have been answered satisfactorily to you by the researcher. You do not waive any of your legal rights by signing this consent form.

SIGNATURE BY THE SUBJECT:

_____   _____   _____
 Name of Participant   Signature of Participant   Date of Signature

SIGNATURE BY THE INVESTIGATOR/INDIVIDUAL OBTAINING CONSENT: I attest that all the elements of informed consent described in this consent

document have been discussed fully in non-technical terms with the participant. I further attest that all questions asked by the participant were answered to the best of my knowledge.

_____   _____
Signature of Individual Obtaining Consent   Date of Signature

☐*Check here if the Individual Obtaining Consent observed the signing of this consent document and can attest, to the best of their knowledge, the person signing the consent form is the subject or the subject's legally authorized representative and the person signing the form has done so voluntarily. By checking this box, the Individual Obtaining Consent does not need to sign on the Witness signature line (below)*

_____   _____
Signature of Witness   Date of Signature

APPENDIX F

ADMINISTRATOR INTERVIEW QUESTIONS

CSUSB

WE DEFINE THE *future*

CALIFORNIA STATE UNIVERSITY, SAN BERNARDINO
5500 University Parkway, San Bernardino, CA 92407
www.csusb.edu

ADMINISTRATOR: SITE
                                DATE

Intro: # of years; what taught; which districts;

* Prior to COVID-19:
1. What is the process for determining the professional development that will be provided at your site?

2. How is the professional development presented? (When? By whom?)

3. And then what happens?

4. What is the process used for determining what professional development (or what portions of a professional development training) will be implemented in the classrooms?

5. Describe how the accountability system works at your site.

6. Tell me about a time, if at all, when your site received professional development, which was not implement in the classrooms?

7. Why was it not implemented?

8. And then what happened?

9. What do you like about professional development your site has received during this (or a prior) school year(s)?

10. What would you like to see done differently regarding the professional development your site will receive in the coming year(s)?

11. What makes professional development of value to you/your site?

12. What makes professional development not of value to you/your site?

13. What makes professional development not of value to you/your

department/your district?

14. Are there any consequences if teachers do not attend the optional training?

15. Are there any benefits or favor of any kind shown to teachers who do participate in the optional training?

16. How has planning and presenting for PD changed since COVID-19 hit this past March 2020?

17. How, if at all, has planning and presenting for PD changed in the last five (5) years?

APPENDIX G

PROFESSIONAL DEVELOPMENT PRESENTER'S CONSENT FORM

Professional Development Presenter's Consent Form

CALIFORNIA STATE UNIVERSITY, SAN BERNARDINO
5500 University Parkway, San Bernardino, CA 92407
www.csusb.edu

Title of Study: Effective and Lasting Professional Development for K-6 Classroom Teachers

Researcher: Rebecca (Becky) S Monroe   **Dept.:** Education   **Phone:** (909) 936-6480

Educator, ███████ retired 2020   **email:** ayeteach@earthlink.net

Introduction

You are being invited to take part in a research study. The study is being conducted with the approval of the Institutional Review Board (IRB) of California State University San Bernardino, and your district, ██████████████████████████. This study will be conducted using all the procedures and guidelines set by the IRB , and ██████████. However, before you decide, it is important for you to understand why the research is being done and what it will involve. Please take the time to read the information in this form carefully. If there is anything that you do not understand or anything on which you would like more information, please ask questions and the researcher will try their best to answer them. Once the study has been explained and you have had all your questions answered to your satisfaction, you will be asked to sign this form if you agree to participate. Before anything is done for this study, you must sign this form. A copy of this signed form will be given to you. You do not have to take part in this study. You are free to withdraw from this study at any time you choose without giving a reason, but you may be asked to assist with finding a replacement. The plan is to begin the research September 1, 2021 and it should be completed within eight (8) months. Your personal commitment would be 30-90 minutes.

Why are you being invited to participate in this study?

You are asked to participate in this study because you are a professional development presenter in the district who has provided PD either at the site or district level. As a presenter, you may be able to provide information that might prove insightful as we look deeper into how to ensure the professional development the district provides in the future is of high quality and has lasting benefits to both our teachers and our students.

What is the purpose of this study?
This study is being conducted to gain a better understanding of the experiences of K-6 classroom teachers as they receive professional development at the site and district level. In addition, the study will examine why teachers implement some professional development strategies but not others. An exploration of the components of professional development sessions will also be conducted to see if it can be determined what criteria make up for quality professional development. The goal is to examine viable options for bringing about change at the site and district level so that only appropriate, high quality PD will be presented at each site. When this occurs, teachers will be better able to make instructional changes and begin to implement the strategies they have learned into their classrooms for the betterment of themselves and their students. The hope is this will result in increased student achievement throughout the district. Ultimately, this research will be shared with the district's Department of Accountability and Educational Technology, as it is their responsibility to ensure all district students are protected.. . All participants will remain anonymous. Pseudonyms will be used for all participants and for all schools.

Who is participating in this study?
Participants in this study will include classroom teachers, PD presenters, and site administrators. If others offer/ask to participate (i.e., district administrators) they will be considered. Because of COVID-19, the number of participants may be decreased from the original number desired, but the researcher is still hopeful about having enough participants for a quality study.

What will happen if I take part in this research study?
The conversations will be held via Zoom Conference meetings. This is a free software (www.zoom.us) that can be downloaded through your mobile phone/device or personal computer/laptop. If you agree to be in this study, you will be asked to do the following things:

- Participate in a semi-structured interview in August 2021 – March of 2022.

- Give your permission to have the interview recorded.

- Allow for a follow-up interview if required, and based on your responses to the questions.

If we are able to meet in person rather than through zoom, the interviews will be held in a space chosen by you and require approximately 30-60 minutes. A follow-up interview would add 30 minutes to your time commitment.

Consent to Recording:

Each party consents to the monitoring or recording of the zoom conference of the parties in connection with this Agreement or any potential transcription; agrees to obtain any necessary consent of and give notice of such recording to such personnel of it; and agrees that recordings may be submitted in evidence in any Proceedings relating to this Agreement.

Please sign below if you are willing to have this interview recorded via video. You may still participate in this study if you are not willing to have the interview recorded.

☐ **I do not want to have this interview recorded.**
☐ **I am willing to have this interview recorded:**

Signed: _____

Date: _____

What are the possible risks of the study?

There is no physical risk to you in this study. However, some participants may feel there is a risk of retribution if responses provided are not positive or in keeping with "company policy." For this reason, all participant information is confidential. Participants' and schools' identities will be protected through the use of pseudonyms; and all data collected will be safely secured in a locked filing cabinet in the researcher's home unless being used by the researcher. In addition, there may be potential discomfort on the part of the participant of being audiotaped, videotaped, or interviewed. Participants have the right to refuse to be audiotaped or videotaped; they also have the right to review the recordings and the transcriptions made as part of the study to determine whether they should be edited or erased in whole or in part. During interviews, participants may refuse to answer any question(s) they do not want to answer and still remain in the study. At any point, participants may withdraw from the study without repercussions. Once their interview has been transcribed, the participant will have the opportunity to review the transcript to verify its accuracy, as well as to determine if any information needs to be omitted and/or changed.

What are the benefits of being in the study?

Participants may benefit from the study as districts improve the process by which sites determine the focus, delivery, and implementation of professional development provided to their K-6 teachers. In addition, participants may benefit as they have the opportunity to reflect further about their PD and teaching experiences; and it may lead to a deeper understanding of the purpose and process of professional development. These benefits would have lasting, long-term effects on the participants and their work performance. If this occurs, classroom instruction should improve resulting in better student performance.

Confidentiality
The records of this study will be kept strictly confidential. Research records, including notes, transcripts, video records, or audio recordings will be kept in a locked file, and all electronic information will be coded and secured using a password protected file. We will not include any information in any report we may publish that would make it possible to identify you.

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The decision to participate in this study is entirely up to you. You may refuse to take part in the study *at any time* without affecting your relationship with the investigators of this study or CSUSB or the district in which you work. Your decision will not result in any loss or benefits to which you are otherwise entitled. You have the right not to answer any single question, as well as to withdraw completely from the interview at any point during the process; additionally, you have the right to request that the interviewer not use any of your interview material after the interview is completed.

Right to Ask Questions and Report Concerns
You have the right to ask questions about this research study and to have those questions answered by me before, during or after the research. If you have any further questions about the study, at any time feel free to contact researcher at ayeteach@earthlink.net or via the phone number listed below. If you would like, a summary of the results of the study will be sent to you upon request. If you have any other concerns about your rights as a research participant that have not been answered by the investigators, you may contact CSUSB Institutional Review Board. If you have any problems or concerns that occur as a result of your participation, you can report them. Alternatively, concerns can be reported by completing a Participant Complaint Form, which can found on the IRB website at https://www.csusb.edu/institutional-review-board.

By signing below, you are consenting to participate in this research study. You have read the information given or someone has read it to you. You have had the opportunity to ask questions, which have been answered satisfactorily to you by the researcher. You do not waive any of your legal rights by signing this consent form.

SIGNATURE BY THE SUBJECT:

_____   _____   _____
 Name of Participant   Signature of Participant   Date of Signature

SIGNATURE BY THE INVESTIGATOR/INDIVIDUAL OBTAINING CONSENT: I attest that all the elements of informed consent described in this consent document have been discussed fully in non-technical terms with the participant. I further attest that all questions asked by the participant were answered to the best of my knowledge.

_____   _____
Signature of Individual Obtaining Consent   Date of Signature

☐*Check here if the Individual Obtaining Consent observed the signing of this consent document and can attest, to the best of their knowledge, the person signing the consent form is the subject or the subject's legally authorized representative and the person signing the form has done so voluntarily. By checking this box, the Individual Obtaining Consent does not need to sign on the Witness signature line (below)*

_____   _____
Signature of Witness   Date of Signature

APPENDIX H

PROFESSIONAL DEVELOPMENT PRESENTER INTERVIEW QUESTIONS

CALIFORNIA STATE UNIVERSITY, SAN BERNARDINO
5500 University Parkway, San Bernardino, CA 92407
www.csusb.edu

Semi-Structured Interview Questions
Title of Study: Professional Development for K-6 Classroom Teachers

Researcher: Rebecca (Becky) S Monroe **Dept.:** Education **Phone:** (909) 936-6480
Educator, ▮▮▮▮▮, retired 2020 **email:** ayeteach@earthlink.net

Teacher: Site Date
Intro: # of years; what taught; which districts;

<mark>*</mark> Prior to COVID-19:
1. What is the process for determining the professional development that will be provided at the various sites or at the district level?

2. Describe for me the process used when you plan a new professional development session or set of sessions.

3. What components are critical for you to include in your presentation? And why is each piece critical?

4. Are there additional components that are nice to include but not critical? How do you determine when to use them?

5. What is your role, if any, in ensuring the training you provide will be implemented in the classroom?

6. How is the professional development presented? (When? By whom?)

7. And then what happens?

8. What is the process used for determining what professional development (or what portions of a professional development training) will be implemented in the classrooms?

9. Describe how the accountability system works at the sites; at your department.

10. What do you like about professional development you have presented during this school year?

11. What would you like to see done differently regarding the professional development you will present in the coming year?

12. What makes professional development of value to you/your department/your district?

13. What makes professional development not of value to you/your department/your district?

14. How has planning and presenting for PD changed since COVID-19 hit this past March 2020?

15. How, if at all, has planning and presenting for PD changed in the last five (5) years?

16. Do you have a calendar for the year?

17. Are some trainings optional?

18. What happens if a teacher doesn't attend a required training session?

19. How do you advertise your trainings? How do you enlist teachers to attend?

REFERENCES

Alvior, Mary G. (2015). An example of a conceptual framework with statement of

the problem [Blog Post]. In *Research-based Articles.* Retrieved from

https://simplyeducate.me/2015/01/19/example-of-a-conceptual-framework/

Antley, T. (2020). *What is professional development and why is it important?*

WebCE.

https://www.webce.com/news/2020/07/16/professional-

development#:~:text=What%20Is%20Professional%20Development%3F

%20Professional%20development%20refers%20to,up-to-

date%20on%20current%20trends%2C%20and%20advance%20their%20

career.

Bar-Yam, M., Rhoades, K., Sweeney, L. B., Kaput, J., & Bar-Yam, Y. (2019).

Complex systems perspectives on education and the education system.

Cambridge, MA: NECSI.

Bell, A., & Mladenovic, R. (2015). Situated learning, reflective practice and

conceptual expansion: Effective peer observation for tutor development.

Critical Perspectives, 20(1), 24-36.

https://doi.org/10.1080/13562517.2014.945163

Birman, B., Le Floch, K. C., Klekotka, A., Ludwig, M., Taylor, J., Walters, K., et al.

(2007). State and local implementation of the No Child Left Behind Act:

Vol. 2. Teacher quality under NCLB: Interim report. Washington, DC: U.S.

Department of Education; Office of Planning, Evaluation and Policy

Development; Policy and Program Studies Service.

Borko, H. (2004). Professional development and teacher learning: Mapping the

terrain. *Educational Researcher, 33*(8), 3-15.

https://doi.org/10.3102/0013189X033008003

Burke, B. M. (2013). Experiential professional development: A model for

meaningful and long-lasting change in classrooms. *Journal of Experiential*

Education, 36(3), 247-263. https://doi.org/10.1177/1053825913489103

Carlisle, C., Cooper, H., & Watkins, C. L. (2004). "Do none of you talk to each

other?": The challenges facing the implementation of interprofessional

education. *Medical Teacher, 26*(6), 545-552.

https://doi.org/10.1080/61421590410001711616

Commission on Teacher Credentialing. (2017). *California Teaching Performance*

Assessment (CalTPA). CA.gov. Retrived from

http://www.ctcexams.nesinc.com/TestView.aspx?f=HTML_FRAG/CalTPA

_TestPage.html

Cresswell, J. H. (2014). *Research Design: Qualitative, Quantitative, and Mixed*

Methods Approaches. Thousand Oaks, CA: SAGE.

Davis, E. A., & Krajcik, J. S. (2005). Designing educative curriculum materials to

promote teacher learning. *Educational Researcher, 34*(3), 3-14.

https://doi.org/10.3102/0013189X034003003

Desimone, L. M., Porter, A. C., Garet, M. S., Yoon, K. S., & Birman, B. F. (2002).

Effects of professional development on teachers' instruction: Results from

a three-year longitudinal study. *Educational evaluation and policy analysis*, *24*(2), 81-112.

Desimone, L. M. (2009). Improving impact studies of teachers' professional development: Toward better conceptualizations and measures. *Educational Researcher, 38*(3), 181-199. https://doi.org/10.3102/0013189X08331140

Desimone, L. M. (2011). A primer on effective professional development. *Phi Delta Kappan, 92*(6), 68-71. https://doi.org/10.2307/25822820

Dewey, J. (1929). *The sources of a science of education*. New York, NY: Horace Liveright.

DuFour, R. (2002). The learning-centered principal. *Educational Leadership, 59*(8), 12-15. Retrieved from http://www.ascd.org/publications/educational-leadership.aspx

DuFour, R., DuFour, R. (2012). *The school leader's guide to professional learning communities at work*. Solution Tree Press; Bloomington, IN.

DuFour, R., DuFour, R., Eaker, R., Many T. (2009) *Learning by doing: A handbook for professional learning communities at work – A practical guide for PLC teams and leadership.* Moorabbin, Vic : Hawker Brownlow Education.

Duncan, A. (2009). U.S. Education Reform: "This truly is a moon shot." *Vital Speeches of the Day,* 75(12), 557-560.

EssayMin. (2018). *The importance of a case study.* Retrieved from

https://essaymin.com/blog/importance-of-a-case-study/

Finn, C. E. (2008). *Troublemaker: A Personal History of School Reform since*

Sputnik. Princeton University Press. http://www.jstor.org/stable/j.ctt7t95d

Flessner, R., & Stuckey, S. (2013). Politics and action research: An examination

of one school's mandated action research program. *Action Research,*

12(1), 36-51. Retrieved from https://doi.org/10.1177/1476750313515281

Garet, M. S., Porter, A. C., Desimone, L., Birman, B. F., & Yoon, K. S. (2001).

What makes professional development effective? Results from a national

sample of teachers. *American Educational Research Journal, 38*(4), 915–

945. https://doi.org/10.3102/00028312038004915

Gengarelly, L. M., & Abrams, E. D. (2009). Closing the gap: Inquiry in research

and the secondary science classroom. *Journal of Science Education and*

Technology, 18(1), 74-84. https://doi.org/10.1007/s10956-008-9134-2

Glesne, C. (2016) *Becoming a qualitative researcher: An introduction*. 5th Edition

Boston: Allyn and Bacon,.

The Glossary of Education Reform. (2013). *Professional development*. The

Glossary of Education Reform. https://www.edglossary.org/professional-

development/

Goddard, Y. L., Goddard, R. D., & Tschannen-Moran, M. (2007). A theoretical

and empirical investigation of teacher collaboration for school

improvement and student achievement in public elementary schools.

Teachers College Record, 109(4), 877-896. https://www.tcrecord.org/

Goodman, K. S. (1986). What's whole in whole language? Boston, MA:

Heinemann.

Graves, D. H. (1983). Writing: Teachers and children at work. Boston, MA:

Heinemann.

Grubbs, M. (2014). Space race two: continuation of STEM education and

commercialization of space. Technology & Engineering Teacher. Oct

2014, Vol. 74, Issue 2, p. 24-29.

Guskey, T. R. (1986). Staff development and the process of teacher change.

Educational researcher, 15(5), 5-12.

Guskey, T. R. (2002). Professional development and teacher change. Teachers

and Teaching, 8(3), 381-391.

https://doi.org/10.1080/135406002100000512

Guskey, T. R. (2003). Analyzing lists of the characteristics of effective

professional development promote visionary leadership. NASSP Bulletin,

87(637) 4-20.

Hiebert, J., Gallimore, R., & Stigler, J. (2002). A knowledge base for the teaching

profession: What would it look like and how can we get one? Educational

Researcher, 31, 3-15. https://doi.org/10.3102/0013189X031005003

Jason, H. (2007). Becoming a truly helpful teacher: considerably more

challenging, and potentially more fun, than merely doing business as

usual. *Advances in Physiology Education, 31*(4), 312-317.

https://doi.org/10.1152/advan.00078.2007

Johanningmeier, E. V. (2010). A nation at risk and Sputnik: Compared and

reconsidered. *American Educational History Journal*, *37*(1/2), 347.

Jolly, Jennifer L. The National Defense Education Act, Current STEM Initiative,

and the Gifted. *Gifted Child Today*, v32 n2 p50-53 Spr 2009. (EJ835843),

Database: ERIC

K-12 Education Team. (2015). Teachers know best: Teachers' views on

professional development. *Bill and Melinda Gates Foundation*.

Kay, S. (2013). America's Sputnik Moments, *Survival (00396338), 55(2), 123-*

146.

https://doi-org.libproxy.lib.csusb.edu/10.1080/00396338.2013.784470

Kekahio, W., & Baker, M. (2013). *Five steps for structuring data-informed*

conversations and action in education (REL 2013–001). Washington, DC:

U.S. Department of Education, Institute of Education Sciences, National

Center for Education Evaluation and Regional Assistance, Regional

Educational Laboratory Pacific. Retrieved from http://ies.ed.gov/ncee/

edlabs.

Knight, J. (2009). What can we do about teacher resistance? *Phi Delta Kappan,*

90(7), 508-513. https://doi.org/10.1177/003172170909000711

Knight, J. (2021). Moving from talk to action in professional learning.

Educational Leadership, 78(5), 16-21.

Krumsvik, R. (2008). The view of knowledge and the new national curriculum in Norway. *US-China Education Review*, 5(7) (Serial No.44): 13-28.

Lemov, D. (2014). *Teach like a champion 2.0: 62 techniques that put students on the path to college*. San Francisco: Jossey Bass Wiley

Lipton, L., & Wellman, B. M. (2018). *Mentoring matters: A practical guide to learning-focused relationships* (3rd ed.). MiraVia.

Lortie, D. (1975). *Schoolteacher: A sociological study*. Chicago, IL: University of Chicago Press.

Malterud, K. (2001). Qualitative research: standards, challenges, and guidelines. *Lancet*. 2001 Aug 11;358(9280):483-8. doi: 10.1016/S0140-6736(01)05627-6. PMID: 11513933.

Martin, K. (2012). *The outstanding organization: Generate business results by eliminating chaos and building the foundation for everyday excellence*. New York, New York: McGraw-Hill:.

Mewborn, D. S., & Tyminski, A. M. (2006). Lortie's apprenticeship of observation revisited. *For the Learning of Mathematics, 26*(3), 30-32. https://flm-journal.org/

Morse, W. C. Foreword. In M. Friend & L. Cook, (2000). *Interactions: Collaboration skills for school professionals* (3rd ed., pp. xi–xii). New York: Addison Wesley Longman.

Paul, C. (2018). *Elementary and Secondary Act of 1965.* VCU Social Welfare History Project.

https://socialwelfare.library.vcu.edu/programs/education/elementary-and-secondary-education-act-of-1965/

Penuel, W. R., Fishman, B. J., Yamaguchi, R., & Gallagher, L. P. (2007). What makes professional development effective? Strategies that foster curriculum implementation. *American Educational Research Journal, 44*(4), 921-958. https://doi.org/10.3102/0002831207308221

Pitsoe, V., & Maila, M. (2013). Re-thinking teacher professional development through Schön's reflective practice and situated learning lenses. *Mediterranean Journal of Social Sciences, 4*(3), 211-218. https://doi.org/10.5901/mjss.2013.v4n3p211

Plato. (1943). *Plato's The Republic*. New York: Books, Inc.,

Povey, H., Adams, G., Everley, R. (2017). Public stories of mathematics educators: "Its influence taints all": Urban Mathematics Teachers resisting performativity through engagement with the past. *Journal of Urban Mathematics Education. Vol. 10, No2, pp. 52-65 @JUME http://educationlgsu.edu/JUME*.

Professional Development. (n.d.). In *Businessdictionary.com*. http://www.businessdictionary.com/definition/professional-development.html

Public Law 85-864, 'The National Defense Education Act', 2 September 1958.

Robinson, A. (2011). Education reform: The problem with helping everyone reach "average." *Christian Science Monitor*, N PAG.

Sagor, R. (2000). *Guiding school improvement with action research*. Alexandria, VA: ASCD.

Schaff, M. (2017). Sputnik & the space race, *Sputnik & the space race, 1-2.*

Steiner, L. (2004a). *Designing effective professional development experiences: What do we know?* Naperville, IL: Learning Point Associates. *https://gtlcenter.org/sites/default/files/docs/pa/4_PDResearchPolicyAction/DesigningEffectivePD.pdf*

Steiner, R. L. (2004b). The evolution and applications of dual-stage thinking. *The Antitrust Bulletin, 49*(4), 877-909. https://doi.org/10.1177/0003603X0404900404

Supovitz, J. A. (2001). Translating teaching practice into improved student achievement. In S. Fuhrman (Ed.), *National Society for the Study of Education yearbook*. Chicago, IL: University of Chicago Press.

TeachingExpertise.com What do we really mean by "Quality first teaching?" https://www.teachingexpertise.com/articles/what-do-we-really-mean-by-quality-first-teaching/

Thorton, Fr.James. The benefits of a classical education. *The New American*, July 25, 2013. http://www.thenewamerican.com/culture/education/item/16056-the-benefits-of-a-classical-education

Trigwell, K., Prosser, M., & Waterhouse, F. (1999). Relations between teachers'

approaches to teaching and students' approaches to learning. *Higher

Education, 37*, 57-70. https://doi.org/ 10.1023/A:1003548313194

Tyack, D., & Cuban, L. (1995). *Tinkering toward Utopia: A century of public

school reform*. Cambridge, MA: Harvard University Press.

United States Department of State. (2009) *The launch of Sputnik, 1957*.

https://2001-2009.statelgov/r/pa/ho/time/lw/103729.htm#

Walden, E. L. (1992). Public education: Sin eater for a nation at risk. *Clearing

House,* 65(4), 215.

https://doiorg.libproxy.lib.csusb.edu/10.1080/00098655. 1992.

10114207.

Wang, M. C., Haertel, G. D., & Walberg, H. J. (1993). Toward a knowledge base

for school learning. *Review of educational research*, *63*(3), 249-294.

Wayne, A. J., Yoon, K. S., Zhu, P., Cronen, S., & Garet, M. S. (2008).

Experimenting with teacher professional development: Motives and

methods. *Educational Researcher, 37*(8), 469–479.

https://doi.org/10.3102/0013189X08327154

Wilson, S. M., & Berne, J. (1999). Chapter 6: Teacher learning and the

acquisition of professional knowledge: An examination of research on

contemporary professional development. *Review of Research in

Education, Vol. 24, pp. 173-209,* https://doi.org/10.3102/0091732X024

Woltman, H., Feldstain, A., MacKay, J. C., & Rocchi, M. (2012). An introduction

to hierarchical linear modeling. *Tutorials in Quantitative Methods for Psychology, 8*(1)*,* 52-69. https://doi.org/10.20982/tqmp.08.1.p052

Yin, R. K. (2006). Case study methods. In J. Green, G. Camilli, & P. Elmore (Eds.), *Handbook of complementary methods in education research* (pp. 111-122). Mahwah, NJ: Lawrence Erlbaum Associates.

Zimmerman, J. (2006). Why some teachers resist change and what principals can do about it. *National Association of Secondary School Principals.* http://bul.sagepub.com DOI: 10.1177/0192636506291521