

VIRTUAL MENTORING AND COACHING THROUGH VIRTUAL  
PROFESSIONAL LEARNING COMMUNITIES AND REFLECTION: BUILDING  
INSTRUCTIONAL CAPACITY OF SCHOOL LEADERS TO IMPACT BILINGUAL  
AND ENGLISH LEARNERS

A Dissertation

by

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## **ABSTRACT**

The purpose of this study was to examine the effect of virtual mentoring and coaching (VMC) on developing school leaders' instructional capacity through the Component 3 of Project Accelerated Preparation of Leaders for Underserved Schools (A-PLUS): Building Instructional Capacity to Impact Diverse Learners, SEED Grant Award#U423A170053) and to determine how school leaders perceive the effectiveness of the Reflection Cycle model while being engaged in virtual professional learning communities (VPLC). In the first journal article, I focused on the process of VMC for school leaders and thematically analyzed the process of VMC across different studies and its implications in bilingual/ESL education. In the second journal article, I examined how reflection helped the school leaders in underserved schools build their instructional capacity to impact diverse bilingual and English learners (ELs). To this end, I collected the data through participants' reflections via recordings of online discussions within virtual professional learning communities (VPLC) and portfolios related to the professional development (PD). The constant comparative method of the data led to the emergence of cycles of learning to build the school leaders' instructional capacity to improve instruction for bilingual/ELs and economically challenged students (ECs). The participants' portfolios revealed an increased awareness toward instructional leadership and decision-making as informed by the practicing school leaders' reflections. The participants' reflections also indicated cycles of change evolving from reflection. Further analysis of the data revealed the emergence of major themes guiding school leaders' transformation of their leadership, anchored by their professional learning. Our findings

have implications for encouraging reflection among prospective school leaders to accelerate preparation of leaders for underserved schools with high concentration of bilingual/ELs and ECs. In the third journal article, I examined the effectiveness of the VPLC from the perspective of school leaders as it relates to the Professional Development (PD) component of the project A-PLUS to impact diverse learners. I found that the practicing school leaders were positive toward the VPLC in terms of: (a) increasing convenience and professional networking, (b) supporting community building and critical reflection among school leaders, and (c) providing resources for future use. The VPLC can be regarded as a gateway to increasing scalability of quality PD programs for school leaders serving underserved schools across the states. I conclude with implications for research and practice in bilingual/ESL education.

**Keywords:** instructional leadership; bilingual/ESL education; English learners (ELs); professional development (PD); virtual mentoring and coaching; Reflection Cycle; virtual professional learning communities (VPLC); school leaders; underserved schools; transformation.

## **DEDICATION**

**To my heart and soul,  
Who see their life in my happiness,  
My parents**

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### **Contributors**

This work was supervised by a dissertation committee consisting of Dr. Rafael Lara-Alecio, Department of Educational Psychology, Dr. Beverly J. Irby, Department of Educational Administration, Dr. Hector Rivera, Department of Educational Psychology, Dr. Fuhui Tong, Department of Educational Psychology, and Dr. Malt Joshi, Department of Teaching, Learning, and Culture.

The data analyzed was provided by Dr. Beverly J. Irby as principal investigator of the Project A-PLUS: Accelerated Preparation of Leaders for Underserved Schools: Building Instructional Capacity to Impact Diverse Learners (#U423A170053; A-PLUS; Irby, Lara-Alecio, & Tong, 2017) under the U.S. Department of Education SEED Program.

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## NOMENCLATURE

A-PLUS	Accelerated Preparation of Leaders for Underserved Schools
ERIC	Education Resources Information Center
ESL	English as a Second Language
EL	English Learner
EC	Economically Challenged
IES	Institute of Education Sciences
PLC	Professional Learning Community
PD	Professional Development
TEA	Texas Education Agency
VPD	Virtual Professional Development
VMC	Virtual Mentoring and Coaching
VPLC	Virtual Professional Learning Community
WWC	What Works Clearinghouse (WWC)

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## **CHAPTER I**

### **INTRODUCTION**

Developing school leaders has been critical given the competitive climate and shortage of effective leaders (Fink, 2011; Sun, 2018). Schools must develop future leaders and quickly build their leadership skills. Mentoring and coaching support, as suggested in earlier studies (e.g., Gimbel & Kefor, 2018; Lewis & Jones, 2019), can exert a positive impact on developing school leaders while ensuring their persistence in their related career.

Most schools recognize the advantages of using virtual delivery of instruction by providing flexibility in the workplace, using a variety of instructional approaches and resources, and above all, eliminating travel expenses (Dede et al. 2009). According to Jaquith et al. (2010), professional development (PD) offerings for school leaders often fail to: (a) align program content and principal needs; (b) link professional learning with campus needs; and (c) apply job-embedded learning opportunities.

As technology improves, the dissemination of information to school leaders and educators as well as the alignment of instructional priorities with professional responsibilities improves. As such, PD and technology improvement merge and work in harmony to produce an experience that leaders can negotiate with their learning needs and schedules. Irby et al. (2017) suggested that virtual PD (VPD) allows teacher leaders to work at their own pace while they prioritize their level of engagement. Since the learning experiences are ongoing, major stakeholders,

including teachers and school leaders can benefit from stronger levels of support over a more extended period than a short face-to-face (F2F) PD.

The contribution of leadership coaching in supporting principals to develop their leadership knowledge and skills in line with either their current school or district-based instructional reforms cannot be overstated. As shown from the literature (e.g., Sugar & Slagter van Tryon, 2014), leveraging F2F coaching as a type of PD, has been limited because of expenses such as traveling to training venues. Consequently, VMC has been introduced as a way for providing a wide range of PD opportunities and also has been found cost effective in providing real-time feedback, helping busy principals receive online mentoring support before and after work. As indicated in earlier research (Ermeling et al., 2015; Shrestha et al., 2009), via an electronic medium, mentoring and coaching has resulted in increased productivity and profitability and lower costs. Leadership development and career advancement for school leaders, as it will be argued in the next chapters, are based on mutual recognition and fulfillment of sustained mentoring and feedback.

It still remains under-researched for ways to reduce the cost of implementing effective mentoring and coaching support as a component of PD. Principal inquiry groups offer additional support for school leaders' growth. A promising strategy to foster professional learning for school leaders is mentoring and coaching support because school leaders and other staff members can be supported as they participate in professional learning communities (PLC). Thus,

coaching and mentoring support can build capacity in school leaders as well as develop their leadership strengths.

### **Definition of Terms**

The terms and definitions listed below are highly mentioned throughout my dissertation study.

#### **Instructional Leadership**

Traditional instructional leadership, according to Hallinger (2011), reflects school leader-specific behaviors that support their school's academic mission and climate, including coordinating, controlling, supervising, and developing curriculum and instruction. A more modern conceptualization of instructional leadership resulted in leading to learn, which recognizes the importance of collaboration and shared leadership in school success while also maintaining focus on direct components of student outcomes with teaching and curricula (Daniëls et al., 2019; Neumerski, 2013).

#### **Reflection for School Leaders**

Dewey (1933), who promoted that the function of reflective practice is to transform a conflict situation into a coherent, settled one, first introduced the concept of reflection. Dewey's concepts related to reflection provided a foundation for current theories and were inclusive of a knowledge base for thinking. For Dewey, critical reflection entails "(1) a state of doubt, hesitation, perplexity, mental difficulty in which thinking originates, and (2) an act of searching, hunting, inquiring to find materials that will resolve the doubt, to settle and dispose of the perplexity" (p. 12).

#### **Mentoring and Coaching**

Mentoring and coaching are two interrelated terms, yet, as Irby (2012) noted, there are some differences as well. Mentoring is considered an ongoing process between a mentor and a mentee, but coaching is more structured, and centered on a specific skill. As suggested by Irby et al. (2017), a mentor might engage in coaching, but a coach rarely engages in mentoring. Thus, I suggested that both are needed for school leaders' success and, thus, I included both the mentoring and coaching of leaders. These coaches could become mentors in the process.

### **Virtual Mentoring and Coaching**

Virtual mentoring is known as cyber-mentoring as well as e-mentoring (Owen, 2015). E-mentoring, as Chong et al. (2019) suggested, is using computer mediated communication (CMC) to improve mentoring experiences.

### **Professional Learning Communities**

Professional learning communities (PLC) refers to the groups of staff members engaged in collaborative learning with the purpose of developing their own leadership skills via involvement in communities of practice which have become increasingly popular (Irby, 2015). PLCs, are, generally, designed with the underlying assumption of collective learning and social interaction that fosters shared knowledge building via communities of practice (Dobie & Anderson, 2015).

### **Virtual Professional Learning Communities**

A promising strategy to foster collaborative learning opportunities is the use of virtual PLC (VPLC) which can be implemented in various forms, including online platforms for sharing discussion forums and synchronous courses.



## Conceptual Framework

### Virtual Mentoring and Coaching (VMC)

Using different approaches, the conceptual framework on the two major components of virtual professional development (VPD; Irby et al., 2017) on effective leadership practices for school leaders, including: (a) virtual mentoring and coaching (VMC; Irby et al., 2017) and (b) virtual professional learning communities (VPLC; Irby et al., 2017). Figure 1 depicts a visual of the conceptual framework.

### Figure 1

#### *Conceptual Framework*



I investigated how VPLC can contribute to school principals' leadership development using the idea of professional learning communities (Stoll et al., 2006), communities of practice (Wenger, 1998), and coaching partnership (Robertson, 2008). Based on social constructivism, Collins et al. (1989) developed cognitive apprenticeship theory in which they focus on "learning through guided experience" (p. 457) and their

core teaching method is modeling, coaching, and scaffolding. In this study, the method of modeling, scaffolding, and coaching, which is designed based on social constructivism, was used to define the functions of online teaching and coaching (Parkes et al., 2013). Under this framework, the principals' knowledge was constructed by interaction, collaboration, and reflection with other group members.

### **Virtual Professional Learning Communities (VPLC)**

Unlike traditional PD, which treats educators as passive learners and provides little room for them to relate the content to individual contexts, virtual professional learning communities (VPLC) are based on the premise of active inquiry and reflection (Bedford, 2019). VPLC offers opportunities for educators to share expertise and insights, explore and construct new knowledge, and engage in activities that fosters the transformation from concept to practice (Hairon et al., 2015).

In VPLC, educators focus on shared tasks and work cooperatively toward problem solving by negotiating within the community. A promising strategy to foster collaborative learning opportunities for major stakeholders, including school teachers and leaders across is the use of VPLC which can be implemented in various forms, including online platforms for sharing discussion forums and synchronous course management software. Thus, school leaders and other staff members need to be supported in various ways as they implement VPLC in their schools. This includes continual real-time mentoring and coaching as well as constant formal PD programs using VPLC. High-quality mentoring and coaching programs using VPLC are, therefore, needed more than ever.

## **The Reflection Cycle Model**

Reflection is a highly valued attribute of effective school leaders (Day & Harris, 2002; Osterman & Kottkamp, 1993). Without the predisposition to reflect on their practice, school leaders are less likely to improve their performance and transform schools. The Reflection Cycle model, proposed by Brown and Irby (2001), follows PD content to facilitate principals' reflections (see Appendix A).

### **Purpose of the Study**

In this study, I will review how virtual mentoring and coaching (VMC) is represented for school leaders. Next, I will address the effect of the Reflection Cycle on school leaders' leadership development. Moreover, I will examine how school leaders in underserved schools with high concentrations of high-need students across the state of Texas perceived the effectiveness of the VPLC while receiving mentoring and coaching support. Yet, until very recently, there has been little rigorous research demonstrating the importance of reflection for leadership development, much less the specific mentoring and support practices via VPLC that cause leadership teams to develop their leadership capacity. Against this backdrop, I will focus on varied levels of mentoring and coaching support for leadership development via VPLC in underserved schools with high concentrations of high-need students across the state of Texas.

### **Research Questions**

I will address the areas that VPLC using VMC can do to support school leaders' instructional skills and help them grow professionally. Virtual mentor coaches allow leadership teams to have access to useful resources and new developments in leadership

practices. To this end, the following research questions are formulated in the current research:

1. Based on the existing literature, how is virtual mentoring and coaching represented for school leaders?
2. In what ways did the practicing school leaders reflect upon their instructional leadership through online discussions within VPLC?
3. In what ways did the practicing school leaders reflect upon their instructional leadership through the development of portfolios?
4. How did the practicing school leaders perceive the effectiveness of the VPLC as a vehicle for improving their instructional leadership practices?
5. What did the practicing school leaders perceive as essential components that an effective VPLC for school leaders should entail?

### **Statement of the Problem**

What constitutes a reflective school leader serving low performing campuses with high concentration of bilingual/English learners (ELs) and economically challenged students (ECs) is still a matter of debate. Continuous leadership development requires collective reflection and action (Irby et al., 2019), and it is often very difficult for school leaders with their busy, demanding schedules to reflect upon their instructional leadership. Encouraging reflective practice on the part of school leaders, as Brown and Irby (2001) stated, fosters self-awareness of their limitations in addition to learning from past practices, events, and experiences. It appears that research about the effectiveness of reflective activities and models that encourage school leaders to reflect and improve

upon their instructional leadership for bilingual/ELs and ECs still remains rather underexplored.

Much still needs to be done in identifying those aspects of the virtual coaching that limit as well as foster a genuine collaboration between the participants. VPLC, as an underexplored area, brings promising opportunities to major stakeholders, including instructional leaders and classroom teachers. Despite the increasing use of VPLC, still relatively few studies utilize strong empirical methods for evaluation. Even fewer studies evaluate VPLC in terms of its efficacy in improving school leaders' instructional practices in building their team's leadership capacity. Virtual coaching through VPLC still needs more research to focus on possible ways to build school leaders' instructional and leadership skills.

### **Limitations**

The main limitation in utilizing data is that the length of time for the intervention of mentoring and coaching was four weeks. This limited amount of time may or may not be able to provide enough information regarding the process of participant learning as well as the sustainability of their instructional leadership practices. Results might be more revealing if participants received VMC for a longer period of time. A follow-up study with more diverse groups of participants is needed. The investigation of the factors contributing to effective virtual coaching and strategies for coaching partnership in VPLC requires more research. The findings may provide interesting insights into the qualitative features of group coaching through shared collaboration and serve as an inspiration for designing successful VPLC. When it comes to VPLC, it is required to

know more about the possible ways to reduce the cost of implementing effective VPLC and recruiting professional coaches. In particular, examining the effect of VMC using VPLC can be recommended from the coaches' experiences and perceptions both with qualitative and quantitative methods. Future research is, then, suggested to examine the impact of tiered coaching support via VPLC on sustaining school leaders' fidelity of implementation (FOI). Another issue that requires attention is the evaluation system and the issues involved in hiring and monitoring coaches themselves to train school leaders and staff members. Assessing coach impact on school principals, training of coaches, and coaching competencies require further exploration. Finally, variables such as the amount of professional development provided by the district as well as demographic information of the participants could prevent participants from completing all course expectations.

### **Delimitations**

The delimitations in this study which inevitably limit the scope of investigation are as follows. A semi-structured interview was conducted in this study to have the perceptions of the practicing school leaders about the effectiveness of the VPLC. The research was delimited to the exploration of "cognition" and "perception" rather than exploring the possible (mis)matches between participants and coaches' understanding of the VPLC. The participants' variables, including years of administrative experience, age, and gender, that might influence the way they perceive the effectiveness of the VPLC and coaching support, were not be subject to investigation in the current research.

## **Organization of the Study**

Chapter I of my study consists of introduction, conceptual framework, definition of terms, the purpose, research questions, along with limitations and delimitations of my study.

Chapter II of my study includes the first journal article, focusing on the existing literature on the topic of VMC as a component of PD for leadership development. It also includes an introduction describing the process I will take in conducting my systematic literature review which is then followed by the current literature available on the topic of mentoring and coaching with a focus on virtual mentoring and coaching (VMC) for leadership development as they relate to school principals.

Chapter III of my study includes the second journal manuscript, focusing on the role of the Reflection Cycle for leadership development.

Chapter IV of my study contains the third journal manuscript, focusing on the practicing school leaders' perceptions of the effectiveness of the VPLC for leadership development.

Chapter V includes final remarks and implications of this study for future practice and research.

## References

- Bedford, L. (2019). Using Social Media as a Platform for a Virtual Professional Learning Community. *Online Learning*, 23(3), 120-136.
- Brown, G., & Irby, B. J. (2001). *The principal portfolio* (2nd ed.). Corwin Press.
- Collins, A., Brown, J. S., & Newman, S. E. (1989). Cognitive apprenticeship: Teaching the crafts of reading, writing, and mathematics. In L. B. Resnick (Ed.), *Knowing, learning and instruction: Essays in honor of Robert Glaser* (pp. 453-494). Erlbaum.
- Daniëls, E., Hondeghem, A., & Dochy, F. (2019). A review on leadership and leadership development in educational settings. *Educational Research Review*, 27, 110-125.  
<https://doi.org/10.1016/j.edurev.2019.02.003>
- Day, C., & Harris, A. (2002). Teacher leadership, reflective practice, and school improvement. In *Second international handbook of educational leadership and administration* (pp. 957-977). Springer, Dordrecht.
- Dede, C., Ketelhut, D. J., Whitehouse, P. & McCloskey, E. (2009). A research agenda for online teacher professional development. *Journal of Teacher Education*, 60, 8-19.
- Dewey, J. (1933). *How we think: A restatement of the relation of reflective thinking to the educative process*. Boston: Heath & Co.
- Dobie, T. E., & Anderson, E. R. (2015). Interaction in teacher communities: Three forms teachers use to express contrasting ideas in video clubs. *Teaching and teacher education*, 47, 230-240.



- Ermeling, B. A., Tatsui, T. T., & Young, K. R. (2015). Virtual coaching for instructional leaders: A multi-method investigation of technology-enabled external assistance. *Teachers College Record, 117*(11), 110303.
- Fink, D. (2011). Pipelines, pools, and reservoirs: Building leadership capacity for sustained improvement. *Journal of Educational Administration, 49*, 670-684.
- Gimbel, P., & Kefor, K. (2018). Perceptions of a principal mentoring initiative. *NASSP Bulletin, 102*(1), 22-37.
- Gray, C., Fry, B., Bottoms, G. & O'Neil, K. (2007). *Good Principals Aren't Born –They're Mentored: Are We Investing Enough to Get the School Leaders We Need?* Southern Regional Education Board.
- Hairon, S., Goh, J. W. P., & Chua, C. S. K. (2015). Teacher leadership enactment in professional learning community contexts: Towards a better understanding of the phenomenon. *School Leadership & Management, 35*(2), 163-182.
- Hallinger, P. (2011). Leadership for learning: Lessons from 40 years of empirical research. *Journal of Educational Administration, 49*(2), 125-142.  
<https://doi.org/10.1108/09578231111116699>
- Irby, B. J. (2012). Editor's overview: Mentoring, tutoring, and coaching. *Mentoring & Tutoring: Partnership in Learning, 20*(3), 297-301.
- Irby, B. J. (2015). Editor's overview: Virtual mentoring and coaching (VMC). *Mentoring & Tutoring: Partnership in Learning, 23*(3), 183-186.

- Irby, B. J., Lara-Alecio, R., & Tong, F. (2017). Accelerated preparation of leaders for underserved schools: Building instructional capacity to impact diverse learners (U423A170053). Funded Grant, U.S. Department of Education SEED Program.
- Irby, B. J., Tong, F., & Lara-Alecio, R. (2019, April 5). *Two leadership and instructional coaches' perception of their roles in turnaround campus improvement* [Paper presentation]. American Educational Research Association (AERA) Annual Meeting, Toronto, Canada.
- Jaquith, A., Mindich, D., Wei, R. C., & Darling-Hammond, L. (2010). *Teacher professional learning in the United States: Case studies of state policies and strategies*. Oxford, OH: Learning Forward. Retrieved from <http://www.learningforward.org>.
- Knapp, M. S., Copland, M. A., & Talbert, J. E. (2003). *Leading for learning: Reflective tools for school and district leaders*. CTP Research Report.
- Lewis, T. E., & Jones, K. D. (2019). Increasing principal candidates' self-efficacy through virtual coaching. *Journal of Organizational & Educational Leadership*, 4(3), 4.
- McLester, S. (2012). Sustainable professional development. *District Administration*, 48(10), 36-41.
- Neumerski, C. M. (2013). 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.
- Osterman, K. F., & Kottkamp, R. B. (2004). *Reflective practice for educators: Professional development to improve student learning*. Corwin Press.

- Owen, H. D. (2015). Making the most of mobility: Virtual mentoring and education practitioner professional development. *Research in Learning Technology*, 23, 1-14.
- Parkes, M., Reading, C., & Stein, S. (2013). The competencies required for effective performance in a university e-learning environment. *Australasian Journal of Educational Technology*, 29(6), 771-791.
- Stoll, L., Bolam, R., McMahon, A., Wallace, M., & Thomas, S. (2006). Professional learning communities: A review of the literature. *Journal of Educational Change*, 7(4), 221-258.
- Sugar, W., & van Tryon, P. J. S. (2014). Development of a virtual technology coach to support technology integration for K-12 educators. *TechTrends*, 58(3), 54-62.
- Sun, A. (2018). Grow your own leaders: On-the-job mentoring for aspiring assistant principals. *Journal of Behavioral and Social Sciences*, 5, 107-117.
- Wenger, E. (1998). *Communities of practice: Learning, meaning, and identity*. Cambridge University Press.

## **CHAPTER II**

### **VIRTUAL MENTORING AND COACHING FOR SCHOOL LEADERS**

#### **Introduction**

Technological advancements increasingly have allowed for the rise of global, virtual relationships and working environments, including the field of mentoring and coaching. Studies regarding the potential of virtual mentoring and coaching (VMC) as an alternative tool in collaborative instructional improvement have been conducted; however, a systematic literature review to evaluate the gaps in uncovering the process of VMC to better support leadership teams and provide effective VMC practices has remained underexplored. I focused on the process of VMC for school leaders and thematically analyzed the process of VMC across different settings. 232 studies were imported for screening, 196 were screened, 29 full text articles were assessed for eligibility, and 22 studies were included and thematically analyzed. The studies indicated the characteristics of VMC, the identities of virtual mentor coaches, and benefits of VMC. I conclude with implications for further research.

#### **The Need for This Review**

Mentoring and coaching are two interrelated terms, yet, as Irby (2015) noted, there are some differences as well. According to Irby (2012), “mentors can coach, but coaches hardly ever mentor” (p. 297). Mentors build personal as well as professional relationships with mentees over an extended period, during which mentees’ needs and the nature of their relationships tend to change. Mayer et al. (2013) suggested that mentors provide principals with external support to develop

and sustain their instructional capacity for improvement of teaching and learning within school.

The benefits that Dziczkowski (2013) provides in regards to F2F mentoring programs are numerous, including: (a) improved self-esteem, (b) increased knowledge of different approaches, and (c) reduced anxiety. In comparison to F2F mentoring, the pervasiveness of technology, according to Dziczkowski (2013), has led to the rise of cyber or virtual mentoring. Earlier research studies (Fleury, 2014; Demus, 2020) indicated that virtual mentoring establishes flexibility in scheduling and greater rapport that may be geographically plausible in a traditional F2F format. Fleury (2014) offered a Virtual Education Academy (VEA), funded by the U.S. Department of Education, to support a group of students at risk to develop their self-esteem and guide them academically.

One area of research targeting school leaders' leadership capacity is mentoring and coaching (Hulsbos et al., 2016; Zepeda et al., 2014). Irby (2015) argued that the area of virtual mentoring and coaching (VMC) still remains rather underexplored. While traditional F2F mentoring and coaching relationships are positively received and are related to improved leadership growth, there are inherent disadvantages, such as limited choices in a mentor or coach and geographic and time constraints that can disproportionately affect individuals from underserved school districts (Johnston et al., 2016). In response, VMC has grown as a viable alternative (Irby, 2015); however, this area remains rather underexplored compared

to F2F mentoring and coaching, especially regarding a possible framework for successful virtual leadership coaching and outcomes.

VMC as an alternative tool of online mentoring is also called e-mentoring (Irby, 2015). While rigorous empirical research on VMC is limited, Van Dyke (2019) discussed the value of virtual team coaching and the competencies required to effectively coach teams virtually.

### **An Overview of Mentoring and Coaching**

In this section, an overview of mentoring and coaching for school leaders is primarily given. Next, I discuss VMC and then presents specific research related to VMC for school leaders, and lastly provides information on the future of VMC for school leadership. Finally, concluding remarks including gaps and future directions for research were given.

#### **Mentoring and Coaching for School Leaders**

According to the National Center for Education Statistics (2019), in 2016-2017, the percentage of school principals who stayed at their current schools was lower for principals with a high concentration of minority students (80%) and specifically was still lower for those with 10 or more years of experience as a principal (15%). Professional development (PD) is, thus far, considered critical for continuing leadership development and school improvement. Jaquith et al. (2010) reported that an effective PD is supported by: (a) coaching, modeling, observation, and feedback and (b) school-based collaborative work in PLC and leadership teams. Mentoring and coaching support, as suggested in earlier studies (Dziczkowski, 2013; Gimbel & Kefor, 2018; Lewis & Jones,

2019), can have positive impact on developing school leaders while ensuring their persistence in their related career. Researchers revealed that coaching provides personalized learning for leadership teams (Lochmiller, 2018) and builds collective efficacy (DeWitt, 2018).

As evidenced by researchers (e.g., Campbell et al., 2012; Doran et al., 2018), formal and informal conversations and staff meetings have resulted in positive outcomes including, increased level of interpersonal and organizational effectiveness and career advancement for new school leaders stepping into their leadership roles. Additionally, within-field peer mentoring (i.e. collaboration with colleagues) leads to establishing rapport between novice and professional leaders (Clayton et al., 2013) and increases administrative support (Lewis & Jones, 2019; Youngs et al., 2011). Recently, there is a trend to prepare future leaders as instructional leaders rather than administrators (Geer et al. 2014; Gray, 2018). Gimbel and Kefor (2018) indicated that external assistance and instructional coaching provided to low-performing schools helped school leaders stay focused on priorities and contribute to school improvement efforts. In Mayer et al. (2013) study, for example, leadership coaches provide school leaders with external support to develop and sustain their instructional capacity for improvement of teaching and learning within school. Gray (2018) also offered a research-based leadership-focused mentoring and coaching model, which combined the concepts of early field practices to support and sustain prospective school leaders.

James-Ward (2013) revealed the perceived benefits of novice principals' coaching experience, indicating their success on the job as identified by the student

achievement and their advancement to district leadership roles. Templeton et al. (2016) also studied the coaching attributes of the Texas Teacher Evaluation and Support System (T-TESS). In addition, Gray (2018) developed a leadership-focused coaching model for educational leadership to prepare and sustain leaders for jobs in schools. The model promotes more experiential learning for aspiring instructional leaders. Lindle et al. (2017) also focused on developing rural school leaders' capacity through cross-district coaching using a logic model. Furthermore, Houchens et al. (2017) examined how coaching techniques support school leaders develop their instructional capacity, affirming that a coaching protocol in deepening critical reflection is well received by principals.

Ermeling et al. (2015) have suggested coaching and mentoring to be worthwhile endeavors to improve and develop school leadership; nevertheless, coaching and mentoring relationships typically have been studied in F2F contexts. While there is nothing inherently wrong with F2F mentoring and coaching, they can be restrictive. For example, geographical and financial barriers may prevent some school leaders from receiving these supports (Johnston et al., 2016) or may reduce the effectiveness of mentoring and coaching (Tahir et al., 2015). To overcome these and related barriers, virtual mentoring and coaching (VMC) has become a viable alternative for school leaders (Irby, 2015).

### **Virtual Mentoring and Coaching (VMC) for School Leaders**

Owen (2015) suggested virtual mentoring should also be known as distance, remote, tele-mentoring, cyber-mentoring as well as e-mentoring. As Van Dyke (2019)



noted, most of the individual, group and team coaching practices are done virtually. State education agencies and school districts utilize virtual coaching to reduce costs associated with F2F training while providing more PD opportunities (Ermeling et al., 2015; Ohlson, 2012). While rigorous empirical research on VMC is limited, there is evidence that VMC has promising effects on instructional leaders' knowledge (Shrestha et al., 2009). Research specific to VMC for school leaders is scarce, and what is available is largely descriptive. The benefits of VMC, if done properly, for new education leaders, such as team leaders, instructional coaches, assistant principals, and principals, are substantial.

It appears that the experimental research on VMC is still inconclusive. Earlier researchers (e.g., Ermeling et al., 2015; Kutsyuruba & Godden, 2019) have indicated that VMC should be guided by a clearly defined framework focused on the internal and external levels of the school system to maximize leadership team's capacity for school building improvement. This chapter includes a systematic literature review of research on VMC for school leaders which identifies and evaluates findings of earlier studies. The research question guiding my systematic literature review is: Based on the existing literature, how is virtual mentoring and coaching represented for school leaders?

### **Method**

According to Higgins and Green (2011), I used a systematic method of review of literature to address a question following the steps, including: (a) formulate the problem, (b) select the studies to be included, (c) synthesize the

studies matching specified criteria, (d) collect and analyze data, (f) appraise the results, and (g) critique and improve the existing reviews of literature.

I attempted to be inclusive of any type of peer-reviewed research study, theoretical, prior reviews of online instruction, or empirical studies. The inclusion criteria consisted of both quantitative and qualitative studies from peer reviewed journal articles and reports. Studies published prior to 2009 were excluded.

Selection criteria for the publications included the following:

1. Published documents were in peer reviewed journals, academic reports, and dissertations.
2. The publications included the key variables, including: mentoring and coaching, school leaders, principals, leadership development, virtual coaching, and virtual mentoring.
3. Studies published in peer-reviewed journal articles, dissertations, and reports were eligible within the publication date of 01/01/2009 to 12/31/2020.
4. Studies conducted in the United States were included.

### **Search Strategies**

I began my search in ERIC (Education Resources Information Center) which is a database under EBSCO, an online library of educational research and information. Search strategies following the guidelines for a systematic literature review for electronic databases were developed. To determine gaps or to critique existing literature, I attempted to include any published works including, theoretical, prior reviews, or empirical studies. Three main databases to collect data

included: (a) ERIC-EBSCO, (b) Education Source, and (c) ProQuest Dissertations and Theses Global. I reviewed (a) F2F (F2F) mentoring and coaching, (b) virtual mentoring and coaching (VMC), and (c) virtual mentoring and coaching (VMC) for school leaders.

I used the following syntax regarding my initial search: AB ( ( (virtual or cyber\* or online) n2 (coach\* or mentor\*) or (ementor\*) ) ) AND AB leader\* AND AB ( school leader\* or principal\* ). The second search was conducted on three databases with additional key terms. The following syntax was used: DE "Principals" or AB principal\* OR TI principal\* AND DE "Mentors" or TI mentor\* or AB mentor\* AND DE "Leadership" OR DE "Transformational Leadership" OR DE "Leadership Effectiveness" OR AB leader\* or TI leader\*.

I conducted an extensive search and searched for the three concepts with the formerly mentioned databases with additional search terms. The following concepts were used:

Concept #1: virtual mentoring/coaching

DE = mentors OR “facilitators (individuals)” OR beginning teacher induction OR teacher supervision OR instructional leadership OR instructional effectiveness

Title/Abstract = (((virtual or cyber\* or online) n2 (coach\* or mentor\*) or (ementor\*))) OR “instructional coach\*” OR “instructional mentor\*”

Concept #2: school leaders/principals

DE = teacher leadership OR instructional leadership OR principals OR assistant principals OR beginning principals OR administrators OR school administration OR leadership effectiveness OR administrator effectiveness

Title/Abstract = leader\* OR principal\* OR “instructional leader\*” OR “school administrator\*“

Concept #3: elementary or secondary education

DE = elementary education OR secondary education

Title/Abstract = “elementary education” OR “secondary education” OR elementary school\*” OR “secondary school\*” OR “high school\*“

### **Data Analysis**

My initial search, after removing the duplicates, included a total of 196 articles, reports, and dissertations in ERIC-EBSCO. I read through the titles and abstracts to eliminate those academic pieces that are part of my exclusion criteria. I found 34 ERIC documents, 77 academic articles, and 85 dissertations.

I found 33 documents in Education Source and 85 were found in the ProQuest Dissertations and Theses Global. Then I exported documents into my COVIDENCE account to conduct a more thorough review of the full text. Upon scanning each document, I could determine if they fit my inclusion criteria. Through this process I narrowed down the search to virtual mentoring and coaching for school leaders. I found 30 academic articles and 2 documents in ERIC-EBSCO that met the inclusion criteria and that were considered relevant.

### **Abstract Screening**

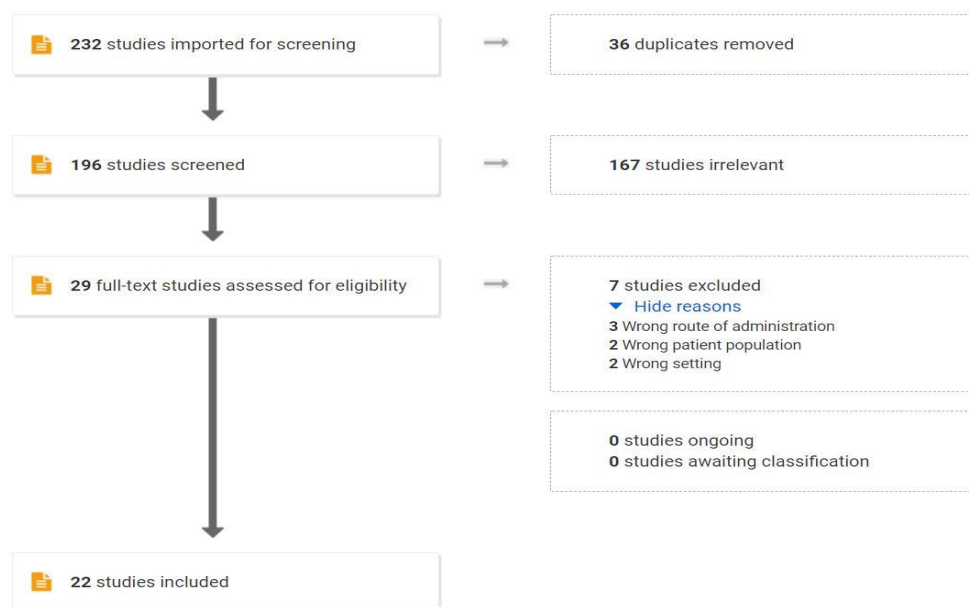
I screened the abstracts using the COVIDENCE systematic literature review management system. Once all screening was complete, I reviewed all that had been written about VMC for school leaders. What is not included in this review was literature related to personal education, nursing, and psychology. Rather, the focus was strictly related to mentoring and coaching for school leaders.

## PRISMA

I used a Preferred Reporting Items for Systematic Reviews and Meta-analyses (PRISMA; Moher et al., 2009). The PRISMA flowchart diagram is indicated in Figure 2. 232 studies were imported for screening, 196 were screened, 29 full text articles were assessed for eligibility, and 22 studies were included and thematically analyzed.

**Figure 2**

*PRISMA Flowchart Diagram*



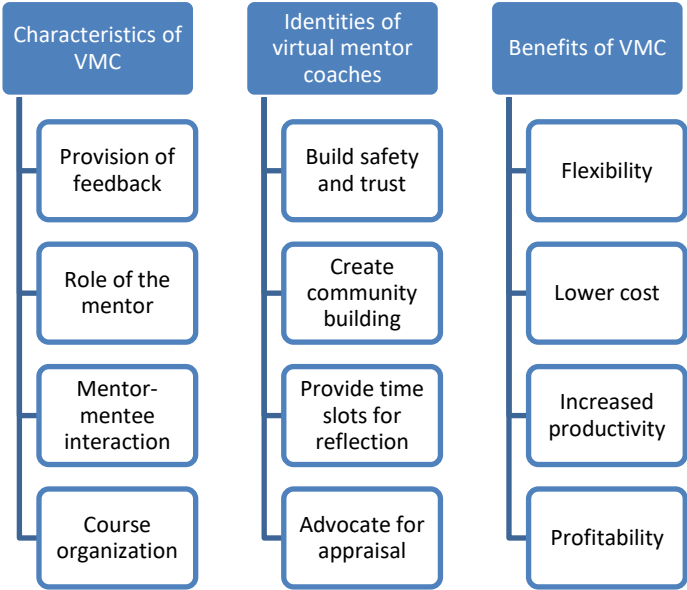
In the absence of a prior framework for VMC, I used Braun and Clarke’s (2006) approach to conduct thematic analysis. According to Chong et al. (2019), this approach has been widely used in the area of mentoring to explore the nature of e-mentoring across multiple settings. I read the included articles to find meaning and patterns in the data. Next, I constructed initial coding and grouped them into categories based on their similarities. Finally, I grouped categories into themes which represents a strand of meaning within the data set.

**Results**

I examined the ways in which VMC is represented for school leaders. As displayed in thematic analysis of studies included three major themes of: (a) characteristics of VMC, (b) identities of virtual mentor coaches, and (c) benefits of VMC. Each theme will be described below.

**Figure 3**

*Flowchart of Thematic Analysis*



### *Characteristics of VMC*

The literature related to school instructional leadership supports mentoring and coaching as developmental tools; however, findings have stemmed largely from F2F studies (e.g., Barnett et al., 2017; Duncan & Stock, 2010), with few researchers examining the role and outcomes regarding the virtual, online, or electronic aspect of mentoring and/or coaching in this area. Nevertheless, in most studies, teachers, not principals, have been the target demographic of this research line. Owen (2017) reported on qualitative results from a virtual professional learning and development program, indicating the possible ways of involvement in virtual mentoring. Other limitations exist even when virtual mentoring is the main focus.

At the turn of the century, most schools recognized the advantages of using virtual delivery of instruction by providing flexibility in the workplace, using a variety of instructional approaches and resources, and above all, eliminating travel expenses (Dede et al. 2009). According to Darling-Hammond et al. (2009), PD offerings for principals often fail to: (a) align program content and principal needs; (b) link professional learning with school or district needs; and (c) leverage job-embedded learning opportunities (e.g., applying new skills or working with a coach or team) to focus on a specific issue at school. Compared to F2F mentoring and coaching, VMC is more cost-effective and brings more productivity. With the removal of time and place constraints, Ermeling et al. (2015) indicated that VMC assisted leaders to practice and develop their skills in a comfortable environment on a daily basis and increase their opportunities to connect with one another.

Although the integration of coaching and mentoring for school leaders has increased over the past several years (James-Ward, 2013), how to evaluate a VMC program for developing school leaders' instructional capacity is still sparse (Gray, 2018), especially since VMC is a newer mentoring and coaching approach (Clement & Welch, 2018). The components of VMC have not been clearly defined, and many questions remain unaddressed regarding the specific mentoring and coaching strategies that result in instructional capacity building and various practices that support or constrain the VMC effectiveness.

Certain VMC features have been linked to participants' satisfaction, including (a) provision of feedback (Dominguez & Hager, 2013), (b) role of the mentor (Richter et al., 2013), (c) mentor-mentee interaction (Alemdag & Erdem, 2017; Gimbel & Kefor, 2018; Risser, 2013; Hayes, 2019), (d) course organization (Quintana & Zambrano, 2014; Schrum et al., 2012), and (e) user-friendliness of the platform interface (Redmond, 2015). Gimbel and Kefor (2018) also conducted a study to investigate the practicing school principals' understating of the efficacy of a new mentoring program. Barnett et al. (2017) also found that assistant principals held positive attitudes toward mentoring and PD support, expressing their need to obtain knowledge and skills from these communities of practice. Aas and Vavik (2015) and Capraro (2019) also suggested, indicators of a successful mentoring and coaching for school leadership still remain rather underexplored, including coach selection, the kind of training the participants received, and the modalities to meet virtually, F2F, or hybrid.



Chong et al. (2019) in a recent systematic scoping review of online mentoring and coaching programs between 2000 and 2017 identified six key elements of e-mentoring. With regard to evaluations of VMC, the findings revealed three main resources: the participants' self-reported perceptions and perspectives, change in professional knowledge, performance, and competency, and the interaction and content throughout the VMC process. Chong et al. pointed out that current research on VMC was mainly based on the assessment at a single time point, holistic evaluation of VMC is needed in order to advance our understanding of the mentor-mentee interaction process in an online environment.

### ***Identities of Virtual Mentor Coaches***

Although the majority of mentoring and coaching research stems from F2F settings, a growing literature indicates that competent VMC providers share many of the same characteristics and behaviors, such as good mentoring relationships, shared leadership, and trustworthiness (Irby, 2017; Irby & Pugliese, 2019). However, there is an added level to becoming a competent virtual mentor or coach due to the very same characteristics that set VMC apart. Namely, VMC providers must be able to exude trust, build effective relationships, communicate well, and utilize other mentoring and coaching skills and strategies without the aid of traditional F2F settings (e.g., immediate feedback, nonverbal signals), as well as master the technologies used in the online mentoring relationship (Kumar & Coe, 2017; Kumar & Johnson, 2017). In the literature surrounding competent virtual mentor coaches, many of the same qualities, characteristics, and practices, such as trustworthiness, supportiveness, flexibility,

interpersonal and communication skills, experience and knowledge, and the use of reflective practices and feedback have also been cited (Rekalde et al., 2015). There is a paucity of research examining VMC for instructional leadership compared to F2F findings, but results suggest virtual coaching as an effective practice. For instance, Ermeling et al. (2015) adapted a F2F program to a virtual coaching framework that supported instructional leadership development and efforts of principals and school leadership teams, revealing that virtual coaching was effective compared to previous F2F efforts, particularly for principals' instructional leadership growth.

Irby and Pugliese (2019) defined virtual mentor coaches as live, real-time observation and feedback to the participants. The virtual mentor-coach was not on-site, but observed the participants virtually via a live view camera and provided live, on-spot feedback. Since the learning experiences are ongoing, school leaders can benefit from stronger levels of support virtually during their busy schedules rather than a short F2F PD support and coaching. Previously, Lara-Alecio et al. (2015) conducted ELLA-V project (Investing in Innovation Fund, U.S. Department of Education) that had live virtual mentor coaches for teachers across the state of Texas. They have developed a more cost-effective platform to strengthen and sustain VMC involving mentor-coach at the time of mentoring-coaching sessions. They have indicated a positive impact of tiered coaching support on the participants' fidelity of implementation.

In addition, Lara-Alecio et al. in 2015 suggested that VMC must: (a) include purposeful observation and feedback with a follow-up session; (b) create a collaboration and community building; (c) provide time slots for reflection and practice; and (d)

advocate for appraisal and transformation during the mentoring and coaching sessions. However, it still remains under-researched the ways to reduce the cost of implementing effective mentoring and coaching models and find high-quality virtual mentor-coaches.

### ***Benefits of VMC***

The benefits of VMC, if done properly, for instructional leaders, such as team leaders, instructional coaches, assistant principals, and principals, are substantial. The benefits of VMC are multifaceted. Compared to F2F mentoring and coaching, VMC is more cost-effective and brings more productivity. With the removal of time and place constraints, Ermeling et al. (2015) indicated that VMC assisted leaders to practice and develop their skills in a comfortable environment on a daily basis and increase their opportunities to connect with one another.

VMC offers a level of flexibility in terms of mobility, which allows the participants opportunities to interact (Owen, 2015). With VMC, the mentor is not on-site, however, he or she provides an online meeting platform, wherein leaders log in, engage with the mentor(s), and discuss pre-specified topics related to campus leadership and instruction.

Unlike traditional F2F PD, Archer and Max (2018) indicated that virtual learning environments establish flexibility in scheduling and greater rapport and pairing of school leaders. Feeling the need to provide continual professional learning at minimal cost, VMC as a component of PD has become popular in which schools can deliver training virtually while increasing convenience. While rigorous empirical research on VMC for

school leaders is still limited, evidence points to increasing opportunities for principals' leadership development as well as their instructional improvement (Coggshall, 2015).

Furthermore, VMC proved to be beneficial for school teachers as indicated in earlier studies (Hramiak, 2010; Israel et al., 2013; Kidd & Murray, 2013; Marsh & Michell, 2014); however, more research is needed to shed light on its fidelity of implementation for school principals and leadership teams. Aas and Vavik (2015) also suggested that indicators of a successful school leadership coaching still remain rather underexplored, including coach selection, the kind of training the participants received, and the modalities to meet virtually or F2F. As such, studies which examine the impact virtual coaching as a practice have for developing leadership performance appears to be beneficial.

Jones and Larwin (2015) found that novice principals significantly improved their instructional leadership capacity following a one-year mentoring and coaching experience. However, the program was structured so that online mentoring, in this case, email and social media, supplemented F2F meetings rather than replaced them. A pattern often seen where virtual coaching for instructional leadership is concerned (e.g., Johnston et al., 2016). Although participants in Quintana and Zambrano (2014) study did acknowledge VMC advantages, such as reducing distractions and geographic barriers. Other limitations exist even when VMC is the main focus.

### **Conclusion**

The interest in the use of mentoring for leadership development is expanding dramatically, as VMC allows school leaders to have access to useful

resources and new developments in leadership practices. Much still needs to be done in identifying those aspects of VMC that limit as well as foster a genuine relationship between mentor and mentee. VMC, as an underexplored area, brings promising opportunities to major stakeholders, including instructional leaders and classroom teachers. Despite the increasing use of VMC, there are still relatively few studies that utilize strong empirical methods for evaluation. There are even fewer studies that evaluate VMC in terms of its efficacy in improving school leaders' instructional practices or student learning.

As a leadership development tool, we addressed prevailing issues in developing leadership capacity of school leaders within VMC. Virtual mentoring programs have a rather remarkable impact on building school capacity for instructional improvement, suggesting that despite some limitations, the new principals develop faster if they receive high quality mentoring. While all schools can benefit from effective leadership teams, the power of high-quality VMC has special significance for schools that serve a disproportionate number of minority students and/or have failed to make adequate yearly progress. VMC which provides external support helps school leaders stay focused on priorities and transform schools into strong professional communities where educators can successfully close the achievement gap and improve results.

It is, thus, needed to focus more on online platforms for improving leaders' instructional capacity via real-time mentoring and coaching followed by coaching feedback. It is required to know more about the possible ways to reduce the cost of

implementing effective VMC and recruiting professional coaches. Further research is required to shed light on creating online platforms through which both participants and coaches gained insightful experience from participating in real-time live mentoring and coaching. More research needs to investigate the impact of tiered coaching support on sustaining school leaders' fidelity of implementation (FOI). Another issue that requires attention is the evaluation system and the issues involved in hiring and monitoring coaches themselves to train school leaders and staff members.

Assessing coach impact on school principals, training of coaches, and coaching competencies require further exploration. The implications of the current systematic review of studies are also encouraging for design and implementation of virtual coaching for instructional leaders through online platforms to facilitate an integrative experience-based leadership approach. This study reinforces the importance of VMC as a key component of PD in the development of future leaders and calls for strategies and mechanisms for incorporating VMC in leadership education.

## References

- Aas, M., & Vavik, M. (2015). Group coaching: a new way of constructing leadership identity?. *School leadership & management*, 35(3), 251-265.
- Alemdag, E., & Erdem, M. (2017). Designing an e-mentoring program for novice teachers in Turkey and investigating online interactions and program outcomes. *Mentoring & Tutoring: Partnership in Learning*, 25(2), 123-150.
- Archer, J., & Max, J. (2018). *Implementing online professional learning communities: Insights from WestEd's blended professional development model* [Insight brief]. Washington, DC: Mathematica Policy Research.
- Barnett, B. G., Shoho, A. R., & Okilwa, N. S. (2017). Assistant principals' perceptions of meaningful mentoring and professional development opportunities. *International Journal of Mentoring and Coaching in Education*, 6(4), 285-301.
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative research in psychology*, 3(2), 77-101.
- Brown, G., & Irby, B. J. (2001). *The principal portfolio*. Thousand Oaks, CA: Corwin Press.
- Campbell, C. M., Smith, M., Dugan, J. P., & Komives, S. R. (2012). Mentors and college student leadership outcomes: The importance of position and process. *The Review of Higher Education*, 35(4), 595-625.
- Capraro, R. M. (2019). Mentoring and coaching school leaders and their teams. In Author (Eds.), *Coaching and mentoring: A handbook for leadership success* (pp. 1-16). Aggie STEM and the Education Leadership Research Center Publishing.

- Chong, J. Y., Ching, A. H., Renganathan, Y., Lim, W. Q., Toh, Y. P., Mason, S., & Krishna, L. K. (2020). Enhancing mentoring experiences through e-mentoring: a systematic scoping review of e-mentoring programs between 2000 and 2017. *Advances in Health Sciences Education, 25*(1), 195-226.
- Clayton, J. K., Sanzo, K. L., & Myran, S. (2013). Understanding mentoring in leadership development: Perspectives of district administrators and aspiring leaders. *Journal of Research on Leadership Education, 8*, 77-96.
- Coggsall, J. (2015). Title II, Part A: Don't scrap it, don't dilute it, fix it. Washington, DC: American Institutes for Research. Retrieved from <http://educationpolicy.air.org/publications/title-ii-part-dont-scrap-it-dont-dilute-it-fix-it>
- Darling-Hammond, L., Wei, R. C., Andree, A., Richardson, N. and Orphanos, S. (2009). *Professional learning in the learning profession*. National Staff Development Council.
- Demus, L. S. (2020). *Virtual coaching in elementary schools* [Doctoral dissertation, Lamar University]. ProQuest Dissertations and Theses Global.
- Dede, C., Ketelhut, D. J., Whitehouse, P. & McCloskey, E. (2009). A research agenda for online teacher professional development. *Journal of Teacher Education, 60*, 8-19.
- DeWitt, P. M. (2018). *Coach it further: Using the art of coaching to improve school leadership*. Corwin.
- Dominguez, N., & Hager, M. (2013). Mentoring frameworks: Synthesis and critique. *International Journal of Mentoring and Coaching in Education, 2*, 171-188.



- Doran, J. M., Galloway, M. P., Ponce, A. N., & Kaslow, N. J. (2018). Leadership mentoring: a survey of early career psychologist leaders. *Mentoring & Tutoring: Partnership in Learning, 26*(2), 165-182.
- Duncan, H. E., & Stock M. J. (2010). Mentoring and coaching rural school leaders: What do they need?. *Mentoring & Tutoring: Partnership in Learning, 18*(3), 293-311.
- Dziczkowski, J. (2013). Mentoring and leadership development. *The Educational Forum, 77*(3), 351-360.
- Ermeling, B. A., Tatsui, T. T., & Young, K. R. (2015). Virtual coaching for instructional leaders: A multi-method investigation of technology-enabled external assistance. *Teachers College Record, 117*(11), 110303.
- Fink, D. (2011). Pipelines, pools, and reservoirs: Building leadership capacity for sustained improvement. *Journal of Educational Administration, 49*, 670-684.
- Fleury, N. (2014). *Mentors' perceptions on the effectiveness of a school-based virtual mentoring program* [Doctoral dissertation, Nova Southeastern University]. ProQuest Dissertations and Theses Global.
- Geer, G. C., Anast-May, L., & Gurley, D. K. (2014). Interns perceptions of administrative internships: Do principals provide internship activities in areas they deem important?. *International Journal of Educational Leadership Preparation, 9*(1), 1-15.
- Gimbel, P., & Kefor, K. (2018). Perceptions of a Principal Mentoring Initiative. *NASSP Bulletin, 102*(1), 22-37.

- Goldrick, L. (2016). Support from the start: A 50-State review of policies on new educator induction and mentoring. Retrieved from <https://newteachercenter.org/wp-content/uploads/2016CompleteReportStatePolicies.pdf>
- Gray, J. A. (2018). Leadership coaching and mentoring: A research-based model for school partnerships. *International Journal of Education Policy and Leadership*, 13(12), 1-17.
- Gray, C., Fry, B., Bottoms, G. & O'Neil, K. (2007). *Good Principals Aren't Born –They're Mentored: Are We Investing Enough to Get the School Leaders We Need?* Southern Regional Education Board.
- Hayes, S. D. (2019). Using developmental relationships in mentoring to support novice principals as leaders of learning. *Mentoring & Tutoring: Partnership in Learning*, 27(2), 190–212. <https://doi.org/10.1080/13611267.2019.1611289>
- Higgins, J.P.T., Green, S. (Eds.), 2011. *Cochrane handbook for systematic reviews of interventions version 5.1.0. The Cochrane collaboration*. Available at: [www.cochrane-handbook.org](http://www.cochrane-handbook.org) (retrieved 24.1.2013).
- Houchens, G. W., Stewart, T. A., & Jennings, S. (2017). Enhancing instructional leadership through collaborative coaching: a multi-case study. *International Journal of Mentoring and Coaching in Education*, 6(1), 34-49.
- Hramiak, A. (2010). Online learning community development with teachers as a means of enhancing initial teacher training. *Technology, Pedagogy and Education*, 19(1), 47-62.
- Hulsbos, F. A., Evers, A. T., & Kessels, J. W. M. (2016). Learn to lead: Mapping workplace learning of school leaders. *Vocations and Learning*, 9(1), 21-42.  
<https://doi.org/10.1007/s12186-015-9140-5>

- Irby, B. J. (2012). Editor's overview: Mentoring, tutoring, and coaching. *Mentoring & Tutoring: Partnership in Learning*, 20(3), 297-301.
- Irby, B. J. (2015). Editor's overview: Virtual mentoring and coaching (VMC). *Mentoring & Tutoring: Partnership in Learning*, 23(3), 183-186.
- Irby, B. (2017). Leaders as mentors. *Mentoring & Tutoring: Partnership in Learning*, 25(4), 391-394.
- Irby, B. J., Sutton-Jones, K. L., Lara-Alecio, R., & Tong, F. (2017). From MOOCs to MOOPILs: Pushing the Boundaries of Virtual Professional Development and Learning for Teachers. *International Journal of Information Communication Technologies and Human Development (IJICTHD)*, 9(1), 34-47.
- Irby, B. J., & Pugliese, E. (2019). Editor's overview: Considerations of virtual peer leadership mentoring. *Mentoring & Tutoring: Partnership in Learning*, 27(5), 483-486.
- Israel, M., Carnahan, C. R., Snyder, K. K., & Williamson, P. (2013). Supporting new teachers of students with significant disabilities through virtual coaching: A proposed model. *Remedial and Special Education*, 34(4), 195-204.
- James-Ward, C. (2013). The coaching experience of four novice principals. *International Journal of Mentoring and Coaching in Education*, 2(1), 21-33.
- Jaquith, A., Mindich, D., Wei, R. C., & Darling-Hammond, L. (2010). *Teacher professional learning in the United States: Case studies of state policies and strategies*. Oxford, OH: Learning Forward. Retrieved from <http://www.learningforward.org>.
- Johnston, W. R., Kaufman, J. H., & Thompson, L. E. (2016). *Support for instructional leadership: Supervision, mentoring, and professional development for US school*

*leaders: Findings from the American School Leader Panel.* RAND Corporation,  
[https://www.rand.org/pubs/research\\_reports/RR1580-1.html](https://www.rand.org/pubs/research_reports/RR1580-1.html).

Jones, M. K., & Larwin, K. H. (2015). Does mentoring make a difference? An investigation of a mentoring program's impact on first year building principal's practices and self-efficacy. *Perspectives: Journal of Research and Opinion about Educational Service Agencies*, 21(2). 1-27.

[http://www.aesa.us/resources/Perspectives/perspectives\\_2015/mentoring.pdf](http://www.aesa.us/resources/Perspectives/perspectives_2015/mentoring.pdf)

Kidd, W., & Murray, J. (2013). Using emerging technologies to develop professional learning. *Professional Development in Education*, 39(2), 65-167.

Knight, J. (2018). *The impact cycle: What instructional coaches should do to foster powerful improvements in teaching?* SAGE.

Kumar, S., & Coe, C. (2017). Mentoring and student support in online doctoral programs. *American Journal of Distance Education*, 31(2), 128-142.

<https://doi.org/10.1080/08923647.2017.1300464>

Kumar, S., & Johnson, M. (2017). Mentoring doctoral students online: Mentor strategies and challenges. *Mentoring & Tutoring: Partnership in Learning*, 25(2), 202-222.

<https://doi.org/10.1080/13611267.2017.1326693>

Kutsyruba, B., & Godden, L. (2019). The role of mentoring and coaching as a means of supporting the well-being of educators and students. *International Journal of Mentoring and Coaching in Education*, 8(4), 229-234.

- Lara-Alecio, R., Irby, B. J., & Tong, F. (2017). English language and literacy acquisition validation (U411B120047). Funded Grant, Office of Innovation and Improvement, US Department of Education.
- Lewis, T. E., & Jones, K. D. (2019). Increasing principal candidates' self-efficacy through virtual coaching. *Journal of Organizational & Educational Leadership*, 4(3), 4.
- Lindle, J. C., Della Sala, M. R., Reese, K. L., Klar, H. W., Knoeppel, R. C., & Buskey, F. C. (2017). A logic model for coaching experienced rural leaders: lessons from year one of a pilot program. *Professional Development in Education*, 43(1), 121-139.
- Lomos, C., Hofman, R. H., & Bosker, R. J. (2011). Professional communities and student achievement—a meta-analysis. *School effectiveness and school improvement*, 22(2), 121-148.
- Lochmiller, C. (2018). Coaching principals for the complexity of school reform. *Journal of School Leadership*. 28(2), 144-172.
- Marsh, B. & Mitchell, N. (2014). The role of video in teacher professional development. *Teacher Development*, 18(3), 403-417.
- Mayer, A. P., Grenier, R. S., Warhol, L., & Donaldson, M. (2013). Making a change: The role of external coaches in school-based communities of practice. *Human Resource Development Quarterly*, 24(3), 337-363.
- McLester, S. (2012). Sustainable professional development. *District Administration*, 48(10), 36-41.
- Merriam, S. B. (2002). Introduction to qualitative research. *Qualitative research in practice: Examples for discussion and analysis*, 1(1), 1-17.

National Center for Education Statistics (2019). Retrieved from

[https://nces.ed.gov/programs/coe/indicator\\_slb.asp](https://nces.ed.gov/programs/coe/indicator_slb.asp)

Ohlson, M. (2012). Virtual mentoring: Developing global leaders for life. *Journal of Educational Multimedia and Hypermedia*, 21(2), 175-185.

Owen, H. D. (2015). Making the most of mobility: Virtual mentoring and education practitioner professional development. *Research in Learning Technology*, 23, 1-14.

Owen, H. (2017). The best PLD I've ever had: Reconceptualising professional learning and development. *Professional Development in Education*, 43(1), 57-71.

Quintana, M. G. B., & Zambrano, E. P. (2014). E-mentoring: The effects on pedagogical training of rural teachers with complex geographical access. *Computers in Human Behavior*, 30, 629-636.

Rekalde, I., Landeta, J., & Albizu, E. (2015). Determining factors in the effectiveness of executive coaching as a management development tool. *Management Decision*, 53(8), 1677-1697.

Redmond, P. (2015). Discipline specific online mentoring for secondary pre-service teachers. *Computers & Education*, 90, 95-104.

Richter, D., Kunter, M., Lüdtke, O., Klusmann, U., Anders, Y., & Baumert, J. (2013). How different mentoring approaches affect beginning teachers' development in the first years of practice. *Teaching and Teacher Education*, 36, 166-177.

Risser, H. S. (2013). Virtual induction: A novice teacher's use of Twitter to form an informal mentoring network. *Teaching and Teacher Education*, 35, 25-33.

- Robertson, J. (2008). *Coaching educational leadership: Building leadership capacity through partnership*. Sage.
- Schrump, L., English, M. C., & Galizio, L. M. (2012). Project DAVES: An exploratory study of social presence, e-mentoring, and vocational counseling support in community college courses. *The Internet and Higher Education*, 15(2), 96-101.
- Shrestha, C. H., May, S., Edirisingha, P., Burke, L., & Linsey, T. (2009). From F2F to e-mentoring: Does the "e" add any value for mentors?. *International Journal of Teaching and Learning in Higher Education*, 20(2), 116-124.
- Stoll, L., Bolam, R., McMahon, A., Wallace, M., & Thomas, S. (2006). Professional learning communities: A review of the literature. *Journal of Educational Change*, 7(4), 221-258.
- Sugar, W., & van Tryon, P. J. S. (2014). Development of a virtual technology coach to support technology integration for K-12 educators. *Tech Trends*, 58(3), 54-62.
- Sun, A. (2018). Grow your own leaders: On-the-job mentoring for aspiring assistant principals. *Journal of Behavioral and Social Sciences*, 5, 107-117.
- Tahir, L., Haruzuan Mohd Said, M. N., Daud, K., Vazhathodi, S. H., & Khan, A. (2016). The benefits of headship mentoring: An analysis of Malaysian novice headteachers perceptions. *Educational Management Administration & Leadership*, 44(3), 420-450.  
<https://doi.org/10.1177/1741143214549973>
- Templeton, N. R., Willis, K., & Hendricks, L. (2016). The coaching principal: Building teacher capacity through the Texas teacher evaluation and support system (T-Tess). *International Journal of Organizational Innovation*, 8(4), 140-145.

- Van Dyke, P. M. (2019). Virtual team coaching: Skills learned from research. In D. Clutterbuck, J. Gannon, S. Hayes, I. Iordanou, K. Lowe, and D. MackKie, D. (Eds.) (2019). *The practitioner's handbook of team coaching* (pp. 299-318). New York, NY: Routledge.
- Youngs, P., Jones, N., & Low, M. (2011). How beginning special and general education elementary teachers negotiate role expectations and access professional resources. *Teachers College Record*, 113(7), 1506-1540.
- 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.
- <https://doi.org/10.1080/19415257.2013.821667>



## **CHAPTER III**

### **Developing School Leaders' Instructional Leadership through Reflection**

#### **Introduction**

School leaders, according to Lavigne and Chamberlain (2017), are accountable for instruction happening in schools. It is, indeed, the school leader who recruits, retains, and supports teachers and leads and oversees change at the campus level. However, what constitutes a reflective school leader serving low performing campuses with high concentration of bilingual/English learners (ELs) and economically challenged students (ECs) is still a matter of debate. Continuous leadership development requires collective reflection and action (Etchells et al., 2019), and it is often very difficult for school leaders with their busy, demanding schedules to reflect upon their instructional leadership. Encouraging reflective practice on the part of school leaders, as Brown and Irby (2001) stated, fosters self-awareness of their limitations in addition to learning from past practices, events, and experiences. It appears that research about the effectiveness of reflective activities and models that encourage school leaders to reflect and improve upon their instructional leadership for bilingual/ELs and ECs still remains rather underexplored. Therefore, the purpose of our research was to examine how the practicing school leaders develop their instructional leadership through reflection.

#### **Review of Literature**

There is multiple research in the areas of reflection, professional development (PD), and portfolio development across the disciplines. However, there are fewer research studies inclusive of reflection for leadership development. In this section, I

discuss reflection as it relates to school leaders. I then share reflections related to PD captured in portfolios for school leaders.

### **Reflection for School Leaders**

Dewey (1933), who promoted that the function of reflective practice is to transform a conflict situation into a coherent, settled one, first introduced the concept of reflection. Dewey's concepts related to reflection provided a foundation for current theories and were inclusive of a knowledge base for thinking. For Dewey, critical reflection entails "(1) a state of doubt, hesitation, perplexity, mental difficulty in which thinking originates, and (2) an act of searching, hunting, inquiring to find materials that will resolve the doubt, to settle and dispose of the perplexity" (p. 12). Much of the work related to reflection into the 21st century, according to Brown et al. (2001), followed Dewey's concepts.

The continual process of reflection, as Shamir and Eilam (2005) noted, is a key to improving one's leadership. In order for leaders to meet their work-related challenges, they need to enrich and deepen their understanding of current theory and practice, attend relevant professional meetings, and seek dialogues with colleagues while being reflective (Bizzell, 2011; Gümüs, 2019; Fisher & Waller, 2013). Without the predisposition to reflect on their practice, school leaders are less likely to improve their performance and transform schools.

In the 1990s, Brown and Irby (1995) and Short (1997), examined how reflection contributed to the improvement and growth of school leaders as professionals. They noted that reflection improves leadership skills by: (a) solving problems, (b) monitoring

progress, (c) accelerating leading change, and (d) enhancing organizational success and student achievement. When leaders take time to reflect on meaningful topics, as suggested by Brown and Irby (2001), they often display a focus on viewing reflection as a key factor to school improvement.

Previously, researchers (i.e., Branson, 2007; Densten & Gray, 2001; Jefferson & Anderson, 2017; Patterson, 2015; Smith & Shaw, 2011) revealed that reflection is a highly valued attribute for effective leadership teams. Branson (2007), for example, described reflection used by Queensland primary school principals as an effective tool for providing principals with the necessary self-knowledge of their values to enhance their authentic leadership practice. Patterson (2015) and Smith and Shaw (2011) had empirically examined how reflection contributes to leadership capacity, but did not describe how this could be made mainstream.

Given the demands under which school leaders work, according to Zimmerman (2011), it is critical for administrators to discover “their own readiness” for change by becoming reflective (p. 107). Wu and Crocco (2019) examined reflection for leadership development, revealing that the measurement for reflection remains rather unaddressed in the literature. They reviewed the application of reflection, suggesting that reflective practices vary in terms of outcomes ranging from personal development to team efficiency. Reflection for school leaders is, thus, of value to help them understand, evaluate, and, if necessary, adapt their leadership strategies.

### **Reflection Related to Professional Development (PD) Captured in Portfolios**

At the turn of the century, principal portfolios were common tools for assessing what practicing principals had learned and how their learning could improve their future actions (Brown & Irby, 2001). Foundationally, Brown et al. (1998) found the portfolio to be an effective tool in principal appraisal. They suggested that principal portfolios should meet the following assumptions:

1. The principals' practice greatly influences school outcomes.
2. Leadership expectations are understood by everyone.
3. Active reflection is necessary to set goals and learn from past experiences.
4. Professional development (PD), mentoring, and coaching are key to the appraisal process. (p. 19)

Portfolio development, according to Brown and Irby (2001), involves: (a) the selection of an artifact; (b) sharing leadership experiences by the artifact, and (c) an action plan. Principal portfolio, which represents participants' growth as evidenced by a collection of artifacts, according to Brown and Irby (2001), not only encourages reflection, but also improves professional learning and growth. Thus, reflection became an integral part of the portfolio development process, motivating school leaders to seek out new understanding and solutions regarding issues that arose.

In studies employing reflection through principal portfolio, researchers (e.g., Chikoko, Naicker, & Mthiyane, 2011; Knoeppel & Logan, 2011) found that reflection inherent in portfolios has resulted in improved leadership practice in such areas as problem-solving, resource management, and, most important, student progress. Slepcevic-Zach and Stock (2018) confirmed a significant and positive impact of

reflection in the portfolio development process assisting principals in improving their self-regulation, engagement, and awareness. Portfolio development related to PD, according to Nesbit (2012), requires more systematic higher-order thinking about events and experiences leading to deep-level analysis.

Portfolio development related to PD, according to Brown and Irby (2001), is focused primarily on documenting professional learning and identifying growth areas. However, it seems that the impact of reflections related to PD included in portfolios on sustaining school leaders' instructional capacity remains rather unexamined. Thus, the practicing school leaders need to reflect on the nature of their professional leading and learning through portfolios. Zur and Eisikovits (2016), so far, indicated that successful school leaders constantly use the reflection process through portfolios to improve their leadership and enhance collaboration. Specifically, they found that reflection through the process of development of portfolios promoted: (a) collaboration and communication, (b) trust-building in a non-threatening environment, (c) leadership growth, and (d) problem-solving skills among superintendents, principals, and teachers.

### **Conceptual Framework**

Previously, researchers (e.g., Hallinger, 2003; Nir & Hameiri, 2014; Printy, 2010) suggested that school leaders play a central role in the implementation of instructional practices such as supervision of instruction, communication with teachers, resource allocation, and budgeting. Using different approaches, the research team built the conceptual framework on the two major components of PD on effective leadership development for school leaders, including: (a) the Reflection Cycle (Brown & Irby,

1997, 2001) and (b) virtual professional leadership learning communities (VPLC) for reflective school leaders.

### **The Reflection Cycle**

Inspired by the idea of personal, professional reflection that is placed within a principal portfolio (Brown & Iby, 1997, 2001), I aimed to determine how well the practicing school leaders' reflection translates to practice and the perceived impact of the learning on their leadership practice from school leaders' perspectives. To gather these perspectives, the Reflection Cycle was embedded at the end of each module of the online PD content to facilitate school leaders' reflections. Participants moved through five stages.

The Reflection Cycle served as a guide for continuous and reflective learning and transformative thinking about practice. Brown and Irby (2001) offered five steps for developing reflective activities, including: (a) select the artifact; (b) describe the circumstances related to the artifact; (c) analyze the “why” of the selection of the artifact and “how” of its relationship to the activities; (d) appraise the artifact; and (e) transform the practice by translating theory to practice and developing plans for future practice (see Appendix A).

Reflective practice (Schön, 1987), participatory action research (Chevalier & Buckles, 2019), and experiential learning (Dewey, 1933) explained how individuals learn through experience. This framework helped us understand different cycles of reflection in the development of individual reflections in portfolios. This helped us better

understand the Reflection Cycle as a structure in this action research through online forums and discussion.

### **The Virtual Professional Leadership Learning Communities (VPLC)**

A PLC, according to DuFour et al. (2010), is an ongoing process which refers to groups of staff members doing collaborative learning “in recurring cycles of collective inquiry and action research” (p. 11). Quality leadership requires involvement in professional learning communities (PLC) as a tool for shaping leaders’ reflective practices. Irby et al. (2017) developed *virtual* professional leadership learning communities (VPLC) as a reflective tool to help busy principals who have limited time to reflect on their leadership practice and share their learning through communities of practice.

The VPLC process guided the PD sessions. In our VPLC, the practicing school leaders had access to communication and collaboration tools for discussion, planning, and reflection while receiving professional learning modules and other supporting resources. The activities were designed to give the participants an opportunity to apply the PD-related support, plan how to share it with their peers, and then apply it in their own school settings. Having an online community allowed practicing school leaders to share leadership, research, and resources, which provided them with an avenue for collaboration and reflection with other school leaders as they went through the Massive Open Online Professional Individualized Learning modules (MOOPILs; Irby et al., 2017). The MOOPIL is a platform for principals’ self-reflection through which principals gained insightful experience from participating in VPLC sessions. The

participating leaders worked together to reflect, find problems, and determine workable solutions with the focus on building instructional leadership capacity for diverse ELs. The participants encountered leading and reflection questions as well as discussion opportunities.

Each MOOPIL module was organized using Leading Question, Engagement, Applied Research, Discussion, Example(s), and Reflection (L.E.A.D.E.R.; Irby et al., 2017) model. The VPLC model was used by the research team to facilitate the MOOPIL and VPLC. According to Irby et al. (2020), what is currently missing in the literature is research on how reflection can effectively: (a) build instructional capacity of school leaders particularly those serving low performing schools; (b) increase school leaders' self-awareness while involving them in the cycles of reflection; and (c) create an optimal learning portfolio where school leaders can scaffold their effectiveness and take themselves to the next level in their instructional leadership. Each VPLC follows the L.E.A.D.E.R. steps.

### **Purpose of the Study and Research Questions**

The purpose of this study was to examine how the practicing school leaders serving underserved schools with high concentration of bilingual/ELs and ECs develop their instructional leadership through reflection. I explored the participants' reflections, which were captured in recordings of online discussions within VPLC, accompanied by the development of portfolios related to PD. I sought to answer the following research questions:



1. In what ways did the practicing school leaders reflect upon their instructional leadership through online discussions within VPLC?

2. In what ways did the practicing school leaders reflect upon their instructional leadership through the development of portfolios?

## **Method**

### **Research Approach and Context**

I employed a qualitative study with collective case study (Yin, 2009; Creswell, 2015), focusing on understanding meaning from the participants' reflections. Merriam (2002) noted that qualitative research seeks to understand meaning through an inductive analysis process and provides a rich description of the phenomenon (p. 15). In the collective case study, the research team analyzed individual case studies and looked across those individual cases for similarities and differences (Yin, 2009). A collective case study was appropriate in this study because I looked at the responses of each participant related to the research questions and then looked across all responses for similarities and differences.

This study was derived from the Project A-PLUS: Accelerated Preparation of Leaders for Underserved Schools: Building Instructional Capacity to Impact Diverse Learners (#U423A170053; Irby et al. 2017) under the U.S. Department of Education SEED Program, which focused on the school leaders working in underserved schools across the state of Texas. The project incorporated multiple innovative approaches to developing school leaders in building instructional capacity at the campus level.

### **Participants**

The research team worked with the leadership teams, including principals, assistant principals, and instructional skill specialists, from 18 school districts across the state of Texas. Following the National Center for Education Statistics (NCES, 2017-2018), our districts fell into four basic types: City (n = 6, 32%), Suburban (n = 7, 38%), Town (n = 2, 12%), and Rural (n = 3, 18%), including charter schools. With the four basic types outlined by the NCES, the researchers assigned charter school districts to one of the major categories. The participants of this study included 44 school leaders at the elementary school level in the state of Texas. The participants were recruited in a fair and unbiased manner and were from campuses with traditionally underrepresented students, including economically disadvantaged and/or EL students. The ELs were considered high-needs students by the state of Texas because they were all L1 Spanish-speaking ELs with limited English proficiency.

Out of 44 school leaders, 40 participants took part in the current research. Ranging in age from 25 to 55, approximately forty-eight percent (n = 19) of the participants were White, followed by Hispanic (22.5%, n = 9), Black/African-American (20%, n = 8), Asian (7.5%, n = 3) and others (3%, n = 1). The participants had different years of experience as an administrator. Concerning their years of experience, 57.5% of participants (n = 23) worked as an administrator below 5 years and 42.5% of them (n = 17) reported that their administrator experience was above 5 years.

### **Instruments**

To document the school leaders' reflections, I used: (a) online discussions within VPLC and (b) portfolios along with artifacts.

### *Online Discussions within VPLC*

I provided ongoing professional learning and incorporated the Reflection Cycle through online discussions. Our VPLC included: (a) making reflection a priority, (b) utilizing portfolios related to PD within the program, and (c) building reflective and leadership skills throughout the program. Our research team encouraged the practicing school leaders to share their reflections on learning with colleagues as a way to promote ongoing learning within VPLC. To build instructional capacity, the research team worked with the school leaders to assist them to determine what avenues they would take to help their instructional leadership teams improve instruction for ELs and ECs while reflecting on their own practice and ultimately helping classroom teachers achieve better results.

The participants were scheduled VPLC sessions on a weekly basis. Our research team worked to implement reflective dialogues for participating principals. Our VPLC included discussions related to research, application exercises, practical implementation strategies, and collaboration with peers as they focused on building capacity in instructional leadership to influence teaching of and learning for ELs. As participants engaged, they were encouraged to share their learning, pose questions, offer recommendations or insights, and challenge themselves and each other to continue to learn and reflect. Each VPLC took between 60-90 minutes to complete, and it was a requirement to review the MOOPIL and respond to the reflection section of each prior to the VPLC engagement. With a focus on building instructional capacity, reflection modules and discussions helped school leaders create a support network, identifying the

importance of VPLC, and how to apply new leadership and instructional strategies. Included in are the leadership-related topics, including : (a) vision and mission, (b) building community engagement, (c) bullying prevention, (d) critical dialogue, (e) cultivating leadership, (f) culturally responsive leadership, (g) developing instructional skills specialist, (h) improving instruction, (i) leading and learning in PLC, (j) monitoring curriculum and instruction, (k) sharing leadership, (l) strategic planning, (m) using data to make instructional decisions, and (n) using the Root Cause Analysis.

### *portfolios*

The participants were told to compile, over a school academic year, portfolios with evidence of reflection upon instructional leadership. The portfolios were housed in Canvas, an online learning management system. The guidelines for the items in the portfolio included information about the Reflection Cycle that the participants used at the close of each of the courses. The goal of portfolios is to enhance the learning experience by considering the content in this course and sharing insights and learnings with group members to affect educator success and student learning.

The portfolios allowed the researchers to gather valuable reflections about how well the PD translated to practice and the perceived impact of learning on practice from the practicing school leaders' perspectives. The mechanism of the participants' reflections in the portfolios focused on application, including online review, feedback, and evaluation; while the MOOPILs were focused on learning and considerations of transformation of practice. When completed, the participants' portfolios were evaluated to indicate the participants' overall learning and growth. Time for discussion through the

Reflection Cycle was built into the participants' portfolios. The portfolios required artifacts with reflective journals.

The artifacts included such items as the participants' learning goal setting and photos of meeting agenda, notes, lesson plans, anecdotes, observations, program posters, new report cards, website sharing, Campus Improvement Plans (CIPs), and other relevant entries. Artifacts and reflections were related to various areas or criteria of leadership or various aspects of their roles related to their instructional leadership capacity.

### **Data Collection Procedure**

I used online discussions within VPLC to collect data during the year-round process of implementing this study. I also used the portfolios related to PD to collect data. Each participant was provided with guidelines and instructions on how to develop a portfolio and how to write reflections on experiences in instructional leadership. Five-step Reflection Cycle was used to offer a structure. I allowed for individuality regarding participants' reflective journal entries through the process of portfolio development, while controlling for format. The 5 steps were intended to serve as a general outline throughout the modules of the course. Each participant was required to include artifacts and reflections addressing instructional leadership modules. All portfolios related to PD were collected for review.

Prior to beginning their portfolios, the participants were encouraged to set goals related to their campus expectations. As they developed their portfolios, they engaged in reflective discussions through the collection of artifacts that were relevant to their goals,

and they wrote accompanying reflections. Additionally, they engaged in reflective dialogue about their experiences pertaining to PD-related support. Portfolios, thus, required the practicing leadership teams to provide evidence of the completion of objectives along with artifacts. Participants were encouraged to allocate time for reflection. With the help of a team from the High-Performance Research Computing (HPRC) department, the research team developed the portfolios.

Once all stages were complete, the textboxes from each step were combined into a single journal entry that can be saved locally or exported to be emailed. Although the researchers did not specify length, the participants' reflections were consistent, with an average length of one page. The task of the facilitator was to support the participants in the portfolio development process including their reflections and to ensure that the participants proceeded through the Reflection Cycle process and answered the questions about their experiences on their own campus.

### **Data Analysis and Study Credibility**

The participants' reflections along with their portfolio artifacts and their reflective discussions within VPLC were collected and analyzed. I employed individual descriptive coding (Saldaña, 2015) to understand how the practicing school leaders selected the artifacts using the Reflection Cycle to document their learning and determine their future instructional leadership goals. I used Miles et al. (2014) cycles of coding and patterns to derive meaning from reflective narratives included in online discussions within VPLC and portfolios, using informed intuition to examine patterns

and themes. Two independent researchers coded the data and then discussed the emerging themes along with categories.

The coding process began with analytic memos and interpretations regarding the initial codes and notes. Our research team then engaged in individual coding and reviewed our codebooks. The constant comparative method (Patton, 2002) was conducted by identifying the emerging themes. I combined the inductive themes with a simultaneous comparison of all coding schemes and began to group similar codes into categories (Saldaña, 2015).

As our team discussed grouping categories, the researchers began to look to the conceptual framework of the Reflection Cycle. This framework helped the researchers code many of the categories emerging from the participants' reflections. Once data were grouped into major categories, the researchers reviewed the categorized data, discussing frequently the emerging themes and categories. To assure quality and trustworthiness in this study, the researchers used triangulation, member checking, and peer review of the participants' reflections included in their portfolios and online discussions within VPLC. Triangulation occurred by looking for convergence of emerging themes. Our research team also used member checking (Lincoln & Guba, 1985) while coding and categorizing information in all sources gathered. Data were peer reviewed by two experts in the field of Educational Administration to ensure that the themes and categories described the data.

## **Results**

The Reflection Cycle offered the practicing school leaders a structure that, although prescriptive, provided a space for individuality. School leaders used the Reflection Cycle: (a) in groups through VPLC while being engaged in dialogue and discussion and (b) individually in writing their reflections that accompany the artifacts related to PD included in their portfolios. Based on their experiences and their reflection surrounding the PD modules, the practicing principals and leadership teams applied the cycles of reflection to instructional leadership while using insights gained from reflection for problem-solving, translating theory to practice, and developing plans.

I investigated two research questions. The first research question addressed the participants' reflection upon their instructional leadership through online discussions within VPLC. As to the second question, I focused on the school leaders' reflection upon their instructional leadership using the Reflection Cycle through the development of portfolios as presented below.

**Research Question 1. How did the practicing school leaders reflect upon their instructional leadership through online discussions within VPLC?**

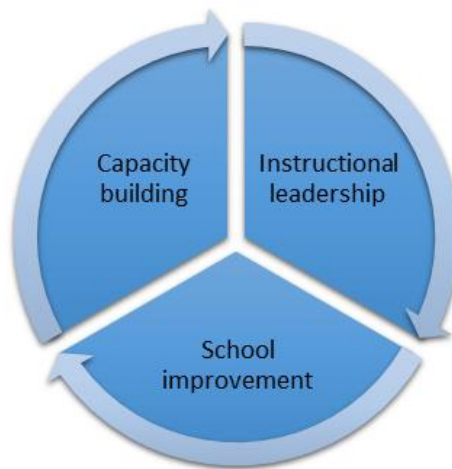
The participants' reflections through online discussions within VPLC were explored to answer the first research question. The Reflection Cycle offered the participants a structure for documenting their learning through reflection upon their practice. The participants followed the Reflection Cycle, which demonstrated depth, breadth, and quality of thinking regarding their professional learning. The participants found the reflections personalized and relevant to their jobs, which resulted in the three cycles of learning related to PD emerging from their responses as captured in portfolios



(Figure 4). I called this the cycles of learning because the participants primarily learned from their experiences and progress in enhancing their instructional capacities through the three elements of: (a) Capacity Building, (b) Instructional Leadership, and (c) School Improvement. This cycle began from the first element moving to another.

**Figure 4**

*Cycles of Learning Within VPLC Emerging from Participants' Reflections*



During the *Capacity Building* stage, the practicing school leaders partnered with each other to identify and sustain their instructional capacity for improvement of teaching and learning within school. During the *Instructional Leadership* stage, the participants were prepared to hit the goal by enhancing the instructional capacities of teachers at their schools and described the strategies to improve instruction for ELs. Online discussions within VPLC opened interaction among school leaders as they learned from their colleagues and shared their best practices and collaboration for discussion, planning, and group assignments. Finally, during the *School Improvement* stage, the participants were able to refine their professional goals through the process of

community engagement. Therefore, the participants learned that their future practice would be impacted by trusting others to lead with them.

The practicing school leaders followed the Reflection Cycle, which demonstrated depth, breadth, and quality of thinking regarding the practicing school leaders' professional learning. Reflection occurred within VPLC. The goal for the participants as indicated by their reflections was related to their own abilities in instructional leadership for improving student achievement and school effectiveness. Table 1 renders the major themes emerging from the participants' reflections.

**Table 1**

*Reflections through Online Discussions within VPLC: Cycles of Learning*

Themes	Sub-themes	Descriptors
Capacity building	Strategic planning and management	critical dialogues change management learning in PLC
	Sharing leadership	cultivating leadership in others collective capacity
Instructional leadership	Coaching and supporting teachers	teacher development engagement with instructional practices
	Monitoring curriculum and instruction	supporting sources student learning improving instruction

School improvement	Developing and leading the vision of school	campus climate bullying prevention data driven decision
	Community engagement	

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Following are the practicing school leaders' online discussions within VPLC. Pseudonyms were used to ensure the participants' anonymity. The excerpts below were taken from the participants' reflective discussions and reported as low-inference descriptors.

***Cycle of Learning 1: Capacity Building***

**Strategic Planning and Management.** This cycle helped the participating school leaders to share their skills in leadership while building capacity in others to lead. As they went through the PD, they began to evaluate and seek the needs of the community as a whole. Most of the participants highlighted the significance of including all stakeholders in the strategic planning. One of the participants, for example, stated:

*We need to include all stakeholders to build a program that will meet the needs of all students and have a safe place for families to come and get assistance and truly trust us. [MB]*

As documented in their reflections, the practicing principals began to establish rapport among their campus leadership team and a sense of trust and relationship building as a result of the PD they received. The practicing school leaders' knowledge of the strategic planning process has helped them solidify their knowledge and affirm the

importance of the campus needs assessment process. One of the participants, for instance, noted:

*I need to be strategic in how I phrase questions or what type of feedback I request, but I think it would be helpful to understand the current climate in our community. [SH]*

As the school academic year progressed, the participants continued to work with other leaders on campus to make sure they are doing what they need to do for ELs. The participants realized that they need a leadership team that they can trust to help them move forward their campus vision and initiative. A principal reflected:

*The cycle was a reminder of how important it is to be an instructional leader most of the time rather than the disciplinarian of the school. [AB]*

**Sharing Leadership.** The participants have learned from their group, while inspiring, encouraging, and motivating others to reach their potential. One of the principals, for example, reflected:

*In the past, I was convinced that if I wanted something done right, I needed to do it myself. However, I now know that is not going to produce the results that I desire. I have to open myself up to sharing knowledge with my team and trusting them as professionals to get the job done. [KS]*

The principals could team up, drawing on expertise and sharing leadership. Their ultimate goal, as most of the participants reflected, was to build more relations and capacity within future leaders. A principal added:

*I have always believed in the value of shared leadership in teachers and building their capacity. I want them to take command of their action plans and show ownership as they themselves become their own change agent. [RM]*

### ***Cycle of Learning 2: Instructional Leadership***

**Coaching and Supporting Teachers.** The participants maintained that they were not only responsible for ensuring that each and every student was receiving a high-quality education but also coaching teachers to improve their instructional capacity in working with ELs and ECs and providing them with PD support. School leaders who were at the frontline with instruction and interacting with students need to be coached and coaching other teacher leaders.

The practicing school leaders in this action research continue the goal to increase rigor in the classroom by using peer observation and feedback, utilizing their instructional coaches and district specialists. Aside from PLC being conducted by team leaders, one of the principals reflected:

*Next school year, we are going to be coaching and mentoring the new teachers that will continue with the program for the first graders. We will have the opportunity to monitor students' progress in language development in both languages. And we will continue to receive coaching from our consultants. [ET]*

Another principal added:

*The insights I have gained that transformed my practice are the importance of teachers' support in order to have high impact teaching and learning, and the*

*importance of a shared clear vision so principals can have the help of supporting staff. [AB]*

Likewise, the participants' online discussions within VPLC centered on change as they shared the power of reflection with their campus teachers and pointed to the need for reflection and continuous professional growth for teacher leaders. Throughout the school year, the practicing school leaders used peer coaching with their new teachers and their mentors. For example, an assistant principal commented:

*As a reflection on what was learned in this module, I think it is important to have our new teachers this year, be able to share their knowledge to new teachers next year in order to give them opportunities to lead and peer coach themselves. [VL]*

One of the principals declared that she did not have a formal coaching framework in place on campus. The artifact she selected was simply a framework for each campus meeting that helped her identify purpose, clarity, and accountability. In addition, she has encouraged members of each PLC to visit other classrooms to learn both effective and ineffective methods. The principal reflected further and added:

*In grades 2-5, there is only one teacher per grade/content, so I have chosen to use the PLC model to establish opportunities for coaching. I would refer to it more as a collaborative process in which the "coach" shifts based on need and expertise. Within each PLC, I have at least one "go-to" individual to serve as a leader for various areas from data analysis to instructional strategies. [SH]*

Another school leader pointed to the significance of having a reflection sheet that might increase the alignment between their views and teachers' reflections. She reflected:

*I'd like to have a reflection sheet for the teachers to complete first and then match it to my notes for better alignment of their self-reflection views with my notes. [BJ]*

**Monitoring Curriculum and Instruction.** The practicing school leaders were constantly monitoring the impact of the cycles of reflection in cultivating curriculum and instruction. One of the participants, for example, commented:

*I feel validated that the work we are doing in our weekly staff development to cultivate instructional capacity is on the right path. Since we just started this cycle, it is hard to say how effective it will be just yet. The end goal is to craft educators who are able to naturally reflect day to day. [JW]*

The participants' goals were mostly to improve instruction and ensure consistency in monitoring and providing feedback to teacher leaders. With a common rubric, teachers and leadership teams have been able to have conversations across grade levels. This has also led to incorporating reflection into the specific curriculum. One of the participants reflected:

*Self and regular evaluation of the implemented program is a must need to see the outcomes and take necessary actions towards the ultimate goals. We have to fix the weak areas and continue emphasizing the strength areas by appreciating the individuals and teams involved in the process. [SH]*

Most of the practicing school leaders found that their conversation on PD support was particularly enlightening, giving teacher leaders what they need when they need it as opposed to creating one-size-fits-all staff development opportunities for which everyone participates and interacts with the same content and at the same level. This made the participating school leaders think that they need to differentiate their professional learning opportunities. A principal, for example, asserted:

*In the past, I have always placed such a huge emphasis on quality instruction and student growth but overlooked the importance of social and emotional learning which stretches us to equip our students with tools to engage in critical dialogues. [AB]*

The process of monitoring helped the participating school leaders troubleshoot curriculum concerning instructional effectiveness. Together with teachers they were able to come up with some goals they wanted to accomplish for their campus. To improve school leaders' instructional leadership and reinforce their ability to supervise classroom teachers, one of the principals met frequently with teachers to discuss his observation. Moreover, one particular thing that he would do was to allow teachers to verbalize their needs prior to observing them. This would help the teachers to pay close attention to instructional areas where they felt that help was most needed. This would help to pinpoint which teachers needed more help and support in monitoring the effectiveness of their own instruction. It helped school leaders to transform their practice by asking more probing questions to ensure teachers were capable of accurately implementing the curriculum and differentiating instruction. As such, one of the participants declared:



*I believe that we are doing a good job ... Our monitoring systems and plans to assist are in place. Plans to continue learning for all are also in place. We have plans to learn more about the PD programs as well as for guided staff development. Administrators have plans to attend conferences to continue growing professionally. Teachers have plans to help students grow academically, socially and emotionally through differentiation of instruction. [SH]*

As evidenced by the participants' reflections, most of them asserted they must ensure that each student has received a high-quality instruction and learning is occurring daily. As reflected in their portfolios, the participants were able to observe how teachers and instructional specialists were planning and preparing for students on a weekly basis. Thus, they maintained that those teachers that needed additional assistance have been placed in individual and coaching plans with specific goals.

### ***Cycle of Learning 3: School Improvement***

**Developing and Leading the Vision of School.** The participants' reflections revealed a significant positive impact of online discussions within VPLC on their goal-directed self-regulation, self-awareness and reflection, and leveraging their strengths. The participating leaders assured that they had the responsibility to influence the school culture and would keep the vision as the foundation for all priorities and decisions. One of the participants, for example, stated:

*After much dialogue with colleagues via this platform, I am encouraged to write a journal and note the best practices and/or approaches that have proven instrumental to current leaders. I am eager to embrace a campus, however, in*

*order to ensure it will be a campus of excellence under my leadership, it is vital to enhance my knowledge in platforms such as this with leaders that are experienced as well as leaders that are aspiring to become agents of change at future campuses. [DS]*

Most principals reflected that the MOOPIL modules were effective, consistently commenting that they would like for their campus improvement planning committee to meet and review the vision and mission statements to help determine if they applicable to students today and to their decision-making process as a team. The findings indicated that the reflection was helpful since it offered the school leaders the chance to work on the mission and vision statements to optimize their school performance and minimize the areas they had difficulty within the school community. A principal, for example, commented:

*Honestly our mission and vision should be revised and considered for update including all stakeholders in the process. With this new planning format, we may re-identify our mission and vision, and evaluate our current statements and how they are valued within the school community. It should be done in a well-planned timeline with all stakeholders' involvement by using observable data in the process. [IS]*

As a result, the participants' reflections related to PD provided interesting insights to lead the changes to the vision of school and serve as an inspiration for designing successful vision and mission statements. One of the principals added:

*Changes to the vision are welcome as we also change to meet the needs of our students. Changes inform our practice and although a statement on our letterhead it is also where all decisions and practices are measured against. It will not be changed during the course of the school year, but revisited and rewritten during the summer preceding the school year. [DW]*

**Community Engagement.** Toward the end of the PD sessions, the participants believed that their current administration was taking steps to make better and informed decisions to target the school's needs. One critical modification, as the participants mostly confirmed, was to include teachers, parents, and community members in the CIPs. The participants believed that it is crucial that all stakeholders meet to identify the areas where growth is needed. Reflections allowed the participants to share important leadership research and resources and provided them with an avenue for collaboration with other school leaders as they proceeded through the MOOPIL modules. Thus, one of the participants wrote:

*I believe it is so important to involve all stakeholders in the process no matter where you are. I also believe that our vision and mission statement is current, but I also believe it may be something that we would like to look at since it has been something that we have not looked at in the past 3 years. It is important to see if all stakeholders believe that the vision and mission is current and or needs any slight changes. [VL]*

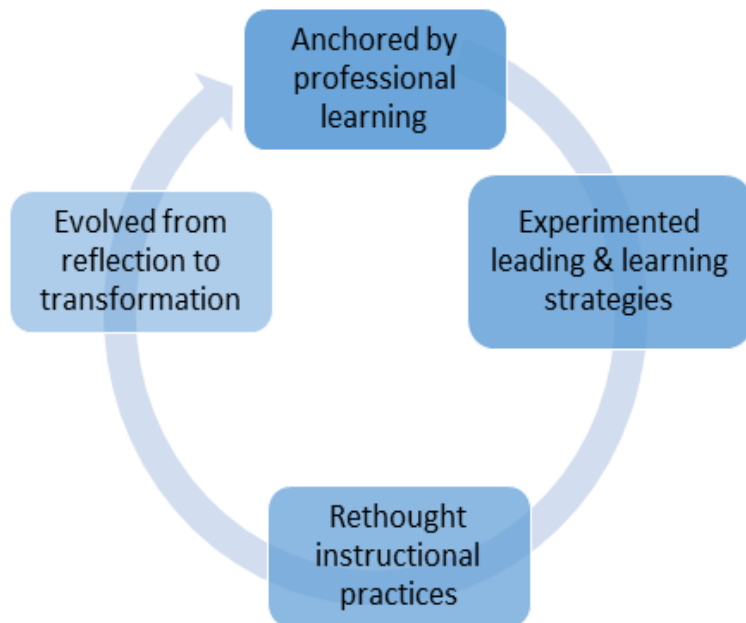
**Research Question 2. How did the practicing school leaders reflect upon their instructional leadership through the development of portfolios?**

The second research question addressed the practicing school leaders' reflection upon their instructional leadership using the Reflection Cycle through the development of portfolios. The goal of portfolios along with artifacts was to enhance the participants' learning experience by sharing insights and learnings with others to affect educator success and student learning. These cycles continued fairly as the participants developed and refined their leadership practices, and, thus, were regarded as transformative when problems arise. I found that these cycles, following the Reflection Cycle, ranged from increased understanding to transformation in behaviors. I considered these themes as cycles of change evolved from reflection, unlocking the potential held in school leaders and teams (see Figure 5).

I found four Cycles of Change from the participants' reflections. I called the steps, the Cycle of Change because categories occur frequently during peak times of development to: (a) document the participants' professional learning and growth in leadership; (b) experiment their leading and learning strategies; (c) consider their thoughts and feelings underlying instructional practices; and (d) determine their changed behaviors and future goals.

**Figure 5**

*Participants' Reflections Through Portfolios: The Cycles of Change*



The portfolios helped the practicing principals become more accountable for what they had learned while thinking critically about the course content and sharing their leadership practices. The participants regarded portfolios as a great reflective practice to share their leadership experiences as they added some sources and best practices that worked for them during the PD sessions. This allowed them to communicate through reflection, particularly for underserved districts, their leadership challenges on their campuses and shared some of their limited resources.

The practicing school leaders shared their leadership experiences through portfolios. They adopted self-reflective disposition using the Reflection Cycle to discuss their own strengths and areas to work on. The Reflection Cycle was regarded as an important vehicle for encouraging systematic thinking leading to deep-level analysis. As displayed in Table 2, the emerging themes along with descriptors underlying personal development to team effectiveness are presented.

**Table 2**  
*Reflections through portfolios*

Themes	Sub-themes	Descriptors
Anchored by professional learning	A commitment to continuous growth	self-assessment as a leader monitoring instructional improvement
	Instructional leadership	improving instructional capacity
Experimented leading & learning strategies	Encouragement of experimentation	collaborative partnership communication with leadership team
	Deep conversations focused on student learning	assessing student learning quality of content availability of resources
Rethought instructional practices	Direction to refine instructional practices	modeling reflective practices for teachers insight and experiences of peers
Evolved from reflection to transformation	Involvement in goal setting	solving instructional issues applying the gained knowledge/skills
	Implications of practice for future actions	

The excerpts below were taken from the practicing school leaders' reflections.

***Cycle of Change 1: Anchored by Professional Learning***

**Continuous Professional Growth.** The participating principals reported that the use of reflections included in the portfolio enhanced their continuous leadership while

allowing them to be a resource to new teachers by giving them some tools to make them succeed. Since I began the process of implementing portfolios related to PD, I have seen several positive outcomes. One is that the dialogue between the practicing school leaders and instructional coach has opened up. Another is that I have seen how the process of portfolio development through reflection and selection of artifacts has the potential to improve leadership skills among the practicing principals. Accordingly, a principal commented:

*This added to my understanding of building my leadership skills in that it confirmed my current knowledge and reminded me of some key points. [AB]*

The participants developed their portfolio reflections related to their professional or academic learning. Based on their PD support and their reflections, they tended to better ensure their leadership knowledge and monitor the implementation of curriculum and instruction.

**Instructional Leadership.** With a focus on building instructional capacity, reflection modules and discussions helped principals create a support network, identifying the value of VPLC, and how to apply new leadership and instructional strategies. A participant, accordingly, stated:

*As I was going through the module, I found myself validating a lot of the beliefs that live by as a leader. As a leader I tend to flow through and or meld different types of leadership characteristics to fit the situation and the person and/or group I am leading. [AR]*

Along the same line, with respect to benefits of reflections included in the portfolios, another participant reflected:

*Writing reflections added to my understanding of building instructional capacity through making a clearer designation between PD and learning experiences. I will try my best to make sure that the things we cover are truly matching the needs of those we serve during the learning sessions. [AB]*

The portfolios guided by the cycles of reflection served as a checkpoint not only for assessing professional learning but also for determining whether the leading and learning skills for school leaders should be reconsidered. The artifacts and reflections included in the portfolios represented strengths and accomplishments of the participants who received PD support.

### ***Cycle of Change 2. Experimented Leading and Learning Strategies***

**Encouragement of Experimentation.** Of additional importance to leadership growth and professional learning was the encouragement of experimentation and incorporation of available knowledge bases. Learning from the PD modules along with reflections has influenced the participants' future leading and learning practices that they tended to tailor their instructional leadership to individual campus teachers. One of the participants stated:

*This experience affects goals for the teacher leaders in that they are expected to share their learning from PD with others. This experience impacts their process of implementation in that it allows them to share and practice their learning. [AR]*



The practicing school leaders believed that experimentation is valuable through walkthroughs in the classroom. One of the participants who served as a lead bilingual teacher and assisted other bilingual and ESL teachers went on further and added:

*.... One thing that I found effective when discussing the inclusion and implementation of the ELPS in all subject areas, was that all teachers began to share their experiences with EL's and the different ways they would benefit if they were able to make better connections with the content, writing, and the proper use of academic vocabulary. [JL]*

The cycles of reflection served as a catalyst for providing direction for improvement in such areas as problem solving and, community interactions, and, most important, student progress. One of the participants asserted:

*I monitor the plan and I use benchmarks to see if student progress was made. We are making great progress and teachers are taking ownership of the data. [AR]*

**Deep Conversations Focused on Student Learning.** The school leaders have become more accountable through cycles of reflection, not only for their own instructional leadership but also for the performance of teachers and the students' academic achievement. As expectations and accountability have increased, so has the principals' need to enhance program effectiveness and improve schooling. Participants were able to talk more in depth about the need for improving schools at their campus level. The district and campus leaders used feedback to determine school effectiveness. Similarly, a principal noted:

*I know in my district, we have a lot of professional development and not as many professional learning opportunities. We spend a lot of time teaching the masses on things that the district administration thinks the teachers need to know if they sit and get sessions. These are not all bad, however, there is little connection between these training sessions and the impact on student learning. [SL]*

I found that open dialogues and collegiality from principal to principal as well as from principal to facilitator were promoted throughout the portfolio development process. I encouraged the participants to engage in and understand the Reflection Cycle process to create a shared sense of leadership expectations. Likewise, a participant declared:

*I will go through explicit instruction strategies with my team and teachers to be able to cover EL students' needs. Administrative team supervising all teachers' performance and goals for each test to see improvement. Each teacher knows their student scores and their needs. So they have different strategies for ELL students. If we are not going to monitor student performance closely we cannot address their needs and we cannot find the correct solution. [AU]*

I also provided too much demonstration and practice opportunities. By using the Reflection Cycle, the practicing school leaders became self-aware of what they should be doing to put student learning in priority while recognizing their own strengths and areas to grow.

### ***Cycle of Change 3: Rethought Instructional Practices***

**Direction to Refine Instructional Practices.** The participants through individual and shared reflections referred to some of the common instructional practices that teachers used in their classroom. These included, but not limited to: (a) guided lesson plan, (b) common assessment analysis, and (c) 5E (i.e. Engage, Explore, Explain, Elaborate, and Evaluate) model along with explicit instruction. While some of the participants were familiar with these concepts, re-reading the research gave them time to reflect and remind them how to implement all these concepts, and not just some of them which they were comfortable with. The participants were mostly in favor of lesson plan format. A principal noted:

*Before I arrived, the lesson plan format did not exist. Everyone did their own thing which is fine in some schools. But at my school because we have 100% ELs we needed a structure that was similar in instruction in each class. Our ultimate goals were to be student-centered and to increase language development. [AR]*

Shared reflective practices reminded the participants what to include for their lesson plan. They used the lesson plan at the beginning of the school academic year to guide teachers and their leadership team when planning. The participants confirmed they have framed a comprehensive outline of the instructional cycle during the PD sessions. Using the elements of explicit instruction and upgrading their lesson plans, the principals were given the opportunity to identify the instructional delivery that needs to be adjusted or retaught. More specifically, student artifacts were reviewed as another data source to provide a point of reference for measuring student achievement and school success. Additionally, one of the participants reflected:

*The artifact I chose was a Guided Reading Lesson Plan form that guides teachers through the explicit delivery of small group instruction. While there are many resources that script a lesson, I love how this tool strengthens the teachers' planning muscles, especially our newer teachers. The more that teachers use this form, the more it becomes a natural process in both small group instruction and whole group lessons. [SH]*

The school principals reported the use of common assessment analysis, which is commonly practiced, to improve their own instructional leadership. The purpose of this practice was to identify critical student learning standards and items that students missed most frequently and need more support after the major district assessments. Each participant identified three standards in which ELs tested the lowest and the three standards in which ELs tested the highest. Then, they reflected on this data in their professional learning communities (PLC) by discussing: (a) the standards on which teachers scored higher; (b) the standards on which the entire grade level ELs did poorly; (c) the areas which need change or improvement in instruction to re-teach those standards; and (d) the possible way(s) to help ELs master those standards. Similarly, one of the principals commented:

*With this assessment we can see where the students are. We can also see their growth and what areas they need improvement on. This data can help teachers focus on improving their instructional delivery. [JG]*

Among the instructional practices, the teacher leaders experimented implementing the 5E model of planning and instruction, merging it with explicit

instruction. This allowed for differentiation based on student need. The 5E model allowed for students to get hooked into learned and explored to find understanding before teacher input. One of the participants commented:

*My math and science teachers use a 5E lesson plan. The teachers themselves suggested using this model. Also, we use STEMscopes where all the lessons are in a 5E template so this helps the teachers in planning. [KM]*

#### ***Cycle of Change 4. Evolved from Reflection to Transformation***

**Involvement in Goal Setting.** Through reflection, aspiring school principals were able to better understand their own learning and leading objectives and seek additional experience while being engaged in VPLC to set their goals. Written reflections included in the portfolios allowed the practicing school and district leaders to reflect on their core beliefs and learning objectives about: (a) school leadership, (b) what they are learning, and (c) how they anticipate applying that learning in their roles as assistant principals or principals.

In this study, I have found that the selection of artifacts and written reflections empower the practicing leaders and make them more accountable for their own learning. One of the aspiring principals, for example, commented:

*We do not currently have a formal coaching framework in place on my campus. In grades 2-5, there is only one teacher per grade/content, so I have chosen to use the PLC model to establish opportunities for coaching. I would refer to it more as a collaborative process in which the "coach" shifts based on need and*

*expertise. Within each PLC, I have at least one "go-to" individual to serve as a leader for various areas from data analysis to instructional strategies. [SH]*

The aspiring principals were able to refine their professional goals through the selection of artifacts and the writing of the reflections. The artifact simply established a framework for each PLC meeting that helped the participants identify purpose, clarity, and accountability. Additionally, the Reflection Cycle enabled the participants to review not only their goals in an organized way, but also what the participants believed to be significant contributions from their reflections to their future actions as principals.

**Implications of Practice for Future Actions.** The participants' reflections evidenced more attention to seeking input, to providing forums for problem-solving, promoting ownership of the problem, and to involving the leadership team in solutions and in planning for the future.

Planning for implementation revealed the importance of what actions to take and what evidence to use to determine the success of future actions. A principal, for example, asserted:

*I will continue to provide teachers opportunities to observe other teachers and allow the excitement of the students and teacher-effectiveness to motivate other teachers to follow. I will continue empowering students to explore guided learning and empowering teachers to design their teaching around the success of students and transforming the way instruction is implemented. [DW].*

The participants have reported that certain practices they have learned in the modules are not practices on their current campus. Their goal was, thus, to begin

transferring what they have learned to improve instruction on campus. Open communication and dialogue between instructional facilitator and practicing school leaders accompanied with reflections included in portfolios has established a positive, personal, and individualized approach to participants' instructional knowledge and skills.

### **Discussion**

I found that the Reflection Cycle was the actual learning in itself, which engaged and guided each individual principal. This allowed the participants to reflect on what they have learned related to PD and how they have used it to transform themselves and their campuses. I found that portfolios related to PD addressed the special needs of the practicing school leaders, particularly their need for reflection and capacity-building at the beginning of the program. Lessons and supporting instructional sources provided meaningful practices during the program, which were applicable to various school settings. As reflected in the participants' portfolios, the practicing school leaders documented their learning and shared their best instructional practices. Collaboration for discussion, planning, and group assignments facilitated reflection and transformation as participants worked together with other school leaders to find problems and identify solutions to better serve ELs and ECs.

With regard to the first question, in many cases, I found that online discussions within VPLC have shaped the practicing school leaders' instructional capacity-building to promote collaborative action and reflection. In doing so, school leaders need a collaborative space to share their learning as a community of practice (Scanlan et al., 2016; Scanlan, Kim, & Ludlow, 2019). In harmony with our findings, researchers (Döös,

& Wilhelmson, 2020; Reid, 2019) revealed that instructional capacity-building for school leaders demands new ways of collective learning and reflection.

In addition, I found that instructional leadership can be encouraged through reflection and PD support (Colmer, 2017; Ng, & Szeto, 2016; Sales et al., 2017). PD support, according to Torres et al. (2020), along with reflection incorporated in VPLC, shed light upon the enactment of shared leadership for professional learning.

Collaborative reflective dialogue (Colmer, 2017) along with the Reflection Cycle encouraged participation and self-reflection within our VPLC L.E.A.D.E.R.

Collaboration and shared reflection are capacities the practicing school leaders learned and give teacher leaders feedback to continue experimenting (Lavigne & Chamberlain, 2017).

Continuing with the benefits of reflection for the practicing school leaders, the Reflection Cycle as a capacity-building tool was deemed important. By being engaged in reflection and dialogue, as Lehrer (2013) and Bleach (2014) noted, the practicing school leaders became able to recognize their own leadership strengths and areas to grow through critical reflection and professional dialogues. In line with previous studies (Lumpkin, 2016; Margolis & Huggins, 2012), school leaders modeled reflection and inquiry while working with other teacher leaders to foster empowerment and ownership of school programs. The participating school leaders were empowered to lead and offer more support to teachers through collaborative agency (Colmer, 2017).

The use of reflections for improving the participants' leadership capacity in solving various instructional issues, as evidenced earlier revealed (e.g., Hallinger, 2003;



Coldren & Spillane, 2007), offers a new vision for leadership improvement and school effectiveness. For continuous professional learning, reflective practice was beneficial to school leaders and other administrators with opportunities to reflect and identify strategies to constantly improve their practice and develop expertise (Martinez, 2015; Patterson, 2015). As evidenced earlier (e.g., Ioannidou-Koutselini & Patsalidou, 2015; Volz-Peacock et al., 2016), I found that making reflection a priority during the action learning encouraged the participants to: (a) internalize their learning; (b) have an awareness of the importance of self-reflection to improve their instructional leadership capacity; and (c) recognize that their learning is related to school success.

Another major finding indicated that reflection improves the practicing leaders' instructional leadership to improve instruction for ELs (Day et al., 2016). According to Darling-Hammond et al. (2009), instructional leadership practices are strengthened when practicing school leaders reflect, question routines, and support each other's professional learning. Principals' involvement in school-wide instructional activities such as leadership coaching and networking, according to Gümüs and Bellibas (2016), has been considered a vital component of school leadership and success. Using the information that was discussed during the PD sessions impacted the participants' instructional practices that has resulted in restructuring their instructional leadership knowledge and skills.

Similarly, Gaines (2019) and Sanchez (2019) conducted a study indicating the impact of principalship in school improvement as it relates to strengthening instructional practices and greater success in student achievement. Evidence of improvements in

professional learning and leading communities, as Barnett and O'Mahony (2006) suggested, include increasing opportunities for school leaders to have more shared commitment for collective learning and reflection. I found that critical reflection within VPLC focused on instructional leadership stimulates professional learning through assisting the practicing school leaders to revisit their values and transform their practices. I, along with other researchers (e.g., Lehrer, 2013; Bleach, 2014), indicated that ongoing PD using PLC is considered essential to transform instructional leadership through a shared process of reflection for communities of practice.

The answer to the second question came from the practicing school leaders' cycles of reflections through the development of portfolios related to PD. Our proposed strategy in this action research was to improve instructional leadership through the Reflection Cycle, because school principals and other staff members can be supported as they develop their portfolios. As Brown and Irby (2001) suggested earlier, I found that reflections inherent in the portfolio development process provided insights and encouraged planning for future professional growth. Likewise, Norberg (2019) showed that a central need in leadership development for school leaders is the skillful engagement in reflection. It can, thus, be argued that the Reflection Cycle served as a guide for continuous and reflective learning in addition to offering a structure to support our VPLC.

I found that the practicing school leaders were engaged in the phases of the Reflection Cycle by: (a) documenting their individual learning; (b) determining their feelings and changes; and (c) planning future goals. The inclusion of reflection in

portfolios indicated that the practicing school leaders know where they need to go and have a plan for getting there. The participants' reflections were generally organized around a commitment to continuous professional learning and growth. This theme, in harmony with previous studies (e.g., Sanzo, 2016; Tingle, Corrales, & Peters, 2019) focused on some aspects of instruction, such as providing incentives for teaching and learning and providing PD support for teacher leaders to improve instruction for ELs. Previously, Grissom et al. (2013) suggested that school leaders are expected to dedicate themselves to monitoring instruction or more specifically, coaching and evaluating teachers.

Consequently, I found that reflection has been connected to transformation and/or improvement of practicing school leaders' instruction, identifying what school leaders learn from professional learning. Literature exists regarding the association between school leaders' instructional leadership and several constructs, including collaboration (Gümüs et al., 2013), school climate (Bellibas & Liu, 2018), and attitude towards change (Kursunoglu & Tanriogen, 2009; McIntosh et al., 2016). In particular, shared leadership and vision (Hord, 2009) has been considered necessary for sustaining PLC sessions to support transformation in instructional leadership (Thornton, 2010; Cherrington & Thornton, 2015).

The Reflection Cycle was regarded as a transformation tool, which provided initiation, encouragement, and support of change. Likewise, Torbert and Taylor (2007) reported various levels of change within action inquiry for the individual learner and for the participants across the community. They argued that "the encompassing aims in

action inquiry are to increase one's own and other's capacity to appreciate and cultivate transformation, integrity, mutuality, justice, and sustainability for ourselves, for our groups and for our institutions" (p. 240). In addition, Chevalier and Buckles (2019) pointed to the potential of this approach for personal and community improvement. As the cycles of change continue, I found that successful reflective practices as represented by the participants' portfolios require fair opportunities for major stakeholders to refine instructional leadership and influence decisions. These changes in the participants' instructional leadership are consistent with Bierly, Doyle, and Smith's (2016) perspective of the distributed and/or layered leadership, creating collaboration and shared responsibility.

### **Conclusion**

Reflection, according to Luttenberg et al. (2017), is considered important for practitioners, including teacher leaders, to deepen their PD and, thus, help them to cope with their work-related challenges and find workable solutions. Although schools can provide a learning environment that stimulates self-reflection, such as providing professional learning opportunities and coaching support, I advocate the potential of the Reflection Cycle for transformation. The VPLC L.E.A.D.E.R. with a focus on transformation of instruction was revealed to be highly effective in supporting and developing reflection in school leaders. Promising reflective strategies for encouraging professional learning for the practicing school leaders have been observed via online discussions within VPLC and portfolios related to PD. Significantly, the Reflection

Cycle assisted the principals in moving from theory to instructional practice and guided them in solving their campus problems through collective action and strategic reflection.

I suggest that the school leaders need to constantly model and encourage reflection, as reflection needs to be embedded in the everyday life of schools. Reflection can, thus, be embedded in the school culture, as Barnett and O'Mahony (2006) suggested, by encouraging school leadership teams to monitor their development and performance. To assist teachers in improving instruction for ELs and ECs, school leaders should increase opportunities that can enhance collaborative action and reflection through VPLC. Reflection can become part of the norms as practicing and aspiring school leaders begin to work together to coach and help their teachers grow and improve their instruction. Self-reflection can, thus, be regarded as a means for individuals to understand their predispositions so that they can foster inclusive learning opportunities in their schools (Brown, 2005).

Once again, the Reflection Cycle, as a leader's toolbox, was designed primarily for policymakers, school leaders, community leaders, and teacher leaders. The framework has offered leaders reflective tools that can guide planning and continuous professional growth. As a part of PD, the Reflection Cycle has engaged the practicing school leaders in discovering powerful connections between their leadership practice and professional learning.

The analysis of the participants' reflections showed that along with the Reflection Cycle, VPLC fostered a collaborative action and strategic reflection. The practicing school leaders reported that our VPLC allowed them to be better equipped to

collaborate and reflect with other principals in similar situations. Collaboration for discussion, planning, and group assignments provided grounds for reflection and improvement as participants worked together with other school leaders to find problems and determine creative and workable solutions in serving underserved schools, for instance, to help struggling learners redirect their unwanted behaviors.

## References

- Aas, M. (2017). Leaders as learners: Developing new leadership practices. *Professional Development in Education, 43*(3), 439-453.
- Barnett, B. G., & O'Mahony, G. R. (2006). Developing a culture of reflection: Implications for school improvement. *Reflective Practice, 7*(4), 499-523.
- Barnett, B. G., Shoho, A. R., & Okilwa, N. S. (2017). Assistant principals' perceptions of meaningful mentoring and professional development opportunities.
- Bellibas, M. S., & Liu, Y. (2018). The effects of principals perceived instructional and distributed leadership practices on their perceptions of school climate. *International Journal of Leadership in Education, 21*(2), 226-244.
- Bierly, C., Doyle, B., & Smith, A. (2016). Transforming schools: How distributed leadership can create more high-performing schools. *Bain & Company Insights*: Boston, MA.
- Bizzell, B. E. (2011). *Professional development of school principals in the rural Appalachian region of Virginia* (Doctoral dissertation, Virginia Tech).
- International Journal of Mentoring and Coaching in Education, 6*(4), 285-301.
- Bleach, J. (2014). Developing professionalism through reflective practice and ongoing professional development. *European Early Childhood Education Research Journal, 22*, 185-197.
- Blackberry, G., Kearney, J., & Glen, M. (2019). Developing an interpretive learning framework for understanding action research projects. *Educational Action Research, 27*(2), 318-330.

- Branson, C. (2007). Effects of structured self-reflection on the development of authentic leadership practices among Queensland primary school principals. *Educational Management Administration & Leadership*, 35(2), 225-246.
- Brown, K. (2005). Transformative adult learning strategies: Assessing the impact on pre-service administrators' beliefs. *Educational Considerations*, 32(2), 17-26.
- Brown, G., & Irby, B. J. (1995). The portfolio: Should it also be used by administrators? *NASSP Bulletin*, 56, 82-85.
- Brown, G., & Irby, B. J. (1997). *The principal portfolio*. Corwin Press.
- Brown, G., & Irby, B. J. (2001). *The principal portfolio* (2nd ed.). Corwin Press.
- Brown, G., Irby, B. J., & Fisher, A. (2001). The leadership framework: Facilitating reflection for 21st century leaders. In T. J. Kowalski, & G. Perreault (Eds.), *21st century challenges for school administrators*. Lanham, MD: Scarecrow Press, Inc.
- Brown, G., Irby, B. J., & Neumeyer, C. (1998). Taking the lead: One district's approach to principal evaluation. *NASSP Bulletin*, 58, 18-24.
- Coldren, A. F., & Spillane, J. P. (2007). Making connections to teaching practice: The role of boundary practices in instructional leadership. *Educational Policy*, 21(2), 369-396.
- Colmer, K. (2017). Collaborative professional learning: Contributing to the growth of leadership, professional identity and professionalism. *European Early Childhood Education Research Journal*, 25(3), 436-449.



- Cherrington, S., & Thornton, K. (2015). The nature of professional learning communities in New Zealand early childhood education: An exploratory study. *Professional Development in Education, 41*(2), 310-328.
- Chevalier, J. M., & Buckles, D. J. (2019). *Participatory action research: Theory and methods for engaged inquiry*. Routledge.
- Chikoko, V., Naicker, I., & Mthiyane, S. E. (2011). Leadership development: School principals' portfolios as an instrument for change. *Education as Change, 15*(2), 317-329.
- Creswell, J. W. (2015). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research* (5th ed.). Pearson.
- Darling-Hammond, L., Wei, R. C., Andree, A., Richardson, N. and Orphanos, S. (2009). *Professional learning in the learning profession*. National Staff Development Council.  
[http://outlier.uchicago.edu/computerscience/OS4CS/landscapestudy/resources/DarlingHammond,%20Wei,%20Adnree,%20Richardson%20and%20Orphanos,%202009%20%20\(1\).pdf](http://outlier.uchicago.edu/computerscience/OS4CS/landscapestudy/resources/DarlingHammond,%20Wei,%20Adnree,%20Richardson%20and%20Orphanos,%202009%20%20(1).pdf).
- Day, C., Gu, Q., & Sammons, P. (2016). The impact of leadership on student outcomes: How successful school leaders use transformational and instructional strategies to make a difference. *Educational administration quarterly, 52*(2), 221-258.

- Densten, I. L., & Gray, J. H. (2001). Leadership development and reflection: What is the connection?. *International Journal of Educational Management, 15*(3), 119-124.
- Dewey, J. (1933). *How we think: A restatement of the relation of reflective thinking to the educative process*. Boston: Heath & Co.
- Döös, M., & Wilhelmson, L. (2020). Changing organizational conditions: Experiences of introducing and putting Function-Shared Leadership (FSL) into practice in schools and pre-schools. *Leadership and Policy in Schools, 1-18*, DOI: 10.1080/15700763.2020.1734628.
- DuFour, R., DuFour, R., Eaker, R., & Many, T. (2010). *Learning by doing: A handbook for professional learning communities at work* (2nd ed.). Bloomington, IN: Solution Tree Press.
- Etchells, M. J., Gaytan, R., de Marin, Sh., Geng, Z., Elfarargy, A. F., Cajiao-Wingenbach, L., Irby, B. J., Tong, F., & Lara-Alecio, R. (2019, April 5). *Two leadership and instructional coaches' perception of their roles in turnaround campus improvement* [Paper presentation]. American Educational Research Association (AERA) Annual Meeting, Toronto, Canada.
- Fisher, D. M., & Waller, L. R. (2013). The 21st century principal: A study of technology leadership and technology integration in Texas K-12 schools. *The Global eLearning Journal, 2*(4), 1-44.
- Gaines, C. B. (Ed.). (2019). *Leadership for school improvement: Reflection and renewal*. Charlotte, NC: IAP.

- Grissom, J. A., Loeb, S., & Master, B. (2013). Effective instructional time use for school leaders: Longitudinal evidence from observations of principals. *Educational Researcher, 42*(8), 433-444.
- Gümüs, E. (2019). Investigation of mentorship process and programs for professional development of school principals in the USA: The case of Georgia. *International Journal of Educational Leadership and Management, 7*(1), 2-41.
- Gümüs, E., & Bellibas, M. S. (2016). The effects of professional development activities on principals perceived instructional leadership practices: Multi-country data analysis using TALIS 2013. *Educational Studies, 42*(3), 287-301.
- Gümüs, S., Bulut, O., & Bellibas, M. S. (2013). The relationship between principal leadership and teacher collaboration in Turkish primary schools: a multilevel analysis. *Education Research and Perspectives, 40*(1), 1-29.
- Hallinger, P. (2003). Leading educational change: Reflections on the practice of instructional and transformational leadership. *Cambridge Journal of Education, 33*, 329-352.
- Hord, S. (2009). Professional learning communities. Educators work together toward a shared purpose – Improved student learning. *Journal of Staff Development, 30*(1), 40-43.
- Irby, B. J., Lara-Alecio, R., & Tong, F. (2017). *Accelerated preparation of leaders for underserved schools: Building instructional capacity to impact diverse learners* (U423A170053). Funded Grant, U.S. Department of Education SEED Program.

- Ioannidou-Koutselini, M., & Patsalidou, F. (2015). Engaging school teachers and school principals in an action research in-service development as a means of pedagogical self-awareness. *Educational Action Research, 23*(2), 124-139.
- Jefferson, M., & Anderson, M. (2017). *Transforming schools: Creativity, critical reflection, communication, collaboration*. New York, NY: Bloomsbury Publishing.
- Knoeppel, R., & Logan, J. P. (2011). Linking theory with practice: A longitudinal analysis of student portfolios in principal preparation. *International Journal of Leadership in Education, 14*(3), 337-349.
- Kursunoglu, A., & Tanriogen, A. (2009). The relationship between teachers' perceptions towards instructional leadership behaviors of their principals and teachers' attitudes towards change. *Procedia-Social and Behavioral Sciences, 1*(1), 252-258.
- Lavigne, A. L., Chamberlain, R. W. (2017). Teacher evaluation in Illinois: School leaders' perceptions and practices. *Educational Assessment, Evaluation, and Accountability, 29*(2), 179-209.
- Lehrer, J. (2013). Accompanying early childhood professional reflection in Quebec: A case study. *Early Years, 33*(2), 186-200.
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. Newbury Park, CA: Sage
- Lumpkin, A. (2016). Key characteristics of teacher leaders in schools. *Administrative Issues Journal: Connecting Education, Practice, and Research, 4*(2), 59-67.

- Luttenberg, J., Meijer, P., & Oolbekkink-Marchand, H. (2017). Understanding the complexity of teacher reflection in action research. *Educational Action Research, 25*(1), 88-102.
- Margolis, J., & Huggins, K. S. (2012). Distributed but undefined: New teacher leader roles to change schools. *Journal of School Leadership, 22*(5), 953-981.
- Marquardt, M. J. (2011). *Optimizing the power of action learning: Real-time strategies for developing leaders, building teams and transforming organizations* (2nd ed.). Boston, MA: Nicholas Brealey.
- Martinez, M. A. (2015). Engaging aspiring educational leaders in self-reflection regarding race and privilege. *Reflective Practice, 16*(6), 765-776.
- McIntosh, K., Kelm, J. L., & Canizal Delabra, A. (2016). In search of how principals change: A qualitative study of events that help and hinder administrator support for school-wide PBIS. *Journal of Positive Behavior Interventions, 18*(2), 100-110.
- Miles, M., Huberman, M., & Saldaña, J. (2014). *Qualitative data analysis: A methods sourcebook* (3rd ed.). Sage.
- National Center for Education Statistics (NCES, 2017-2018). Local boundaries. Retrieved from [https://nces.ed.gov/programs/edge/docs/LOCALE\\_DEFINITIONS.pdf](https://nces.ed.gov/programs/edge/docs/LOCALE_DEFINITIONS.pdf)
- Nesbit, P. L. (2012). The role of self-reflection, emotional management of feedback, and self-regulation processes in self-directed leadership development, *Human Resource Development Review, 11*(2), 203-26.

- Nir, A. E., & Hameiri, L. (2014). School principals' leadership style and school outcomes. *Journal of Educational Administration*, 52(2), 210-227.
- Ng, S. W., & Szeto, S. Y. E. (2016). Preparing school leaders: The professional development needs of newly appointed principals. *Educational Management Administration & Leadership*, 44(4), 540-557.
- Norberg, K. (2019). The Swedish national principal training programme: A programme in constant change. *Journal of Educational Administration and History*, 51(1), 5-14.
- Patterson, E. (2015). What are leaders' experiences of reflection? What leaders and leadership developers need to know from the findings of an exploratory research study. *Reflective Practice*, 16(5), 636-651.
- Printy, S. M. (2010). Principals' influence on instructional quality: Insights from US schools. *School Leadership & Management*, 30(2), 111-126.
- Reid, D. B. (2019). Shared leadership: A comparative case study of two first year U.S. principals' socialization around teacher evaluation policy. *Educational Management Administration & Leadership*, 47(3), 369-382.
- Revans, R., & Pedler. M. (2011). *The ABC of action learning*. Farnham: Gower Publishing
- Saldaña, J. (2015). *The coding manual for qualitative researchers*. Sage Publications.
- Sales, A., Moliner, L., & Amat, A. F. (2017). Collaborative professional development for distributed teacher leadership towards school change. *School Leadership & Management*, 37(3), 254-266.

- Sanchez, J. (2019). *Effective instructional leadership practices of principals in high performing Title I elementary schools in California's San Joaquin Valley* (Doctoral dissertation, California State University, Fresno).
- Sanzo, K. L. (2016). *Strategies for developing and supporting school leaders: Stepping stones to great leadership*. Routledge.
- Scanlan, M., Kim, M., Burns, M. B., & Vuilleumier, C. (2016). Poco a poco: Leadership practices supporting productive communities of practice in schools serving the new mainstream. *Educational Administration Quarterly*, 52(1), 3-44.
- Scanlan, M., Kim, M., & Ludlow, L. (2019). Affordances and constraints of communities of practice to promote bilingual schooling. *Journal of Professional Capital and Community*.
- Schön, D. (1987). *Educating the reflective practitioner*. New York, NY: Basic Books.
- Shamir, B., & Eilam, G. (2005). "What's your story?" A life-stories approach to authentic leadership development. *The Leadership Quarterly*, 16(3), 395-417.
- Short, P. M. (1997). Reflection in administrator preparation. *Peabody Journal of Education*, 72(2), 86-99.
- Slepcevic-Zach, P., & Stock, M. (2018). ePortfolio as a tool for reflection and self-reflection. *Reflective Practice*, 19(3), 291-307.
- Smith, A., & Shaw, P. (2011). *The reflective leader: Standing still to move forward*. Norwich: Canterbury Press.

- Somekh, B., & Zeichner, K. (2009). Action research for educational reform: Remodelling action research theories and practices in local contexts. *Educational Action Research, 17*(1), 5-21.
- Thornton, K. (2010). School leadership and student outcomes: The best evidence synthesis iteration: Relevance for early childhood education and implications for leadership practice. *Journal of Educational Leadership, Policy and Practice, 25*, 31-41.
- Tingle, E., Corrales, A., & Peters, M. L. (2019). Leadership development programs: Investing in school principals. *Educational Studies, 45*(1), 1-16.
- Torres, A. C., Bulkley, K., & Kim, T. (2020). Shared leadership for learning in Denver's portfolio management model. *Educational Administration Quarterly, 1*-37. DOI: 10.1177/0013161X20906546.
- Urick, A., & Bowers, A. J. (2014). What are the different types of principals across the United States? A latent class analysis of principal perception of leadership. *Educational Administration Quarterly, 50*(1), 96-134.
- Volz-Peacock, M., Carson, B., & Marquardt, M. (2016). Action learning and leadership development. *Advances in Developing Human Resources, 18*(3), 318-333.
- Wu, Y., & Crocco, O. (2019). Critical reflection in leadership development. *Industrial and Commercial Training, 51*(7/8), 409-420.



- Zimmerman, J. A. (2011). Principals preparing for change: The importance of reflection and professional learning. *American Secondary Education, 39*(2), 107-114.
- Zuber-Skerritt, O. (2018). An educational framework for participatory action learning and action research (PALAR). *Educational Action Research, 26*(4), 513-532.
- Zur, A., & Eisikovits, R. A. (2016). Imagining an ideal school: An approach for reflecting on principals' educational creed. *Reflective Practice, 17*(1), 1-14.

## **CHAPTER IV**

### **Virtual Professional Leadership Learning Communities for Building School Leaders' Instructional Capacity**

#### **Introduction**

School leaders' continuous professional learning results in student and teacher learning and cultivating a supportive school climate (Ayres et al., 2012; Gümüs, 2019; Steinberg & Yang, 2020). Still underserved schools, as Loeb et al. (2010) and Beesley and Clark (2015) noted, suffer from not having effective principals. Accordingly, those who are in leadership positions in underserved schools often face more challenging conditions, such as those with low achieving students, lack of resources, and less parent involvement (School Leaders Network, 2014). Beteille et al. (2011) and Hull (2012) also found that newly appointed school leaders often fill leadership positions in low-performing schools. As technology improves, the dissemination of information to major stakeholders including school leaders as well as the alignment of instructional priorities with professional responsibilities improves. As such, professional development (PD) and technology improvement merge and work in harmony to produce a growing experience that school leaders can negotiate with their learning needs and schedules.

Irby et al. (2017) suggested that virtual PD (VPD) using communities of practice allows teacher leaders to work at their own pace. Since their learning experiences are ongoing, school leaders can benefit from stronger levels of support over a more extended period than a short F2F PD. One way to provide sustained interaction is through virtual

professional learning communities (VPLC), a method that holds promise (National Academies of Sciences, Engineering, & Medicine, 2015), yet there exists little evidence. As such, there is a need to develop and support school leaders through research-based PD through using VPLC, aligned to what they need to do their leadership jobs. Consequently, in this study, I explored the practicing school leaders' perceptions of: (a) the VPLC as a vehicle for improving their instructional leadership practices and (b) the essential components that an effective VPLC for school leaders should entail.

### **Review of Literature**

I reviewed (a) professional learning communities and (b) virtual professional learning communities (VPLC) and leadership development.

#### **Professional Learning Communities (PLC)**

A professional learning community (PLC) refers to a group of educators who are committed to collaborative learning with a specific goal of improving practice to support student learning (Hord, 1998). In many cases, there is a facilitator in the PLC, who establishes a meeting agenda, guides discussions, and records outcomes. According to Huffman and Hipp (2003), PLC are “the most powerful professional development and change strategy available” (p. 4). According to McLester (2012), different PD models, including professional learning communities (PLC) and personal learning networks (PLNs), are widely being used. The PLC which refers to groups of staff members doing collaborative learning with the goal of improving professional learning, as suggested by McConnell et al. (2013), have become increasingly popular in many school districts. Quality leadership requires strong PLC as an effective tool for shaping leaders’

practices. Earlier research (e.g., Lomos et al., 2011) suggested that bringing groups of teacher leaders from related content areas working collaboratively using PLC was effective regarding improved professional learning and increased student achievement.

According to Owen (2014), PLC can also be personalized, easily accessible, while offering the practicing school leaders directed activities, personal feedback and modeling, and to build a culture of trust and respect. In order for a PLC to be effective, a number of principles should be followed. Hord and Sommers (2008) summarized the literature on PLC and listed five key components that should be included in a PLC. First, supportive and shared leadership refers to the collegial and collective form of participation. Shared leadership and responsibilities foster the ongoing process of collective inquiry and the level of engagement in a PLC. Second, establishing shared values and vision among the members of a PLC promotes a sense of commitment to student learning and guides practices about teaching. Third, an effective PLC creates opportunities for educators to collectively construct new knowledge and apply the learning to practice in individual contexts. Fourth, supportive conditions determine “when, where, and how” the members meet regularly as a unit to conduct professional learning. Ensuring supportive condition is crucial in maintaining the growth of professional learners. Finally, shared practice presents the assessment process of members’ behaviors in a PLC. An effective PLC encourages educators to evaluate others’ views and practices, provide constructive feedback in a way that promotes in-depth reflective analysis, and assimilates new ideas.

With regard to empirical investigation of PLC, a considerable body of researchers have revealed that PLC not only reinforce teacher leaders' professional learning by providing opportunities for teachers to address student needs, improve instruction, and achieve collective goals through collaboration (e.g., McConnell et al., 2013), but also foster teacher leadership development (e.g., Hairon et al., 2015). However, few researchers have investigated the role of PLC in facilitating the professional development of school leaders (e.g., principals, assistant principals). Therefore, the researchers aim to contribute to the literature by investigating school leaders' perception of the effectiveness of the PLC in developing their instructional leadership capacity in a virtual context.

### **Virtual Professional Leadership Learning Communities (VPLC)**

A promising strategy to foster collaborative learning opportunities for school leaders is the use of online PLC which can be implemented in various forms, including online platforms for sharing discussion forums and synchronous courses. School principals and other staff members, thus, need to be supported in various ways as they implement VPLC in their schools. This includes continual real-time coaching support as well as constant formal PD programs using PLC. High-quality leadership development programs using VPLC are needed more than ever. However, it appears that the experimental research on VPLC is still inconclusive. To address this issue, I sought to build school leaders' instructional leadership capacity at the campus level through VPLC across the state of Texas and beyond.

The interest in the use of PD for leadership development is expanding dramatically, as PD allows school leaders to have access to useful resources and new developments in leadership practices. Much still needs to be done in identifying those aspects of the PD that contribute to effective high-quality professional growth and learning. Irby et al. (2017) suggested that online PD using communities of practice allows teacher leaders to work at their own pace while they prioritize their level of engagement. Since their learning experiences are ongoing, school leaders can benefit from stronger levels of support over a more extended period than a short F2F PD. Thus, there is a need to develop and support school leaders through research-based PD through using VPLC, aligned to what they need to do their leadership jobs.

### **Conceptual Framework**

Based on social constructivism, Collins et al. (1989) developed cognitive apprenticeship theory in which they focus on “learning through guided experience” (p. 457), and their core teaching method is modeling, coaching, and scaffolding. According to McLester (2012), different PD models, including professional learning communities (PLC) and personal learning networks (PLN), are widely being used. The PLC which refers to groups of staff members doing collaborative learning with the goal of improving professional learning, as suggested by Irby et al. (2015), have become increasingly popular in many school districts. Quality leadership requires strong PLC as an effective tool for shaping leaders’ practices. Previously, researchers (e.g., Bush, 2019; Harris et al., 2017; Popp & Goldman, 2016) suggested that bringing groups of teacher

leaders from related content areas working collaboratively using PLC was effective regarding improved professional learning and increased student achievement.

Given its social nature, PLCs are grounded by social constructivism theories (Wenger, 1998). In PLC, educators broaden their views and gain new insights by listening to others' previous professional experiences from a variety of contexts. In addition, the concept of cooperative learning in Vygotsky's (1978) theories of development also attaches to PLC. According to Vygotsky's zone of proximal development framework, scaffolding is needed in supporting learners' independent performance of new practices. This theory helps explain how educators support and collaborate with each other toward problem solving through social interaction in PLC. Furthermore, Wenger's (1998) a community of learners model also provided a theoretical foundation for PLC. According to Wenger (1998), "new experiences, contexts, conversations and relationships necessitate reframing previous understandings, as the meaningfulness of our engagement in the world is not a state of affairs, but a continual process of renewed negotiation" (p. 54). In other words, learning occurs in a dynamic process through communities of practice.

Using different approaches, the research team built the conceptual framework on the major components of virtual professional development (VPD; Irby et al., 2017) on effective leadership practices for school leaders, including VPLC. The VPLC L.E.A.D.E.R. process (Leading Question, Engagement, Applied Research, Discussion, Example(s), and Reflection) by Irby et al. (2017) guided the PD sessions. Learning community members were encouraged to contribute to the discussion for each

component of the L.E.A.D.E.R. model. A facilitator introduced the Leading Question(s) and Engagement portion of the model. The leadership group worked through Applied Research, Discussion, and Reflection portions of the model.

Irby (2020) defined VPLC as an online collaboration of teacher leaders who come together to learn new approaches and to focus on relevant issues with leading questions, engagement, applied research, discussion, examples, and guided reflections that move the group members to transform their practice. Irby et al. (2017) developed VPLC L.E.A.D.E.R. as: (a) school leadership and peer mentoring in VPLC still remains rather underexplored; (b) rural school principals serving low performing schools have no other colleagues in the same district to be paired for F2F mentoring; and (c) busy principals have limited time to receive F2F PD and can benefit more from receiving ongoing online coaching support and feedback before and after work. The research team worked with our partners, iEducate and Texas Center for Educator Excellence (TxCEE), implementing activities proposed for participating principals. The VPLC steps included: (a) select the facilitator; (b) determine VPLC meeting via GoToMeeting; (c) introduce leading questions and engage participants; (d) work in groups through applied research, discussion, and example; and (e) discuss reflection and transformation as a team-next goal. In the VPLC, the participants had access tools to communicate, collaborate with their peers, and access professional learning courses, a calendar, and other resources.

### **Purpose of the Study and Research Questions**

Professional learning networks and communities, as one of the major components for PD, still need more research to focus on possible ways to build school



leaders' instructional capacity. Despite the increasing use of virtual platforms as venues for leadership development, little is known about how school leaders interpret their online professional learning experiences through virtual communities of practice. There are even fewer researchers who have evaluated VPLC in terms of its efficacy in improving school leaders' instructional practices. Our proposed strategy in this study was to improve instructional leadership through VPLC, because school principals and other staff members can be supported as they participate in their communities of practice. Since researchers (Drago-Severson et al. 2018; Earl & Fullan, 2003) who have studied effective PD have called for school leaders to translate their learning into their instructional practice, I addressed how the practicing school leaders perceived the quality of the VPLC as part of the project's PD.

In this study, I discuss VPLC as it relates to school leaders. Next, I present VPLC for school leaders and its attributes in comparison to F2F PLC. The goal of this VPLC was to build instructional capacity at the campus level for school leaders using communities of practice. I investigated participating school leaders' perceptions of: (a) the concomitant VPLC features supporting program effectiveness as well as (b) the quality of the VPLC as part of the project's VPD. To this end, I formulated the following research questions:

1. How did the practicing school leaders perceive the effectiveness of the VPLC as a vehicle for improving their instructional leadership practices?
2. What did the practicing school leaders perceive as essential components that an effective VPLC for school leaders should entail?

## **Method**

### **Research Context and Design**

This study was derived from the Project A-PLUS: Accelerated Preparation of Leaders for Underserved Schools: Building Instructional Capacity to Impact Diverse Learners (#U423A170053; Irby et al., 2017) under the U.S. Department of Education SEED Program, which focused on the school leaders working in underserved schools across the state of Texas. This federal funded project supported the leadership development of effective school leaders by: (a) recruiting and preparing leaders, (b) providing VPD activities to current school leaders, and (c) increasing the number of highly effective school leaders in schools with high concentrations of high-needs English learners (ELs) and economically challenged students (ECs). This project has been promoting diversity in the educator workforce by recruiting among male and female school leaders, particularly targeting participants from among those who identify as African American, Hispanic/Latino, American Indian, and Asian.

Based on the research purpose and design, multiple data were collected to explore participants' perceptions and experiences of VPLC. I employed mixed methods in which both quantitative and qualitative data were collected and analyzed to answer the research questions (Creswell, 2005). Specifically, I used sequential explanatory mixed methods design which contained two steps (Creswell et al., 2006). In the first step, a self-report questionnaire was designed and administered to explore participants' perceptions and experiences regarding the VPLC. Based on the results of the survey data, I conducted semi-structured interviews to gain in-depth and more extensive hour-long interviews with a representative sample of the participants.

## **Participants**

The participants of this study were 40 school leaders at the elementary school level in the state of Texas. At the end of the school year, the participants were asked to respond to an online survey and give their feedback regarding the efficiency of this VPD using the online learning communities. A systematic coding method, which appropriately fits interview data, was utilized in the current research (Creswell & Clark, 2017). The researchers extracted the recurring themes emerging from the participants' responses adopting this method. Several participants' responses to interview questions were used to represent strands of opinion which emerged from the interview data along with participants' survey feedback. I arrived at themes by comparison within a single interview for each individual participant and between interviews from different individuals.

Ranging in age from 25 to 55, approximately forty-eight percent ( $n = 19$ ) of the participants were White, followed by Hispanic (22.5%,  $n = 9$ ), Black/African-American (20%,  $n = 8$ ), Asian (7.5%,  $n = 3$ ) and others (3%,  $n = 1$ ). The participants had different years of experience as an administrator. Concerning their years of experience, 57.5% of participants ( $n = 23$ ) worked as an administrator below 5 years and 42.5% of them ( $n = 17$ ) reported that their administrator experience was above 5 years.

## **Description of Intervention**

### ***The VPLC***

The research team provided high-quality, sustained and collaborative professional learning through reflective activities and presentations for school leaders.

Through GoToMeeting, the school leaders followed an agenda for discussion of related modules and activities. Specifically, the research team developed an action plan, which targets instructional quality to promote learning. The research team developed some strategies to increase success in a virtual environment by providing flexible due dates, clear guidance, organized course modules, and frequent communication so that participants would know what was expected of them. Strategies included reflective, personalized, and experience-based with content that is relevant and personal to the participating school leaders. Included in this virtual learning environment was continued practice in relationship building and how mutual collaborations cause both individual and campus improvement. Participants were engaged in intense discussions and sharing leadership strategies that can be used for building multi-tiered systems to foster the promise of equitable learning opportunities. Through virtual mode of delivery, learning communities were created to increase professional growth while establishing a career-long support network that would not exist without this virtual learning environment. The VPLC included: (a) lessons and supporting sources which are applicable to various school settings, (b) communication tools to open interaction among school leaders, and (c) collaboration tools for discussion, planning, group assignments, and leadership development.

The professional learning community, as a leadership development tool, was virtually designed to address prevailing issues in developing leadership capacity of school principals. The VPLC L.E.A.D.E.R., which was flexible to suit the needs of school leaders, used ongoing reflective activities, discussions, and presentations for

school leaders. The VPLC helped school leaders build Communities of Practice (CoP) across time and space virtually. School leaders became proactive as they encouraged others to share knowledge, lead, and build school leaders' instructional capacity within a culturally-appropriate learning environment. The CoP was developed via VPD with Massive Open Online Professional Individualized Learning (MOOPIL; Irby et al., 2017).

Having this online community allowed participants to share important leadership research and resources and provided them with an avenue for collaborating and communicating with other school leaders as they proceed. These VPLC were regarded as grounds for innovation as participants worked together with other school leaders to find problems and determine creative and workable solutions with a focus on building instructional capacity in serving challenging schools.

### **Instruments**

I collected the participants' perceptions of the quality of the VPLC via questionnaire and interview.

#### ***Questionnaire***

The questionnaire included the participants' demographic variables. I developed this questionnaire to explore participants' perceptions of their informal individual learning while being engaged in learning communities with a focus on quality evaluation. This questionnaire had 7 items on a 5-point Likert scale along with 6 open-ended questions which asked respondents to: (a) evaluate the virtual training format; (b) share the most effective aspects of the PLC meetings; and (c) express their takeaways that they gained from this VPLC. I selected a 5-point Likert scale due to higher

discriminating among five response options and less tendency toward the neutral point compared to the 4-point format (Adelson & McCoach, 2010; Leung, 2011).

After addressing confidentiality and explaining the format, out of the questionnaire participants, 6 school leaders took part in the interview phase and 2 of them participated in the follow-up interview which was conducted 6 months after the training. Purposeful sampling, according to Yin (2009), was used to select representative school and district leaders based on the quantitative data. Each participant was interviewed individually and efforts were made to integrate data collection as unobtrusively as possible.

### ***The Follow-up Questionnaire***

The first section of the questionnaire included the demographic information of the participants. The questionnaire had ten items in the second section that addressed the participants' perceptions of the overall effectiveness of the VPLC. The questionnaire items examined the practicing school leaders' perceptions of the L.E.A.D.E.R. process for a VPLC and coaching practices. Two experts evaluated the content of the questionnaire items. I used their feedback regarding the clarity of each item and I reworded some items based on their comments.

### ***Semi-structured Interview***

Semi-structured interviews with school leaders were recorded, transcribed, and analyzed. The questionnaire items were reformulated into semi-structured interview questions (Ivankova et al., 2006).

All participants were asked to give permission to record their interviews. Each participant was interviewed individually via the GoToMeeting. Interviews lasted about 30 minutes for each participant via the online platform. The interview protocol consisted of nine questions, which corresponded to the emerging themes derived from the content of the questionnaire. The notion of a social constructivist view of learning provided the major conceptual framework for the development of interview questions to explore participants' perception of the VPLC meetings.

### **Data Collection Procedures and Analysis**

Based on the research design, multiple data were collected to explore participants' perceptions and experiences of VPLC. I employed a mixed method in which both quantitative and qualitative were collected and analyzed to answer the research questions (Creswell, 2005).

The participants' responses to the follow-up questionnaire were analyzed using cross tabulation and frequency counts. Descriptive statistics were employed to describe the questionnaire items on a 5-point Likert scale. For the quantitative data analysis, the survey demographic information and the participants' responses to the survey questions were analyzed employing descriptive statistics to describe the VPLC questionnaire items on a 5-point Likert scale.

For the qualitative analysis, I coded the data emerged from interviews and participants' responses to the questionnaire. The data were organized into a matrix using a systematic coding method (Glaser & Strauss, 2017) to display the emerging patterns and themes (Patton, 2002). The recurring themes were extracted through comparison

within and between each individual participant's responses. The researchers continued to explore the emerging themes, until no change was observed in the data. Data were analyzed via a constant comparative method (Strauss & Corbin, 1990) with first working through open coding, then axial coding, and finally selective coding within predetermined codes noted as attribute codes (Miles et al., 2014). To keep the identity of participants confidential, I used Participant 1 to participant 43 to refer to the participants in the study. I triangulated the data by reviewing the data independently and then coming together to arrive at consensus related to the themes.

The data were triangulated to identify points of convergence and divergence (Creswell & Clark, 2017). The next step was to compare the interview results with the questionnaire outcome, explain key patterns and elements, and identify similarities and differences within and between sources (Patton, 2002).

### **Trustworthiness and Credibility**

I used member checking (i.e. peer examination) and triangulation (i.e. interview technique) to establish the credibility of the study (Creswell, 2015). I adopted triangulation to enrich trustworthiness by involving individual coding. I coded the interviews independently using the matrix. After completing the coding, two independent coders reviewed the emerging themes until they reached agreement. A summary of the findings was shared with the participants to review. The participants validated that the information was consistent with their experiences.



## Results

I present the findings by research question. There are two research questions with results that follow. I present the questionnaire results first and then interview findings.

The quantitative results respond to the question related to how practicing school leaders perceive the effectiveness of the VPLC on their leadership practices.

### **Research Question 1. How did practicing school leaders perceive the effectiveness of the VPLC as a vehicle for improving their instructional leadership practices?**

#### **Quantitative Findings**

The participants' responses to the open-ended questionnaire questions indicated that the VPLC helped the practicing school leaders develop their leadership practices in terms of: (a) increasing convenience, (b) supporting community building, and (c) providing structured content. The percentage varied from 50% for exposure to diverse perspectives through VPD to 95% for positive evaluation of the VPLC. Table 3 renders the participants' responses to the open-ended questions.

**Table 3**

*Participants' Responses to the Open-ended Questions*

<b>Themes</b>	<b>Sub-themes</b>	<b>M</b>	<b>SD</b>	<b>Percentage (%)</b>
<b>Convenience</b>	Convenience of time	4.75	.44	75%
	Convenience of location	4.95	.22	95%
<b>Community Building</b>	Interaction with colleagues and coach	4.05	1.15	50%

	Exposure to diverse perspective	4.23	.95	50%
	Opportunity to review discussion archives	4.47	.75	60%
	Time to be reflective	4.63	.59	67.5%
<b>Content</b>	Resource for future use	4.68	.61	75%
Overall		4.54	.49	

**Increasing Convenience.** Present in most of the participants' responses, the school leaders confirmed that interaction via communities of practice was very helpful. The findings revealed that the participation and interaction through VPLC were encouraged while creating a trusting and collaborative environment. This PD provided a wide range of learning opportunities and has been cost-effective in providing real-time feedback from facilitators, helping busy principals receive ongoing PD support, modeling, and feedback.

**Supporting Community Building.** This PD provided a wide range of learning opportunities, helping busy principals receive ongoing PD support, modeling, and feedback before and after work. Participant 4, for example, commented:

*With my personality, I love the virtual aspect because it's kind of like I can do it wherever and where I was able to be a part of the VPLC. If I stayed late at work and we had a meeting I could just stay at work and do it. If I went home I*

*was able to do it. If I went to my stepdaughter's soccer game I was able to sit on the sidelines and still be able to do it. [Participant 4]*

This unique VPLC environment increased scheduling flexibility and provided possibilities for stimulating collaboration and knowledge-building among school leaders near and far away. Likewise, Participant 1, for example, reflected:

*My principal and I [as an assistant principal] participated in the program and we were both in two different cohorts. Both are able to talk about it, redesigned some of the things that are going on our campus and were able to be refreshed because of the A-PLUS program. [Participant 1]*

**Providing Focused Content.** An analysis of the participants' responses revealed that the content of the VPLC was highly associated with school leadership development with a specific focus on instructional leadership development. Participants asserted that the sustained focused content and teaching materials met their needs in leading a school successfully with teachers and administrators. Furthermore, the content was research-based with real-world examples, which enabled the participants to obtain an in-depth understanding of the leadership knowledge and practices. One practicing school leader in the program stated that:

*I really appreciate the case scenarios, and examples and non-examples given in each module. This helps me visualize and make the research come to life.  
[Participant 6]*

The participants were asked to indicate whether this virtual community had met their expectations and gave their feedback and recommendations concerning the critical

features facilitating VPLC. The participants' responses on the survey questions indicated positive evaluation of the VPD. With respect to specific VPD aspects, in general, ratings ranged from 4.05 to 4.95. The mean score of the participants' responses was 4.54 with a standard deviation of .49, which indicated that most participants found the overall quality of VPLC meetings effective. The percentage varied from 50% for exposure to diverse perspectives through VPD to 95% for positive evaluation of the VPLC in terms of: (a) increasing convenience and professional networking, (b) supporting community building and critical reflection among school leaders, and (c) providing resources for future use.

**Research Question 2. What did school leaders perceive as essential components that an effective VPLC should entail?**

The results of qualitative analysis revealed three major components that the participants thought a successful VPLC should entail based on their experiences in the program: (a) community building through discussion and collaboration and (b) reflective modules and discussion. In what follows, I will elaborate on each of the above components with the practicing school leaders' descriptions.

Following are the practicing school leaders' responses to the interview questions. The pseudonyms were used to ensure the participants' anonymity. The excerpts below were taken from the participants' interviews and reported as low-inference descriptors. It should be pointed out in advance that no changes were made to the excerpts taken from the participants' reflections with regard to grammar, punctuation, and so on.

**Table 4**

*School Leaders' Responses: Themes and Sub-themes*

<b>Major themes</b>	<b>Sub-themes</b>	<b>Descriptors</b>
Community building	Participation and collaboration	collaborative learning communities of practice convenience of timing
	Professional learning networks and supervision	increased confidence providing a safe space
Reflective modules and discussion	Interactivity and inquiry	networking and connection knowledge sharing improved instruction
	Enhanced engagement	

***Community Building***

**Participation and Collaboration.** Present in most of the participants' responses, the school leaders confirmed that interaction via communities of practice was very helpful. The findings revealed that the participation and interaction through VPLC were encouraged while creating a trusting and collaborative environment. This VPLC provides a wide range of learning opportunities and has been cost-effective in providing real-time feedback from coaches and facilitators, helping busy principals receive ongoing PD support, modeling, and feedback. Participant 4, for example, commented:

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This unique VPLC environment increased scheduling flexibility and provided possibilities for stimulating collaboration and knowledge-building among school leaders near and far away. Likewise, Participant 1, for example, reflected:

*My principal and I [as an assistant principal] participated in the program and we were both in two different cohorts. Both are able to talk about it, redesigned some of the things that are going on our campus and were able to be refreshed because of the A-PLUS program. [Participant 1]*

**Professional Learning Networks and Supervision.** Another theme emerging from the participants' responses and reflections indicated that the participants' knowledge was constructed through interactivity, inquiry, and supervision with other group members with resort to providing guidelines that benefitted campuses to develop their instructional capacity and knowledge. The participants attested that the virtual aspect of the program gave them an opportunity to make connections and establish relationships with their colleagues participating from other schools and districts.

Similarly, participant 5 commented:

*One of the things that I find stimulating is seeing the growth not only for myself but also the teacher's growth when we see a teacher that needs some support and then when you see that they're actually taking your feedback. [Participant 5]*

Since beginning the program, participants have developed an increasingly trusting relationship with their coaches and have also in the last PLC have volunteered to share documents illustrating excellent practice. Additionally, the practicing school leaders have contacted each other outside the VPLC to further enhance their professional learning, as evidenced by the VPLC recordings. In addition, the PLC focusing on improving instruction seems to be valuable to improve participants' instructional practice. Participant 3 and Participant 5, for example, went on further and commented:

*This program allowed me to grow as a leader like I said before it kind of allowed me to think about every time we had a different lesson and I was able to talk to other administrators and other districts about the different lessons [Participant 3].*

*I feel that 1/3 of the PLC are working as a true learning community. The other 2 are more in compliance mode. I must provide more directions, clearer expectations, or find a way to inspire the teachers to embrace the vision of ongoing learning [Participant 5].*

Likewise, Participant 6 commented:

*This PLC helped me to make sure that I spend the majority of my day in the instructional part of my job. There's a lot of administrative functions and responsibilities that really can drain the amount of days that you think how you use it. I guess that's one of the things that I find effective. [Participant 6]*

These VPLC also provided a forum where practicing school leaders could get their questions answered in a timely manner through discussion and collaboration with

their group members. The participants agreed that this VPLC was effective, consistently commenting that the sequenced VPLC meetings helped them structure their discussions and collaboration efforts. They remarked that the VPLC positively facilitated their instructional leadership as they have connected with other principals from different campuses.

### ***Reflective Modules and Discussion***

**Interactivity and Inquiry.** Another theme emerging from the participants' responses and reflections indicated that the participants' knowledge was constructed through interactivity, inquiry, and supervision with other group members with resort to providing guidelines that benefitted campuses to develop their instructional capacity and knowledge. The participants attested that the virtual aspect of the program gave them an opportunity to make connections and establish relationships with their colleagues participating from other schools and districts. Similarly, participant 5 commented:

*One of the things that I find stimulating is seeing the growth not only for myself but also the teacher's growth when we see a teacher that needs some support and then when you see that they're actually taking your feedback.*

*[Participant 5]*

The participants took part in the VPLC at their chosen time while allowing them to become familiar with their facilitator and build a sense of community with other leaders from different campuses and districts. They were more actively engaged in the PLC than, adopting the partnership principles of equality and reciprocity. Leadership



growth and reflection were among the major themes revealed by the participants' responses. Participant 3 believed:

*I think one of the benefits of this particular platform is that you have multiple representation of different types of organization and school systems. So you have small school districts, larger school districts, possibly charter school districts. And so with that being the case, you know reinforcing previous ideas or thoughts. I haven't had a chance to necessarily fully implement my visions but this platform allows you to speak in the model as if you were that campus leader and then get that feedback [Participant 3].*

The VPLC for school leaders provided increased network possibilities, motivating learning forums and discussions that bridge research into practice while increasing effective instructional practices. With a focus on building instructional capacity, the program modules and discussions helped the participating principals create a social network of support and supervision to know: (a) the value of their professional communities and (b) how to use new leadership and/or instructional strategies they had learned in the past, but no longer used with fidelity in their current practices.

These VPLC also provided a forum where practicing school leaders could get their questions answered in a timely manner through discussion and collaboration with their group members. They remarked that the VPLC positively facilitated their instructional leadership as they have connected with other principals from different campuses.

**Enhanced engagement.** By discussing how school leaders can work collaboratively on the issues of learning and teaching that matter to their campuses, the discussion and activities inspired them to reflect on their own leadership practice. The participants' responses indicated a significant positive impact of VPLC for leaders on their self-regulation, awareness, reflection, and leveraging their strengths. Echoing the same ideas, participant 4 added:

*... And I think the program with all the meetings that we had really helped to share experiences and to make connections between those experiences ... and it's going to help me to make better decisions in the future. But, I think the way that the program was presented was very easy to follow, very easy to understand right just like I said having this Canvas support was a plus there [Participant 4].*

Most of the participants also shared their new gained knowledge with other leaders in their communities. The participating leaders have reported that certain practices they have learned in the modules are not practices on their current campus. As they maintained, their goal is to “begin transferring what they have learned” to improve instruction on campus.

Since beginning the program, participants have developed an increasingly trusting relationship with their coaches and have also in the last VPLC have volunteered to share documents illustrating excellent practice. Additionally, the practicing school leaders have contacted each other outside the VPLC to further enhance their professional learning, as evidenced by VPLC recordings. In addition, the VPLC focusing on

improving instruction seems to be valuable to improve participants' instructional practice. Participant 3 and Participant 5, for example, went on further and commented:

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The participants perceived discussion and collaboration, enhanced engagement, and opportunities to reflect and practice as the essential components of an effective VPLC. The practicing school leaders enrolled in the program were able to expand their leadership knowledge and experience by actively participating in the discussions while working on collaborative projects. In addition, the level of engagement was also reported as a key factor that affected learning. The participants believed that mentoring and coaching structure and interaction environment (i.e., F2F or virtual) were the main

elements that impacted their engagement. Finally, an effective VPLC should also provide substantial opportunities for participants to reflect on their learning and practices. Reflection could be reinforced by a well-designed curriculum as well as the mentoring and coaching embedded in the VPLC.

### **Discussion**

Based on both qualitative and quantitative analysis of the data from questionnaires and interviews, I found that this online community allowed participants to share important leadership research and resources, and provided them with an avenue for collaborating and communicating with other school leaders as they proceed. These VPLC were regarded as grounds for innovation as participants worked together with other school leaders to find problems and determine creative and workable solutions with a focus on building instructional capacity in serving challenging schools.

This virtual leadership community in accordance with the quality PD programs, as Archibald et al. (2011) suggested, exhibit certain characteristics, including: (a) discussion and collaboration, (b) enhanced engagement, and (c) opportunities to reflect. This VPLC yields collaborative professional communities of practice and reflective leadership practice in terms of better networking and collective learning. The overall program effectiveness was supported by a series of features. The findings are consonant with previous VPLC conceptual frameworks proposed by many researchers. For instance, Archibald et al. (2011) suggested that an effective VPLC should exhibit certain characteristics, such as (a) focus on the core content; (b) provision of opportunities for a collaboration; and (c) inclusion of reflective modules. Hord and Sommers' (2008)

conceptual framework for PLC also highlighted the importance of collective learning, sharing experiences and practices, and supportive learning environments in building PLC. In addition to program characteristics mentioned in previous VPLC frameworks, I found that mentoring and coaching structure was also an important factor that impacted program effectiveness. The structure referred to the way the coaching session was organized and conducted in the online learning community. I found that sustained shared leadership and goal orientated learning during VPD sessions were imperative in fostering participants' accountability, especially in a virtual professional learning environment.

### **Conclusion**

Research is still emerging on how to develop school leaders' instructional capacity. The research team implemented research-based practices through VPLC for building school leaders' instructional capacity. I found that the practicing school leaders were positive toward the VPLC in terms of: (a) increasing convenience and professional networking, (b) supporting community building and critical reflection among school leaders, and (c) providing resources for future use.

The VPLC can be regarded as a gateway to increasing scalability of quality PD programs for school leaders serving low-performing campuses across the states. Our nation's school leaders can be better supported through sustained effective professional learning through communities of practice. As the research team continues implementing, adapting, and growing the virtual learning environment supporting learning communities, I gained valuable insights that can inform the work of districts, states, and

organizations working to support the school leadership community. Thus, we need to embed VPD activities, additional evidence-based tools and resources from the Institute of Education Sciences (IES) and What Works Clearinghouse (WWC) practice guidelines to facilitate VPLC in future leadership development programs.

When it comes to VPLC meetings, it is required to know more about the possible ways to reduce the cost of implementing sustained effective VPLC. It is also needed to have a clear vision of VPLC among school leaders, measure effective practices, and examine which instructional strategies work. Finally, the processes and structures affecting building professional learning and leading communities, including VPLC size and composition, needs further examination. In addition, performance in VPLC can be affected by a number of participants' demographic variables, including their age, experience, gender, and ethnicity of community members in addition to whether participation is voluntary or mandatory. The time and location of VPLC meetings, VPLC processes, and closure activities can also affect the participants' reflection and performance. It still remains underexplored the ways to reduce the cost of implementing effective VPLC and find high-quality professional learning activities serving administrators' needs.

## References

- Adelson, J. L., & McCoach, D. B. (2010). Measuring the mathematical attitudes of elementary students: The effects of a 4-point or 5-point Likert-type scale. *Educational and Psychological measurement, 70*(5), 796-807.
- Archer, J., & Max, J. (2018). Implementing Online Professional Learning Communities: Insights from WestEd's Blended Professional Development Model. *Mathematica Policy Research*.
- Archibald, S., Cogshall, J. G., Croft, A., & Goe, L. (2011). High-quality professional development for all teachers: Effectively allocating resources. Research & Policy Brief. *National Comprehensive Center for Teacher Quality*. Retrieved from <https://files.eric.ed.gov/fulltext/ED520732.pdf>.
- Ayers, S. Spanneut, G., & Tobin, J. (2012). Identifying the professional development needs of public school principals based on the interstate school leaders licensure consortium standards. *NASSP Bulletin 96*, 67-88.
- Beesley, A. D., & Clark, T. F. (2015). How rural and non-rural principals differ in high plains U.S. states. *Peabody Journal of Education, 90*(2), 242-249.
- Beteille, T., Kalogrides, D., & Loeb, S. (2011). Stepping stones: Principal career paths and school outcomes. *The National Center for the Analysis of Longitudinal Data in Education Research (CALDER Working Paper No. 58)*. Retrieved from <https://files.eric.ed.gov/fulltext/ED529253.pdf>.
- Bush, T. (2019). Professional learning communities and instructional leadership: A collaborative approach to leading learning? *Educational Management*

*Administration & Leadership*, 47(6), 839–842.

<https://doi.org/10.1177/1741143219869151>

City, E. A., Elmore, R. F., Fiarman, S. E., & Teitel, L. (2009). *Instructional rounds in education: A network approach to improving teaching and learning*. Cambridge, MA: Harvard Education Press.

Collins, A., Brown, J. S., & Newman, S. E. (1989). Cognitive apprenticeship: Teaching the crafts of reading, writing, and mathematics. In L. B. Resnick (Ed.), *Knowing, learning and instruction: Essays in honor of Robert Glaser* (pp. 453-494). Hillsdale, NJ: Erlbaum.

Coggsall, J. G. (2015). II, Part A: Don't scrap it, don't dilute it, fix it. Washington, DC: Education Policy Center at American Institutes for Research. Retrieved from <https://files.eric.ed.gov/fulltext/ED571849.pdf>.

Creswell, J. W. (2005). *Educational research: Planning, conducting, and evaluating quantitative and qualitative approaches to research* (2nd Ed). Pearson Education.

Creswell, J. W. (2015). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research* (5th ed.). Pearson.

Creswell, J. W., & Clark, V. L. P. (2017). *Designing and conducting mixed methods research*. Sage publications.

Creswell, J. W., Shope, R., Plano Clark, V. L., & Green, D. O. (2006). How interpretive qualitative research extends mixed methods research. *Research in the Schools*, 13(1), 1-11.



Darling-Hammond, L., Wei, R. C., Andree, A., Richardson, N., & Orphanos, S. (2009).

Professional learning in the learning profession: A status report on teacher development in the United States and abroad. Technical Report. *National Staff Development Council*.

Davis, K., Rogers, D., & Harrigan, M. (2020). A review of state policies on principal professional development. *Education Policy Analysis Archives*, 28(24).

<https://doi.org/10.14507/epaa.28.4421>

Dennen, V. P. (2004). Cognitive apprenticeship in educational practice: Research on scaffolding, modeling, mentoring, and coaching as instructional strategies. In D. H. Jonassen (Ed.), *Handbook of Research on Educational Communications and Technology* (pp. 813-828). Mahwah, NJ: Lawrence Erlbaum, Inc.

Dede, C., Ketelhut, D. J., Whitehouse, P. & McCloskey, E. (2009). A research agenda for online teacher professional development. *Journal of Teacher Education*, 60, 8-19.

Dobie, T. E., & Anderson, E. R. (2015). Interaction in teacher communities: Three forms teachers use to express contrasting ideas in video clubs. *Teaching and teacher education*, 47, 230-240.

Drago-Severson, E., & Maslin-Ostrowski, P. (2018). In translation: School leaders learning in and from leadership practice while confronting pressing policy challenges. *Teachers College Record*, 120(1), 1-44.

Earl, L., & Fullan, M. (2003). Using data in leadership for learning. *Cambridge Journal of Education*, 33(3), 383-394.

- Glaser, B. G., & Strauss, A. L. (2017). *Discovery of grounded theory: Strategies for qualitative research*. Routledge.
- Gümüs, E. (2019). Investigation of mentorship process and programs for professional development of school principals in the USA: The case of Georgia. *International Journal of Educational Leadership and Management*, 7(1), 2-41.
- Hadar, L., & Brody, D. (2010). From isolation to symphonic harmony: Building a professional development community among teacher educators. *Teaching and Teacher Education*, 26(8), 1641-1651.
- Hairon, S., Goh, J. W. P., & Chua, C. S. K. (2015). Teacher leadership enactment in professional learning community contexts: Towards a better understanding of the phenomenon. *School Leadership & Management*, 35(2), 163-182.
- Harris, A., Jones, M., & Huffman, J. B. (2017). *Teachers leading educational reform: The power of professional learning communities*. Routledge.
- Hord, S. M. (1998). Creating a professional learning community: Cottonwood Creek School. *Issues about change*, 6(2), 2.
- Hord, S. M., & Sommers, W. A. (2008). *Leading professional learning communities: Voices from research and practice*. Corwin Press.
- Huffman, J. B., & Hipp, K. K. (2003). *Reculturing schools as professional learning communities*. R&L Education.
- Hull, J. (2012). The principal perspective: Full report. Alexandria, VA: Center for Public Education. Retrieved from <http://www.centerforpubliceducation.org/principalperspective>

- Goodnough, K. (2008). Dealing with messiness and uncertainty in practitioner research: The nature of participatory action research. *Canadian Journal of Education*, 31(2), 431-458.
- Irby, B. J. (2020). Professional learning communities: An introduction. Summer Leadership Institute VI. Education Leadership Research Center, College of Education and Human Development, Texas A&M University, College Station, TX.
- Irby, B. J., Brown, G., & Yang, L. (2013). The synergistic leadership theory: An inclusive theory in the twenty-first century. *The handbook of educational theories* (pp. 985-995). Charlotte, NC: Information Age Publishing.
- Irby, B. J., Lara-Alecio, R., & Tong, F. (2017). Accelerated preparation of leaders for underserved schools: Building instructional capacity to impact diverse learners (U423A170053). Funded Grant, U.S. Department of Education SEED Program.
- Irby, B. J., Sutton-Jones, K. L., Lara-Alecio, R., & Tong, F. (2015). Informal individual learning via virtual professional development: A proposal for massive open online professional informal individual learning (MOOPIL). In *Handbook of research on innovative technology integration in higher education* (pp. 343-355). IGI Global
- Irby, B. J., Sutton-Jones, K. L., Lara-Alecio, R., & Tong, F. (2017). From MOOCs to MOOPILs: Pushing the Boundaries of Virtual Professional Development and Learning for Teachers. *International Journal of Information Communication Technologies and Human Development (IJICTHD)*, 9(1), 34-47.

- Ivankova, N. V., Creswell, J. W., & Stick, S. L. (2006). Using mixed-methods sequential explanatory design: From theory to practice. *Field methods*, 18(1), 3-20.
- Koukis, N., & Jimoyiannis, A. (2018). MOOCs and teacher professional development: A case study on teachers' views and perceptions. In M.B. Nunes & P. Isaias (Eds.), *Proceedings of the International Conference e-Learning 2018* (pp. 19-26), Madrid: International Association for Development of the Information Society.
- Lieberman, A., Miller, L., Wiedrick, J., & von Frank, V. (2011). Learning communities: The starting point for professional learning is in schools and classrooms. *The Learning Professional*, 32(4), 16-20.
- Leung, S. O. (2011). A comparison of psychometric properties and normality in 4-, 5-, 6-, and 11-point Likert scales. *Journal of Social Service Research*, 37(4), 412-421.
- Loeb, S., Kalogrides, D., & Horng, E. L. (2010). Principal preferences and the uneven distribution of principals across schools. *Educational Evaluation and Policy Analysis*, 32(2), 205-229.
- Lomos, C., Hofman, R. H., & Bosker, R. J. (2011). Professional communities and student achievement—a meta-analysis. *School effectiveness and school improvement*, 22(2), 121-148.
- McConnell, T. J., Parker, J. M., Eberhardt, J., Koehler, M. J., & Lundeberg, M. A. (2013). Virtual professional learning communities: Teachers' perceptions of

- virtual versus F2F professional development. *Journal of Science Education and Technology*, 22(3), 267-277.
- McLester, S. (2012). Sustainable professional development. *District Administration*, 48(10), 36-41.
- Miles, M., Huberman, M., & Saldaña, J. (2014). *Qualitative data analysis: A methods sourcebook* (3rd ed.). Sage.
- National Academies of Sciences, Engineering, and Medicine. (2015). *Science teachers learning: Enhancing opportunities, creating supportive contexts*. Washington, DC: The National Academies Press.
- National Association of Elementary School Principals (2019). Making PLC a plus. Retrieved from <https://www.naesp.org/principal-novemberdecember-2019-principals-guide-leadership/making-PLC-plus>
- Owen, H. D. (2014). Putting the PLE into PLD: Virtual professional learning and development. *Journal of Educators Online*, 11(2), Retrieved from <https://eric.ed.gov/?id=EJ1033266>
- Patton, M. Q. (2002). *Qualitative research and evaluation methods*. SAGE Publications.
- Penner-Williams, J., Díaz, E. I., & Worthen, D. G. (2017). PLC: Key PD component in learning transfer for teachers of English learners. *Teaching and Teacher Education*, 65, 215-229.
- Popp, J. S., & Goldman, S. R. (2016). Knowledge building in teacher professional learning communities: Focus of meeting matters. *Teaching and Teacher Education*, 59, 347-359.

- Rowland, C. (2017). Principal Professional Development: New Opportunities for a Renewed State Focus. *Education Policy Center at American Institutes for Research*.
- School Leaders Network (2014). Churn: The high cost of principal turnover. Retrieved from <https://connectleadsucceed.org/?s=Churn%3A+The+high+cost+of+principal+turnover>.
- Steinberg, M. P., & Yang, H. (2020). Does principal professional development improve schooling outcomes? Evidence from Pennsylvania's inspired leadership induction program. (EdWorkingPaper: 20-190). Retrieved from Annenberg Institute at Brown University: <https://www.edworkingpapers.com/sites/default/files/ai20-190-v2.pdf>.
- Strauss, A., & Corbin, J. (1990). *Basics of qualitative research*. Sage.
- Tong, F., Irby, B. J., & Lara-Alecio, R. (2015). Teachers' perception of virtual professional development in a randomized control trial. *International Journal of New Technology and Research*, 1(7), 58-61.
- U.S. Department of Education. (2015). Findings from the 2014–2015 Survey on the use of funds under title II, part A. Retrieved from <https://www2.ed.gov/programs/teacherqual/learport.pdf>.
- von Frank, V. (2011). What learning looks like: Instructional rounds help design and achieve system wide improvement. *The Learning Principal*, 6, 3. Oxford, OH:

Learning Forward. Retrieved from <https://learningforward.org/docs/the-learningprincipal/3-11vonfrank.pdf?sfvrsn=2>

Vygotsky, L. S. (1978). Tool and symbol in child development. In M. Cole, V. John-Steiner, S. Scribner, & E. Souberman (Eds.). *Mind in Society: The development of higher psychological processes*. Harvard University Press.

Wenger, E. (1998). *Communities of practice: Learning, meaning, and identity*. Cambridge University Press.

Yin, R. K. (2009). *Case study research: design and methods* (4th ed.). Sage.

## CHAPTER V

### CONCLUSION

Given the quality professional development (PD) opportunities, school leaders can be empowered to make changes and reach our national goals of high achievement for English learners (ELs) and economically challenged students (ECs). Rowland (2017) noted that most of our nation's school leaders are not aware of what is happening in schools today. These ever-changing issues include, for example, changing demographics, evolving technologies, emerging instructional strategies, and reform initiatives. In regards to principal professional learning, according to Penner-Williams et al. (2017), some of the shortcomings that school principals face are the scarcity of relevant and effective principal preparation and PD programs for newly appointed school principals in challenging schools.

As a leadership development tool, I addressed prevailing issues in developing leadership capacity of school leaders within VPLC. Specifically, the virtual mentor coaches engaged the practicing school leaders in reflective dialogues as a vehicle for collective learning and practice guidance through this virtual community. I found the value of VPLC in developing and supporting campus-based and research-informed practices in view of: (a) increasing convenience and professional networking, (b) supporting community building and critical reflection among school leaders, and (c) providing resources for future use. More embedded, locally driven leadership mentoring and coaching and PD support have indicated more consistent promise (e.g., Bush, 2019;



Houchens et al., 2017), but what requires more research is the content of what school leaders learn and how they transfer their learning to practice.

VPLC offers a level of flexibility in terms of mobility, which allows the participants opportunities to interact (Owen, 2015). With VPLC, the facilitator is not on-site, however, he or she provides an online meeting platform, wherein leaders log in, engage with the participants, and discuss pre-specified topics related to campus leadership and instruction. Against this backdrop, the researchers will focus on the perceptions of principals concerning VPLC, the impact VPLC had on participants' leadership practices and their transfer of learning, and varied levels of mentoring and coaching support for leadership development via VPLC in underserved schools with high concentrations of high-need students across the state of Texas.

### **Implications of the Study**

The findings of this study bear both theoretical as well as practical implications. At the theoretical level, with specific focus on the under-researched area of VMC through VPLC, this study may be considered a pioneering step in providing empirical evidence of the effect of the VPLC L.E.A.D.E.R. on principals' leadership development. At the practice level, the implications of our VPLC are also encouraging for design and implementation of virtual coaching for instructional leaders through online platforms and professional communities to facilitate an integrative, meaningful, relevant and authentic experience-based leadership approach. I have reinforced the importance of VPLC as a key component of online PD in the development of leaders and called for valid and reliable strategies and mechanisms for incorporating VPLC in leadership

education. A further implication for major stakeholders is to establish state policy to highly affect the provision, design, and scope of VMC resulting in enhancing the quality of PLCs, particularly VPLCs. Funds and resources are undoubtedly needed to adequately address support and expertise from a variety of organizations and partners to build school capacity for improvement quality programs and instruction efforts. Therefore, capacity-building policy (McDonnell & Elmore, 1987) is recommended for consideration.

### **Suggestions for Further Research**

Much still needs to be done in identifying and validating those critical aspects of the VPLC that limit, as well as foster, a genuine collaboration between the participants. Further research is required to shed light on creating online platforms through which principals gained insightful experience from participating in real-time live mentoring and coaching. More research needs to investigate the impact of tiered coaching support on sustaining school leaders' fidelity of implementation (FOI). Effective principals' leadership plays a vital role in ensuring transforming successful schools and improving practices to promote success for ELs and ECs. VPLC allows principals to have access to useful resources and new developments in leadership practices.

Research is still emerging on how to develop school leaders' instructional capacity. The research team implemented research-based practices through VPLC for building school leaders' instructional capacity. The interest in the use of VPLC for leadership development is expanding dramatically, as VPLC allows school leaders to have access to useful resources and new developments in leadership practices. Much still

needs to be done in identifying those aspects of the VPLC that contribute to effective high-quality professional growth and learning. VPLC as a component of PD brings promising opportunities to major stakeholders, including instructional leaders and classroom teachers. Despite the increasing use of VPLC, there are still relatively few studies that utilize strong empirical methods for evaluation of VPLC. There are even fewer studies that evaluate VPLC using coaching support in terms of its efficacy in improving school leaders' instructional practices or student learning.

VPLC still needs more research to link the process of reflection to the possible ways to build school leaders' instructional leadership capacity to prepare them for teacher leaders' growth and supervision. Findings suggest that school leaders need additional PD and coaching support to build capacity, particularly in accommodating the demands of leadership team effectiveness and school improvement. While our proposed VPLC has been linked to improvement in instructional leadership, identifying what practicing and aspiring school leaders learn from professional learning requires further investigation. Yet conditions to sustain an effective VPLC requires further research.

I provided insights into the capacity-building process of school leaders through VPLC. The framework of leading questions, engagement, applied research, discussion, examples, and reflection was followed by the coaches and was found to be effective, especially in supporting reflection for school leaders and administrators. Besides, the VPLC sessions played a significant role in creating a safe space and comfortable environment for participants, where they were willing to share experiences, engage in reflective practice, and build trust and relationships. These collaborations, along with the

accessibility of the online coaching, provided school leaders flexible and effective assistance for reflection and transformation. It can be suggested that bringing groups of teacher leaders from related content areas working collaboratively using VPLC was an effective approach targeted to improve professional learning and increased student achievement. A promising strategy to foster VPLC for school leaders is the coupling of it with VMC, because school leaders and other staff members can be supported as they participate in VPLC meetings. Such a strategy can build capacity in school leaders as well as develop their leadership strengths.

More research is undoubtedly needed to find strategic reflection to positively impact culturally and linguistically responsive pedagogy for underserved schools. Future research is, then, suggested to explore funds and resources to adequately address support and expertise from a variety of organizations and partners to build individual leadership capacity for school transformation efforts, mindfulness, and emotional intelligence through reflection. As the change cycle goes on, school leaders in underserved schools serving bilingual/ELs and ECs need to receive targeted, meaningful, and continuous PD which might lead to their growing experience and expertise in instructional leadership. These PDs might include, but are not limited to, school climate, parent involvement, and instructional quality in their schools.

Findings from this study are useful in describing the mentoring and coaching process and, thus, provides empirical evidence for VPLC. Key steps and components of effective coaching highlighted in the current research also offer practical guidance for

future coaches in conducting and evaluating VPLC. I offer the following guidelines for future practitioners:

1. The virtual mentor coaches should provide meaningful practices, which are applicable to various school settings.
2. The virtual mentor coaches should open negotiation among participants as they learn from each other and share their best practices.
3. Collaboration for discussion, planning, and group assignments provided grounds for reflection and transformation as participants work together to find problems and determine creative and workable solutions.

Further research is needed to provide the evidence of feasibility and effectiveness of the VPLC using the Reflection Cycle. In particular, it would be necessary to further quantify the impact of the VPLC model with the guidelines. It is hoped that the findings from this research will promote better PD using VPLC for an increasing number of school leaders in wider contexts.

A follow-up study with larger and more diverse groups of participants in different contexts is also needed. The theme that requires more exploration is the investigation of the factors contributing to effective VPD and effective strategies for partnerships in VPLC. The findings may provide interesting insights into the qualitative features of group coaching through shared collaboration and serve as an inspiration for designing successful VPLC. In particular, we recommend examining the impact of VPLC from the virtual mentor coaches' experiences and perceptions and the impact of tiered VMC support via VPLC on sustaining school leaders' fidelity of implementation

(FOI). Perhaps, a counternarrative would be to study individual learning in VPLC small groups without a virtual mentor coach present and to determine how that going it alone increases perceived leadership skills. I believe that what I have reported here is an initial step for reflection and opportunity to validate this and other approaches so the educational system can open better opportunities for ELs and ECs to be able to succeed in their classroom and later in society.

## References

- Bush, T. (2019). Professional learning communities and instructional leadership: A collaborative approach to leading learning? *Educational Management Administration & Leadership*, 47(6), 839–842. <https://doi.org/10.1177/1741143219869151>
- Ermeling, B. A., Tatsui, T. T., & Young, K. R. (2015). Virtual coaching for instructional leaders: A multi-method investigation of technology-enabled external assistance. *Teachers College Record*, 117(11), 1-63
- McDonnell, L. M., & Elmore, R. F. (1987). Getting the job done: Alternative policy instruments. *Educational Evaluation and Policy Analysis*, 9(2), 133-152
- Penner-Williams, J., Díaz, E. I., & Worthen, D. G. (2017). PLC: Key PD component in learning transfer for teachers of English learners. *Teaching and Teacher Education*, 65, 215-229.
- Rowland, C. (2017). Principal Professional Development: New Opportunities for a Renewed State Focus. *Education Policy Center at American Institutes for Research*.
- Houchens, G. W., A. Stewart, T., & Jennings, S. (2017). Enhancing instructional leadership through collaborative coaching: A multi-case study. *International Journal of Mentoring and Coaching in Education*, 6(1), 34-49. <https://doi.org/10.1108/IJMCE-07-2016-0057>
- Owen, H. D. (2015). Making the most of mobility: Virtual mentoring and education practitioner professional development. *Research in Learning Technology*, 23, 1-14.

## Appendix A

You will use the Reflection Cycle (Brown & Irby, 2001) to proceed through the Reflection Cycle process. Answer the questions related to the Reflection Cycle from the perspective of your experiences on your own campus. You are required to select an artifact(s), then describe, analyze, appraise the events, situation, and experiences surrounding that artifact and then how you will transform your leadership practice based on your moving through the Reflection Cycle.

### SELECT

Select an artifact(s) to demonstrate how knowledge gained in a course or module connects to your professional context. ***Emphasis should be on the leadership experience in developing the product rather than the product itself.***

### DESCRIBE

Share and describe your artifact (the events/the experiences surrounding it). For example, describe the artifact (the experience) you used.

### ANALYZE

Share the “why” and “how” of your artifact (experience) or pose questions of others to learn more.

### APPRAISE

Based on your learning, appraise the value of your experience based on observable data.

### TRANSFORM

Considering responses from other participants or your personal learning and understanding gained in this cycle, what insights have you gained to transform your practice?



**Appendix B**  
**Principals' Perceptions of the Effectiveness of the**  
**Virtual Professional Learning Communities (VPLC)**

**Instructions**

The items below explore your perceptions of the virtual professional learning communities (VPLC) sessions that you have received. Please answer the following questions based on your experience with APLUS live virtual online training. Read each statement and choose the answer that corresponds with your perception regarding the different items on the questionnaire. Answer truthfully. There is NO right or wrong answers. By selecting, "I agree" below, you agree that you have read the statement of informed consent and that you have not previously completed this survey. By selecting "don't agree" it means you do not want to participate in the study.

Agree

Don't Agree

Name of School and District

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Gender

Male

Female

Age

25-34

35-44

45-54

55+

Choose not to answer

Ethnicity

White

Black or African American

Asian

Hispanic

Other

Years of Experience as an Administrator

Less than 1 year

1-2 years

3-5 years

6-10 years

11+ years

How much Professional Development (PD) have you had related to improving instruction for English learners?

0 hour

1-10 hours

11-20 hours

1-50 hours

50+ hours

How did you compare the virtual training format to a traditional F2F PLC in the following aspects?

1=Much worse 2=Somewhat worse 3=About the same 4=Somewhat better 5=Much better

- Convenience of timing
- Convenience of location
- Interaction with colleagues and mentors
- Exposure to diverse perspective
- Opportunity to review discussion archives
- Time to be reflective
- Resource for future use

1. After participating in this training, were your expectations satisfied? Describe the you're your expectations were or were not satisfied.
2. What is the most valuable aspect of the VPLC?
3. What could be done to improve the quality of the VPLC?
4. After participating in this training, how would you engage your colleagues in the VPLC?
5. What were your two greatest takeaways that you gained from this VPLC?
6. Is there something else that you feel should be included in the VPLC?