

2020

Principals' Perceptions of Administrative Preparedness for Implementation of Project-Based Learning

Johane St Aime
Walden University

Follow this and additional works at: <https://scholarworks.waldenu.edu/dissertations>



Part of the [Educational Administration and Supervision Commons](#)

This Dissertation is brought to you for free and open access by the Walden Dissertations and Doctoral Studies Collection at ScholarWorks. It has been accepted for inclusion in Walden Dissertations and Doctoral Studies by an authorized administrator of ScholarWorks. For more information, please contact ScholarWorks@waldenu.edu.

Walden University

College of Education

This is to certify that the doctoral study by

Johane St. Aime

has been found to be complete and satisfactory in all respects,
and that any and all revisions required by
the review committee have been made.

Review Committee

Dr. Mary Hallums, Committee Chairperson, Education Faculty

Dr. Glenn Penny, Committee Member, Education Faculty

Dr. Timothy Lafferty, University Reviewer, Education Faculty

Chief Academic Officer and Provost

Sue Subocz, Ph.D.

Walden University

2020

Abstract

Principals' Perceptions of Administrative Preparedness for Implementation of Project-
Based Learning

by

Johane St. Aime

MSED, Brooklyn College, 2005

BS, Hofstra University, 2002

Project Study Submitted in Partial Fulfillment
of the Requirements for the Degree of
Doctor of Education

Walden University

February 2020

Abstract

In a school district located in the southeastern part of the United States, the local problem was that principals were concerned about their knowledge and training to effectively implement project-based learning (PBL). The purpose of this study was to explore the principals' perceptions about PBL and the implementation, training, and resources needed to improve the instructional leadership of PBL. Daresh and Playko's proactive leadership theory served as the conceptual framework that guided this study. The research questions focused on principal perceptions about PBL, about implementing PBL, and about necessary training and resources to improve principal training of PBL. A basic qualitative design was used to capture the insights of 12 principals through semistructured interviews. Purposeful sampling was used to identify 12 participants: 4 elementary school principals, 4 middle school principals, and 4 high school principals. Emergent themes were identified through in vivo coding, and the findings were developed and checked for trustworthiness through member checking and rich descriptions. The findings revealed that principals recognized a need for effective professional development that is principal centered and tailored to equip principals to effectively implement PBL. A professional development project was then created to address principals' concerns and to provide training on how to effectively implement PBL at all school levels. This study has implications for positive social change by creating a professional development program to offer principals strategies and resources for assisting teachers in PBL implementation.

Principals' Perceptions of Administrative Preparedness for Implementation of Project-

Based Learning

by

Johane St. Aime

MSED., Brooklyn College, 2005

BS, Hofstra University, 2002

Project Study Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Education

Walden University

February 2020

Dedication

There is no one who can accomplish a goal on their own. Therefore, I am humbled and acknowledge that completing and publishing this study could not have been possible on my own. I thank the Lord, Jesus Christ for strength and comfort in his truth to persevere. I thank my husband for always believing in me and encouraging me to do things that I never thought I could do. I dedicate this accomplishment to all the people in my life who have played a role in guiding and supporting me to never give up. This study is dedicated to educational leaders, who have not forgotten that their priority is to support and serve students, teachers, the school community.

Acknowledgments

I would like to acknowledge my chair, Dr. Hallums for her support in the writing of this doctoral study. The times that I wanted to throw in the towel, but she held my hand and gave me words of encouragement to keep going and not give up and providing specific critical feedback to help me write the paper through each phase of the process. I want to thank Dr. Penny for his support in providing critical feedback to keep me focused on the alignment of the study. There are several educators who have played an important role in my professional journey and I could not have become the professional that I am if had not been for their influence and teachings. I would be remiss if I did not thank my former principal Dr. Hardin and all the principals who participated in this study.

Table of Contents

List of Tables	iv
Section 1: The Problem.....	1
The Local Problem.....	1
Rationale	3
Definition of Terms.....	5
Significance of the Study	6
Research Questions.....	7
Review of the Literature	7
Conceptual Framework.....	9
Project-Based Learning.....	10
Leadership Styles	13
Implications.....	18
Summary.....	19
Section 2: The Methodology.....	21
Research Design and Approach	21
Participants.....	23
Criteria and Justification.....	23
Procedures for Gaining Access to Participants.....	24
Researcher-Participant Interaction.....	24
Data Collection	25
Role of the Researcher	26
Data Analysis	27

Evidence of Quality	29
Discrepant Cases	30
Data Analysis Results	30
Research Question #1	33
Deeper Learning.....	33
Research Question #2	35
Time.....	35
Quality Collaboration.....	36
Strong Pedagogy	37
Research Question #3	39
Ongoing Professional Development	39
Discrepant Cases	40
Evidence of Quality	41
Summary	42
Study Findings	44
Section 3: The Project.....	46
Introduction.....	46
Components of the Professional Development Project	46
Goals of the Professional Development Project	47
Rationale	48
Review of the Literature	50
Professional Development	53
Professional Growth for Principals.....	55

Project Description.....	60
Resources	61
Potential Barriers and Solution	61
Implementation Proposal	62
Project Evaluation Plan.....	66
Project Implications	68
Section 4: Reflections and Conclusions.....	69
Project Strengths and Limitations.....	69
Recommendations for Alternative Approaches	70
Scholarship, Project Development and Evaluation, and Leadership and Change	71
Reflection on Importance of the Work	72
Implications, Applications, and Directions for Future Research.....	73
Organizational Social Change.....	73
Theoretical Implications	73
Recommendations for Practice	74
Conclusion	74
References.....	76
Appendix A: The Project	88
Appendix B: Interview Protocol	94
Appendix C: Interview Questions.....	95

List of Tables

Table 1. Codes and Interview Questions Aligned to Research Questions 1-3	32
Table 2. Research Question Themes.....	33
Table 3. Professional Development Project Overview	65
Table 4. Logical Model Research Overview	67

Section 1: The Problem

The Local Problem

In a school district located in the southeastern region of the United States, a local problem was that principals were concerned about their knowledge and training to effectively implement project-based learning (PBL). The College and Career Ready Performance Index (CCRPI) scores had not increased since the implementation of PBL and there was little evidence of the increase (J. Brown, personal communication, April 5, 2017). There have been several studies conducted on qualities of effective principals and training principals receive from preparation programs. However, current research is limited on the effects of principals' perceptions on their instructional leadership and on their ability to implement PBL effectively.

As stated in an internal report from the school district under study, schools within the district were to implement PBL as a strategy within the instructional framework. The foundation of PBL is the belief that learning is enhanced through real-world problem-solving, which engages students in relevant learning opportunities (Tobias, Campbell, & Greco, 2015). The topic of readiness dealt with whether principals could successfully lead the implementation of PBL with their current administrative skills. PBL was a new instructional practice, which called for implementing an aspect of authentic learning, which allowed students to drive the learning (Zuniga & Cooper, 2016).

According to internal reports in 2014, the district began to shift its instructional practices toward PBL by piloting with five cohort schools: three middle and two high schools. As the change began around the district, additional cohorts were added that

included elementary schools. Through the monitoring of these first five schools, the district gradually began to define the vision of PBL.

During this process, principals were given the mandate to redesign their schools' instructional practices according to at least one of the five tenets prescribed by the district as part of its defined personalized learning model. The tenets for the local school district were as follows in no particular order: (a) 21st Century skills, (b) authentic learning, (c) technology enable, (d) learner profile, and (e) competency-based learning. The local school district used authentic learning and PBL interchangeably.

The implementation of PBL as an element of personalized learning became relevant to the success of students (Zmuda, Curtis, & Ullman, 2015). Although not initiated until 2015, based on internal district records, the district was first introduced to the PBL framework in 2013 as a way to provide more meaningful, differentiated, and personalized learning opportunities for students. A response outlined in the Georgia Department of Education (Gadoe.org, n.d) generated graduation rate reports, which showed an increase of high school dropout rates and low graduation rate. In addition, veteran principals, appeared to be unprepared to transition into 21st Century instructional leaders. As a result, the PBL initiative was adopted and the district's leadership directed principals to lead the implementation of PBL as the district moved forward to prepare students to meet the requirements of college and career standards. Principals responded to the district's mandate with uncertainty and were unsure whether they were adequately prepared to meet this requirement in their respective schools. As stated by Leithwood and

Azah (2016), leadership networks create a belief system that has the possibility of dictating the perceptions of its members.

The notion of authentic learning produced the idea of authentic leadership. Authentic leadership is presented to illustrate how leaders, teachers, and students demonstrate their learning in deeper and more relevant ways (Alvai & Gill, 2017). At the time of the 2015 pilot with the five schools, principals were given autonomy to create their own school vision, which aligned with the vision of the district. As part of designing a local school vision for personalized learning, school principals and their leadership teams were instructed to present their school's progress to various district leaders for feedback. These presentations were used to assist each school staff in refining their school's vision to better fit the district's vision. Principals had the task of creating a design team to construct such vision. However, they faced challenges, which resulted in one of the five principals resigning and a second principal being reassigned to a different school. Thereafter, principals began to express their concerns related to their level of administrative preparedness to lead and guide the implementation of PBL successfully in their respective schools.

Rationale

School districts across the United States have worked toward preparing students to be college and career ready (Zmuda et al., 2015). In the past 5 years, the district under study experienced decreasing school ratings when assessed according to the CCRPI standards. In the past 10 years, the district experienced an increase in growth creating a diverse population of students with various modalities of learning. The CCRPI was the

matrix used to score school's overall performance in the following areas: (a) content mastery, (b) progress, (c) closing gaps, (d) readiness, and (e) graduation rate (Overview of the Redesigned CCRPI, 2018). School systems that score below 60% for three consecutive years were considered chronically failing schools. According to the CCRPI beginning from 2013 to as recent as 2018, the district's scores over the course of 5 years were 76.2%, 74.4%, 72.9%, 71.1%, 71.6%, and 66.0% respectively. Furthermore, the district experienced an increase in the student population of diverse and unique learners. Based on the decline and lack of significant growth, the district implemented new initiatives such as personalized learning to increase CCRPI scores and prepare its diverse students for college and career goals.

Moreover, the successful implementation of personalized learning was heavily contingent upon the principals' leadership and guidance at every stage of the implementation process. To that end, how well principals were prepared affected the ability to be successful in providing the quality of leadership and guidance needed in this work. During a regional monthly principal meeting, cluster principals demonstrated disappointment with the 2017 CCRPI scores (N. Golden, personal communication, August 2017). The urgency to reach each student through the implementation of personalized learning using PBL became a heavy burden and principals questioned their administrative preparedness to increase the achievement (S. Crumbly, personal communication, February 5, 2017). Therefore, the data revealed a continually decreasing CCRPI, which directly affected all stakeholders.

The purpose of this qualitative design was to explore the principals' perceptions about PBL and the implementation, training, and resources needed to improve the instructional leadership of PBL. The principals' ability to lead the implementation of PBL directly dictated how effective the teachers were implementing this process in the classroom. Principals as well as teachers and all stakeholders were essential in this process (Brezicha, Ulkrika, & Mitra, 2015). District administrators, principals, and school stakeholders were directly affected by the outcome and dependent on both the knowledge and administrative preparedness of each principal in meeting the expected implementation goal.

Definition of Terms

The following terms and definitions are used throughout this study.

College and career ready: The function of the school system is to prepare students to be productive citizens in society. The focus is to prepare high school students to master content knowledge transitioning them to college and careers (Malin & Hackmann, 2016).

Personalized learning: An instructional approach to provide relevant individualized learning solely based on the need of the individual student in creating a student-centered environment (Zmuda et al., 2015).

Proactive leadership: A theory that promotes the skill of leaders recognizing their preparedness level and understanding how to apply these abilities toward the success of their organizations (Daresh & Playko, 1992).

Project-based learning: A strategy that enhances real-world and relevant learning through problem-solving, critical thinking, and collaboration (Tobias et al., 2015).

Self-efficacy: The belief in one's ability to accomplish a specific task and yield the desired outcome (Versland, 2016).

Significance of the Study

This study addressed the gap in practice by identifying principals' perceptions on whether they have the instructional leadership to implement PBL. This study contributed to the body of knowledge needed to address whether principals perceived whether they were prepared to lead the implementation of PBL, by exploring principals' perceptions of their personal knowledge and understanding of PBL. The knowledge of principals and their ability to lead their teachers will affect the successful implementation of PBL (Louis, Hord, & Von Frank, 2017). This implementation provided principals with an opportunity to meet the district's goal to increase the CCRPI district scores. Further, the study identified the principals' knowledge of PBL and their administrative preparedness to effectively lead and guide the implementation of PBL for the 21st Century.

As reported by Zmuda et al. (2015), the global economy is vastly changing and the need for workers who possess 21st Century skills in communication and technology has increased dramatically. Identifying the gap in practice provided insight about the elements needed to support principals to successfully implement PBL instructional practices within their schools and provide districts with a framework to increase their overall CCRPI scores, which support student success.

This study addressed the problem of the CCRPI scores influencing principals' perception of their knowledge and administrative preparedness to lead and guide the implementation of PBL. The problem provided insight to the local educational setting into the perception their leaders hold when it comes to implementing initiatives along with a platform to increase self-efficacy and encourage dialogue between districts and principals to self-evaluate their performance. The need for principals to engage in reflection and self-efficacy is used as a way to improve leadership skills (Versland, 2016).

Research Questions

The goal of this qualitative study was to explore principals' perceptions about PBL, about implementing PBL, and about training or resources needed to improve their leadership of PBL. Zuniga and Cooper (2016) indicated that a leader with a clear understanding and vision is more apt to effectively implement a plan of action. The research questions guiding this qualitative study were as followed:

1. What are principals' perceptions about PBL?
2. What are the principals' perceptions about implementing PBL?
3. What are principals' perceptions about training or resources needed to improve administrative leadership of PBL?

Review of the Literature

For the literature review, I examined the role of the principal and effectively implementing programs to increase student achievement. The role of the principal has increased throughout the years with increased responsibility on student achievement,

teacher retention, and increased emphasis on principals to be effective instructional leaders (McKibben, 2015). As the student population changed and technology advanced, principals began to question their knowledge and administrative preparedness to lead the next generation of learners into the 21st Century.

The research of supportive literature addressed the topics of principals' direct effect on student learning, instructional leadership versus managerial leadership, and principals' implementation of PBL through the use of articles and journals from the Walden Library. My literature search included the Walden Library for peer-reviewed journals, Scholarwork for published doctoral study, and Google Scholar using the following terms: *principals' perceptions of their administrative preparedness*, *principal understanding of PBL*, *managerial verses instructional leadership*, and *principals leading 21st century education*. These terms supported the data gathering and the content of this qualitative study that aligned the problem, rationale, and research questions. There were over 150 results that dealt with principal preparation programs and their effectiveness. However, the results for principals' knowledge of PBL were few. In this study, I examined the administrative preparedness of principals as their traditional role changed to prepare students for the 21st Century.

The problem addressed in this project study connected with the theory presented by Daresh and Playko (1992) known as the proactive administrative process or proactive leadership theory. This theory highlights the need for leaders to actively reflect and participate in self-efficacy as essential elements of leadership development (Daresh &

Playko, 1992). Therefore, according to this theory, the effective development of a leader positively affects student achievement and staff morale.

Conceptual Framework

The conceptual framework of this qualitative study was based on Daresh and Playko's (1992) theory of instructional leadership as a proactive administrative process. This theory emphasized the need for principals not to focus on the sole role of instructional leaders but to immerse themselves into understanding and applying the proactive administrative framework to be effective leaders. The proactive administrative process focused on several qualities, which embody the concept of developing the whole leader instead, and not solely on administrators being instructional leaders (Daresh & Playko, 1992).

Principals are the visionaries and innovative leaders who are accountable for preparing students for the future. However, this study highlighted the perceptions of principals who may not believe they have the administrative preparedness to fulfill this requirement. As a result of this project study, it is my hope that principals will be respected and feel secure of their administrative preparedness through intentional actions. Being able to plan for change ahead of time and not plan after it has already come is an intentional administrative action.

Daresh and Playko (1992) pointed out the need for leaders to be equipped for change and obtain the tools necessary to support teachers through the initiative. Proactive leaders do more than manage the daily operations of the organization and read articles about the latest trends; proactive leaders take an active role in moving the change as it is

taking place (Daresh & Playko, 1992). Daresh and Playko emphasized the importance of self-reflection as an attribute that all leaders need to possess. Empowering leaders to be forward-thinking may provide successful implementation of 21st century skills. The principalship has evolved; as the principals' role evolves, mandates are added.

Daresh and Playko's theory was referred to in Larson's (2013) study of the Leadership Project. The basis of the research was Daresh and Playko's proactive leadership, which emphasized the importance of professional development for leaders. Larson's research was grounded on the positive effects of constructing professional development that meets the needs of individual leaders and provided opportunities for leaders to provide input in the needs of their leadership growth.

Project-Based Learning

PBL, often referred to as authentic learning or problem-based learning, introduces students to relevant learning and real-world experiences with authentic audiences. PBL is a method in which students are at the center of the learning and are introduced to a problem that is relevant to the community or lives of the learners (Zuniga & Cooper, 2016). In PBL, learners actively participate in critical thinking, develop cognitive skills, perform with creativity, and have opportunities to effectively collaborate and communicate with various stakeholders (Hallinger & Bridges, 2016). Hallinger and Bridges (2016) listed six essential elements of PBL. The elements included the definition that every PBL is based on a problem and not a theory. The core focus of PBL is to showcase students at the center of the learning. Students are responsible for managerial duties that identify the problem and discover a solution. The curriculum is based around

the problem and not disciplines and a feedback loop between students and teachers provides continuous student learning opportunities. The process provides students the opportunity to construct their own understanding and opportunities to create the plan they want to follow to identify the solution. PBL is a tool used to expose learners to relevant and real-world learning through metacognitive processes (Zmuda et al., 2015). These processes enable the whole child to learn beyond test items but through experiences. Principals are tasked with leading and guiding their staffs to effectively use this strategy to drive student achievement.

Connection of PBL to college and career readiness. The emphasis of college and career readiness is focused on developing and preparing students for the 21st century. The implementation of PBL as one of the driving forces to expose students to relevant and real-world learning is a technique used for this goal. According to Hallinger and Bridges (2016), PBL is a method that teaches learners how to learn and take ownership of their learning. The implementation of PBL is frequently applied in the medical field and implemented in leadership preparation programs. Therefore, PBL methods of learning exist in various fields and are implemented to achieve the highest quality of instruction (Hallinger & Bridges, 2016). Researchers have argued that implementing PBL to a curriculum can be beneficial. The literature reiterated the vast professional fields that have implemented this learning method and how it connected to learning.

Leader expectations. In the past, the role of the principal was managerial, but as the role changed and the demand for the principal to be instructionally competent increased, the role of the principal became that of an instructional leader (Neumerski,

2012). Administrative preparation programs had the task of developing proactive leaders to the initiative of leading instruction (P. T. Ng, 2015). O'Doherty and Ovando (2013) believed that the manner leaders think determined the success of the leadership. Therefore, principals are faced with being the instructional leader of their buildings, which entails possessing the necessary knowledge and administrative preparedness to lead and guide the implementation of best practices for their teachers to enhance the academic growth of their students (Alvai & Gill, 2017). As instructional leaders, principals are expected to be competent in instructional content knowledge (Steele, Johnson, Otten, Herbel-Eisenmann, & Carver, 2015). Hallinger and Murphy (2013) investigated the lack of preparedness school leaders faced to meet the high demands in leading learning. Therefore, their findings explained the negative affects this lack of preparation had on schools and student achievement. The success of the principal directly affected the success of the school (Lemonie, Greer, McCormack, & Richardson, 2014).

A leader learner understands the purpose and outcome of the instructional practice being implemented to increase academic growth (Hallinger & Bridges, 2016; Zepeda, Parylo, & Bengtson, 2014). Both Zepeda et al. (2014) and Hallinger and Bridges (2016) concluded that when the leaders' content knowledge increased so did their knowledge of leading teachers in teaching the content. It is essential for a principal to be ready to lead change on Day 1, and that is possible through effective training (Kearney & Valadez, 2015). Among the several demands and mandates on principals to lead relevant instruction that prepares students for the 21st century, the role of the principal has evolved in various ways.

Managerial versus instructional leadership. The emphasis of principals being instructional leaders is a new concept. Principals traditionally fulfilled the managerial role. According to Sheng, Wolff, Kimer, and Yager (2017), a managerial principal is one who manages the building such as creating the master schedule and assuring operational elements of the school day run smoothly. The role of the principal included managerial duties but the ability to increase student achievement and teacher effectiveness is attainable through the application of proactive leadership and effective instructional leadership (Fisher, 2014). The role of instructional leader continues to consist of elements of managerial leadership due to both roles responsible for the operations of the school and improving student achievement (Stringer & Hourani, 2016). However, the managerial role focused on the operations of the building.

Leadership Styles

The style of a leader leads their decision-making and drives the effectiveness of their leadership. There are several forms of leadership styles and each researched style contributes to teacher performance, culture and climate, and student achievement (Allen, Grigsby, & Peters, 2015). The literature identified elements in which leaders benefit from identifying the leadership styles, self-reflect, and the importance of training and resources to develop effective leadership. One area of training identified in the literature is the use of principal preparation programs. Preparation programs focus on the development of leaders in an educational system instead of developing leaders individually (Cardno & Youngs, 2013). The growth of leaders provides opportunities for leaders to self-reflect and positively influence student learning, which provides a foundation for effective

leadership (Szczesniul & Huizenga, 2014). Therefore, principals needed to take an active role in the learning process as instructional leaders. The development of a shared vision constructs effective leadership and clear expectations to move a project forward.

According to Zavala (2014) and Versland (2016) a common pillar of effective leadership is the structure of a shared vision. The development of a shared vision is guided by the ability for a leader to self-reflect. According to Talan, Bloom, and Kelton (2014) such reflection is the beginning steps to confront the problem and work toward building capacity within the principal, teacher, and school community. The principal has the task of being instructional leader, creating positive work conditions for staff, and closing the gaps of student academic achievement.

The changing roles of the principal comes with an increase in the workload (Oplatka, 2017). The increase in the workload and the accountability increased the stress on employees. Oplatka (2017) investigated the elements of the principals' workload based on the perspective of Israeli principals use of a qualitative approach. Principals' perception of their workload varied with principals stating that the workload is constant and others expressing that the workload was part of the job and the need to work on their management skills to cope with the demand. The ability for principals to reexamine their leadership skills provides areas of growth as pointed out by Brabham (2017), whose study highlighted the qualities of effective leaders. Principals indicated that it was burdensome when dealing with the demands of supervisors and bureaucratic structures.

The emphasis on the ability of the principal to lead is significant and success is ultimately dependent on the principal (Schechter & Shaked, 2016). The research question

addressed in the study conducted by Schechter and Shaked (2016) was to identify the leading components causing principals to partially fulfill the guidelines regarding national reform. The study highlighted the premise that without an effective principal the implementation of school reform would be unsuccessful. The use of maximal differentiation sampling was used in this research and the findings analyzed three major factors taken into consideration in influencing the decision of the principal to refrain from fully implementing the reform. These three factors were adjusted to school reality, caring for teachers, and using discretion. In all of these three areas, principals took upon themselves to modify the reform to fit their respective schools, perceived staff needs, and selected the parts of the reform, they considered to be important.

The study concluded with the notion that there is a need for additional research in this area due to the data being collected in a specific content area. Similarly, Lock and Lummis (2014) conducted an investigation focused on school leaders' compliance to requirements from the federal and state governments. As previously stated, there exists intense demands on principals to lead the future of learning and be the leaders in a variety of tasks. Principals are expected to establish relationships with stakeholders and attempt to implement district initiatives while continuing to secure their school autonomy.

Similarly, Weiner and Woulfin (2017) utilized the analogy of a seesaw to determine the schema of the principals regarding the district's efficiency, principals' proficiency, and principal power. Principals challenged to become effective leaders while faced with increased demands and high-stakes accountability in an attempt to build their skills and not burn out (Grinshtain & Gibton, 2017). Learning coping strategies and

establishing a healthy balance is highlighted in the literature to become an effective leader, who produces high achievement.

The need for self-directed leadership which provides principals the skill to self-reflect, monitor, and evaluate their leadership skills is essential (Reichard, Waker, Putter, Middleton, & Johnson, 2017). The literature supported a comprehensive understanding of the role of principals and the external and internal forces in which they face daily to become effective leaders. For instance, Travers, Morisano, and Locke (2015) identified the need for constant self-reflection through analyzing situations to evaluate academic outcomes. Leaders are able to realize change and effective leadership through systems of support.

As stated by Francone (2017) the participation in ongoing networking and professional development increased the ability of the leader to increase student achievement. Due to the ever-changing role of the principal, the need for the district to provide relevant ongoing professional development and opportunities to network with other principals exist. These steps in building leader capacity will strengthen their administrative skills (Mombourquette & Bedard, 2014). The introduction of leadership networks as a system of support for principals was investigated through a path-analytic technique. Leithwood and Azah (2016) reported the benefits for principals to actively participate in leadership networks. It provided the opportunity to develop leadership skills and increase capacity within their respective buildings.

Principals who are supported are empowered to lead and guide the implementation for effective instructional practices to provide opportunities for teachers

to grow instructionally (Brezicha et al., 2015). According to Elfers and Stritikus (2014), when principals are supported, teachers developed sound instruction that supports students' academic growth. Elfers and Stritikus's (2014) study evaluated the leadership skills of its leaders. The study examined the direct correlation between leader support and ongoing professional development to the increase of student performance. The outcome was that teacher effectiveness and student achievement hangs on the leadership of the principal, which depends on the quality of the system support invested into the ongoing and relevant development of the principal (Hoing, 2012). The support from principals affect student achievement and prepare students to be college and career ready.

Malin and Hackmann (2016) reported that the use of distributed leadership in promoting college and career readiness increased student achievement. The conclusion of the study determined the need for a collective vision and clear vision to successfully implement college and career pathways for high school students. It also emphasized the need for a trusting school culture where mistakes are welcomed. In addition, Young (2015) conducted a study on the power of self-reflection and goal growth setting to increased student academic performance. Young's study was a qualitative look into the need to increase student performance and promote 21st Century skills through self-reflection and goal growth setting. The literature continued to encourage a deeper emphasis on the direct effect of effective leadership on leader competency, teacher performance, and student academic growth.

The implementation of PBL is often considered a strategy to be used in the core subjects such as reading, math, and science. Tobias et al. (2015) and Zuniga and Cooper

(2016) explored the concept of shifting adult mindset and the challenges adult learners face in changing mindsets to move forward to increase student achievement. The study of Tobias et al. (2015) focused on music educators implementing PBL within the classroom and the journey in leading their students to acquire a greater appreciation for music and learning through the use of PBL. The leadership aspect encouraged creativity amongst their staff members to build confidence and increase student success.

The literature review led to the notion of district support to invest in principals in hopes to increase abilities to become effective instructional leaders. There needed to be a clear vision beginning at the district level and shared by principals to implement within their respective buildings. The literature also emphasized the importance of the school autonomy and effective professional development, which targets the individual needs of the principals and not a one size fits all system. In addition, the literature strongly supported the need for self-reflection on the part of the principal about their leadership skills and to participate in networking with others to continue to build individual professional development and self-growth.

Implications

The literature review pointed out the importance of structure system supports and the significance of the supports to benefit leaders in their professional growth (Hitt & Tucker, 2016). In addition, the literature addressed the need for principals to self-reflect and participate in ongoing effective professional development. The literature supports further investigation focused on the effectiveness of principals as instructional leaders and the affect their effectiveness has on direct student learning within the classroom.

Lastly, the literature addressed various elements of support systems to empower principals and what elements are most needed to become the most effective principal.

The findings of this study were used to develop specific training and resources to support principals in establishing effective instructional leadership strategies in the implementation of PBL. The development of professional development for principals may lead to a broader dialogue that may encourage principals' and the district to set a clear vision and action plan in the effective use of PBL, which may affect an increase of the CCRPI scores.

Summary

Section 1 summarized the local problem of whether principals have the instructional leadership skills to effectively implement PBL and the purpose was to explore the principals' perceptions about PBL, implementation, training or resources to improve said instructional leadership of PBL. The research questions addressed the focus of the purpose of the study. The three research questions focused on the perception, implementation, and training or resources to improve the instructional leadership of PBL. The literature review investigated the importance of self-reflection, self-efficacy, and coping strategies to increase effectiveness of principals as leaders. In addition, the literature indicated the need for system supports though the use of ongoing networking and professional development to equip principals to increase professional and content knowledge.

As a result, the leadership styles of the principals and their perceptions of their skills directly affect student achievement. The quality of learning is led by the principals'

direction and one indicator of school success is the CCRPI score. Therefore, Section 2 will provide additional description of the sampling process and the research design that is implemented to gather data for this study.

Section 2: The Methodology

Research Design and Approach

To examine the research questions in this project study, I used a basic qualitative design. This study design allows a researcher to gather data through the theoretical lens in which the participants construct their views of experiences (Merriam & Tisdell, 2009). In this study, I explored the principals' perceptions of their knowledge of PBL, implementing PBL, and the training or resources needed to improve administrative leadership of PBL.

In selecting an appropriate research design, understanding the process of a qualitative design is essential. Qualitative research designs include narrative research, phenomenological, ethnography, case study, and others. A narrative approach focuses on storytelling of a person's life experiences (Yazan, 2015). Although there is more to conducting a narrative inquiry than collecting life stories, the basis is to understand the stories of individuals. Although my research included individual interviews, the focus was on the participants' perceptions of their leadership abilities when focused on a specific initiative, so a narrative approach was not suitable. A phenomenological design would not have been appropriate either because data were not collected from participants over a period of time (Merriam & Tisdell, 2009). The phenomenological and narrative designs both focus on the life experiences of individuals, and multiple interviews are conducted (Yazan, 2015), whereas for this research I conducted one round of interviews. Similarly, the ethnographic design was not appropriate because it focuses on patterns of culture to better understand a group and their experiences. After reviewing each of the

various qualitative designs, I selected a basic qualitative design. Although each of the above-mentioned research designs are valuable within qualitative research, the decision to use the basic qualitative study stems from the nature of the research highlighting the principals' perceptions of their leadership abilities within a specific school district.

The basic qualitative design focused on the worldview of the participants. Creswell (2014) described the qualitative approach as a worldview, narrative design, or open-ended interviews that affords participants to share their perceptions. Patton (2015) identified various approaches to implement purposeful sampling: deviant case sampling, intensity sampling, maximum variation sampling, homogenous sampling, and typical case sampling. This study followed the approach of homogenous sampling. The participants included principals who have experience in the implementation of PBL. Each of the purposeful sampling approaches mentioned by Patton are valid and reliable for collecting data due to the techniques used in gathering the stories of the participants. The problem highlighted in this qualitative study targets the perceptions of principals.

A qualitative design includes a variety of methods such as participant observation, documentation review, first-person account, and open-ended interviews (Bogdan, Biklen, & Jha, 2016). This study focused on the method of using open-ended interview questions and documentation review, in conjunction with the review of archival data, due to the nature of the study. The utilization of one-on-one interviews allowed me to actively participate with the participants and situation. Doing so provided the opportunity to understand the context in which the study took place and highlighted a context-sensitive process associated with qualitative study (Bogdan et al., 2016). To gain insight into the

context and perceptions, it was part of the qualitative process to capture the subjects' views to construct an understanding.

Participants

Criteria and Justification

According to Creswell (2014), purposeful sampling is when the researcher intentionally selects participants who have a common likeness and connection to the research. The consent form included the criteria needed to participate in the research, and with the assistance of the district, I identified and selected participants based on the criteria outlined in the consent form. The criteria for participation were that the participants had to have been principals for at least 3 years within the same school, participated in the cohort to meet the goal of the district, and implemented PBL within their buildings. All the participants were to be part of the districts beginning stages of the implementation of the personalized learning model and the start of the mindset shift from teacher-centered to student-centered classrooms.

A purposeful sample of 12 principals who had been implementing PBL in their schools were selected. The sample included four principals from elementary schools, four from middle schools, and four from high schools. The purposeful sampling provided me with the opportunity to expand the research (see Bogdan et al., 2016). This sampling technique focused on relevant and expert participants, who were identified by the district and selected by me due to their connection to the study.

Procedures for Gaining Access to Participants

Prior to the data collection, I requested permission from the school district under study and approval from Walden University Institutional Review Board (IRB) to conduct the interviews. The school district took approximately three months to approve the request for research. After receiving district and IRB approval (06-19-19-0583786), I contacted individual participants through email to consider participating in the study. The email provided participants with an overview of the problem, purpose, and research questions of the study. After gaining access to participants, I conducted one-on-one interviews with the four elementary school principals, four middle school principals, and four high school principals. The interviews focused on understanding the perceptions of these principals regarding their knowledge of PBL, about implementing PBL, and about training or resources needed to improve their leadership of PBL. Interviews were scheduled through email communication to confirm appointments and were scheduled to range from 40-60 minutes in length. Principals had a choice on where they would like the interview to take place. During the interview, I reiterated the purpose of the study and participants' rights to confidentiality. The participants were informed of the audio recording of the interview and were informed that throughout the interview they had the opportunity to elaborate.

Researcher-Participant Interaction

To establish a positive researcher-participant working relationship, I informed participants of their rights as participants in the study and provided them with a copy of their rights. Participation rights included the protection of their identity with

confidentiality being the first priority. To protect participants as well as the staff and students at their schools, I used pseudonyms. Participants were invited to sign consent to participate in the study, which highlighted the key elements of the process such as data collection methods, approximate time for each data collection form, and time required for member checking or any other measure of quality. Establishing transparent expectations and clear purpose of the study ensured a positive environment in gathering the necessary data.

Data Collection

Qualitative studies require specific data collection and a time allotted to collect the necessary data (Creswell, 2014). I conducted the interviews with the 12 principals using an interview protocol (see Appendix B) to increase the validity to the study. Face-to-face interviews were conducted, and an opportunity was provided for participants to share relevant information. In addition, an interview protocol was used to organize and properly document the interviews were conducted (Yazan, 2015). The use of an interview protocol allowed me to use standard procedures to create uniform interviews (see Merriam & Tisdell, 2009). The use of an interview protocol provides the opportunity to go in-depth with the interview using follow-up questions and asking participants to explain their ideas.

In addition, qualitative interviews were conducted to elicit views of the participants. Open-ended questions were used to go in-depth with understanding the perceptions of the participants and how they relate to the study (Creswell, 2014). The use of qualitative observations was not suitable for this study. The intent was to gather

perceptions, not to study the behaviors of individuals. According to Yazan (2015), the use of member checking provides a priori analysis to a study through the process of interviewees reviewing the final report to check for accuracy of how the participants' perceptions were reported. In using the member check, participants are provided the opportunity to review the interview responses and discuss the findings with the researcher.

Interview questions (see Appendix C) addressed the research questions of the study that focused on the knowledge the principals perceived they possess regarding PBL and the implementation, training, or resources needed to support the implementation of PBL. The interviews were scheduled to take approximately 40-60 minutes each allowing time for participants to feel comfortable to speak freely on the topics. I conducted audio recording of the interviews to ensure accuracy of the data, and I transcribed the audio recordings after the interviews. I compared the transcribed document and the recordings to ensure information was not missed during the interview.

Role of the Researcher

When conducting a qualitative study, a researcher may become immersed in the study but keep thoughts and opinions separate from the outcome of the research (Yazan, 2015). I work in the district as an assistant principal and have worked with a few of the principals in various roles. I had a working relationship with the administrators and have worked in the district for approximately 10 years as a teacher, project manager, and currently serve as an assistant principal. I do not supervise any of the participants and had professional relationships with potential participants.

Hence, as an administrator, I have some knowledge of the district's mission; this may affect the study due to some biases related to the topic. My experience as a project manager, who worked as a liaison between the middle school and the district to assist in the implementation of PBL and now currently an assistant principal provided both access to information and may have preconceptions. However, I believe that these roles allow me to step aside and conduct interviews, collect the data, and analyze data with fidelity. The opportunity to collect and understand the perceptions of the principals, the leaders who are given the task to drive this mission is an honor. Although, I may have prior experiences working directly with the topic, I believe that principals have not been given the opportunity to share their story.

Data Analysis

Data analysis provides a researcher with deeper understanding of the data as it is peeled back to understand the study. Data were analyzed after it was collected through documentation, recording, and transcribing of the interviews. A coding procedure was implemented to assist in organizing the data from the interviews. According to Saldana (2013), coding is the use of simple words or phrases used to represent the theories and operational definitions to create the first level of coding. The coding system was used to report the data from the interviews, aligning it to the research questions and capturing the similarities, differences, and frequencies of the words and phrases used throughout the study. The data assigned categories and were revised based on the data; this is known as encode and recode (Saldana, 2013). A frequency table was used to organize the data.

After interviews were concluded, the transcripts of the interviews were reviewed. The audio recordings were used to verify all necessary information had been included. The In Vivo coding method was used to organize the data and to provide clarity of sorting and grouping the data. The In Vivo method highlighted the words and phrases used in the participants language. Coding is more than identifying patterns but a form of linking and identifying commonality to interpret data (Miles, Huberman, & Saldana, 2014). As I attempted to understand the perceptions of the individual principals, the initial coding was labeled through linking an idea, which through analyzing developed the outcome of a theme as each individual participant shared their perceptions. As I analyzed the data and reviewed the transcripts, it was important to use words to code for categories and eventually created themes that linked larger perceived outcomes. In addition, a database was used to store and sort the documents and audio recordings into bins for easy retrieval. Themes may be connected across individuals in case studies to advance the qualitative narrative to provide layers of complexity (Merriam & Tisdell, 2009). One of the most important steps is reflecting on the study. Reflection is displayed in the researcher asking questions such as “What lessons were learned?” (Bogdan et al., 2016). The suggested steps will validate the accuracy of the information. To resolve any issues that may arise with discrepant cases, the audio recording was closely reviewed to align with the notes of the interview and if additional information or clarification was needed, participants were contacted to schedule additional time.

Evidence of Quality

The research was based on clear and specific criteria for participant selection and participants' identities were protected using numbers instead of real names. The importance of the protection of the participants is of great value as is the data that is collected from the participants. In addition, to ensure the evidence of quality the integrity of the research was upheld using the In Vivo coding method. The coding method began with sorting and grouping words and phrases from the interviews using linking words but to dive deeper into the analysis of the data, a secondary attempt to use phrases, which create themes based on a clearer understanding of the data was developed to interpret the data and understand the principals' perceptions. Lodico, Spaulding, and Voegtle (2010), stated that conducting member checks is a balanced method to discourage researcher's biases within the study. The notion of transferability is also mentioned as a source of the evidence of quality. Transferability is through the eyes of the reader in how well the strategies and methods used in the research can be used within their own communities when they understand how it was used within the research. As a result, the use of the coding system and member checks ensure that the data collected and analyzed was valid and reliable.

The use of purposeful sampling is one method to ensure that participants align to the topic of the research. In addition, the confidentiality of the participants encouraged participants to speak freely and honestly in reference to the research topic. The use of the coding methods founded on Miles et al. (2014) provided an unbiased method to analyze the data and to understand the collective perception shared by the participants.

Discrepant Cases

Although, methods and procedures were used to ensure the quality data collection and analyze the topic of discrepant cases exists in all forms of study, and in particular, qualitative designs. Discrepant cases are defined as any data that may disconfirm or not align with the trend of the data collected (Merriam & Tisdell, 2009). To address discrepant cases that may arise a review of the coding process was conducted to ensure that the perceptions of the participants were accurately recorded, and the use of the interview protocol may ensure that the data is reliable and valid.

Data Analysis Results

One-on-one interviews were conducted with 12 current principals for this study: four elementary principals (EP), four middle school principals (MP), and four high school principals (HP). The participants were selected based on their leading of PBL within their current school buildings. The interviews were scheduled to be done at the worksite in a private area where they could be recorded without interruption. During the interviews, I reviewed the consent form and provided participants with a copy of the interview questions. Participants varied in experience and number of years that they have served in the role of principal within that building. However, all participants had a minimum of 3 years as a principal in their respective schools. Principals varied from serving as principals in economic disadvantaged schools known as Title I and schools that were not considered economically disadvantaged.

The principals were asked 12 questions in the interview, and all 12 questions were asked of each participant during each interview (see Appendix C). The interview was

originally scheduled for a minimum of 40 minutes; however, the average time of the interviews ranged from 20 to 30 minutes in duration, based on the responses of the participants. The Easy Voice audio recording application was used on my Android phone to record the interviews. Each recording was labeled and dated. The recordings were stored in my personal files and my Dropbox. In addition, notes were recorded during the interview that provided the opportunity to highlight significant responses and terms. The 12-question interview provided opportunities for the participants to speak candidly with responses based on their experiences. Specific phrases were recorded when a majority of the participants mentioned the phrase or similar idea connected to the phrase.

A process of qualitative analysis was applied to the interview data. First the interviews were transcribed and then reviewed for accuracy. Then I went through a process of coding. Finally, those codes were aggregated to form themes. The result of that process is described below. The interview questions revealed specific patterns in the responses. The themes emerged from the codes aligned to each research question in Table 1 the focus of coding was founded on the meaning of PBL according to the participants, the role of the teacher in the process, and the students. After analyzing the data and examining the notes taken during the interviews, I created 17 codes with descriptions from the phrases that were frequently used during the interviews. The codes that emerged from the interview questions are presented below in Table 1.

Table 1

Codes and Interview Questions Aligned to Research Questions 1-3

Research Questions	Interview Questions	Codes
RQ #1	What is your understanding of project-based learning? How did this understanding come about?	Real-world experience Student-led and relevant learning Student inquiry Read articles
RQ #2	How is project-based learning implemented in your school? How would you define an instructional leader? Which of these attributes do you relate to? What do you believe are key elements to be prepared to implement project-based learning?	PBL exist in pockets Learns aside with teachers, leads the implementation, strong pedagogy and content knowledge, unable to balance PBL with standard alignment Student centered, real world application, relevant
RQ #3	How have you been prepared to lead the implementation of project-based learning in your school? In your opinion, what are some resources needed to assist you to be more effective to implement project-based learning? How would you describe the training that you have received to implement project-based learning? would you make to future trainings?	Not prepared outside of self-taught, Time, consultant, ongoing professional development Surface learning- what and why of PBL but lacking the how, Deeper training on how, specific training on specific school need

Through the aggregation of codes, five themes emerged. The codes were grouped to identify common themes. The consistent themes presented are shown in Table 2 below as they align to the research questions.

Table 2

Research Question Themes

Research Questions	Consistent themes
RQ #1	1. Deeper learning
RQ #2	2. Time 3. Quality collaboration 4. Strong pedagogy
RQ # 3	5. Ongoing Professional Development

Research Question #1**Deeper Learning**

Theme 1 addressed deeper learning. Principals varied on the quality of training provided by the district. However, the majority of principals interviewed expressed that the training was helpful but provided surface learning. The trainings focused more on the overview of PBL and why it is effective but not much of the *how* was addressed to put into practical application. Participant MP1 described the trainings as more of an overview than an in-depth look into the implementation of PBL. He expressed that the 3-day trainings from an outside company was weak training. He stated that:

Training for principals was geared for teachers and not principals who were in the work. The trainings did not provide relevant training for principals who were expected to guide and lead the work of PBL. It was rather surface learning information.

In speaking about the lack of trainings to address the *how* of PBL within the school structure where there was an emphasis of teaching the standards, principals addressed the need for a mentor. The mentor would follow up after the initial trainings to support principals in taking the surface learning of PBL and applying to the specific schools. Thus, the need for deeper learning on the part of the principal, who is viewed as the instructional leader. Principals expressed the need for some *handholding* when it came to the implementation phase of PBL and the need for the consistent feedback to support them on their journey.

The mention of ongoing support was frequently addressed during the interviews. HP1 expressed, “How can I perform if I don’t know how I am doing? I am not an expert, but I am expected to perform as one without guidance on my journey.” All 12 participants expressed the need for individual support for their particular schools. The function of a consultant would be to support in the design of a custom PBL program unique to the particular need of the school. Participant MP2 expressed the need for a consultant to assist principals in balancing PBL and meeting the curriculum standards. The need to balance concepts with the use of clear examples of how it works would be beneficial. Therefore, the theme of deeper learning emerged from the frequent mentioned terms of needing to understand, understanding the how, depth and breadth instead of the surface learning that was presented through the previous trainings.

Research Question #2

Time

Theme 2 addressed the need for Time. The term *time* was used frequently to describe the need for teachers to collaborate and time for administrators to plan with teachers. According to EP1 time is needed for teachers to implement PBL, which demands the schedule to allow time for this practice to be a more fluid process for teachers to implement and principals to monitor. In addition, EP1 mentioned, the need for time, to create a pervasive practice within the school and without quality time to plan, collaborate, and monitor, schools end up with *pockets of PBL practices*. When asked to describe PBL within their respective buildings, the majority of principals admitted that there were pockets of consistent and quality PBL strategies being implemented within their schools, but it was not a pervasive practice that was mostly due to the limit of time.

The theme of time was mentioned as it related to the time needed to produce quality PBLs and to develop effective structures. Time also is essential in creating the master schedule to display the elements of the school day that are a priority. Participant HP1 expressed, the belief that time is needed to implement PBL. He stated, “Teachers need time to plan with principals, to create *think tanks* of ideas.” Similarly, Participant EP4 described the time as an essential element of PBL, which determines the level of willingness from teachers to try new things and presents opportunities for principals to engage in the planning of PBLs. Therefore, the theme of time provided an opportunity to effectively implement PBL.

Principals described the need for time to collaborate with teachers in developing relevant PBLs and others spoke of time in creating a cohesive understanding of curriculum and PBL that would allow for a balanced approach on the school level. Hence, ensuring that neither curriculum nor PBL was sacrificed for the other. A great emphasis was on the lack of time to engage in quality collaboration with their teachers, gather resources, and create relevant PBLs that were student centered.

Participants differed in how time needed to be spent on PBL. For example, HP2 and MP4 believed time was needed for students to engage in PBL while still focusing on the standards and assessments throughout the day. While EP3 and HP1 leaned on the need for teachers to plan for such activities. Overall time was a theme that was frequently mentioned throughout the interviews.

Quality Collaboration

Theme 3 addressed quality collaboration. Participants emphasized the elements of a successful implementation of PBL must include quality collaboration. The concept of quality collaboration emerged from principals' responses to the effectiveness in establishing a specific time and structure where teachers can plan lessons, analyze student data, and create activities that align with standards. In addition to the need for quality collaboration for teachers, principals highlighted the need for quality collaboration for students during the PBL process. Principals expressed the belief that PBL is relevant to the current learning and encourages students to explore problems and find solutions. PBL provides a personal connection to a local problem and gives students a voice. Participant EP4 stated, "PBL presents students with needs in the real-world and integrates contents to

allow students to collaborate and not learn in isolation.” Participant EP4 who use to be a middle school principal expressed, the value in providing quality collaboration as students’ transition to middle school. Participant EP4 continued by stating, “Quality collaboration among staff members in co-creating opportunities to develop a student-centered learning environment through the use of PBL.”

Strong Pedagogy

Theme 4 addressed strong pedagogy. Strong pedagogy was identified by participants as one of the elements needed in successful implementation of PBL. EP1 stated, “As an instructional leader it is required that you have strong content knowledge and pedagogy to support teachers in creating these effective PBLs. As a result, it leads to the integration of content areas in building effective PBLs that are inter-related.” Participant MP2 who was an assistant principal and became the principal in the same school described that one of the attributes needed to implement PBL is displaying strong content pedagogy. The lack of this is detrimental to the success of the implementation of PBL. Although, Participant MP2 has a strong background in content knowledge he expressed that he was self-taught in regard to PBL. Participant MP1 stated,

Being the leader, you are expected to be competent on PBL and that causes principals to try to learn as much as they can to be effect. However, with the limited professional development provided, you rely on reading articles and conducting your own research in hopes of being successful.

In addition to strong pedagogy and deeper learning, principals were passionate in expressing the need to learn with their teachers. One principal stated that to support the

implementation of PBL, principals, who are the instructional leaders had to attend teacher trainings to learn alongside teachers. Another principal stated that the only way they knew how to lead was learning with teachers because that was the only valuable training offered by the district. Throughout the interviews it was evident that principals valued the notion of learning alongside their teachers. However, participants differed on this topic of learning alongside teachers for all trainings. Especially, EP4, who had expertise in the field of PBL in his previous school district and expressed dissatisfaction that learning for principals was not tailored to developing the knowledge bank of principals. EP4 expressed “I feel as though I am digressing in my learning because I am grouped on the level of teachers instead of one who leads teachers.”

During the interviews principals frequently expressed that their effectiveness directly effects the professional growth of their teachers. Participant HP4 expressed that he had increased in his effectiveness in the implementation of PBL and it is measured by how he supports his staff. He stated that

I know that I need ongoing professional development to increase my knowledge, but I learn most when I learn alongside my teachers. I make sure that we are learning together, and this happens when I am present during trainings and collaborative planning sessions.

Participants did not vary in these themes rather they echoed one another as they grew into effective leaders.

Research Question #3

Ongoing Professional Development

Theme 5 addressed the urgency of ongoing professional development. Principals understood the importance of not only effective professional development but the need for ongoing professional development. Professional development that included structured deep learning, district support to assist with their specific school's implementation of PBL and providing them with the knowledge needed to better support their teachers. Participant HP1 mentioned the need for monitoring the process to assist principals in feeling successful and not feeling that they were on an island alone. Similarly, EP4 acknowledged

The need for support for teachers through effective support of principals to lead PBL. When principals do not know how this should look like and how to structure this within their daily schedules, it becomes overwhelming and sometimes falls to the waist side.

The outcomes of the interviews suggested that principals desire to provide support to staff and understand the importance of PBL in increasing student engagement and academic outcomes. However, the lack of effective training and guidance led them to depend on their competency while in hopes of leading teachers to successfully implement PBL. The principals expressed a need for ongoing professional development that provided differentiated supports for the various schools and their unique populations.

As the interviews continued, principals were vocal when it came to what resources they needed to be successful in PBL and what should future trainings consist of

for PBL. The themes of working with a mentor was expressed throughout. When followed up with a question to clarify the need, principals stated their need to ensure that the structures that are in place are being done correctly. Participant MP2 stated that he has had the opportunity to visit other schools out of county and all over the country to improve his PBL understanding and implementation. However, the lack of having access to an expert within the district to walk him through the steps and serve in the role of a “thinking partner” is detrimental to the cause. Principals have shared that they want to grow but need structures in place to support the professional growth to become effective instructional leaders. Hence, based on the findings, principals do not perceive they have the administrative preparedness to implement PBL due to the lack of support and relevant learning needed to equip them to be successful in meeting the goal of the district.

Discrepant Cases

Although, methods and procedures were used to ensure the quality data collection and analyze the topic of discrepant cases exists in all forms of study, and in particular, qualitative designs. Discrepant cases are defined as any data that may disconfirm or not align with the trend of the data collected (Merriam & Tisdell, 2009). Hence, there were 12 participants interviewed and out of the 12, two had prior experience serving as principal in another school to implement PBL. One participant began the implementation of PBL at the elementary school level and moved to implement PBL at the high school level. The other participant began the implementation at the middle school level then moved to the elementary school level. This discrepancy highlights the various experiences of the participants and the expertise or the lack of expertise they brought to

the school. Both participants expressed similar perceptions of feeling inadequately prepared to lead the implementation but more so when they moved to a different school level. Although, the participants experienced leading PBL implementation at two different school levels, they continued to lack the training needed to effectively lead the work. All 12 participants differed in their professional experiences, but they shared similar perceptions of their lack of administrative preparedness to implement PBL.

Evidence of Quality

The research was based on clear and specific criteria for participant selection and participants' identity were protected using numbers instead of real names. The importance of the protection of the participants is of great value as is the data that is collected from the participants. Individual interviews were conducted an audio recording and transcript was created. In addition, to ensure the evidence of quality the integrity of the research was upheld using the In Vivo coding method. The methods implemented in this study provided the opportunity for participants to respond to candidly respond to the interview questions. I often followed up with probing questions that prompted them to elaborate on their responses. I was able to record detailed responses from each for each participant.

The notion of transferability is also mentioned as a source of the evidence of quality. Transferability is through the eyes of the reader in how well the strategies and methods used in the research can be used within their own communities when they understand how it was used within the research. As a result, the use of the coding system and member checks ensured that the data collected and analyzed is valid and reliable.

In addition, the confidentiality of the participants encourages participants to speak freely and honestly in reference to the research topic. The use of the coding methods founded on Miles et al. (2014) provide an unbiased method to analyze the data and to understand the collective perception shared by the participants. The themes emerged from the codes collected from the participant responses and these five themes became the foundation of the research to provide guidance to create the project for this study.

Summary

The study addressed the problem of principals who were concerned about their knowledge and training to effectively implement PBL. The purpose of the study was to explore the principals' perceptions about PBL, and its implementation, training or resources needed to improve the instructional leadership of PBL. The conceptual framework used for this research is based on Daresh and Playko's theory of the proactive administrative process. This theory highlighted the essential elements a leader needs to effectively lead. Three research questions were created for this study 1) What are principals' perceptions about PBL? 2) What are the principals' perceptions about implementing PBL? 3) What are principals' perceptions about training or resources needed to improve administrative leadership of PBL? Interview questions were constructed to align with the research questions. One-on-one interviews were conducted with 12 participants. There were four elementary school principals, four middle school principals, and four high school principals, who all had at least three years of experience in the role of a principal and began implementation of PBL in the building they currently lead. The principals' responses to the interview questions provided me the opportunity to

identify 17 codes and through those codes 5 themes emerged. The themes were as follows: (a) deeper learning, (b) time, (c) quality collaboration, (d) strong pedagogy, and (e) ongoing professional development. The participants expressed that these themes were valuable to successfully lead the implementation of PBL.

Overall principals expressed the need of all of these themes but had a variety of reasons why each of these themes were necessary. For example, the theme of time was described to scheduled time teachers needed to plan quality PBL lessons and time principals needed to collaborate with teachers to create quality PBL lessons that aligned to the standards. Throughout the interviews it became evident that principals understood the important role they played as the instructional leader of their building and how their leadership effected both student learning and teacher instructional practices. The body of literature confirmed the importance of the role of the principal and supported the belief that principals are the instructional leader in the school. Therefore, a principal's leadership performance directly affects the instructional practices of teachers and the academic success of students.

In addition, principals described PBL as student inquiry that leads to a focus on a real-world relevant problem. In essence, principals acknowledged that to be an effective leader one must believe that leadership matters, knowledge matters, and vision matters (Allen et al., 2015). The themes provided clarity on the perceptions that principals believed about their leadership and how their leadership effected the implementation of PBL in their schools.

Study Findings

As the data were analyzed it became clear that principals were in need of wraparound supports from the district in this area of PBL and supports that did not only focus on their own development but the development of their teachers. As a result, the need to develop a professional learning plan was the focus of the project for this research. Therefore, a need for the district to construct a system that leveraged principal support through a coaching cycle would be beneficial. The literature supported a deeper look into providing principals quality training to effectively implement initiatives. According to Gumus (2019), the need for principals to receive ongoing quality training to effectively lead instructional practices with their staff and positively affect student learning is an investment that pays well into the future success of student achievement. Hulsbos, Evers, and Kessels (2015), continued the study of supports for leaders through promoting the role of central and school districts to play an active part in the training of principals. Leaders become effective when they have clear expectations and are provided with a framework to accomplish the task assigned.

As principals grow as instructional leaders, the quality of instructional practices in the classroom and student achievement will also increase. Principals want and need clear expectations to meet the requirements of their role, a mentor to guide them on the path, and measurement tools that clearly evaluate their progress and provide feedback for next steps. These themes were echoed throughout the interviews with principals. A school district is in the position to provide that support to advance the professional growth of their leaders as it affects student learning outcomes. As a result of the interviews, the

findings of the research point to an inadequate support of school principals to effectively implement PBL in their schools. The research outcome of the data collection provided a better understanding of the principals' perceptions of their lack of administrative preparedness. This may have been, in part, because previous trainings seemed to be more teacher focused instead of leader focus. Hence, the findings supported the need for effective professional development focused on principal development. The findings supported the need of professional development that is principal centered and tailored to equip principals to effectively implement PBL. The themes connected in supporting professional development to support principals to develop the necessary leadership skills and to provide structures to assess, plan, implement, and monitor principals as they become effective instructional leaders.

Section 3: The Project

Introduction

The project is a 5-day professional development session targeted to train principals on implementing PBL within their schools. I arranged the professional development session topics according to the needs expressed during the interviews. The sessions focus on the components of PBL implementation and how principals can establish sustained practices in their buildings.

Components of the Professional Development Project

The objective of the sessions is to provide practical strategies in supporting principals to implement in their individual schools. The sessions consist of the importance of leader reflection and proactive actions incorporated with being an instructional leader and the use of the design thinking model as a framework to structure sessions. The professional development consists of the following components:

1. Lessons focused on the elements of PBL, performance task focused on using the design thinking model.
2. Collaborative activities, leader reflection, and pulse check to identify the various stages of the principal participants.
3. Development of an action plan that integrates elements of PBL and standards/curriculum to structure the day-to-day operations of the school.
4. Establishment of a flexible timeframe to provide opportunities for leaders to transfer their learning within the sessions in their day-to-day operations.

Goals of the Professional Development Project

The goal of this 5-day professional development project is to equip principals with the administrative preparedness to successfully implement PBL. By using quality resources and developing principals as instructional leaders, the training may help principals become effective. Due to the various levels of principals' knowledge of PBL and the information collected from the interviews, I focused the professional development on creating a principal network. This network incorporates protocols, objectives, and on the job training with monitoring of the implementation process. The professional development project focused on personalizing the feedback from the facilitator due to the difference of each school and principal need. The goals of the professional development project were based on Daresh and Playko's (1992) conceptual theory of a proactive leadership. Therefore, principals as the audience participate in self-reflection and embark on this journey of PBL implementation as innovative leaders who are focused and prepared for the change instead of dealing with the change as it comes.

In addition, the sessions are structured to have self-reflection, to actively implement skills within their own schools, and to develop a network of principals who build a community of trust and knowledge. The objectives of this professional development program entitled "Leveraged Learning for Leaders" focused on the professional development of leader knowledge and the professional development of the leader social and emotional needs. Through the 5-day sessions, principals will have the opportunity to examine their own perceptions through collaborative activities such as storytelling, which allows them to share their journey. In addition, principals will

strengthen their understanding of the “why” of PBL and focus in-depth on the “how,” in order to transfer their new knowledge to their own unique schools. Through the use of the design thinking model, PBL elements, and focusing on being a proactive instructional leader, principals will develop their action steps to successfully implement PBL. I hope the professional development experience establishes a principal network that provides support and collaborative feedback instead of the self-taught concept that was mentioned during the interviews and possibly establishing a co-mentor relationship among participants.

Rationale

Based on one-to-one interviews I conducted with principals, I was able to identify the need for professional development that targeted the knowledge and growth of implementing PBL. The interviews revealed that the prior professional development sessions provided by the county were more teacher centered and focused on why PBL was useful rather than how to implement PBL. As I analyzed the interview transcripts, the data showed the need for professional development that was job embedded. Job embedded development would support the opportunity for ongoing feedback and monitoring of their efforts to implement PBL (Fisher, 2014). Principals indicated that the previous professional development was perceived as surface learning and did not go into in-depth of the work; in other words, I provided an overview for educators who were considering the implementation of PBL but did not provide action steps for practical use.

The professional development project enabled me to address the sensitive concerns that principals expressed (see Section 2). I selected a professional development

structure that provides the opportunity for leaders to engage in meaningful learning. By meaningful learning, I mean that the professional development should address the concerns of a group while valuing the individual need of each participant in developing their administrative preparedness to implement PBL. This training assists with the concept of efficiently using time with purposeful and intentional training for a targeted audience. The structure of the professional development project addresses the concerns that were mentioned in the interviews including principal centered PBL training, understanding how to implement PBL, and creating a network that promotes a mentor relationship for feedback and support. Through professional development, principals analyze their thinking by using metacognitive exercises. This training also introduces design thinking as a tool to establish connection among the participants focusing on human needs with an emphasis on developing principals as instructional leaders to lead the implementation of PBL.

During my investigation, it became evident that research examining quality professional development of leaders existed. In addition, as academic standards changed and the demand for rigorous curriculum has increased, there is a related increase in the need for effective leadership. The call for principals to be instructional leaders becomes a dilemma because they too need quality training to be effective in this role. Miller et al., (2016) emphasized that the principal is one of the most important, if not the most important, role leading to the success of both teacher development and student academic success. In my professional development project, I focused on building the knowledge of principals to better understand PBL. In addition to building knowledge of PBL, however,

I also developed an approach that builds a network of ongoing support for principals as they implement PBL.

Review of the Literature

During the data collection through one-on-one interviews, it became evident that principals would benefit from targeted professional development with an emphasis on practical methods principals are able to implement to their respective schools. The implementation of targeted professional development with a clear purpose is an effective method to provide principals with PBL Project Description knowledge, practical strategies, and develop a collective accountability measure through professional networking. The choice to select professional development for this project supports Daresh and Playko's (1992) proactive leadership theory, which promotes the use of effective professional development with an emphasis on self-efficacy and self-reflection.

As stated by Manuti, Pastore, Scardigno, Giancaspro, and Morciano (2015), professional development needs to be a balance of informal and formal learning that provides leaders a way to increase their knowledge of the content but allows them to experience experiential and relationship learning as well. Through this process, principals receive differentiated and specified training for their professional growth, as well as the professional development aligning to the professional standards to highlight the relevance and importance of the training. According to Alhouti and Male (2017), professional development is most powerful when aligned to relevant professional standards that are used to evaluate the principal's performance. The research emphasizes on the importance of having an effective school leader to guide

teachers in their instructional practices. However, as teacher development is crucial to their need to increase content knowledge and provide students with quality instruction it is more important for principals to receive quality professional development to foster a school focused on high-quality instruction and high-quality learning (Hilton, Hilton, Dole, & Goos, 2015). Hilton et al. (2015) posited that the professional growth of the principal is a key element that directly affected teacher professional development and student learning outcomes.

Through the interviews, participants frequently shared that principals' limited understanding of how to implement PBL successfully in their schools was due to the surface learning of the previous district trainings and the lack of focus on developing leaders to lead and guide this work. Principals expressed that they felt inadequate and had a desire to do this work but lacked the "know-how" to not only implement PBL, but to incorporate it into their day-to-day work within their schools. Great schools have great principals and a great principal is one who is an effective instructional leader. Establishing effective instructional leadership skills in principals begins with quality and intentional professional development that is ongoing, job-embedded, and focuses on the improvement of student learning (Miller et al., 2016). In addition to providing leaders with quality professional development, the focus is for principals to obtain effective strategies to push the implementation of PBL in their respective schools. According to Sofo and Abonyi (2017), professional development opportunities for principals are crucial but the purpose needs to be targeting the self-reflection of the leader to act in changing practices for sustainable student outcome.

In developing this project, I researched the effectiveness of professional development with an emphasis on the leader growth. I searched for journals using the Walden library research sites including Thoreau, EBSCO, ERIC and Google Scholar to obtain research related to the project. The keyword search terms to gather research included *professional development, school principal growth and development, principal training, design thinking, professional development for principals, developing instructional leaders, principal self-efficacy, collective efficacy, learning for current principals, and school district support for principals*. These terms were used in isolation and in combinations to locate the most relevant research for this project. The search was limited to the terms previously referred to, peer-reviewed articles, and dates ranging from 2015-2019 to ensure they met the 5 years of study completion date.

Miller et al. (2016) examined the effects of professional development on principal growth but more importantly the effect of the growth linked to student achievement. Growth in knowledge and skill is necessary but the purpose of a good leader is to positively improve student achievement and teacher effectiveness. According to Miller et al. (2016) an effective professional development program measures how the knowledge obtained from the program are transferred and implemented by participants. When professional development is targeted and intentional there is a significant increase in principals' collaboration with teachers, increase instructional practices, establish effective norms for collaboration, and increase student outcomes (Miller et al., 2016). Providing continuous professional development for principals is imperative due to the increasing

demands and research identifying the effectiveness of the principal as one of the most important elements in public education (Nasreen & Odhiambo, 2018). The success of a school goes beyond day-to-day operations but are linked directly to the principal's content knowledge, effect on culture and climate, and leveraging research based instructional practices.

Professional Development

As stated by Nasreen and Odhiambo (2018), the core purpose of professional development is to increase the competency and effectiveness of participants through specialized training that is relevant and transferable. These specialized trainings enable principals to become the life-long learners the role demands of them to successfully stay abreast to educational trends and instructional practices. Cunningham, Vangronigen, Tucker, and Young (2018), examined the importance of professional development being intentional and relevant for participants to increase the engagement of the participant learning. There exist three types of knowledge that a school leader needs to effectively lead and use these types of knowledge must be utilized in structuring professional development. The three types of knowledge are declarative, procedural and contextual.

According to Cunningham et al. (2018) each knowledge builds upon the previous. For example, this professional development project begins with the need for principals to be able to declare an understanding of PBL. Then, to use this understanding to create an implementation plan which is to transfer that understanding into action and then be able to match the action to the context of the need of their school. Professional development structures are impactful when it provides participants the opportunity to part in discourse,

acquire new knowledge, purposefully connect and teach new knowledge (Augustine-Shaw, 2016). The purpose of professional development is to engage participants in deep learning which produces positive outcomes.

As the notion of professional development relates to the possibility of professional growth in conjunction with the design thinking framework, it provides an additional level of rigor to learning. Sarooghi, Sunny, Hornsby, and Fernhaber (2019) examined the components of the design thinking model and the effect it has on enhancing the problem-solving capacity in leaders whether it be in business or in education. The combination of professional development and a design thinking approach is highly effective to the professional growth of principals. The research examines the effectiveness of professional development with the use of high leveraged practices that include principals' self-efficacy, reflection, critical thinking, and ability to transfer the knowledge to their schools.

In transferring the knowledge obtained to their schools it adversely benefits the professional development of their teachers to improve their instructional practices. Metcalf (2019) investigated the increase of student achievement through the professional development of principals as they leverage the knowledge to increase teacher pedagogy. When professional development lacks the seven principles of quality professional development it will not be effective. The seven principles of quality professional development are: data driven, clear purpose, job-embedded, promote effective collaboration, sustained, feedback, and reflective (Metcalf, 2019). This study utilizes

these principles to guide the development of the professional development project for the participants.

Professional Growth for Principals

In response to the needs the principals indicated were priority to enhance their professional growth, mentoring and coaching were largely mentioned. According to Metcalf (2019), combining professional development with mentoring or coaching will increase the skillsets of principals thus enhancing the instructional practices of teachers, who in fact directly affect student achievement. The effectiveness of the principal determines the effectiveness of the quality of instruction and student outcome within a school and this is possible through the ongoing supports from the district to create a systematic framework to sustain improved student outcomes. Ng and Szeto (2015) stated it is almost impossible to have a successful principal without the effective implementation of ongoing training to enhance their skillset.

The investment in growing principals is an investment to better student outcome and it as I investigated the effectiveness of professional development, mentor/coaching continued to be echoed throughout the research. Professional development targeted for principals enriches their practice and enables them to enhance the practices of other educators. There is a need for constant reflection on one's practices and the learning must connect to the work for it to be meaningful and applicable (Wright & Da Costa, 2016). Service, Dalgic, and Thornton (2017) explored the importance of including mentoring and coaching within continuous professional development of principals. As the one-on-one interviews took place, principals mentioned the need for feedback through a mentor

or coach. These also was expressed in the establishment of a principal network group to provide ongoing supports with like-minded professionals. The demands on principals is ever increasing and although traditional face-to-face professional development is effective the building of ongoing networking and continuous professional growth can also be obtained with a balance approach.

Trust, Carpenter, and Krutka (2018) examined the use of professional learning networks through social media. Principals must participate in professional learning opportunities to enhance their practices and the use of social media such as Twitter may provide supplementary support to evidence-based practices for leaders to grow. Too often principals expressed that they perceived their role as isolated and believing they were on an island alone. According to Service & et al. (2017), providing mentors or coaches to principals enhances their critical reflection on their own leadership and positions them to develop a new lens to evaluate their school culture and climate. Including mentor and coaching to the professional development framework provides a deliberate action to develop principals (Gumus, 2019).

Service et al. (2017), responded to the question of what would be an effective professional development for experienced principals within the study and the response is simple: an effective professional development is one that is relevant to the principal's current building in which the principal can take that knowledge and implement it to their current situation to move the needle in their respective schools. The focus of this professional development project connects to this discovery as such promotes a relevant topic to provide tools to successfully implement PBL within their schools. In addition,

encouraging informal discussions and developing networks of principals to learn and grow together, increases their effectiveness (Daniëls, Hondeghem, & Dochy, 2019; Hildreth, Rogers, & Crouse, 2018; Hulsbos et al., 2015). The increase of networking opportunities increases the engagement and the valuable discourse between principals, who have described their roles of isolation to be a pervasive perception among principals.

The research seemed to promote the use of professional development to enhance the learning of principals. However, there is a limited source of research that target professional development for principals but focus on professional development for teachers and aspiring principals rather than current principals. Hildreth et al. (2018) reiterated the importance of providing ongoing professional development for principals and to go as far to state that principal professional development is more important than teacher development. As a cross-county runner capitalizes on strengths through consistent practice and sustaining stamina this is compared to effects of professional development for principals to increase their knowledge and sustain their effectiveness. To accomplish this the design of the professional development is key. Hussin and Al Abri (2015), explored the development of an effective professional development targeted for principals. The development of professional development for principals must include a clear purpose and a clear method of monitoring whether the training was effective.

In addition, it is essential that the school district reprioritize its efforts to invest in its leaders through leveraging high-quality instructional training which provides qualified supervisors of principals to mentor and guide principals in becoming high-quality instructional leaders (Riley, 2018). Professional development is not an event but is an

intentional and ongoing growth opportunity that is utilized to develop capacity amongst leaders and establish sustainable systems to improve student learning. Therefore, specific outcomes to better equip principals to be effective instructional leaders in the implementation of PBL is the goal. The sessions are aligned with pertinent information to deepen the understanding of principals to be able to understand, identify, and guide teachers to effectively implement PBL within each classroom of their school. Boston, Henrick, Gibbons, Berebitsky, and Colby (2016) constructed a framework illustrating what principals should have a knowledge of pertaining to high-quality instruction and the action steps needed to ensure that high-quality instruction is observed throughout the building.

The monitoring portion is relevant through the application of acquired skills from the trainings to the transfer to their schools. In which promotes the principal's self-efficacy to dictate the action of the principal to implement the strategies learned from the professional development (Versland & Erickson, 2017). The need for high-impact professional development is a term Koonce, Pijanowski, Bengtson, and Lasater (2019) explored to tackle the challenge of principal engagement. It is common for principals to present professional development to teachers based on their needs, but it can be challenging to engage principals in their own professional development. Professional development must be relevant, applicable, provide collaboration, but most importantly be engaging for participants (Bush, 2016). The absence of engagement will cause any attempt for quality professional development to fail. The professional growth of principals cannot be sustained with a lack of engagement. This fact returns to the focus

on creating relevant, collaborative, and practical strategies that principals can apply to their schools.

Therefore, engagement encompasses the understanding of a leadership network to build a team. To engage principals in professional development there must be a reason to collaborate and forming a network group promotes quality learning (Leithwood & Azah, 2016). In addition, Honig and Rainey (2019), explained that taking a teaching-and-learning approach to professional development rather than a traditional professional learning approach increases engagement due to it being interactive and applicable to their current role. A mindset shift is needed for principals to reprogram the way they view professional development and to do their part and immerse themselves in opportunities for professional growth (Samson & Charles, 2018). Professional growth consists of opportunities for one to learn, understand and apply the information they have acquired.

Effective leadership. During this research it was challenging to obtain research focused on the development of in-service principals through professional development or work embedded training to increase their effectiveness. This presented a gap in practice, but the Wallace Foundation has commissioned several research projects focused on the school principal and the importance of developing the principal to strengthen the teaching and learning. Güngör and Yildirim, (2016) echoed this concern in their investigation of in-service training for principals. Güngör and Yildirim, (2016) obtained a similar finding professional development is necessary to develop principals. In addition, of providing the professional development principals learn through performance tasks and open discussions to increase their administrative experiences and performance. The Wallace

Foundation has dedicated years of research focused on the development of principals and the importance that the development is ongoing, laser focused and meaningful for school principals to grow in their effectiveness as leaders. The focus has been largely on the development of teachers and how principals can lead that development but the Wallace Foundation has provided opportunities for researchers such as Darling-Hammond, LaPointe, Meyerson, Orr, and Cohen (2007) to partner with the foundation and solely research the essential need for principals to be developed effectively.

However, this cannot be solely on the principal to self-train but rather an effort from the school district to invest in their school principals to lead successful schools. Effective districts develop their principals to increase instructional practices in their schools. This is possible through the relevant mentoring and relevant job-embedded learning school districts provide for their principals (Paulsen & Hjertø, 2019). The Wallace Foundation concluded that districts have the responsibility to provide human resources, time allotted for effective professional development and mentors to provide timely feedback for the professional growth of principals. Some of the potential barriers to accomplish this is creating an environment that expects exceptional service. Qualified district personnel are needed to create a structured, relevant and ongoing growth opportunities to guide the mission to better equip principals as they develop collaborative principal networks and increase their leadership skills to lead their schools.

Project Description

This research has led to the creation of a 5-day session that would be the foundation of creating a culture that promotes effective principal collaborative

networking to connect leaders to share a vision in the implementation of PBL. The professional development program would initiate the opportunity for principals to collaborate, receive feedback from one another and experts in the district, and create an actionable plan to implement PBL in their respective schools. Although, schools are different due to the various stakeholders and their needs and would need support to design individual plans that fit their respective schools. However, the shared vision would be professional growth that leads to student academic success.

Resources

The resources needed for the 5-day session include a central location where principals can gather and a meeting place that provides multiple smaller rooms that will allow principals to participate in breakout sessions within their educational level. In addition to a central meeting space there will be a need of a technology staff member available when needed to assist with internet connection, power-point presentations, and assuring all participants are able to access resources. The 5-day session would take place during the days when school is out, but principals have to report to work. This allows principals to stay in their buildings while school is in session and participate in the sessions when they do not have to manage staff and students.

Potential Barriers and Solution

Although, sessions will be scheduled when school is not in session, there will need to be collaboration with the district calendar to ensure that there are not overlapping meetings on the calendar. In addition, during the period in which school is not in session, principals may plan a vacation or take time off as well. A solution to these possible

barriers is to provide session dates to the principals beforehand and to collaborate with the district to post the dates of the session on the district calendar. This may ensure that events and other business principals need to attend to during those off-peak days are marked on the calendar and all stakeholders are aware of these session dates.

Implementation Proposal

The sessions will begin with the “Why” to answer this question candidly, leaders are encouraged to share their why they are implementing PBL. This portion of the session provides leaders with the opportunity to find their root cause and not focus on the goal of the district. Several of these reflection pieces are incorporated throughout the sessions to push leaders to truly think upon their practices. To deeply reflect on the perceptions, they hold of their leadership and their effectiveness.

1. The sessions are broken into parts to provide metacognitive activities in which leaders actively interactive with other principals to discuss their implementation stage. Where am I now? Where do I want to be? How will I get there? What is my anticipated time?
2. To have principals transfer their learning from the sessions to assist them in moving forward to their anticipated goal of implementing PBL in their schools.
3. To provide principals with ongoing feedback through their implementation that is specific to the needs of their respective schools.
4. Increase the knowledge of PBL and the “how” it can be balanced with the demands of the standards and curriculum mandated by the district and state.

5. The use of the Design Thinking model as a framework for setting the outcomes of the learning and leader development.
6. To acknowledge their individual level of competency of PBL and develop their knowledge of PBL. This aspect focused on scaffolding and differentiated instruction.

The 5 days will not take place in consecutive days but rather sessions are structured in the coaching cycle that focuses on teaching, reflecting, practice, feedback and more teaching. The days will consist of 3 sessions per day: Purpose, Connect, and Learn sessions, which address the problem, collaboration and possible solutions principals have voiced as topics of concern. Each day will end with reflection and next steps that explore the prototype portion of returning to the schools to begin the solution process. Day 1 will be developing the structure of whole group including elementary school, middle school, and high school principals during the first two sessions of purpose and connect. However, principals will be grouped with role alike cohorts for the Learn section of the session to provide opportunities for collaborative planning and reflection of the next steps.

These five stages are not in any particular order nor do they need to be sequential but provide the flexibility in supporting human development and growth (Sarooghi et al., 2019). The sessions use the format of the design thinking model. The business world uses this approach to meet the needs of their customers while producing capacity within their teams. The design thinking model is used in schools to increase critical thinking among students thus producing effective PBL work. However, Sarooghi et al. (2019) examined

the use of the design thinking model as an effective but challenging framework in developing quality leadership. The design thinking model consist of 5 stages of development: empathize, define, ideate, prototype, and test. These stages focus on the collaboration and are human centered in establishing unique perceptions across the organization. In other words, a community of “Thinking Partners” (Sarooghi et al., 2019). The professional development overview is found in Table 3 to outline the sessions and the focus on professional growth.

All stakeholders have a role and responsibility in developing effective principals. The principal has the responsibility to expect an engaging professional development and engagement is twofold. The professional development program has to be well developed and relevant to the participants and the participants, who are the principals must be open minded (Brown & Militello, 2016). The presenters must set clear expectations and objectives. The principals must be ready to meet the expectations presented to them for their successful professional growth.

Table 3

Professional Development Project Overview

Day #	Session topic overview	Objectives
1	<p>Purpose - What is PBL and how much do you know on how to make it happen in your buildings?</p> <p>Connect - Building a collaborative network using storytelling.</p> <p>Learn - Revisit the WHY and exploring the various HOWs</p>	Principals will identify their understanding of PBL through examination and reflection of their own leadership and begin to develop the how in understanding the why.
2	<p>Purpose - Design Thinking as for innovative leaders</p> <p>Connect - Creation of “Thinking Partners”</p> <p>Learn - decomposing the standards and aligning possible PBL opportunities</p>	Principals apply elements of the design thinking model to understand how to align PBL to standards.
3	<p>Purpose - Balancing PBL to the</p> <p>Connect - instructional leader role and barriers leaders face</p> <p>Learn - continue to develop alignment of standards and PBL</p>	Understand the various ways to balance the standards to PBL
4	<p>Purpose - Balancing PBL and role responsibility</p> <p>Connect - Reviewing protocols in building the capacity with your staff</p> <p>Learn - How to develop the design thinking model for your teachers</p>	Principals will develop structures and protocols to support staff development of PBL within their respective schools.
5	<p>Purpose - How supports the Why of PBL</p> <p>Connect - supporting teams through collaboration</p> <p>Learn - develop what design thinking for your building</p>	Principals will develop a Design Thinking Model to create steps for their building to establish PBL.

Project Evaluation Plan

The Leveraged Learning for Leaders professional development program will be evaluated using the logic model. According to Lodico et al. (2010), the logic model is distinctively different from the other evaluation plans. The logic model includes the participants in providing timely feedback to the program. This provides the participants to voice their input during the program and provides the creators of the program an opportunity to adjust and reevaluate activities as the program is taking place. The logic model provides a “casual connection”, which aligns the objectives of the program to the professional growth of the participants. The model serves as a framework that evaluates the program at each phase or session. In using the logic model several areas of the program can be evaluated with direct participant input to measure engagement. The logic model aides the program to stay on course and focus on the objectives of the program through the use of aligned activities to meet the needs of the participants. In this study, the program was established through the themes that were produced through the one-on-one interviews. Therefore, the main themes were used to develop the professional development program to meet the needs of principals in the implementation of PBL in their schools.

According to Lodico et al. (2010), the logic model framework consists of components such as: input, activities, outputs of the activities, intermediate outcomes, and end outcomes. Each component serves a purpose in the connection between the program and the participant outcome. The input component focused on the principals need for high-quality professional development targeted for school principals to

implement PBL. The activities component describes the action of creating the professional development sessions targeting principals to grow professional in a 5-day session. The sessions are tailored to the needs of the principals as they stated during the one-on-one interviews.

Participants will complete a survey after each activity to assess the engagement and the quality of the learning. During the output of the activity's component, surveys and observations will be used to evaluate the depth and breadth of the session. The overview of the logic model for professional development is outlined below in Table 4.

Table 4

Logical Model Research Overview

Evaluation Objective	Evaluation Tool	Timeline for Data Collection
Participant engagement and interaction	Survey and observation	Daily observations conducted during sessions
To document participants' perceptions of the Leveraged Learning of Leaders	Principal surveys	After each session with specific questions guided by the session topics
To document principals, use of learning	Observations and network discussions/feedback	During discussions and activities. Discussion opportunities to report back to group in next sessions
Assess PBL implementation within school	Observation, artifacts, and reflections	Principals will use their PBL action plan and share reflections of the process with network.

Project Implications

As stated in Section 3 of this research study there are several possible social change implications. One of the most important change implications is the academic success of students. The opportunity for principals to participate in relevant growth opportunities that targets their need for support in the implementation of PBL is rewarding. As a result of the professional growth of school principals through the use of a professional development program benefits instructional practices of the teachers in their building. Hence, causing a dominion effect of top down success and ultimately the success of schools to increase student learning and meet the district mission.

Section 4: Reflections and Conclusions

Project Strengths and Limitations

The professional development program focused on the professional growth of school principals and equipping them with the tools that they expressed through a one-on-one interview were lacking in their implementation of PBL. The study used a laser-focus approach to identify a possible local problem addressing the principals' perceptions of their administrative preparedness to implement PBL effectively in their schools from the data collected in Section 2. I selected a professional development project because the majority of principals expressed their lack of preparedness to implement PBL due to the focus of previous professional development efforts on developing teachers more than developing leaders.

As the research continued, literature supported the need for effective, engaging, and embedded professional development opportunities for leaders to increase efficiency in the role of instructional leadership. However, there were limitations in the literature on in-service principals and their professional growth. Although a number of researchers have investigated principal preparation programs, few have examined professional growth of principals. Therefore, Section 3 relied on the work of the Wallace Foundation as they led the way to examine the importance of preparing instructional leaders to grow as leaders and in turn increase instructional practices of their teachers and increase student achievement.

Hence, the Leverage Learning of Leaders professional development project is in response to the principals' feedback to better lead the implementation of PBL. The

professional development project targets several areas of development: (a) knowledge of PBL, (b) the “how” in the implementation of PBL with the use of individual action plans for the respective schools, (c) establishment of collaborative principal networks, (d) collaborative network providing feedback on progress, and (e) opportunities for self-reflection and self-monitoring of progress.

A limitation of this professional development project was the willingness of principals to fully engage in this learning experience that is focused on their professional growth. The majority of principals struggled during interviews to focus on their learning but rather focused on the need for professional development for their teachers. In addition, overcoming the barrier of principals believing that they can effectively implement PBL in their schools while continuing the mandates of following the standards and assessment demands is a mindset shift that can be resolved using the design thinking model as a framework for the professional development.

Recommendations for Alternative Approaches

The local problem was that principals were concerned about their knowledge and training to effectively implement PBL. The study investigated the principals’ perceptions about PBL and its implementation, training, and resources needed to improve their instructional leadership of PBL. The problem was addressed through the use of interviews, and a professional development project was established to resolve the problem. The problem could have been addressed through means of creating various focus groups, conducting observations or interviewing district leaders to investigate the supports that are available for principals to be successful in the implementation of PBL.

As stated by Hourani and Stringer (2015), the use of principal evaluation tools provides a blueprint on how to support professional growth in principals. The use of professional leadership standards which are indicated in leadership evaluations provides constructive feedback.

In addition, the sample size of the participants could have been larger, and a questionnaire could have been utilized to gather responses. An alternative definition of the problem may have been stated as a focus on the implementation stages of PBL as a program evaluation. At that point, the focus would be how to best implement PBL through the lens of principals and teachers.

Scholarship, Project Development and Evaluation, and Leadership and Change

During this study, the knowledge obtained through identifying a topic of study and working through the prospectus was challenging. The confidence needed to write a scholarly paper, which was reviewed continuously by experts in the field, was encouraging at times but overwhelming as well. The literature review sections were the most challenging of the paper due to the gathering peer-reviewed research needed to saturate the purpose of the paper. Therefore, referring to researchers in the field such as Bogdan et al., (2016), Lodico et al. (2010), and Creswell (2014) provided the guidance to structure a qualitative study and reliable research methods.

I can confidently state that I have grown in knowledge and understanding as it relates to research methods and presenting the research in scholarly language. As I continued my search for literature to provide valid information on the role of the principal, instructional leadership, and professional development just to name a few

topics searched it became relevant in my current role in the schools. Although an assistant principal who one day aspires to become a principal, I began to truly understand the specific research-based strategies needed to be an effective instructional leader. The proactive theory of Daresh and Playko (1992) and the various researchers who examined the effectiveness of self-reflection, forming network groups, and providing ongoing purposeful professional growth opportunities for principals are a few of the strategies that have been noted in this study.

Reflection on Importance of the Work

Through the study, it became evident that I was transforming my thinking as it relates to the role of the principal. I had the opportunity to sit with 12 in-service principals from various levels and listen to their responses to the interview questions. The role of the principal as mentioned in this study has drastically evolved from that of a manager to that of an instructional leader. The shift has caused principals to juggle additional mandates in their roles. Principals are responsible for not only the day-to-day operations of the school such as scheduling and ensuring the safety of all but also having substantial content knowledge to lead a team in the implementation of curriculum. As stated, principals know and understand the learning that is taking place in their buildings. As a result, they too must participate in effective ongoing professional growth opportunities that equips them to lead effectively. I learned that the term “life-long learner” does apply to leaders who truly want to lead with purpose to positively impact teacher instruction and student achievement.

Implications, Applications, and Directions for Future Research

The work of the Wallace Foundation dedicated to developing effective principals has provided the blueprint for principals and districts to empower their leaders to become instructional leaders who are confident in their content knowledge, effective in their communication, and influential in building capacity within their schools. Therefore, the potential impact for positive social change lies in the investment districts place in principals to lead. Principals are provided with quality professional growth opportunities to enhance their skillset as instructional leaders, which in turn benefits the teachers in their instructional practices and increase student achievement. As the principals' perceptions of their administrative ability become confident in the strategies they are implementing, they become powerful in self-efficacy as they grow as a leader.

Organizational Social Change

In addition, the potential organizational social change is student academic growth and leadership growth in the district. Effective leaders expect results and results benefit the success of the organization or school district. The organization may be able to produce faster improving and high achievement due to building the capacity of their leaders who build the capacity of the staff in their schools. The organization will build the capacity with its district office to mentor and provide quality support to both the principals and the schools.

Theoretical Implications

The study is based on the conceptual theory of Daresh and Playko (1992) as it relates to proactive leadership. The proactive leadership theory focuses on the thought

process and actions of the leader as the instructional leader. It calls for the leader to be proactively 10 steps ahead and being able to see the whole picture as decisions are established. The practice of self-reflection on the part of the principal is critical in the development of the individual's leadership capability. Through self-reflection, principals are able to evaluate and reorganize steps in the organization that increase high-quality learning for students. In addition, principals taking time to participate in professional development, establish networks, and routine self-reflection have a greater chance of becoming the effective principal needed to successfully implement PBL or any initiative that may present itself.

Recommendations for Practice

The research supports the use of professional development that is ongoing, job-embedded, and provides ongoing feedback through the use of experienced mentors. The recommendation for practice is focused on the implementation of structured professional development targeted for principals to build capacity. Darling-Hammond et al. (2007), who partnered with the Wallace Foundation, stated that it is highly recommended that principals are provided with professional growth opportunities. In addition, the need for literature focused on principal professional development is limited. However, the continuous demand for principal effectiveness is rising and it is highly recommended that principals have opportunities to participate in learning to improve their leadership skills.

Conclusion

This study focused on the principals' perceptions of their administrative preparedness to implement PBIS effectively. Through the data collection and literature

review, it has become evident that without effective, intentional, and ongoing supports provided for principals, it is almost impossible for principals to meet the goal of the districts or school system. Research supported the need for professional development that cultivates principals to be effective instructional leaders who are learning through job-embedded experiences, increasing their content knowledge, and setting clear mission and vision for their teachers. The study revealed that principals' perceptions of their ability were due to the belief that they were unprepared to do what was being asked of them by the district. The limited trainings and resources were at the core of the dissatisfaction. As we begin to view our leaders as students, who are eager to learn and grow, they too will be empowered through effective trainings and resources to better equip their teachers to advance student achievement.

References

- Augustine-Shaw, D. (2016). Developing leadership capacity in new rural school district leaders: The Kansans Educational Leadership Institute. *The Rural Educator*, 37(1), 1-13.
- Alhouti, I., & Male, T. (2017). Kuwait principals: Preparation, induction and continuing development. *Journal of International Studies in Educational Administration*, 45(1), 88-103. Retrieved from <https://www.cceam.org>
- Allen, N., Grigsby, B., & Peters, M. (2015). Does leadership matter? Examining the relationship among transformational leadership, school climate, and student achievement. *NCPEA International Journal of Educational Leadership*, 10(2), 1-22. Retrieved from <https://www.icpel.org/ijelp.html>
- Alvai, S. B., & Gill, C. (2017). Leading change authentically: How authentic leaders influence follower responses to complex change. *Journal of Leadership and Organizational Studies*, 24(2), 157-171. doi:10.1177/1548051816664681.
- Bogdan, R., Biklen, S. K., & Jha, A. K. (2016). *Qualitative research for education: an introduction to theories and methods*. Uttar Pradesh: Pearson India Education Services.
- Boston, M. D., Henrick, E. C., Gibbons, L. K., Berebitsky, D., & Colby, G. T. (2016). Investigating How to Support Principals as Instructional Leaders in Mathematics. *Journal of Research on Leadership Education*, 12(3), 183–214. doi:10.1177/1942775116640254
- Brabham, C. B. (2017). *Principals' perceptions of instructional leadership development*

(Doctoral dissertation).

Retrieved from <https://scholarworks.waldenu.edu/dissertations/3865>

- Brezicha, K., Ulkrika, B., & Mitra, D. C. (2015). One size does not fit all: Differentiating leadership to support teachers in school reform. *Educational Administration Quarterly*, 51(1), 96-132. doi:10.1177/001316X4521632.
- Brown, C., & Militello, M. (2016). Principal's perceptions of effective professional development in schools. *Journal of Educational Administration*, 54(6), 703–726. doi:10.1108/jea-09-2014-0109
- Bush, T. (2016). Preparation for school principals: Rationale and practice. *Educational Management Administration & Leadership*, 44(4), 537-539. doi:10.1177/1741143216645505
- Cardno, C., & Youngs, H. (2013). Leadership development for experienced New Zealand principals: Perceptions of effectiveness. *Educational Management Administration and Leadership*, 41(3), 256-271. doi:10.1177/1741143212474808.
- Creswell, J. W. (2014). *Research design: Qualitative, quantitative, and mixed methods approaches*. Thousand Oaks, CA: Sage Publications.
- Cunningham, K. M., Vangronigen, B. A., Tucker, P. D., & Young, M. D. (2018). Using Powerful Learning Experiences to Prepare School Leaders. *Journal of Research on Leadership Education*, 14(1), 74–97. doi:10.1177/1942775118819672
- Daniëls, E., Hondeghem, A., & Dochy, F. (2019). A review on leadership and leadership development in educational settings. *Educational Research Review*, 27, 110–125. doi:10.1016/j.edurev.2019.02.003

- Daresh, J. C., & Playko, M. A. (1992). *The professional development of school administrators: Preservice, induction, and in-service applications*. Boston, MA: University of Michigan. Allyn & Bacon.
- Darling-Hammond, L., LaPointe, M., Meyerson, D., Orr, M. T., & Cohen, C. (2007). *Preparing School Leaders for a Changing World: Lessons from Exemplary Leadership Development Programs*. Stanford, CA: Stanford University, Stanford Educational Leadership Institute.
- Elfers, A. M., & Stritikus, T. (2014). How school and district leaders support classroom teachers' work with English language learners. *Educational Administration Quarterly*, 50(2), 305-344. doi:10.1177/0013161X13492797.
- Fisher, Y. (2014). The timeline of self-efficacy: Changes during the professional life cycle of school principals. *Journal of Educational Administration*, 52(1), 58-83. doi:10-1108/JEA-09-2012-0103.
- Francone, J. (2017). *Systems of support for elementary school principals: A case study*. Walden University, Scholarworks.
- Georgia Department of Education. (n.d.). *2017 College and Career Ready Performance Index (CCRPI)*. Retrieved from <http://ccrpi.gadoe.org/2017/>
- Grinshtain, Y., & Gibton, D. (2017). Responsibility, authority, and accountability in school-based and non-school-based management: Principals' coping strategies. *Journal of Educational Administration*, 56(1), 2-17. doi:10-1108/JEA-01-2017-0005.
- Gumus, E. (2019). Investigation of mentorship process and programs for professional

development of school principals in the U.S.A.: The case of Georgia.

International Journal of Educational Leadership and Management, 7(1), 2.

doi:10.17583/ijelm.2019.3718

Güngör, S. K., & Yildirim, Y. (2016). Views of school administrators related to in-service training activities. *Universal Journal of Educational Research*, 4(3), 516–523. doi:10.13189/ujer.2016.040307

Hallinger, P., & Bridges, E. M. (2016). A system review of research on the use of problem-based learning in the preparation and development of school leaders. *Educational Administration Quarterly*, 1-34. doi: 10.1177/001316X16659347.

Hallinger, P., & Murphy, J. F. (2013). Running on empty? Finding the time and capacity to lead learning. *NASSP Bulletin*, 97(1), 5-21. doi:10.1177/0192636512469288.

Hildreth, D., Rogers, R. H., & Crouse, T. (2018). Ready, set, grow! Preparing and equipping the rural school leader for success. *Alabama Journal of Educational Leadership*, 5, 39-52. Retrieved from ERIC database. (EJ1194721)

Hilton, A., Hilton, G., Dole, S., & Goos, M. (2015). School Leaders as Participants in Teachers' Professional Development: The Impact on Teachers' and School Leaders' Professional Growth. *Australian Journal of Teacher Education*, 40(12). doi:10.14221/ajte.2015v40n12.8

Hitt, D. H., & Tucker, P. D. (2016). Systematic Review of Key Leader Practices Found to Influence Student Achievement. *Review of Educational Research*, 86(2), 531–569. doi:10.3102/0034654315614911

Hoing, M. I. (2012). Central office administrators support principals' development as

- instructional leaders. *Educational Administration Quarterly*, 48(4), 733-774.
doi:10.1177/001316X12443258.
- Honig, M. I., & Rainey, L. R. (2019). Supporting principal supervisors: what really matters? *Journal of Educational Administration*, 57(5), 445–462. doi:10.1108/jea-05-2019-0089
- Hourani, R. B., & Stringer, P. (2015). Professional development: perceptions of benefits for principals. *International Journal of Leadership in Education*, 18(3), 305–339.
doi:10.1080/13603124.2014.904003
- Hulsbos, F. A., Evers, A. T., & Kessels, J. W. M. (2015). Learn to lead: Mapping workplace learning of school leaders. *Vocations and Learning*, 9(1), 21–42.
doi:10.1007/s12186-015-9140-5
- Hussin, S., & Al Abri, S. (2015). Professional development needs of school principals in the context of educational reform. *International Journal of Educational Administration and Policy Studies*, 7(4), 90-97. doi:10.5897/IJEAPS2015.0391
- Kearney, W. S., & Valadez, A. (2015). Ready from day one: An examination of one principal preparation programs redesign in collaboration with local school districts. *Educational Leadership and Administration: Teaching and Program Development*, 26, 27-38. Retrieved from <http://www.caepa.org/publications>
- Koonce, M., Pijanowski, J. C., Bengtson, E., & Lasater, K. (2019). Principal engagement in the professional development process. *SAGE Publications*. 103(3), 229-252.
doi:10/1177/0192636519871614.
- Larson, W. (2013). A professional development project for school leaders: Including

- investigations of the value of the project to the participants. *AURCO Journal*. 19.
- Leithwood, K., & Azah, V. N. (2016). Characteristics of effective leadership networks. *Journal of Educational Administration*. 54(4), 409-433. doi:10.1108/JEA-08-2015-0068.
- Lemonie, P., Greer, D., McCormack, T. J., & Richardson, M. D. (2014). From managerial to instructional leadership: Barriers principals must overcome. *Educational Research and Development*, 17(1), 17-30.
- Lock, G., & Lummis, G. (2014). Complying with school accountability requirements and the impact on school leaders. *Australian Journal of Teacher Education*, 39(2).
- Lodico, M. G., Spaulding, D. T., & Voegtle, K. H. (2010). *Methods in educational research: From theory to practice*. (2nd) Edition. San Francisco, CA. Jossey-Bass.
- Louis, K. S., Hord, S. M., & Von Frank, V. (2017). *Reach the highest standard in professional learning and leadership*. Thousand Oaks, CA: Corwin and Learning Forward.
- Malin, J. R., & Hackmann, D. (2016). Urban high school principals' promotion of college-and-career readiness. *Journal of Educational Administration*, 55(6), 606-623. doi:10.1108/JEA-05-2016-0054.
- Manuti, A., Pastore, S., Scardigno, A. F., Giancaspro, M. L., & Morciano, D. (2015). Formal and informal learning in the workplace: a research review. *International Journal of Training and Development*, 19(1), 1–17. doi:10.1111/ijtd.12044
- McKibben, S. (2015). The principal as lead learner. *Education Update*, 57(7), 2-6.
- Merriam, S. B., & Tisdell, E. J. (2009). *Qualitative research: A guide to design and*

implementation (4th ed.). San Francisco, CA: Jossey-Bass.

- Metcalf, B. (2019). How principals understand of best practices in professional development impacts teacher pedagogy. *National Louis University Education Leadership Doctoral Program*.
- Miles, M. B., Huberman, A. M., & Saldana, J. (2014). *Qualitative data analysis: A methods sourcebook*. Thousand Oaks, CA: Sage.
- Miller, R. J., Goddard, R. D., Kim, M., Jacob, R., Goddard, Y., & Schroeder, P. (2016). Can professional development improve school leadership? Results from a randomized control trial assessing the impact of McREL's balanced leadership program on principals in rural Michigan schools. *Educational Administration Quarterly*, 52(4), 531–566. doi: 10.1177/0013161x16651926
- Mombourquette, C., & Bedard, G. (2014). Principals' perspectives on the most helpful district leadership practices in supporting school-based leadership for learning. *International Studies in Educational Administration*, 42(1), 61-73.
- Nasreen, A., & Odhiambo, G. (2018). The continuous professional development of school principals and current practices in Pakistan. *Bulletin of Education and Research*, 40(1), 245-266.
- Neumerski, C. M. (2012). Rethinking instructional leadership, a review: What do we know about principal, teacher, and coach instructional leadership, and where should we go from here? *Educational Administration Quarterly*, 49(2), 310-347. doi:10.1177/0013161X12456700.
- Ng, P. T. (2015). Aspiring principals' perception of the challenges of beginning

principals and the support that they need. *Asia Pacific Journal of Education*, 35(3), 366-376. Doi: 10.1080/02188791.2015.1056594.

Ng, S. W., & Szeto, E. (2015). Preparing school leaders: The professional development needs of newly appointed principals", *Educational Management Administration & Leadership*, 1741143214564766, pp.1-18, retrieved from available <http://journals.sagepub.com/doi/pdf/10.1177/1741143214564766>.

O'Doherty, A., & Ovando, M. (2013). Leading learning: First year principals' reflections on instructional leadership. *Journal of School Leadership*, 23, 533-561.

Oplatka, I. (2017). Principal workload: Components, determinants and coping strategies in an era of standardization and accountability. *Journal of Educational Administration*, 55(5), 552-568. doi:10.1108/JEA-06-2016-0071.

Overview of the Redesigned CCRPI. (2018).

Retrieved from https://www.gadoe.org/Curriculum-Instruction-and-Assessment/Accountability/Documents/Webinars%20and%20Presentations_FY18/Redesigned%20CCRPI%20Overview%202018.pdf

Patton, M. Q. (2015). *Qualitative research & evaluation methods: Integrating theory and practice* (4th ed). Thousand Oaks, CA: Sage.

Paulsen, J. M., & Hjertø, K. B. (2019). Strengthening school principals' professional development through effective school ownership in Norwegian municipalities. *International Journal of Educational Management*, 33(5), 939–953. doi: 10.1108/ijem-08-2017-0221

Reichard, R. J., Waker, D. O., Putter, S. E., Middelton, E., & Johnson, S. K. (2017).

Believing is becoming: The role of leader developmental efficacy in leader self-

development. *Journal of Leadership and Organizational Studies*, 24(2), 137-156.

doi: 10.1177/1548051816657981.

Riley, N. (2018). Examining the perceptions of principals to improve professional development opportunities and support from central office: A program evaluation. (Published doctoral dissertation). National Louis University, Chicago, IL.

Retrieved from <https://www.digitalcommons.nl.edu> (DISS 339).

Saldana, J. (2013). *The coding manual for qualitative researchers*. Thousand Oaks, CA: SAGE Publications.

Samson, M. K., & Charles, M. M. (2018). Challenges facing secondary school principals in the implementation of the national curriculum statement in Capricorn district of the Limpop Province. *British Journal of Multidisciplinary and Advanced Studies*, 2(1), 60-70.

Sarooghi, H., Sunny, S., Hornsby, J., & Fernhaber, S. (2019). Design Thinking and Entrepreneurship Education: Where Are We, and What Are the Possibilities? *Journal of Small Business Management*, 57(S1), 78–93. doi: 10.1111/jsbm.12541

Schechter, C., & Shaked, H. (2016). Leaving fingerprints: Principals' considerations while implementing education reform. *Journal of Educational Administration*, 55(3), 242-260. Doi: 10.1108/JEA-01-2016-0014.

Service, B., Dalgic, G. E., & Thornton, K. (2017). Benefits of a shadowing/mentoring intervention for New Zealand school principals. *Professional Development in Education*, 44(4), 507–520. doi: 10.1080/19415257.2017.1378705

Sheng, Z., Wolff, L., Kimer, L., & Yager, S. (2017). School administration manger:

- Redefining the principals' role as an instructional leader. *Journal of School Leadership* 27, 119-145.
- Sofu, F., & Abonyi, U. K. (2017). Investigating the self-reported professional development activities of school leaders in Ghanaian rural basic schools. *Professional Development in Education*, 44(4), 521–538.
doi:10.1080/19415257.2017.1359795
- Steele, M. D., Johnson, K. R., Otten, S., Herbel-Eisenmann, B. A., & Carver, C. L. (2015). Improving instructional leadership through the development of leadership content knowledge: The case of principal learning in algebra. *Journal of Research on Leadership Education*, 10(1), 3-10. Doi: 10.1177/1942775115569419.
- Stringer, P., & Hourani, R. B. (2016). Transformation of roles and responsibilities of principals in times of change. *Educational Management Administration and Leadership*, 44(2), 224-246. Doi: 10.1177/1741143214549971.
- Szczesiul, S., & Huizenga, J. (2014). The burden of leadership: Exploring the principal's role in teacher collaboration. *Improving Schools*, 17(2), 176-191.
Doi:10.1177/1365480214534545.
- Talan, T. N., Bloom, P. J., & Kelton, R. E. (2014). Building the leadership capacity of early childhood directors: An evaluation of a leadership development mode. *Early Childhood Research and Practice*, 16(1-2).
- Tobias, E. S., Campbell, M. R., & Greco, P. (2015). Bringing curriculum to life: Enacting project-based learning in music programs. *National Association for Music Education*, 102(2), 39-47. Doi: 10.117/0027432115607602.

- Travers, C. J., Morisano, D., & Locke, E. A. (2015). Self-reflection, growth goals, and academic outcomes: A qualitative study. *British Journal of Educational Psychology, 85*, 224-241. Doi: 10.1111/bjep.12059.
- Trust, T., Carpenter, J. P., & Krutka, D. G. (2018). Leading by learning: exploring the professional learning networks of instructional leaders. *Educational Media International, 55*(2), 137–152. doi: 10.1080/09523987.2018.1484041
- Versland, T. M. (2016). Exploring self-efficacy in educational leadership programs: What makes the difference? *Journal of Research on Leadership Educational, 11*(3), 298-320. Doi: 10.1177/1942775115618503.
- Versland, T. M., & Erickson, J. L. (2017). Leading by example: A case study of the influence of principal self-efficacy on collective efficacy. *Cogent Education, 4*(1). doi: 10.1080/2331186x.2017.1286765
- Weiner, J. M., & Woulfin, S. C. (2017). Controlled autonomy: Novice principals' schema for district control and school autonomy. *Journal of Educational Administration, 55*(3), 334-350. Doi: 10.1108/JEA-03-2016-0032.
- Wright, L., & Da Costa, J. (2016). Rethinking professional development for school leaders: Possibilities and tensions. *Educational Administration and Foundations Journal, 25*(1), 29–47.
- Yazan, B. (2015). Three approaches to case study methods in education: Yin, Merriam, and Stake. *The Qualitative Report, 20*(2), 134-152. Retrieved from <http://www.nova.edu/ssss/QR/QR20/2/yazan1.pdf>
- Young, M. (2015). Effective leadership preparation: We know what it looks like and

what it can do. *Journal of Research on Leadership Education*, 10(1), 3-10.

doi:10.1177/1942775115569419.

Zavala, F. A. (2014). Principals' perceptions of the most important components in an effective principal preparation program. Walden University Scholarworks.

Zepeda, S. J., Parylo, O., & Bengtson, E. (2014). Analyzing principal professional development practices through the lens of adult learning theory. *Professional Development in Education*, 40(2), 295-315. Doi: 10.1080/19415257.2013.821667.

Zmuda, A., Curtis, G., & Ullman, D. (2015). *Learning personalized: The evolution of the contemporary classroom*. Jossey-Bass, San Francisco, CA.

Zuniga, A., & Cooper, T. M. (2016). Project –based learning: 7 ways to make it work. *Educational Leadership*. 72-76.

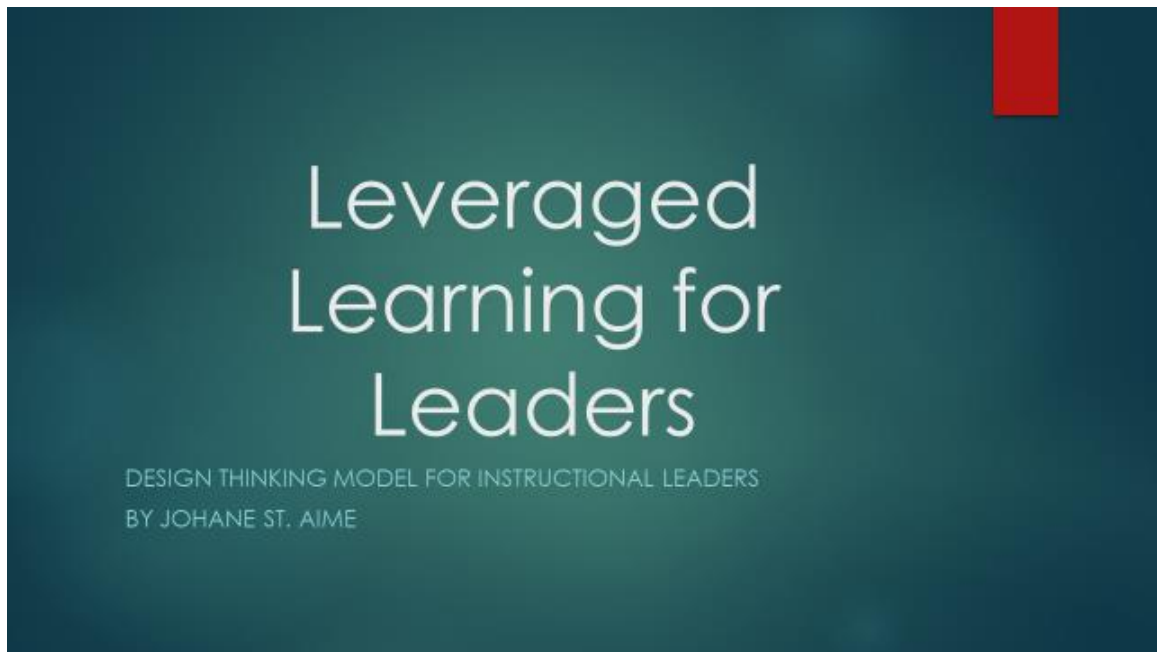
Appendix A: The Project

Purpose: The Leveraged Learning for Leaders is designed as a professional growth opportunity for principals to dive deeper into the understanding the *Why* and the *How* of PBL implementation. Principals will be immersed in relevant dialogue with peers, establish network cohort, and develop an actionable plan personalized to their unique schools as they use the design thinking model frameworks.

Structure: All sessions will have a Purpose, Connect, and Learn element throughout the day. There will be 5-day sessions with job-embedded activities to guide the work.

Agenda: Each day participants will be greeted, and specific themes will be presented. Day 1 will have an introduction slide show for that day will be presented.

Slides for Day 1



What are principals' perceptions about PBL?

What are the principals' perceptions about implementing PBL?

What are principals' perceptions about training or resources needed to improve administrative leadership of PBL?

RESEARCH QUESTIONS

Day 1: Understand PBL and begin to develop how to implement.

Purpose

What is PBL?
Does it benefit students?
What are the elements of PBL?

Connect

How can we use our stories to build a network?
How can we learn from the PBL journey of others?
How can telling your school story provide insight to others?

Learn

Why implement PBL? What are the various ways to implement?
How has your thinking changed about PBL?
What can you take back to your school ?



What do you know about Project-based Learning?

What is PBL and how does it benefit student achievement?

- ▶ Project-Based Learning begins with a driving question.
- ▶ Relevant to a local problem that needs a solution.
- ▶ Students drive the learning and inquiry.
- ▶ It is important to students and the community

Effective Collaborative Networks

- ▶ Story Telling Activity- participants will be grouped by school levels and follow an active listening protocol.
- ▶ Participants will record what is similarities, different, and identify the theme most described through the story telling of the group.
- ▶ Participants will present to the whole group and the group will identify the similarities, differences, and if the themes identified match the themes that emerged through the research study.

Thinking Partners: What insight did this activity provide you with and what do you expect to benefit from having this collaborative network?

Agenda for Sessions 2, 3, 4, and 5 Professional Development Project

Session 2: Design Thinking Model

8:00-8:30- Meet and Greet (light breakfast)

8:30-9:30- Session 1 recap

9:30-9:40- 1st break

9:40-11:30- What is the Design Thinking Model and what does it have to do with PBL?

11:30-12:30- Lunch

12:30-3:00- How can we decompose the state standards to identify possible PBL opportunities?

3:00-3:15- 2nd break

3:15-4:00- Using “Thinking Partners” to identify the theme(s) focused on today

Session 3: Balancing Act (Curriculum vs. PBL)

8:00-8:30- Thinking Partner activity

8:30-8:40-Recap session 2

8:40-9:30- Define the role of instructional leader?

9:30-9:40- 1st break

9:40-10:40- What barriers do leaders face and how can professional learning resolve it?

10:40-11:20- Collaborative Planning

11:20-12:00- Learning with teachers

12:00-12:30- What role does TIME play?

12:30-1:30-Lunch

1:30-3:00- PBL creation with focused standards (presentations)

3:00-3:10- 2nd break

3:10-4:00- What structures can we use to balance standards with PBL? Job-Embedded

Task: Redeliver to your Leadership Team (take meeting minutes to share)

Session 4: Building Capacity

8:00-10:00- Job-Embedded Share Out

10:00-10:10- 1st break

10:10-11:20- How can establishing protocols support in building capacity?

11:20-12:20- Lunch

12:20-2:30- How can the design thinking model be used to build PBL practices with your staff?

2:30-3:00- 2nd break and **Network discourse (What steps do you need to take to prepare your teachers for the next level of PBL?)**

3:00-4:00- Mapping out your PBL action plan for your school

Session 5: Developing, Monitoring, and Implementing your PBL Map

8:00-9:00- How can mentors support?

9:00-9:30- District Mentors Greet and Meet

9:30-10:30- Sharing Introduction to Actionable Plan to Mentors

10:30-10:40- 1st break

10:40-11:40- Develop PBL Map (continue)

11:40-12:40- Lunch

12:40-1:20- Success and Barriers (share with network)

1:20-2:20- PBL Map Feedback

2:20-2:30- 2nd break

2:30-4:00- Next steps and recap

Appendix B: Interview Protocol

One-on-one Interview:

- Greet the participant
- Introductions
- Review the purpose of the study
- Procedures: recording materials
- Provide participant with copy of questions
- Record responses via note taking
- Maintain the conversation
- Pause if required to deepen the information I have gathered
- Ask if they would like to add anything
- Conclusion
- Make a summary
- Check for accuracy
- Thank the participant
- Check to confirm the interview was recorded

Appendix C: Interview Questions

Research Questions for the study are as listed

- **RQ #1: What are principals' perceptions about PBL?**
- **RQ # 2: What are the principals' perceptions about implementing PBL?**
- **RQ #3: What are principals' perceptions about training or resources needed to improve administrative leadership of PBL?**

The interview questions below are labeled to align the research questions.

Interview Questions

1. What is your understanding of project-based learning? RQ #1
2. How did this understanding come about? Explain. RQ #1
3. How is project-based learning implemented in your school? RQ #2
4. How have you been prepared to lead the implementation of project-based learning in your school? RQ #3
5. How would you define instructional leader? Which of these attributes do you relate to? RQ #2
6. In your opinion, what are some resources needed to assist you to be more effective to implement project-based learning in your school? RQ #3
7. How would you describe the training that you have received to implement project-based learning? RQ #3
8. If any, what improvements would you make to future trainings? RQ #3
9. What do you believe are key elements to be prepared to implement project-based learning? RQ #2

10. By implementing project-based learning in your school, do you believe you are accomplishing the goal of the district? Explain RQ #2
11. How do you view your effectiveness in leading and guiding project-based learning? RQ #2
12. What is your view of the effectiveness of project-based learning in your school building under your leadership? Explain RQ #2