A CASE STUDY OF LEADERSHIP SUPPORTS OF JOB-EMBEDDED

PROFESSIONAL DEVELOPMENT

Amber R. Jones, B.A., M.Ed.

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APPROVED:

Robert Voelkel, Major Professor
Frances van Tassell, Co-Major Professor
Miriam Ezzani, Committee Member
Deidre Parish, Committee Member
Misty Sailors, Chair of the Department of
Teacher Education and Administration
Randy Bomer, Dean of the College of Education
Victor Prybutok, Dean of the Toulouse Graduate
School

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Professional development is a critical part of school improvement and enhancing teacher quality; yet there is limited literature about how principals design and lead effective professional development systems. The research activities in this qualitative single case study explored the leadership practices at one successful school implementing job-embedded professional development. A conceptual framework relating Hallinger's leadership for learning construct to professional development helped frame the research. Collected data included participant interviews, a focus group interview, observations, and relevant document analysis. These data were analyzed using a general inductive method to identify the prevailing leadership characteristics. The major themes that emerged during analysis were: (a) vision and goals, (b) high expectations, (c) structures and resources, (d) communication, (e) monitoring progress and providing recognition, (f) focused and ongoing professional development, (g) differentiated professional development, (h) trust and professionalism, (i) culture of learning and growth, (j) building capacity, and (k) collaboration. These themes aligned well with the initial conceptual framework. These findings support the concept that leadership for learning may have implications for school leaders trying to implement effective job-embedded professional development.

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CHAPTER 1

INTRODUCTION TO THE STUDY

Quality teaching is one of the most influential factors affecting student achievement (Goe, 2007). For educators to continue to improve their practice, they must have access to high-quality professional development (Kennedy, 2016). Although universities provide preservice training programs, higher education institutions are not equipped to provide enough experiences for teachers to become effective. Teaching is complex, and it takes years to become proficient. According to Mizell (2010), "Educators who do not experience effective professional development do not improve their skills, and student learning suffers" (p. 6).

Because professional development is so vital, districts must provide high-quality programs that enhance educator quality. Any reform initiative undertaken by a district should adhere to the practices of quality professional development to ensure it is effective. In the analysis of Garet, Porter, Desimone, Birman, and Yoon (2001), effective professional development is (a) sustained and intensive, (b) focused on content, (c) structured for active learning, and (d) integrated into daily work. The *Every Student Succeeds Act* (ESSA) of 2015 reinforced this concept of quality professional development. This reauthorization of the landmark *Elementary and Secondary Education Act* (ESEA) of 1965 is the first iteration of American public education law that enumerated specific descriptors of professional development. ESSA described professional development as "sustained (not stand-alone, 1-day, or short term workshops), intensive, collaborative, job-embedded, data-driven, and classroom-focused" (p. 2096).

Because of emerging research and federal legislation related to professional development, many districts across the United States are trying to move in the direction of more job-embedded

models of learning for teachers. This type of professional development differs from pullout training models in which educators leave their classrooms to attend workshops. Instead, job-embedded professional development is school- or classroom-based. A key feature in this learning model is that it is "integrated into the workday, consisting of teachers assessing and finding solutions for authentic and immediate problems of practice as part of a cycle of continuous improvement" (Croft, Coggshall, Dolan, Powers & Killion, 2010, p. 2).

Districts have invested heavily in these initiatives, and yet, some educators do not find their professional development to be satisfying or helpful. In a study commissioned by the Bill and Melinda Gates Foundation (2014), teachers reported a gap between their ideal professional development and the reality of the experiences they receive. Teachers desire professional development that is relevant, personalized, interactive, sustained over time, and delivered by someone who understands their experience. Job-embedded models are designed to target these aspects, yet teachers in the Gates Foundation study reported high levels of dissatisfaction with these initiatives. Focus-group teachers described their ideal collaborative experiences as energizing, supportive, and hands-on or scenario-based, but they described their current reality of collaborative professional development as disengaging, time-wasting, and poorly planned or executed.

Why is there a disconnect between teachers' desire to have collaborative, intensive learning experiences and their dissatisfaction when they take part in these models? One potential reason is the difficulty school leaders have in effectively implementing and sustaining job-embedded professional development. Organizations struggle to change culture and provide leadership sufficient to embed these models with success. Fullan (2006) explained this gap in results as a product of having a *theory in use* but not a *theory of action*. He argued that many

reforms are incomplete because they do not attend to the larger context of the change.

Organizations that plan for new initiatives must not only address the content of the professional development but must also focus on the theories of action and systemic thinking. In other words, leaders must think more broadly about their role in implementing and sustaining professional development for it to be effective in accomplishing the intended outcomes. If these are not included in the overall plan of action, the implementation will be superficial. At worst, it can create a negative perception of the reform, a perception that has a lasting impact on teachers' attitudes toward collaborative learning and professional development.

Many well-intentioned organizational leaders, however, tend to focus on the content of their initiatives and ignore the context of learning and the support needed for change. Elmore (2016) asserted that the process of school improvement is more complex than what current professional development practices support. Elmore noted that professional development is often over-simplified and "embodies deep and profound misconceptions about how human beings learn, develop, adapt and change" (p. 3). Educational leaders must look for ways to begin shifting from prescriptive, top-down approaches to creating processes that allow an organization to embed powerful ideas in their unique context. The leadership challenge then becomes developing the culture and processes that generate and build a culture of professional development, without dictating that campuses and teams simply implement new initiatives. In this study, I sought to examine leadership practices that support job-embedded professional development.

Statement of the Problem

The problem of practice for this study was to understand school leadership attributes as they relate to job-embedded professional development for teachers. Educational leaders must ensure all students are in classrooms with teachers that are highly capable in their content and pedagogy. In addition, there is increasing pressure for public schools to produce students that have future-ready skills that will allow them to be successful in a global economy. The changing nature of education in the 21st century has rapidly changed the pace at which teachers need to learn and integrate new skills into their practice. Teachers need to have access to ongoing powerful professional development to achieve positive outcomes for students.

Although there are few empirical studies of professional development and its impact on student achievement, the literature shows potential in the areas of job-embedded professional development. The findings that have emerged point to the importance of having collaborative, sustained learning that is connected to teacher practice in order to have a positive effect on student achievement (Darling-Hammond, Wei, Andree, Richardson, & Orphanos, 2009; Garet et al., 2001). While this paradigm shift in professional development seems promising, the literature also reveals that many teachers in the United States do not currently have access to job-embedded learning models they find valuable (Darling-Hammond et al., 2009; Gates Foundation, 2014).

Educational leaders must find ways to design and support quality professional development that is effective and results in lasting change. Because teaching students is so complex, it makes sense that professional development for adults would be equally complicated. Drago-Severson (2016) noted that "While we often intuitively understand that we need to provide children and youth with diverse supports and challenges to help them grow, the importance of differentiating our teaching and leading for *adults* is often overlooked" (pp. 56-57). For educational reforms to move forward, leaders need to understand how to support adult growth and reframe professional development in the context of that knowledge. Because of the

lack of robust literature connecting leadership to professional development, in this qualitative case study, I focused on examining leadership attributes and their relation to job-embedded professional development.

Conceptual Framework

The conceptual framework for this study is anchored in the assertion that school leaders impact the job-embedded professional development in which teachers engage. This framework draws upon the research of school leadership, professional development, and teacher change. To properly frame this study, it is important to examine the leadership of effective organizations and the conditions that are necessary for job-embedded professional development that improves teacher practice.

In a synthesized model of leadership, Hallinger (2011) conceptualized a hybrid model of leadership, drawing on elements of various leadership models. This leadership for learning framework articulated a set of four concepts that emerged from more than 40 years of leadership research: (a) values and beliefs, (b) leadership focus, (c) context, and (d) sharing leadership.

Leaders use their values and beliefs to shape culture and decision making. To build the academic capacity of their school, leaders ensure the focus of their work is on the articulated vision and goals, structures and processes, and capacity of people. Leadership also is highly contextual and adept leaders must align their practices with the specific situational needs of their school. Finally, skilled leaders find ways to share leadership to drive change in their organizations. According to Hallinger, leadership has an indirect influence on student achievement; therefore, leaders must have a mechanism by which they impact student outcomes.

The lack of empirical research makes it difficult to determine which variables contribute to effective professional development; however, the limited existing research does provide some

insight into characteristics of teacher learning that impact students. Croft et al. (2010) synthesized a variety of research findings related to professional development to provide understanding of the design of high-quality learning systems. They noted three necessary conditions for effective job-embedded professional development: (a) teacher opportunity to learn, (b) learning communities, and (c) effective facilitation. For teachers to have opportunity to learn, they must have time, space, structure, and support to engage in learning that results in their growth. Learning communities enable teachers to engage in cycles of inquiry around problems of practice that directly impact the classroom. Effective facilitation of job-embedded professional development requires facilitators to have expertise in content and pedagogy, as well as strong interpersonal and group development skills.

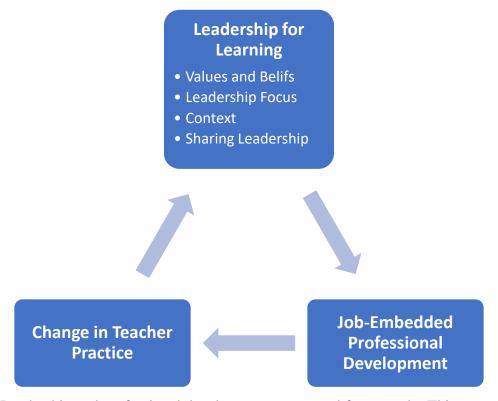


Figure 1. Leadership and professional development conceptual framework. This conceptual framework depicts the relationship between leadership for learning (Hallinger, 2011) and jobembedded professional development that impacts teacher effectiveness through change in practice.

For this research study, I argue that these leadership for learning attributes are crucial for enacting quality professional development, which then starts the process of changing teacher practice and beliefs. The proposed relationships are demonstrated in Figure 1. The conceptual framework shows the expected relationship of two constructs, leadership and job-embedded professional development. By demonstrating a link between these constructs, the goal in this study was to reveal explicitly a pathway by which professional development mediates leadership effects on teacher practice.

Purpose of the Study

To what extent leadership influences student achievement and how various leadership types affect student outcomes has been the subject of a variety of studies (Leithwood, Louis, Anderson, & Wahlstrom, 2004; Robinson, Lloyd, & Rowe, 2008). While some of the findings show a positive relationship between school leadership and student achievement, it has been more challenging to pinpoint the mechanism by which leaders influence positive outcomes in their specific contexts (Leithwood et al., 2004). As a result, the purpose of this study was to explore school leadership characteristics that lead to quality job-embedded professional development for teachers. The findings of this study have the potential to help determine if effective school leadership is a link to quality teacher professional development and positive changes in teacher practice.

Research Questions

To examine leadership and job-embedded professional development practices in schools, the following overarching research question guided this case study: In what ways do campus principals support job-embedded professional development?

To answer the overall research question, I examined two subsequent questions.

- 1. What leadership behaviors do principals employ that support job-embedded professional development?
- 2. What are teachers' perceptions of how campus leaders support their professional development?

Significance of the Study

While numerous studies sought to connect leadership to student learning outcomes, there have been few that explored leadership and teacher professional development that ultimately resulted in improved student achievement. Intuitively, leadership practices that contribute to more effective teaching practices should positively impact student achievement. Testing that assumption, however, has been challenging (Heck & Hallinger, 2014). More research is needed that directly connects leadership practices to professional development that enhances teacher effectiveness. In addition, research that explores the relationship of leadership and professional development has the potential to inform practice and policy in PK-12 education. While the boundaries of this single case are limited, the in-depth findings of this case study may inform campus leaders about the link between campus leadership and teachers' professional development that impacts student achievement.

Delimitations

According to Roberts and Hyatt (2019), delimitations clarify the scope and let the audience know the boundaries of the study. The following factors are delimitations of this research. The site used in this study was one north Texas elementary school. This site was specifically chosen for this study because it utilizes a variety of job-embedded professional development models. Education participants included K-5 public school administrators, instructional coaches, and teachers. Finally, the timeframe for data collection was two months

within the spring semester of a single school year. At that time, teachers had participated in a variety of professional learning opportunities throughout the schoolyear.

Assumptions

This qualitative study included the perceptions and experiences of school administrators, instructional coaches, and classroom teachers. I used a sample of the staff from the studied campus and their perceptions were used to generalize the understandings about leadership and professional development for the whole campus. One assumption for this research is that the participants selected for data collection are illustrative of the overall staff. Another assumption is that participants responded normally and answered questions honestly. Since the research questions sought to find the true experiences and perceptions of educators, it was important that participants felt free to be transparent. Finally, it is assumed that the school year chosen for the study represents a typical school year for this campus and that the results from the data collection period accurately depicted the school.

Definition of Terms

This study contains the following terms throughout. For clarification, the following definitions are provided for reference.

- Change in teacher practice. Change in teacher practice includes alterations in classroom practices that result in differences in student learning outcomes and teachers' beliefs and attitudes (Guskey, 2002).
- *Job-embedded professional development*. This professional development model refers to learning that is collaborative, inquiry-based and integrated into teachers' daily practice. This model of learning is also ongoing, sustained over time, and designed to enhance instructional practices and improve student learning (Croft et al., 2010).

- *Leadership*. Leadership encompasses practices that aid schools in setting directions and influencing members of the organization to move in that direction (Leithwood et al., 2004).
- Leadership for learning. Leadership for learning refers to "Approaches that school leaders employ to achieve important school outcomes, with a particular focus on student learning" (Hallinger, 2011, p. 126).
- *Professional development*. Professional development is defined as a "comprehensive, sustained, and intensive approach to improving teachers' and principals' effectiveness in raising student achievement" (Hirsh, 2009, p. 12).

Organization of the Study

This dissertation is organized into five chapters. Chapter 1 provides the introduction to the study and contains an overview of professional development and leadership. Chapter 1 also identifies the statement of the problem, purpose of the study, conceptual framework, research questions, significance of the study, limitations and assumptions, and definition of key terms. Chapter 2 is a review of relevant literature to give context for this study. The review covers literature focused on leadership that affects student achievement, professional development and its impact on students and teachers, leadership for learning, and the characteristics of jobembedded professional development. Studies that relate leadership characteristics to teacher development are explored. Additionally, the literature review contains research in support of the conceptual framework. Chapter 3 describes the research methodology and outlines procedures, data collection tools, analysis methods, and limitations. Chapter 4 provides data analysis and results. Chapter 5 presents a discussion of the findings from the study and how the findings connect to each of the research questions. Chapter 5 concludes with a discussion of lessons learned throughout this study, as well as future implications for research and practice.

Summary

Access to quality professional development is a critical need so that teachers can meet the increasingly complex demands of their profession. School leaders must answer this call by designing learning systems in which teachers can learn and grow in their abilities. Because of the limited research connecting leadership and professional development, the purpose of this qualitative case study was to explore leadership practices that support job-embedded professional development.

The following chapter is a review of the literature. Chapter 2 contains a comprehensive review of the existing research pertaining to professional development, leadership, and the ways in which those concepts interact to sustain changes in teacher practice. The literature reviewed in Chapter 2 sets the foundation for this study and provided the contextual frame for this research.

CHAPTER 2

REVIEW OF LITERATURE

The purpose of this study was to examine how leadership impacts job-embedded professional learning in schools. Despite some research that demonstrates the importance of leadership for learning systems, few studies have explored the link between leadership and sustained, ongoing models of professional development (Heck & Hallinger, 2014). A close look at leadership qualities that create and sustain supportive professional environments will provide a better understanding of how to encourage change in teacher practice that ultimately leads to better student outcomes.

This chapter includes a review of literature focused on how leadership influences quality job-embedded teacher professional development and teacher practice. The review first covers research related to leadership, focusing specifically on the impact of school leadership on student outcomes and the leadership characteristics that support teacher development and systemic change. Next, literature is reported that examines the concept of effective professional development and characteristics of job-embedded professional development. Finally, explored is literature related to the framework used to conceptualize leadership and job-embedded professional development. Professional development is an essential component of continuous improvement and school systems depend on leaders to provide quality opportunities for teachers to grow in their abilities.

Leadership Role in School Change

School leadership is a critical component of ensuring schools are learning organizations that improve student achievement (Marzano, Waters, & McNulty, 2005). Schools are dynamic institutions that present a variety of issues. School leaders consistently must find ways to solve

problems for which the solutions are not readily apparent (Drago-Severson, 2009). As a result, educational leaders must learn ways to support the development of organizations that are ready to meet these adaptive challenges.

Leadership and Student Outcomes

To what extent leadership influences and how various leadership types affect student outcomes was the subject of a variety of studies (Hallinger, 2011; Heck & Hallinger, 2014; Leithwood, Louis, Anderson, & Wahlstrom, 2004; Robinson, Lloyd, & Rowe, 2008). The consensus seems to be that educational leadership has an impact on student outcomes. In a large-scale review of the research, Leithwood et al. (2004) found that leadership accounted for about a quarter of the total school effects, making it second only to the effect of classroom instruction.

It is more challenging to pinpoint how leaders influence student achievement because the relationship between leaders and student outcomes is an indirect one (Hallinger, 2011; Heck & Hallinger, 2014). Drago-Severson (2004) explained that leaders should prioritize adult learning to support student growth and achievement; however, there is limited research examining the specific ways in which leaders effectively facilitate teacher development. Fortunately, a small number of scholars recently explored this connection among leadership, school improvement, and teacher development. They asserted that effective leaders exhibit specific behaviors and focus on organizational and environmental capacities that contribute to quality teaching and therefore more positive student outcomes (Blase & Blase, 1999; Hallinger, 2011; Heck & Hallinger, 2014; Leithwood et al., 2004; Leithwood & Jantzi, 2008; Robinson et al., 2008).

Models of Leadership

In recent decades, scholars researched various leadership models to explain features of

each model, such as transformational leadership (Leithwood & Jantzi, 2005; Sun & Leithwood, 2012), instructional leadership (Hallinger, 2005; Rigby, 2014), distributed leadership (Gronn, 2002; Spillane, 2005), and shared leadership (Hallinger & Heck, 2010; Voelkel & Chrispeels, 2017; Wahlstrom & Louis, 2008). While these scholars sought to classify leadership into distinct types, Leithwood et al. (2004) argued that those categories may be less helpful in understanding the connection to student outcomes than looking at specific behaviors that have an impact on students. Their research suggests that effective school leadership encompasses three sets of basic practices: (a) setting directions, (b) developing people, and (c) redesigning the organization. Leithwood and Jantzi (2008) added the additional leadership practice of managing the instructional program to the list shared by Leithwood et al. (2004). Similarly, Robinson et al. (2008) indicated that abstract leadership theories have less relevance to guide practice and that a more integrated approach to leadership with specific behaviors might provide more insight. Robinson et al. identified five leadership dimensions that influenced students: (a) establishing goals and expectations; (b) strategic resourcing; (c) planning, coordinating, and evaluating teaching and the curriculum; (d) promoting and participating in teacher learning and development; and (e) ensuring an orderly and supportive environment (p. 656). Heck and Hallinger (2014) described the term *leadership for learning* as a hybrid of transformational and instructional leadership and maintained that leadership must be collaborative. They identified three aspects of leadership that contribute to positive student outcomes: (a) shared focus on instruction for student learning, (b) collaborative decisions focusing on academic improvement, and (c) focused participation in efforts to evaluate progress.

Individual Leadership

Individual leadership is critical in establishing a professional learning culture and

building capacity within the school (Cole, 2004; Fullan, 2009; Heck & Hallinger, 2014; Hirsch, Psencik, & Brown, 2014; King, 2011; Timperley et al., 2009). Some scholars noted that a professional learning culture is more likely to develop when school leaders support teacher learning and risk-taking, allowing teachers to collaborate and develop high levels of trust (Cole, 2004; Timperley et al., 2009). Other researchers identified themes of leadership that have an impact on sustaining professional development, such as shared values, building capacity, and empowering teachers to create collaborative learning cultures (Hirsch et al., 2014; King, 2011). Blase and Blase (1999) found that teachers' perception of effective school leader qualities included (a) talking with teachers to promote reflection, (b) emphasizing the study of teaching and learning, (c) supporting collaboration, (d) advocating coaching, (e) supporting program redesign, and (d) creating cultures of continuous learning. Drago-Severson (2004) used a model based on four practices that support teacher development: (a) teaming, (b) providing leadership roles, (c) engaging in collegial inquiry, and (d) mentoring. Hirsch, Psencik, and Brown (2014) added that effective school leaders emphasize results, use data, and continuously advocate for professional learning. Leithwood and Jantzi (2008) also noted that school leaders' efficacy had a modest effect on school and classroom conditions.

Organization and Environment

Other researchers found that environmental factors and school context also are important in establishing systems that support teacher learning (Croft et al., 2010; Hirsch et al., 2014; Kraft & Papay, 2014). Kraft and Papay (2014) found a substantial difference in teacher improvement over time in supportive professional environments when compared to teachers in less supportive schools. In addition to individual leadership qualities, teacher development is also dependent on organizational factors such as (a) school safety, (b) collaboration, (c) adequate time and

resources for professional development, (d) school culture, and (e) effective teacher evaluation practices (Hirsch et al., 2014; Kraft & Papay, 2014). Croft et al. (2010) also noted leaders must create certain organizational conditions for high-quality professional learning systems, including teacher opportunity to learn (distinct from planning time), collaborative learning communities, and ensuring effective learning facilitators.

Teachers and school administrators also report that the absence of certain organizational factors presents significant barriers to effective professional learning and growth. The Bill and Melinda Gates Foundation (2014) found that teachers cited lack of time, financial resources, and continuity between professional development initiatives as reasons professional development is less effective than their ideal. Administrators similarly cited insufficient time within teachers' schedules for initial learning as a barrier to success. They also noted school leaders lacked the time within their schedules to devote to instruction and follow-up support of professional development. Darling-Hammond, Hyler, Gardner, and Espinoza (2017) also shared that professional development may not produce desired outcomes because of organizational barriers such as (a) inadequate resources, (b) lack of shared vision about high-quality instruction, (c) lack of time for planning and implementing, (d) conflicting requirements, and (e) lack of teachers' foundational knowledge.

Teacher Perception of Leadership that Supports Professional Development

Experienced and effective teachers reported that student success is the most important part of their work and what drives them to improve (Meister, 2010). Other teachers wish their school administrators would allow more teacher-driven professional development and fewer top-down initiatives (Bill and Melinda Gates Foundation, 2014). In addition, teachers want the time and space necessary to have meaningful collaborative experiences with colleagues on a regular

basis (Datnow, 2011). Leaders must fully understand and support this collaboration, however, or they risk what Hargreaves (1994) called "contrived collegiality" (p. 195). Knowing what teachers perceive and desire from professional learning is critical for school leaders to create cultures that support and sustain changes in teacher practice.

Teacher Professional Development

Educating children in public schools is complex and requires professionals who draw on a vast array of skills to support the diverse needs of these learners (Drago-Severson, 2009). Since the quality of a teacher impacts student achievement, it is critical to understand how teachers develop the capacities to become effective (Kennedy, 2016; Mizell, 2010). Professional development experiences are essential so that teachers can learn and apply new knowledge and skills to their practice (Darling-Hammond, Hyler, Gardner & Espinoza, 2017; Guskey, 2000). Finding ways to provide quality professional development experiences supports teachers in meeting the demands of their challenging profession (Darling-Hammond et al., 2017; Drago-Severson, 2009).

Current State of Professional Development

Professional learning is an important part of overall improvement efforts, and school leaders must ensure programs will enhance educator quality. However, the process of school improvement is often complex and is not well-supported by current professional learning practices (Elmore, 2016; Fullan, 2006, 2009). Ideas about professional development often involve trying to simply implement best practices, but this over-simplification shows deep misconceptions about how adults learn and change (Elmore, 2016). Even though districts invest large quantities of money and time on professional development, many do not see the improvement in teaching and learning they desire (New Teacher Project (TNTP), 2016). As a

result, school and district leaders evaluate current traditional professional development practices and often discover that their strategies are not effective in supporting the development of effective teaching strategies (Elmore, 2016; Knight, 2007). Teachers also report that current professional development practices are not meeting their growth goals and needs (Bill and Melinda Gates Foundation, 2014; Darling-Hammond, Wei, Andree, Richardson, & Orphanos, 2009).

In current practice, professional development commonly takes two forms: the traditional single workshop approach, or the newer and more complex types of job-embedded learning models (Darling-Hammond et al., 2009; Desimone, 2009). Job-embedded professional development connects directly to the work of teaching and is situated in context. This type of professional development differs from pullout workshop models for which educators leave their classrooms to learn strategies in isolation. Instead, job-embedded professional development is school- or classroom-based and related to daily practice. Teachers work collaboratively during the school day to find solutions as part of a cycle of continuous improvement (Althauser, 2015; Croft, Coggshall, Dolan, Powers, & Killion, 2010; Darling-Hammond et al., 2017).

Effective Professional Development

Determining the attributes of high-quality professional development systems through research has been challenging. One reason is that experts disagree on the characteristics that define quality professional development (Drago-Severson, 2004; Guskey, 2000, 2003). There also are deeply embedded misconceptions about what constitutes professional development activities (Guskey, 2000, 2003). Many educators still hold a belief that professional development consists of the few days a year in which they attend workshops, conferences, or other events, rather than a broader definition that includes those processes and activities that

improve their practice (Desimone, 2009; Guskey, 2000). These newer and more complex forms of professional development make it more difficult to parse from the literature the characteristics of quality professional learning systems.

In its simplest form, education professional development is any activity that enhances professional performance and improves student outcomes (Darling-Hammond et al., 2017; Desimone, 2009; Guskey, 2000). This broad definition, however, does little to guide practitioners in developing quality professional development in their educational systems. Because of this lack of clarity, some scholars advocate that defining professional development should focus on the critical features rather than the structure of the activity (Darling-Hammond et al., 2017, Desimone, 2009; Garet, Porter, Desimone, Birman, & Yoon, 2001; Guskey, 2000). Darling-Hammond et al. (2017) asserted that effective professional development has these seven key features: (a) focuses on content, (b) incorporates active learning, (c) supports collaboration, (d) uses models of effective practice, (e) provides coaching and expert support, (f) offers feedback and reflection, and (g) is of sustained duration.

Another challenge in identifying the characteristics of quality professional development is the lack of empirical research measuring the effect of professional development on student outcomes (Loucks-Horsley & Matsumoto, 1999; Newmann, King & Youngs, 2000; Sawchuck, 2010; Yoon, Duncan, Lee, Scarloss, & Shapeley, 2007). Although limited, there is a small number of studies that meet rigorous standards, and the findings of these highlight the characteristics of quality professional learning (Yoon et al., 2007). Many of these studies on quality professional learning confirmed that the job-embedded, sustained approach is more likely to change teacher practice and have an impact on students (Althauser, 2015; Croft et al., 2010; Darling-Hammond et al., 2009; Garet et al., 2001; Joyce & Showers, 2002, Yoon et al., 2007).

Learning Forward (2011), the national professional learning organization, revised their national standards to take this research into account. Through a collaborative process, the organization developed seven standards to guide the implementation of high-quality professional learning in the areas of (a) learning communities, (b) skillful leadership, (c) resource allocation, (d) use of data, (e) learning designs, (f) implementation, and (g) outcomes. In addition, Learning Forward cited prerequisites that must be in place for learning to be successful, including (a) educators' commitment to all students, (b) disposition and readiness to learn, (c) willingness to respect and trust colleagues, and (d) understanding that educators learn in diverse ways and at different rates.

Professional Development as a System

If teachers are to receive quality professional development over time, schools must invest in effective programs and systems of support. Teaching has become increasingly complex and requires developing a broad set of skills and capacities (Drago-Severson, 2009, 2016). However, there is little clarity and consensus about how to support professional development and ensure it changes practice (Drago-Severson, 2004). Leaders must understand what is necessary to implement and sustain this kind of reform if we expect to see improved student outcomes. In this way, professional development must be a coherent system rather than a set of discrete activities (Fullan & Quinn, 2016; Guskey, 2000). Recent trends in educational reform created an overloaded and fragmented system that has not resulted in improved teaching and learning outcomes (Fullan & Quinn, 2016). In other words, educational leaders must also consider changes to the organizational level while considering development at the individual level (Fullan & Quinn, 2016; Guskey, 2000). Darling-Hammond et al. (2017) noted several systemic challenges that must be overcome to increase the effectiveness of professional development,

such as (a) identifying teacher needs, (b) choosing effective approaches, (c) implementing with quality and fidelity, and (d) assessing professional development outcomes.

Complexity of Change

It also is important that school leaders understand the complexities of change and adult learning needs to effectively support professional development. Fullan and Quinn (2016) argued that public school systems have been using the wrong drivers for years of reform attempts. Having disconnected initiatives essentially stalls real improvement in teaching and learning. Instead, Fullan and Quinn suggested that educational leaders change the system to emphasize focus and coherence. To promote a coherent system of change, Guskey (2000) asserted that professional development should not be an uncoordinated series of activities and, instead, should be intentional, ongoing, and systemic.

Leaders designing a system of professional development must plan for what implementation will look like in the early stages as well as what it will look like later in the process (Fullan, 2007). They also must consider how educators will receive continuous learning to refine their practices. Finally, they need to determine what resources and conditions are necessary to ensure the success of the implementation and they must communicate the anticipated steps and share the planned strategies (Fullan, 2007; Tobia & Hord, 2002).

Conceptual Framework

The framework for this study conceptualizes how school principals support jobembedded professional development that changes teacher practice. The relationship between the constructs of leadership for learning and job-embedded professional development was explored in this case study to determine in what ways school leaders create a system in which teachers engage in job-embedded professional development.

Leadership for Learning

Although many models of leadership exist, Hallinger (2011) presented a synthesized model of leadership for learning. Leadership for learning describes the ways in which school leaders achieve school and student outcomes. Hallinger examined 40 years of educational research relating to the contribution of leadership to school improvement. Throughout the findings of research he reviewed, several leadership factors emerged and Hallinger encapsulated them into the synthesized model of leadership for learning. These include: (a) values and beliefs, (b) leadership focus, (c) context, and (d) sharing leadership.

Values and Beliefs

Values and beliefs are critical attributes that impact school leaders (Day, Harris & Hadfield, 2001; Hallinger, 2011; Warwas, 2015). School leaders bring with them a set of values and beliefs but they also affect the values and beliefs of the schools they lead (Day et al., 2001; Hallinger, 2011). Day, Harris, and Hadfield (2001) believed the core values of principals are very clear to them and those values set the foundation of their vision and practices. Through this *values-led* contingency, principals can navigate leadership dilemmas by drawing on their core values and beliefs. Warwas (2015) added to this concept by exploring the differential behavior of leaders classified by their value profile as (a) outcome-oriented, (b) process-oriented, (c) input-oriented, and (d) community-spirited. According to Hallinger (2011), principals impose values such as academic achievement and growth, but they also influence the values of the school, like collaboration or risk-taking. Leaders also must understand the values and beliefs that already exist within schools. Knowing the current values and belief system allows them to work more productively within the organization.

Leadership Focus

Hallinger's (2011) model also articulated several school-level conditions believed to connect leadership and student outcomes: (a) vision and goals, (b) academic structures and processes, and (c) people capacity. Leaders focusing on these conditions provide strong professional environments in which teachers can support student learning.

Setting the vision and goals is an important way for school leaders to affect learning (Hallinger, 2011; Leithwood et al., 2004; Leithwood & Jantzi, 2005, 2008; Robinson et al., 2008). Various researchers asserted that vision and goals are especially impactful when they are academically focused and set high expectations for learning (Leithwood, Harris & Hopkins, 2008; Robinson et al., 2008). Robinson et al.'s (2008) meta-analysis of leadership research found that establishing goals and expectations produced a moderately large effect size of 0.42 on student learning.

Academic structures and processes also affect the ability of leadership to influence student outcomes because the school's overall "capacity for academic improvement" mediates leadership effects (Hallinger, 2011, p. 132). Using collaborative structures that promote teacher practice and being conscious of processes to enact systemic change are key features of a school's academic capacity (Hallinger, 2011; Fullan, 2001).

People capacity is another school-level condition that leadership influences. According to Fullan (2001), to sustain improvements, leaders must develop other leaders at all levels in their organization. Robinson et al. (2008) noted key instructional leadership behaviors that leaders do to develop the abilities of their people and positively impact student achievement. The highest effect size in their analysis (ES = 0.84) was school administrators promoting and

taking part in professional learning with teachers, followed by planning, coordinating, and evaluating teaching and the curriculum (ES = 0.42).

Context

Another factor influencing leadership for learning is organizational and environmental contexts in which the leader acts (Hallinger, 2011; Spillane, 2005; Sun & Leithwood, 2012). Spillane (2005) contended that leadership is highly variable because of the interaction of leaders with people, places, and practices. Routines and structures can enable or inhibit certain leadership practices. In addition, multiple people may be responsible for decision making or other leadership practices. The requirement to coordinate leadership impacts a leader's behaviors and procedures. This is important to note because this means leadership varies because of the contexts that shape the leader, as well as the organizational and environmental context in which the leader currently practices. Sun and Leithwood (2012) discussed that much of the leadership research fails to consider the context in which leaders work. Hallinger (2011) also noted that separating leadership from the specific situational context is a continued limitation in leadership research. Because of this, leaders who only "possess a single set of tools will find themselves bouncing around from success to failure without understanding why" (p.137). Leaders must understand the context in which they practice and adapt their style.

Sharing Leadership

Empowering other educators can be a powerful driver of change in an organization (Hallinger, 2011; Marks & Printy, 2003; Wahlstrom & Louis, 2008). Wahlstrom and Louis (2008) defined shared leadership as teachers having influence and participation in decision making. In shared leadership, teachers can take on formal roles or leadership can occur informally (Marks & Printy, 2003). In this way, leadership is not dependent on title as teachers

and principals engage in reflection and professional growth together. Wahlstrom and Louis (2008) agreed there is a movement to include teachers in leadership tasks, although they contend the implementation of this practice has been weak. They also reported on the ambiguity of what represents sharing leadership. Hallinger (2011) also addressed this ambiguity and asserted that sharing leadership encompasses a wide range of strategies and behaviors to involve others.

Because of this, leaders must be judicious with when and how they share leadership. Contextual factors, such as staff characteristics, resource allocation, and other environmental features necessitate the differentiation of sharing leadership.

Job-Embedded Professional Development

From the limited literature on professional development outcomes, the consensus is that job-embedded designs have a more positive impact on student achievement than other models, such as pullout workshops (Althauser, 2015; Croft et al., 2010; Darling-Hammond et al., 2009; Garet et al., 2001; Joyce & Showers, 2002, Yoon et al., 2007). Several characteristics of quality job-embedded professional development have emerged from the literature. Some commonalities in the findings are that job-embedded professional development must be (a) intensive and practiced over time, (b) focused on specific content, (c) structured for active learning, and (d) integrated into the daily work of teachers (Croft et al., 2010; Garet et al., 2001; Yoon et al., 2007). Similarly, Desimone (2009) posed a framework for professional development with the core features of (a) content focus, (b) active learning, (c) coherence, (d) duration, and (e) collective participation. These key attributes are similar to the findings of Darling-Hammond et al. (2017). These features point to a broad definition of job-embedded professional development that can encompass a variety of learning designs.

Many forms of job-embedded professional learning currently exist, and the designs are highly variable (Brown-Easton, 2015). Croft et al. (2010) suggested that teachers' job-embedded professional development can differ by the grouping structure: (a) alone, (b) with one-on-one guidance, or (c) in teams. In addition, there is variation to how closely the learning activity is situated within the classroom and the time in which it takes place: (a) in the classroom with students present in real time; (b) in the classroom without students (but still within the school day); or (c) in the school without students, shortly before or after classroom instruction. Table 1 provides several illustrative examples of professional development formats classified as job-embedded, provided they meet the previously stated criteria.

Table 1
Forms of Job-Embedded Professional Development

Name	Description
Action Research	Teachers select an area of teaching to investigate and engage in an inquiry cycle to determine the impact of teaching on learning.
Case Discussions	Teachers engage in collaborative discussions to critically analyze cases of teaching.
Coaching	Teachers have an instructional or peer coach to support and provide feedback as they are applying new strategies.
Critical Friends Groups	Teachers collaboratively analyze and discuss each other's work and problems of practice.
Data Teams/ Assessment Development	Teachers work together to analyze data from standardized or teacher-created assessment; they may also work on enhancing the quality of assessments.
Examining Student Work	Teachers engage in inquiry and feedback about learning based on student work samples.
Instructional Rounds	Teachers make short visits to other classrooms and engage in dialogue about current teaching practices and next steps for improvement.
Lesson Study	Teachers take turns preparing and presenting a lesson to demonstrate a specific practice while others observe and provide feedback to refine the lesson.
Mentoring	Teachers receive peer support as they gain knowledge and skills – a strategy typically implemented for teachers who are newer to the profession.
	(table continues)

Name	Description	
Portfolios	Teachers gather artifacts that demonstrate teaching practices and share these with a group of peers or an administrator.	
Professional Learning Communities	Teachers work in collaborative teams to share practices and solve problems.	
Shadowing	Teachers shadow a student or other educator for the day with the purpose of gathering data about the lived experience of that person.	

Note. Adapted from Croft et al. (2010) and Brown-Easton (2015)

This array of different learning designs provides school leaders the ability to choose forms of job-embedded professional development most appropriate for their context (Brown-Easton, 2015).

Summary

The purpose of this study was to examine how school leadership impacts job-embedded professional learning in schools. Literature reviewed in this chapter provides a synthesis of high-quality professional development and characteristics of school leadership that foster learning systems. Also explored is literature related to leadership for learning and job-embedded professional development. These two constructs ground the conceptual framework used in this research. Gaining a better understanding of how school leaders create and sustain professional development is important so that school systems can meet the many challenges they face.

The research methodology used to explore how leadership supports job-embedded professional development is discussed in the next chapter. Chapter 3 describes the qualitative case study research design as well as the population and sample selection. Additionally, the next chapter contains the data collection and analysis processes. Using this methodology to answer the research questions specifically revealed the ways in which leaders support job-embedded professional development for teachers.

CHAPTER 3

METHODOLOGY

For teachers to advance their practice, they must engage in professional development that impacts student achievement. School leaders have a responsibility to develop the capacity of new teachers and continue the growth of established teachers. The rationale for this research was to explore leadership practices that contribute to quality job-embedded professional development. In this study, I examined the research question: In what ways do campus principals support job-embedded professional development? This overall research question was explicated by two subsequent questions.

- 1. What types of leadership behaviors do principals employ to support job-embedded professional learning models?
- 2. What are the teachers' perceptions of how leaders support their professional development?

By exploring these research questions, the findings may guide school leaders to gain insight into the conditions necessary to support high-quality professional learning.

In this chapter, I explain the methodology for this study. I articulate the research design, along with a detailed description of the population and sample selected for inclusion in the study. This chapter also contains a thorough description of specific data collection tools and procedures. In addition, this chapter includes a complete explanation of data analysis processes and their connection to the conceptual framework. Finally, I specify limitations that affect the generalizability of results from this research.

Research Design

The purpose of this study was to describe leadership practices as they relate to jobembedded professional development practices in schools. A descriptive case study research design allowed an exploration of the characteristics of school leaders and the ways in which their characteristics are associated with professional development. Yin (2018) asserted that case study research is suitable when the research questions seek to explain or provide an in-depth description of phenomena. Similarly, Shaban (2009) stated, "case study methods are used to probe deeply and intensively to gain insight and understandings of phenomena that are new, not-understood, or unexamined" (p. 59). There is limited research into the connections between leadership behaviors and teacher development (Heck & Hallinger, 2014). Because of the relatively unexamined nature of this issue and the need for in-depth analysis, a case study was appropriate.

Additionally, schools are complex systems and successful reform is highly contextual.

Case studies are valuable tools to gain an appreciation of the multiple dimensions of phenomena as they occur in context (Hamilton & Corbett-Whittier, 2013; Hesse-Biber, 2017; Stake, 2005; Yin, 2008, 2018). Hamilton and Corbett-Whittier (2013) posited that using case studies in educational research can "enhance our understanding of contexts, communities, and individuals" (p. 3). As a result, this interpretive approach to studying job-embedded professional development and leadership practices reveals information that can advance research in this area and provide valuable insight to school practitioners.

To answer the research questions in this study, I used a single-case embedded design focusing on a critical case. Yin (2018) noted that the rationale for selecting a critical case is to demonstrate your theoretical propositions. Using a single critical case can help determine if the propositions are correct or if other explanations might be more appropriate. Yin stated, "The single-case can represent a significant contribution to knowledge and theory building by confirming, challenging, or extending the theory" (p. 67). Embedded case study designs are

appropriate when systematic data from elements within the case might be analyzed (Yin, 2018). Figure 2 shows the research design.

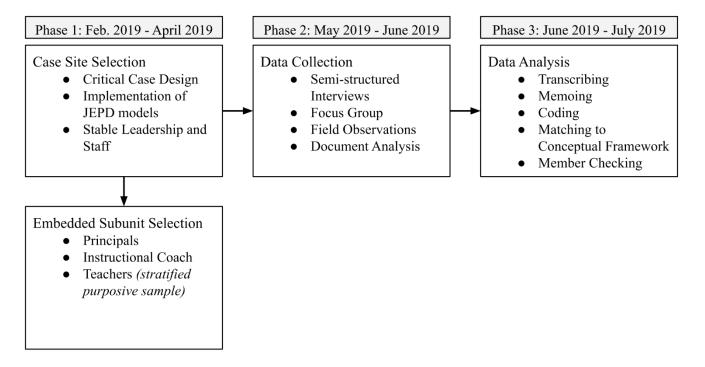


Figure 2. Research design graphic. This figure shows the three phases of the research methodology in this qualitative case study.

Context

The population to which this sample of participants generalizes is public school leaders and teachers. The unit of analysis for this study was a single instrumental case representing a critical case, as defined by Yin (2018). While the unit of analysis for this case study was a single school, results from the findings have the potential to inform the larger population of public-school educators. The elementary school for this research, Longhorn Elementary (pseudonym), is in a suburban district in north Texas. The school enrolls approximately 650 K-5 students with an ethnic makeup of about 70% White, 10% Hispanic, 10% African American, and 10% Asian. The school has small populations of economically-disadvantaged students and English language learners, at less than 5% each (Texas Education Agency, 2016).

Longhorn Elementary is a high-performing campus on state achievement assessments. At least 89% of students scored proficient in all tested grades and subject areas (Texas Education Agency, 2016). Although most of the students at Longhorn are meeting the grade-level minimum performance, the school focus is improving in measures of student progress and increasing the number of students meeting post-secondary readiness targets.

Site Selection

I purposefully selected this school as a critical case because of several characteristics.

Longhorn Elementary employs approximately 50 certified professional staff. In addition to the teaching professionals, the campus has two administrators, a principal and an assistant principal. The school staffs a full-time counselor, a media resource specialist, and an instructional coach. Longhorn has an experienced teaching staff with over 75% of teachers having more than five years of experience (Texas Education Agency, 2016). The teacher turnover rate is also low. Having little attrition in staff was helpful in this case study because participants were able to provide historical perspectives as well as current information.

Additionally, this school was well-suited for studying because it uses a variety of jobembedded learning models, such as instructional coaching, instructional rounds, and data teams. In a survey completed by the Marzano research organization in 2015, Longhorn Elementary teachers reported high levels of access to job-embedded professional development (Marzano Research, 2015). The Marzano survey respondents were asked to indicate their agreement to several indicators describing job-embedded professional development on a 5-point rating scale with 5 indicating strongly agree. Table 2 displays the indicators and the overall mean and standard deviation of those responses.

Table 2

Marzano Overall Mean Scores for Job-Embedded Professional Development at Longhorn

Leading Indicator		Teachers & Staff (N = 39)	
	M	SD	
Online professional development courses and resources relevant to my instructional goals are available to me.	4.09	0.85	
Teacher-led professional development that is relevant to my instructional growth goals is available to me.	4.16	0.69	
Instructional coaching relevant to my instructional growth goals is available to me.	4.16	0.87	
School leaders collect data about how effective professional development is improving teacher practices.	4.06	0.77	
I can describe how the available professional development supports achievement of my instructional growth goals.	4.29	0.58	

Finally, I chose Longhorn Elementary as a critical case study because of the implementation of professional learning communities (PLCs). Since 2015, Longhorn Elementary has engaged in extensive learning and work around the DuFour and Eaker (1998) model of PLCs. According to Croft et al. (2010), one of the key features of successful jobembedded professional development is learning communities. Additionally, Voelkel and Chrispeels (2017) found that higher functioning PLCs using this model predicted higher levels of teacher collective efficacy, which positively impacts student achievement. Because Longhorn Elementary has established PLCs, using this school as a case study can provide practitioners with additional information about the context in which teachers experience job-embedded professional development that impacts teacher practice.

Participant Selection

Within this single case, I examined several embedded subunits. Yin (2018) suggested an embedded design when there is a need to examine multiple levels for gaining different

perspectives. The subunits I chose in this study were (a) two school administrators, (b) one instructional coach, and (c) selected classroom teachers. I purposively sampled seven teachers in formal teacher leader positions for participation in a focus group interview. Additionally, I used a stratified purposive sampling technique to select 10 classroom teachers for in-depth interviews. The criteria for selection included years of experience and current teaching assignment.

Creswell and Creswell (2018) noted that stratification ensures that certain characteristics of the population are represented within the sample. In total, 20 participants were selected for participation in this research. Creswell and Creswell (2018) asserted a sample from 3-30 for qualitative research is likely sufficient to reach saturation. Twenty participants ensured that the collected data were robust and represented a broad range of experiences and perspectives. Table 3 contains relevant demographic information about the selected participants. The names of the educators are pseudonyms to protect the confidentiality of participants.

Table 3

Research Participants

	Name	Role	Years of Experience
School Leadership Team			
Alicia		Principal	24
Carolyn		Assistant Principal	17
Julie		Instructional Coach	9
Team Leaders			
Debbie		Kindergarten	20
Mae		1st Grade	4
Kristin		2nd Grade	15
Aidan		4th Grade	17
Emma		5th Grade	5
Audrey		Art	30
Sam		Special Education	12

(table continues)

Name	Role	Years of Experience
	Classroom Teachers	
Angel	Physical Education	20
Reese	1st Grade	9
Zoe	2nd Grade	3
Mistie	2nd Grade	4
Riley	2nd Grade	6
Bridget	2nd Grade	2
Jessica	3rd Grade	20
Ashley	3rd Grade	17
Katherine	5th Grade	12
Mallory	5th Grade	9

Data Collection Tools and Strategies

I collected qualitative data from Longhorn Elementary during one semester to answer the research questions. Data collection began in May of 2019 and ended in June of 2019.

Triangulated approaches to data collection were important to increase the validity of case-study research (Hesse-Biber, 2017; Yin, 2018). Yin (2018) noted that a major strength of case study research is the opportunity to gather many different sources of evidence. Yin also asserted that a convergence of evidence from a variety of data sources helps strengthen the construct validity of a case study. As a result, I gathered data from various sources, including interviews, a focus group, field observations, and document collection and analysis.

Semi-Structured Interviews

To thoroughly explore the concepts of leadership and professional development, I conducted face-to-face, semi-structured 45-60-minute interviews with the administrators, instructional coach, and selected teachers on-site in May and June of 2019. Both campus administrators, the instructional coach, and the stratified purposive sampling of teachers

representing various grade teaching assignments and experience levels were asked to participate as the 10 interviewees.

Prior to the one-on-one interviews, I ensured that participants understood their role in the research and the confidentiality precautions, and that they had the opportunity to ask questions or opt out of the research. Since I audiotaped the interviews, interviewees were asked to voluntarily consent to audio recordings. I stored these data on a password-protected computer and destroyed them once the audio was transcribed. To guide the one-on-one interviews, I used interview protocols appropriate for the role of the interviewee (Appendices A for teachers, B for instructional coach, and C for principals). After each interview, I completed an interview summary form to assist in the data analysis process (Appendix D).

According to Yin (2018), interviews allow a targeted focus on research topics and thorough explanations by participants. Semi-structured interviews enable participants to share items of importance to them and allow the conversation to develop in unanticipated ways (Hesse-Biber, 2017). A limitation to these methods is potentially skewed responses due to poorly articulated questions (Yin, 2018). To enhance the reliability and to internally validate these instruments, I asked five educators in school principal, instructional coach, and teacher positions to review the questions and provide feedback. In addition, I field tested the interview protocols with three educators in the target population; these field-testing educators were not members of the participant group. During the field-testing process, appropriate changes were made, based on field testers' feedback and recommendations for the final development of the protocols.

Focus Group

In addition to selected teachers participating in the one-on-one interviews, I also conducted a focus group interview of teacher leaders from Longhorn Elementary. The purpose

of the focus group was to explore the teacher-leaders' perspectives of leadership and jobembedded professional development, especially the concept of shared leadership. Hesse-Biber
(2017) asserted that focus groups are advantageous because they can help researchers reveal key
issues and ideas from several people at once. The dynamics between members of the focus
group, or group effect, also provided additional data that would not have been present in one-onone interviews. These exploratory data were useful to identify facets of the research topic that
needed more in-depth examination, such as the role of teacher leaders (Creswell & Creswell,
2018; Hesse-Biber, 2017). Focus groups can present some challenges during data collection,
such as encouraging participation and handling conflicts that may emerge. Hesse-Biber (2017)
encouraged moderators to establish ground rules and have a strategy to make sure everyone
shares, take notes, and remains unbiased. Because of this, I used a semi-structured focus group
protocol (Appendix E) to guide the focus group discussion and I monitored group participation to
ensure all participants were able to answer the questions.

For the focus group, I invited teachers who have formal leadership roles on their respective grade-level or specials teams. These seven teachers purposively selected for participation in the focus group are responsible for leading their grade-level or special areas team during PLCs and team meetings. They also function as liaisons between their teams and the campus principals during monthly leadership team meetings. Their insights about leadership and professional development were valuable data for this study.

Field Observation

Additionally, I gathered qualitative data by directly observing the principal, instructional coach, and team leaders. I documented these observations with ethnographic field notes. Hesse-Biber (2017) asserted that observation allows the researcher to account the "everyday practices"

and customs" of participants (p. 183). According to Kawulich (2005), observation is a useful method of data collection to provide a broad understanding of the issues in the unique context in which they observe. Observation can provide data related to communication and interaction among participants that would not be evident using other data collection methods (Hesse-Biber, 2017; Kawulich, 2005).

During late May of 2019, I observed a meeting of the principal, instructional coach, and a central office coordinator. The purpose of the meeting was for the school and district administrators to collaboratively write an article about the culture of coaching to submit for publication. Additionally, I observed a team leader meeting in which team leaders were discussing the implementation of a learning management system for the following year. Since obtaining prior permission to conduct observations is critical, I gained consent for observations from the campus principal and supplied advanced notice of the observation to the participants. My original research design included three more field observations, but because of the late May data collection window, there were limited opportunities.

To guide the focus of the field observations, I used an observation protocol (Appendix F). Creswell and Creswell (2018) noted observation protocols enable researchers to capture descriptive as well as reflexive notes. Additionally, I scripted raw observational notes in a field journal and constructed more detailed memos of the notes shortly after field observations concluded. During the direct observations, I took on the role of nonparticipant observer to maintain more distance (Liu & Maitlis, 2010). Williams (2008) asserted that nonparticipant observation is an unobtrusive data-gathering method appropriate for research in which the researcher has limited access to the research site and participant observation is not available or appropriate.

Document Collection

Selected documents that relate to professional development experiences are indirect sources of data that supplement other direct data collection methods. I collected documents and artifacts, such as the campus improvement plan (CIP), partnership agreements for instructional coaching, PLC minutes, newsletters, and teacher evaluation evidence documents during the data collection period of May through June of 2019. I used a document analysis template (Appendix G) to note essential information about each of these documents. Bowen (2009) asserted that document collection can lend credibility to other qualitative data sources by corroborating their findings. Documents were a valuable source of information because they supplied historical context, supplementary information, and suggestion of questions to be explored during other methods of data collection (Bowen, 2009). In addition, documents have the advantage of being unobtrusive and non-reactive, unlike data collection methods in which the researcher is present (Bowen, 2005; Creswell & Creswell, 2018). As such, documents provided an objective way to validate the findings of other data collection methods that have potential observer bias.

Data Analysis

Because of the in-depth nature of qualitative research, large volumes of data were collected during field work (Creswell & Creswell, 2018). Thorough analysis is essential to make sense of the data. Hesse-Biber (2017) noted that qualitative data analysis is an iterative process; therefore, data analysis and interpretation take place almost simultaneously with data collection.

While data collection methods are commonly known, researchers have less knowledge about data analysis strategies (Thomas, 2006). Because of this, researchers may be more comfortable with a more general inductive approach to data analysis that is appropriate for those less familiar with traditional approaches to qualitative data analysis. According to Blackstone

(2012), inductive approaches move from a set of observations to generalizations about those experiences. The researcher looks for patterns and trends in the data from which to develop explanations about the data. Similarly, Thomas (2006) described the purpose of general inductive analysis as condensing the data and developing a model or theory about the underlying concepts evident in the data. For this research study, I took a general inductive approach to the data analysis. Thomas (2006) noted five steps in general inductive data analysis: (a) preparation of the data file, (b) initial close reading of the text data, (c) creation of categories, (d) overlapping coding and un-coded text, and (e) continued revision and refinement of the category system.

Data Preparation and Initial Reading

According to Hesse-Biber (2017), researchers need to think about what data will provide an understanding of the research questions. Prior to detailed analysis, I prepared the data for analysis. As a first step, I used a transcription service, Rev.com , to transcribe the interview recordings. Then, I thoroughly read and memoed interview transcripts and observation notes to obtain holistic impressions and extract overall content and general ideas. To organize the data prior to coding, I grouped the interview responses by interview question. This helped simplify the coding process and started the process of looking for emerging patterns and trends. During this data preparation stage, I also began the process of determining which data would be the focus of the detailed analysis and coding. Creswell and Creswell (2018) asserted that since qualitative data are so rich, not all the information is usable. Researchers must go through a process of focusing on some data and disregarding other.

Coding Data, Creating and Refining Categories

After initial understandings were developed, I analyzed the data using a more detailed analysis process. For the first cycle of coding, I used ATLAS.ti[©] to inductively analyze

interview transcripts, focus group transcripts, documents, and field notes to look for commonalities and to descriptively code these data with words or phrases relevant to jobembedded professional development, leadership, and other ideas that emerged during analysis. According to Saldana (2009), descriptive coding is appropriate for qualitative studies, especially those with a wide variety of data sources.

Table 4

Development of Final Categories from Analysis

Sample Initial Codes	Final Categories
big picture, campus goals, campus improvement plan, continuous improvement, data, HRS certification, long-range planning, long-term benefit, vision, district initiatives	Vision and Goals
administrator expectations, challenge, expectation is understood, "get it done," principal expectations, strive for excellence, "want us to be better," "want you to succeed," culture, just understood	High Expectations
book studies, vertical teams, committees, "just-in-time learning," "many opportunities," staff meetings, "7th day rotation schedule," collaborative norms, curated resources, available resources, curriculum teams, Ed Camp, mentoring, PLC, organized, scheduled time, PD system, time, "give us time," protect time, "built into the school day," instructional coach, learning walks	Structures and Resources
"ask teachers what they need," clear communication, communicate progress, conversations, feedback, teacher input, "she listens to us," transparency, voices were heard, survey	Communication
accountability, administrator awareness, celebration, continuous, evidence, follow through, motivation, positive reinforcement, reward	Monitor Progress and Provide Recognition
culture, "can always learn," "care about us to get the best," continuous improvement, encouraged to grow, enthusiasm, emphasize PD, "everyone works with the coach," forced outside comfort zone, growth, growth mindset, "it's just what we do," importance of learning, teachers are receptive, PLC, principal as learner	Culture of Learning and Growth
freedom, "manage our own learning needs," professional, teachers as professionals, "they see us as professionals," "they treat us like adults," trust, validate, voices heard, "we are professionals"	Trust and Professionalism
alignment, connected, consistency, "focus on fewer strategies," focus on instruction, implement in classroom, intentional, meaningful, "more buy in," time to practice, ongoing, purposeful, targeted PD, timely	Focused and Ongoing Professional Development
	(table continues

Sample Initial Codes	Final Categories
apply to classroom, choice, based on needs, engaging everybody, focus on growth areas, grouped by goals, individualized learning, options, relevant, self-led, specific	Differentiated Professional Development
ask to present, share expertise, build capacity, buy in, share learning, team leader facilitate, build confidence, present to peers, sharing with peers, teacher led, share across campuses, peer observation	Building Capacity
collaboration, "figure it out together," helping each other, input on processes, leadership collaboration, learn from each other, listening, shared practice, vulnerability, "we all have a part," work with peers, PLC	Collaboration

To reorganize and synthesize the data, I conducted a second cycle of coding. The purpose of second-cycle coding is "to develop a sense of categorical, thematic, conceptual, and/or theoretical organization" (Saldana, 2009, p. 149). I looked for codes that fall into the three categories described by Creswell and Creswell (2018): (a) expected codes, (b) surprising codes, and (c) unusual or conceptual interest codes. Using a focused coding approach during the second cycle helped develop broader categories and major themes. These categories and themes were then compared to the leadership and professional development conceptual framework seen in Figure 1 in Chapter 1. According to Yin (2018), pattern matching is a technique by which researchers compare research-based patterns with predicted ones. This pattern-matching analysis is desirable and strengthens the internal validity of a case study. Table 4 shows a sample of the initial codes and the final 11 inductive codes that emerged.

Reporting Findings

I report the results of the inductive analysis of data in Chapter 4, using narrative summaries of key ideas and themes with specific excerpts and relevant quotes as evidence.

Creswell and Creswell (2018) noted that rich, thick descriptions allow the reader to be transported to the setting and gain a realistic picture of the results. Where appropriate, evidence

was organized in tables, charts, figures, or other non-textual forms to compose the findings (Yin, 2018).

Trustworthiness

According to Yin (2018), there are four criteria for judging the quality of research designs: (a) construct validity, (b) internal validity, (c) external validity, and (d) reliability. I maintained construct validity through triangulating. Creswell and Creswell (2018) described this process as using multiple data sources and looking for converging themes. In addition, I submitted findings for member checking. Selected participants examined a draft of major findings to read for accuracy of interpretation. For internal validity, Yin (2018) suggested pattern matching with expected constructs for validity. I used this technique to relate findings to the proposed conceptual framework. Creswell and Creswell (2018) described rich, thick description as an additional way to validate the data. Since the purpose of this case study was to describe a single case, the results may not be immediately generalizable to the larger population. School reform measures are highly contextual, so widespread generalizations in this case would be premature. However, the strength of the findings in relationship to the conceptual framework support the external validity (Yin, 2018). Since repeated data collection was not available, I used protocols and guides for the interviews, focus group, observations, and document collection. Documenting these procedures thoroughly enhanced the reliability of the findings. Yin noted that the more explicit the documentation and procedures are, the more likely the study could be replicated to test for reliability.

Ethical Considerations

To maintain ethical research practices during this research study, I took a variety of steps to ensure participants are protected. To confirm I have a thorough understanding of ethics in

research, I completed the National Institutes of Health's online training course and certification process in July 2017. Prior to beginning the research, I obtained consent from my university's institutional review board (IRB). Before the data collection procedures were implemented, participants were given an overview of the purpose and details about the methodology of the study. I obtained informed consent from all educators selected for participation; a form that details the protection and confidentiality procedures can be found in Appendix H. Each educator's identity will remain confidential and participants were informed they could request to leave the study at any time. Additionally, I anonymized all participants, districts, and schools cited within the study, to protect the identity of participants.

Positionality

As the researcher, it was important that I considered reflexivity and positionality when conducting fieldwork for this research study. As Sultana (2007) noted, it is "critical to pay attention to the positionality, reflexivity, the production of knowledge and the power relations that are inherent in research processes in order to undertake ethical research" (p. 392). Because of my position as a former district leader at the site selected, I took care to ensure participants felt safe and able to freely share thoughts and ideas as part of this study. In addition, I have been a professional development practitioner for more than 10 years in a variety of capacities. Most recently, I was a coordinator of professional development in a district central office. In that role, I developed many beliefs and opinions about how to design and implement professional development and the leadership skills I believe are necessary to support it. Throughout this study, I had to critically examine my own potential biases, perspectives, and professional agenda when conducting fieldwork to ensure that my positionality did not compromise the research process (Creswell & Creswell, 2018; Hesse-Biber, 2017).

During data collection and analysis, I bracketed myself as a researcher to ensure my preconceptions about leadership and professional development were not considered. According to Tufford and Newman (2010), bracketing requires researchers to maintain self-awareness throughout the research process to ensure they suspend their own prior experiences, emotions, and cognitive biases about the topic. Writing memos is a method of bracketing that provides a way for researchers to acknowledge and reflect on their thoughts and feelings (Tufford & Newman, 2010). Hesse-Biber (2017) similarly suggested keeping a research journal for reflection to ensure personal values and attitudes do not endanger the research process. I used memoing as a tool to bracket myself throughout the data collection and analysis phase of my research.

Limitations of the Study

Since the data collection was bounded by a single instrumental case of one school in one north Texas district, the results may not be immediately generalizable to other schools.

However, findings from this research may provide insight and in-depth understanding of this specific case. Comprehensive analysis of this single case has the potential to inform school leaders about the role of campus leadership and job-embedded professional development that impacts student achievement.

Another limitation of this research was the length of the data collection process. The professional learning opportunities and leadership behaviors in schools fluctuate over time. Data were collected in the latter part of the school year, so maturation effects may have altered the perceptions of teachers and administrators throughout the year. Finally, the limited opportunity to observe participants was a concern in this research, given the short data collection period (Peterson, 2010).

This study may also have inherent limitations due to the data collection methods, especially during interviews and observations (Barlow, 2010; Liu & Maitlis, 2010). According to Barlow (2010), the researcher's attitude toward participants, power, cultural differences, and interview procedures can influence responses during interviews. To collect valid data, it was extremely important that I maintained the strict role of a researcher during interviews and transparently disclosed reflexivity and positionality. As for limitations during observation, Liu and Maitlis (2010) pointed out that nonparticipant observations have the potential for observer effects and may influence participants' actions. In addition, selectivity bias was a consideration since it is impossible to note everything during field observations. Limitations in interview and observation data were mitigated by triangulating findings from various data collection methods (Hesse-Biber, 2017; Stake, 2005).

Summary

This qualitative case study was designed to examine how school leaders support jobembedded professional development in one school. Chapter 3 outlines the research design and
methodology. This research focused on a single school to understand leadership in an
organization using job-embedded professional development. Data collection methods included
semi-structured individual interviews, focus group interviews, field observation, and document
collection and analysis. These data were analyzed using a general inductive approach. The
themes and concepts that emerged from the data of this study will help frame the connection
between leadership and professional development. Since leadership is an important piece of
school reform efforts, understanding how leaders support teacher development can help
practitioners ensure students have high-quality teachers in every classroom. Chapter 4 includes
an analysis of the findings of the data collected.

CHAPTER 4

PRESENTATION OF FINDINGS

The purpose of this qualitative single case study was to examine the ways in which school leadership supports job-embedded professional development at one campus, Longhorn Elementary. For this research, I analyzed data collected from participant interviews, documents, and field observations. Throughout the data collection, it was evident that several characteristics of leadership were important in supporting professional development opportunities. The presentation of findings in this chapter highlights the broad categories and major themes that emerged from the data analysis. The findings of this study are organized around the themes that emerged during data analysis to answer the overall research question and two supporting questions: In what ways do campus principals support job-embedded professional development?

- 1. What leadership behaviors do principals employ to support job-embedded professional development?
- 2. What are the teachers' perceptions of how leaders support their professional development?

The conceptual framework articulated in chapter 1 is based on the characteristics of Hallinger's (2011) leadership for learning model. Although the conceptual framework is not prominently outlined in this chapter, it is the foundation for the sensitizing concepts used in my interpretation of the data and is discussed in chapter 5.

Findings

The staff at this school have access to many opportunities for job-embedded professional development. Participants shared that they were able to take part in activities such as collaborative book studies, collaborative committee work, observations of other teachers, coaching conversations, and professional development choice menus. Additionally, the staff at

Longhorn named professional learning communities (PLCs) as an ongoing form of professional learning in which they analyzed data, discussed teaching strategies, and planned adjustments to lessons based on the identified needs of students. The following discussion of findings highlights the broad categories and major themes that emerged from the data analysis, as identified in Table 4. The themes are supported by text found in analyzed documents, as well as by the voices of participants. Table 5 displays the themes as they relate to the two subsequent questions.

Table 5
Findings Related to Research Questions

Subsequent Research Question	Emergent Themes
What leadership behaviors do principals employ to support job-embedded professional development?	Vision and goals High expectations Structures and resources Communication Monitoring progress and providing recognition
What are the teachers' perceptions of how leaders support their professional development?	Focused and ongoing professional development Differentiated professional development Trust and professionalism Culture of learning and growth Building capacity Collaboration

What Leadership Behaviors Do Principals Employ to Support Job-Embedded Professional Development? (RQ Sub 1): Vision and Goals, High Expectations, Structures and Resources, Communication, and Monitoring Progress and Providing Recognition

Various themes of leadership emerged during the analysis of the collected data. The following themes capture the leadership behaviors that Alicia and her school leadership team used to support the professional development of their staff.

Vision and Goals

Longhorn Elementary has a clearly articulated vision, mission, and school focus. These

guiding tenets help school leadership set goals and focus the direction of the school. According to collected documents, these are summarized:

- Vision: Prepare students for their global future.
- Mission: Create a community of leaders and learners prepared for society.
- Focus: Foster a culture that encourages everyone involved.

From these statements, community, inclusivity, and academic focus are important at Longhorn. These same values are captured in documents that the staff collaboratively created for their professional learning communities (PLCs). Their beliefs about PLCs, such as "all staff members believe that students can and will learn" and "there is a schoolwide response to intervention...intervention is not left to the individual teacher," reinforce the vision, mission and focus of the school.

The vision of the school also shapes what initiatives the principal, Alicia, determines to implement. During one field observation experience, the instructional technology coordinator from the district office spoke with Longhorn team leaders about piloting an online learning management system in the following school year. The principal specifically volunteered Longhorn to pilot this initiative because it would give their students an opportunity to begin learning future-ready skills such as digital citizenship and online communication and collaboration.

During one-on-one interviews, classroom teachers also recognized how the school leaders keep working toward the vision of the campus and long-term goals. Reese, a first-grade teacher, reported:

I think they're looking ahead, like looking at thinking about what our kids need, how our world is changing, what are the demands of what we need for kids. So, looking ahead, being proactive about it, looking at our lowest data area points, what can we work on...I think they look at all those pieces.

A fifth-grade teacher, Katherine, similarly noted:

I think there are some deep thoughts as to how it impacts the campus as a whole, and how it impacts the teachers and the students. And I think there's also some long, planned goal attainment, where you can really sense that they're doing this not to check a box, but there is a plan, this year, next year, maybe five years down the road, that they see this campus going in, and they want to achieve it. Which I think is kind of a very comforting feeling as an educator. Too often we have to check boxes - we get this one done, we get this one done, we get this one done, we get this one done - but there's really no forward planning, no forward momentum.

Katherine also shared the challenge of school leaders to keep this focus while working through the day-to-day responsibilities of a school administrator.

It's kind of an interesting juggling act that I think leaders have to do, and it's really hard, because you're dealing with the minutiae of parent phone calls, and faculty mistakes, and student mistakes, and all this minutiae that you have to deal with, but at the same time, you're looking at the big picture as how I can best serve my kids next year, this year?

The vision, mission and focus are important drivers of improvement efforts at Longhorn. These are not simply stated, but are consistently reinforced in many aspects of the school.

The campus leadership at Longhorn also sets goals for the campus that focus the improvement efforts of the campus. According to the school's campus improvement plan (CIP), Longhorn set three goals this school year summarized as follows:

- 1. Engage students in learning that will prepare them for graduation and post-secondary success.
- 2. Have structures and systems in place to promote the teaching and learning process for effective instruction in every classroom.
- 3. Ensure the learning community believes the school is safe and maximizes collaboration.

The CIP goals are determined from a comprehensive needs assessment with multiple measures of data, such as student achievement measures, demographic information, discipline and behavior documentation, employee feedback, and parent/community surveys. Alicia reinforced that the campus leadership team uses many data sources to set goals for the campus.

Well, we always use data of course. And the areas that are really showing up as a campus that we need to hit...Our team leaders did a big data dig last summer. And we looked at multiple measures of data to find our strengths and weaknesses. And then yeah, we just go from there.

The classroom teachers are also aware that data influenced improvement efforts and goals for the school. A second-grade teacher, Mistie, commented:

...so, every single year, over the summer, they go, and they look at the STAAR [State of Texas Assessment of Academic Readiness] test, the MAP [Measures of Academic Progress] test, they pull all the data scores. The lead teachers, they go in and they all sit down together, they go over every single grade level and see what our weak areas are, what the stronger areas are, and then at the beginning of the year, during academy, we all sit down as a school and talk about it. And then from there we talk about where we need to grow.

These data sources are consistently analyzed to determine the priorities for school improvement efforts so that Longhorn can continue to make progress towards the stated vision and goals for the school.

One other initiative has been critical for Longhorn to support the vision and goals for the school. Several years ago, the district central office set a goal for all its campuses to become certified by the Marzano Research Institute as High Reliability SchoolsTM. Marzano, Warrick, and Simms (2014) developed the High Reliability Schools (HRS) framework, based on decades of educational research, to help campus and district leaders focus on specific indicators for continuous school improvement. The leadership at Longhorn Elementary embraced this challenge and appreciated the resulting focus on solid research-based practices for school reform.

The HRS model is organized into a five-level hierarchy of practices: (1) safe and collaborative culture; (2) effective teaching in every classroom; (3) guaranteed and viable curriculum; (4) standards-referenced reporting; and (5) competency-based education (Marzano et al., 2014). Beginning with Level 1, schools work to demonstrate their proficiency in each level, using collected evidence of their practices that align with indicators. This year, the school

engaged in Level 2 certification. Since Level 2 emphasizes the practices that support effective teaching in every classroom, Longhorn's leadership team was able to connect this initiative to the vision and goals of the campus and collect evidence to show their action steps. Alicia documented many of these strategies in the CIP. For each of these strategies related to HRS, the CIP also contains the people responsible for monitoring and the expected result. Table 6 illustrates examples of strategies included in Longhorn's improvement plan.

Table 6

Excerpt of Improvement Strategies Included in Longhorn CIP

Strategy Description	Monitor	Strategy's Expected Result/Impact
Staff will use HRS level II (2.3) framework to promote and monitor effective instructional practices in every classroom with the collection of artifacts and individual growth in TTESS goals.	Instructional Coach, Administrators, Team Leaders, and Teachers	Artifacts of HRS Level II evident, staff book study outcomes, and growth on TTESS goals at summative conference
Teachers will participate in collaboration with the instructional coach and through instructional rounds to promote effective instruction (HRS Level 2 goals) and individual selfgrowth (TTESS goals).	Instructional Coach, Administrators, and Teachers	Completed schedule of instructional rounds, HRS Level 2 artifacts evident, and growth with individual TTESS goals

This initiative had a significant impact on the focus of professional development for school leaders and classroom teachers. Julie, the instructional coach at Longhorn, shared how the HRS framework helped her gather data for determining what professional development to offer.

So, another thing that we did, that kind of went with the HRS...We did a lot of quick walkthroughs looking for particular models of instruction elements and that gave us very clear data as to what are we not seeing in the classrooms as much as we should. So, we would kind of look at some of those elements and say, 'This is something that we really need to work on.'

Mallory, a fifth-grade teacher, noted that it was clear the school leaders emphasized HRS and the resulting professional development.

I think that with the introduction of the HRS model and all of those things, with the past few years of working towards that, now we're level two, but seeing all that, I know that so much work goes into that...And I think that that has led to some professional development as well. And so, this year, in the past two years as well, as we've gone through that, I feel like we've stepped it up a notch. And so, it's been nice to see.

Having HRS Level 2 certification as a target allowed Longhorn's staff to ground professional development and improvement efforts in a research-based framework. School leaders used this to frame many of the planned actions and strategies that would lead to the school's stated goals.

A strong vision and goals for performance were evident themes throughout this case study. The school leaders consistently use these as a reference for selecting initiatives to implement. Additionally, the staff at Longhorn analyzed multiple measures of data to determine needed improvement areas that, when addressed, will move them closer to their goals and vision.

High Expectations

In the collected data, the theme of high expectations consistently emerged. Alicia expects the teachers to be quality practitioners that use effective teaching strategies. It is important to her that the teachers be clear about the expected practices for teaching and learning. Because of this, the school leaders created a document that articulated their expectations for classroom instruction. Appendix I displays an excerpt from this document.

Alicia's expectations for Longhorn Elementary were highlighted throughout the study. I observed a meeting in which she met with Julie, the instructional coach, and a central office coordinator to draft an article they were submitting for publication about their culture of coaching. Alicia and Julie often reiterated their belief that all teachers at the campus deserved to

have a coach so they could reach the highest levels of performance. As a result, Alicia communicated her expectations for performance with the faculty at the beginning of the year and asked for their commitment to work with the coach.

In addition to having high expectations for her staff, Alicia has equally elevated expectations for herself. She sets an example for her staff by holding herself to a high standard. As a result, the other faculty rise to the challenge. She stated:

I think there are just high expectations and they know... the instructional leader part of me as well...I think just when you build a culture of collaboration and high expectations and wanting to grow, and do better...That's just kind of all wrapped up...I mean that's just everyday actions. Everything we do.

She went on to share that she believes teachers are so willing to meet her expectations for classroom teaching, in part, because they view her as an instructional leader. They trust that she is not asking them to do anything that she would not be willing to do herself.

I talk the talk and walk the walk; you know what I mean? They know that I could go in there and teach their classroom. They know I know instruction...And so they trust that. And I guess they value that too.

The faculty of Longhorn Elementary know their principal has high expectations for them, and as a result, they want to perform. As the principal noted, the teachers "just do."

This theme was echoed in one-on-one interviews with teachers as well. Ashley, a veteran third-grade teacher shared that teachers have high expectations and are often critical of their performance and this drives their desire for professional development.

I think as teachers we're just hard on ourselves. So, wherever we see a hiccup, wherever I see a hiccup in the classroom, I know, okay, I need to focus on that. So, if it's this time of year, I know that's over the summer for next year, but that's usually what I look for.

Jessica, another third-grade teacher, has been at Longhorn for many years. She has seen this culture of high expectations evolve in recent years. There has been a shift from only a few teachers holding themselves to ambitious standards of performance to "We're doing what's best

for kids, and we're all going to do this." The espoused collective commitments captured this spirit. I encountered these statements on a variety of printed documents that are routinely present during collaborative interactions, such as professional learning community (PLC) meetings. The collective commitments of Longhorn are:

- We will model the acceptance of our differences by developing empathetic learners.
- We will forge a partnership with our learning community in order to promote student success.
- We will commit to cultivating a love of learning every day.
- We will collaborate to develop engaging learning experiences and monitor progress for all students.
- We will practice professionalism, courtesy, and kindness with all students and adults. During the team leader focus group, this theme of high expectations was clear as well. Zoe, the second-grade team leader, also added that a positive attitude and willingness to learn supported the staff in reaching the expected outcomes of their school leaders.

Everyone's willingness to learn and participate. I mean, we like to jump in and do things. So, everyone goes in with a positive attitude when we're presented with different PD [professional development] opportunities. So, I think our overall attitude helps a lot.

The Longhorn Elementary expectations for performance appeared as a theme throughout my research. The school principal uses her credibility as an instructional leader to push for effective teaching practices in every classroom. The teachers see these exacting standards modeled by their leadership and respond by critically examining their practice and focusing on areas for improvement. Their willingness to see these expectations as a positive challenge creates a culture in which Longhorn leaders can reach for greater achievement of their staff and students.

Structures and Resources

Another recurring theme during this case study was the way in which school leaders supplied structures and resources for professional development. The administrators intentionally provided time within the school day for collaboration and learning. Teachers also had access to ample resources and a variety of opportunities for learning.

One of the most impactful strategies used at Longhorn to support professional development for teachers is the instructional schedule. The campus leaders specifically created a schedule that built time into the school day for teachers to meet as a PLC. Appendix J shows the daily schedule at Longhorn Elementary. Every morning, one of the teams has dedicated time to engage in collaborative activities with their PLC. The teams rotate so that each team meets with its PLC every seven days. This schedule is supported by the specials team of teachers (art, music, and physical education). That team takes a different grade level of students each morning and works with them on a variety of activities. On the seventh day of the rotation, the specials team meets. As the physical education (PE) teacher, Angel, shared:

One thing the specials team does, which helps with the classroom teachers...and so with us doing like our Happy Feet, they are able to do the PLC, which therefore helps those students in their class...we rotate and like 5th grade will come in one morning from 7:30 to 8:25 and we do happy feet which is just a walking/jogging club...So it goes 5th, 4th, 3rd, 2nd...and then specials has their time where we get to PLC also and meet.

The classroom teachers also appreciate that the schedule has built-in time for PLCs to meet. Mallory, one of the 5th grade team members, emphasized:

That blocked time, knowing then that you're on a rotation that's already planned for, it gives us an opportunity to sit down and go through things that we sometimes can get distracted away from doing. And so that's been wonderful to have.

Mistie added that the PLC meetings are organized and purposeful, and the agendas are meaningful.

So, PLC, we do every seven days. We go into the PLC room with our grade level, obviously, and we have a PLC menu and PLC binder and it's very organized. The choices that we get to choose from and things that we get to do, to plan, from making CFA's [common formative assessments] to planning out the next quarter, just everything, I mean going over data and all that stuff.

Longhorn's leadership team understands the importance of providing a structure for teachers to routinely engage in professional development such as PLC meetings.

The school leaders also try to ensure they embed other opportunities for professional development within the school day for teachers, so teachers have time for their learning. They use routinely scheduled faculty meetings and other meetings to embed professional development related to teacher goals. The instructional coach noted how they continuously scheduled time for teachers to work on their professional goals.

We've been intentional in bringing them back so often and actually giving them time and not saying, here's this on your own time, go and do your learning. We embed it within some of our staff meetings or professional development days where we show them that we value their learning time and give them time to do that.

Emma, the 5th grade team leader, also appreciated having this time to work on her growth goals related to the Texas Teacher Evaluation System (T-TESS) without spending so much time outside of work hours. She stated, "It saved us time to do our T-TESS within the school day rather than having to stress about it afterwards and getting it done right then and be done with it. That was very helpful."

Longhorn leaders also supplied more ways for teachers to have professional development within the school day. For example, teachers could request class coverage so they could see another teacher using a specific teaching strategy of interest. During the team leader focus group, the second-grade team leader, Kristin commented:

We've signed up for interests, what we were interested in, and teachers signed up for things they were comfortable with people coming to see. So, it gave us time that didn't take away from our own personal time. It was built into the school day.

Intentionally scheduling the school day to carve out time for professional development was important to the leaders at Longhorn Elementary. They understood that making professional development accessible to teachers when they need it increases the ability for their staff to engage in meaningful learning.

In addition to time, having available resources for teachers to use for professional development was a supportive feature in this case study. The leadership team worked to ensure that their staff had a variety of materials on hand that teachers could use for their professional development. The instructional coach, Julie, was instrumental in assessing teachers' needs and finding appropriate resources for their professional development. She created menus for teacher learning. Appendix K shows an example of a menu related to formative assessment. During her interview, she shared how much of the teachers' learning came from the resources listed on the menus.

I kind of curated a bunch of resources or videos of effective teaching or journal articles or different things to read or other outside professional learning opportunities. A lot of it has kind of come from that. We change them out throughout the year.

The campus principal agreed that having these curated resources made it easy for her to suggest resources when she noticed teachers needed help to accomplish their goal. She declared:

I mean, we just were really on it with knowing what their goals were. And then providing people lots of different ways where that will help. Or if somebody says, 'Oh I need help with this.' We could say, 'Have you checked this? Have you checked the bucket of books? Let's go pull that and look at it.'

The teachers at Longhorn also identified how available professional development resources were. Mistie commented about how leaders supplied ample opportunities for professional development.

They definitely give us as many tools as we want. If we want a resource, a book, anything, that they are going to try their best to get it for us. If we are looking for

professional development to go to, our instructional coach will try to find it for us. So, they are trying their best to get us what we want.

Ashley, a third-grade teacher, added that this resource support extended beyond physical resources and included arranging a substitute for her to visit a different district to see a strategy she wanted to try.

I asked to go look at a campus in [another district] last year. There were no questions asked. 'What are you going to look at? Sure. I'll give you a half day.' So, I mean, they're very supportive. You just have to ask.

Another third-grade teacher, Jessica, mentioned that professional development was more available and accessible than in her other school experiences.

You know, but I've never been anywhere where it's so available. Like, you know, 'Let's read this book. Look at this,' or, 'Here's some new resources.' Almost, I mean, sometimes you're like, 'Oh, there's so much,' but it's like you're not just searching.

Having on-demand resources for professional development is critical to the leadership team at Longhorn Elementary. They want to make sure that teachers can always access professional development when they need it.

One of the most important resources for professional development on the campus was the addition of a full-time instructional coach. The principal shared that the teachers had more opportunities for personalized learning relevant to their needs because of the instructional coach.

Our instructional coach is a huge part of that, because then that's more individualized. She would set meetings; she would have certain times a year where she would have them sign up for a meeting. Just to maybe talk about something they wanted to work on, or even check in on goals.

During one of the field observations, I saw Alicia, Julie, and a central office coordinator collaborating to draft an article about the culture of coaching at Longhorn. They planned to submit their draft to a professional journal to share how they have been strategic about providing the instructional coach as a form of job-embedded professional development that teachers could

access to support their growth goals. One specific point the school leaders mentioned various times was that the instructional coach was expected to work will all teachers at the campus. They explained that in many instances they had seen coaches only work with novice or struggling teachers. This deficiency model of coaching ran counter to their belief that all teachers deserve professional development and coaching to reach their potential. As a result, Alicia introduced Julie at a faculty meeting early in the year and set forth the expectation that all teachers would meet with her regularly.

It was also important to Alicia and Julie to clearly define and communicate the role of an instructional coach so that teachers understood the expectations of their work together. Julie noted:

This was the first year that they've ever had a full-time instructional coach, so that coaching culture really was not quite there. So, we had to spend some time building that and getting them to see the big picture. We know, as a leadership team, what our plan is and how everything fits together, but it was trying to communicate that clearly to everybody to where they understood it.

They shared a document with the faculty called a partnership agreement. This outlined many of the specific roles and responsibilities of the instructional coach at Longhorn. A copy of the instructional coach partnership agreement is in Appendix L.

According to Julie, setting the context of instructional coaching with the entire staff helped her build positive relationships with the teachers. Because of this, she was able to coach teachers to help them achieve their professional goals. She said:

Doing my coaching cycles with them was another pretty successful thing, because everybody got exactly what they needed. They had attention about what their goals were and somebody to kind of bounce ideas off of and come in and watch their progress. Someone to help with some of their evidence.

As a result, when the leadership sent a survey about the impact of coaching, the teachers had positive feedback about the impact of their instructional coach. Several of the teacher interviews

highlighted the positive impact of the instructional coach. Bridget, a newer teacher at Longhorn, spoke about Julie's work with their team.

She has been very hands-on with our team specifically. We have six on our team, grade level, and we're all very different personalities. She spent a lot of time with us particularly...She's helped us figure out how to do it and how to work together. She's given us lots and lots of ideas and coached us, mentored. She sent people to model how it looks like. So, she's been great.

Veteran teachers like Jessica also recognized how the instructional coach was instrumental in helping facilitate professional growth opportunities for teachers. She commented:

It was pretty much, 'Sign up for a time. She's coming in, and, she's going to help you with your goals.' You know, it's a little scary, especially when you've been around awhile. You're like, 'Oh goodness. I kind of like to do it my way in my room, and that's how we do it,' but I think that's what makes us better.

The school leaders in this case study ensured they had structures and resources for professional development. Having a schedule that dedicated time for teachers to collaboratively engage as a PLC supported teacher learning and emphasized it as a priority. Longhorn teachers also had enough professional resources, such as menus, with curated materials to use when they wanted to learn about a specific strategy. The accessibility of the resources helped the teachers focus on their development without spending inordinate amounts of time searching for sources on their own. The instructional coach was an added support for professional development. She not only helped organize learning opportunities for the whole staff, but she also supplied individualized support for teachers around their growth goals. These structures and resources were critical for teachers at this site to access effective professional development.

Communication

The school leaders at this site use various methods to communicate information to teachers about professional development and expectations for implementation, and to focus

teachers on specific initiatives. Riley, a second-grade teacher, shared how leadership uses routine faculty meetings to communicate with the whole staff. These meetings were opportunities for the administrators to clearly communicate the focus and expectations of professional development.

I think they talk to us a lot about at staff meetings, telling us what we're going to focus on this year. They definitely do give us an objective for the year, like when we get together at the beginning of the year trainings they say, 'Okay, this is what we're really working on this year,' like how planning all together was something that we were working on. They definitely do verbalize it to us at staff meetings.

Additionally, the principal uses other written and oral methods to communicate with staff. Using a variety of modes ensures that everyone has an opportunity to access the information. Bridget stated:

Oh, she's huge on communication. She puts it in print form, and she'll email it to you, and she will... You will hear it again and again in different ways. She talks to everybody's route of communication. She's a very good communicator.

Leaders are also in constant communication with teachers through PLCs and other meetings, such as team leader meetings. During the observation of a team leader meeting, I was able to see how the principal communicated to the team leaders the expectations for the new technology initiative. They were able to ask questions and seek clarification with the principal and the district technology coordinator. These team leaders then committed to share the expectations of the pilot with their teams at the next grade-level meetings.

The school leaders at Longhorn also encourage two-way communication with teachers.

They value transparency and feedback. Alicia and the leadership team use faculty meetings,

PLCs, and other group gatherings to provide reflection opportunities. They listen to these

reflections and use this information to further refine their support. One example of this feedback

and communication cycle was related to the specific elements of the model of instruction they

were focusing on for their HRS certification. Administrators conducted a variety of formal and informal walkthroughs and created a plan for feedback based on walkthrough data. They displayed walkthrough data on a bulletin board in their PLC meeting room so that all teachers could see the results of these elements and their implementation in classroom practice. The campus leaders would then ask teachers to reflect on the results. Alicia contended:

They actually could see it. Sometimes we'd go a week and a half and put the data up there...we'd have them reflect on what they're seeing up there...So, teachers started talking about. 'Well what would you see if you came into my classroom and you were to mark differentiation?' They were posing really good questions.

These specific interactions opened the communication lines between administrators and teachers.

A fifth-grade teacher made the connection to this transparent communication and the staff performance toward the campus goals. Mallory noted:

They've been really good about sharing the information of what they present and how they collect all the information to show the things that we're already doing. And I think that that has led to some professional development as well. And so, this year, in the past two years as well, as we've gone through that I feel like we've stepped it up a notch. And so, it's been nice to see.

Figure 3 shows an example of the bulletin board with each instructional strategy and tally marks for how many occurrences administrators observed. Teachers placed notes on the board with reflective comments about these observation results.

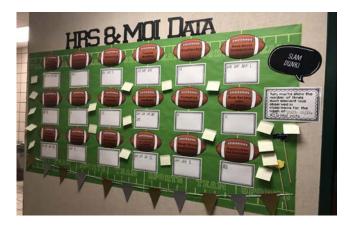


Figure 3. Summary walkthrough data. This bulletin board displays tally marks for observed classroom strategies of focus.

Longhorn leaders used these strategies to create opportunities for teachers to give input about their professional development and any other support they needed. They also used other methods to conduct needs assessments and find out what teachers wanted with respect to their professional development. Ashley mentioned that she received a survey asking what kind of professional development she wanted and would be comfortable presenting to others. She asserted:

Well, they send out the survey, 'Anybody have anything that they want to share?' There was one they sent, I can't remember the exact question, but, 'Here are the areas we want to present, anybody feel strong in that area to facilitate?' So, I think they're always asking. If I remember correctly, this year I think I filled out a survey, one of those online job things, 'What do you think you want?' So, I feel like they're always listening and watching.

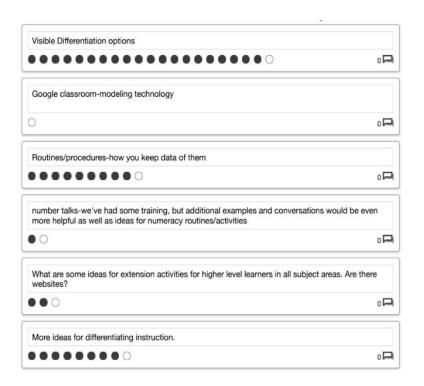


Figure 4. Online voting results. This image has a sample of tabulated results of teachers' preferences for professional development.

In another example of how the leadership team elicited teachers' input about professional development, campus leaders used an online tool called Dotstorming. This tool allowed teachers

to vote by placing dots on the strategies they wanted to learn about in professional development. Each teacher received a set number of dots, and they could use all the dots on one strategy or spread them among several. Figure 4 shows an example of the Dotstorming board and the results of online voting. Leaders used this input to determine the topics for professional development during one of their scheduled days.

Teacher input and listening was impactful to Angel, the PE teacher. She appreciated that Alicia listened to their team about the specific needs of specials teachers versus other classroom teachers. She declared:

Here this past year especially, just more the positive attitude and the positive reinforcement she gives us and the support. We could have asked, 'We'd like to pick a book from specials,' and she goes, 'No, you just have to choose from these.' So, she listens to us and I think she does take into consider what we're needing and what we need to grow and develop into better teachers.

The team leaders also appreciated how the school leaders listened to them. During the focus group interview, team leaders highlighted how campus leaders honored teacher input about having ongoing support and time for application of professional development. Emma stated:

I think our voices were heard in this sense to give us time to reflect...just absorbing and never having time to produce anything we're using. I think she heard that, and she ran with this, giving us these choice boards for PD and then even this summer. I think our, or my, voice was heard.

Communication appeared throughout this case study as a tool the campus leadership used to shape and support professional development. The administrators used multiple methods to ensure faculty understood their expectations for learning. They also used transparent feedback to provide a springboard for two-way communication. The teachers at Longhorn felt they had many opportunities to communicate with leaders about their desired professional development, and they noted that administrators listened, and enacted plans based on their input.

Monitoring Progress and Providing Recognition

Another way the school leaders in this study supported professional development was by monitoring progress and providing recognition to the staff. There was constant progress monitoring of goals between administrators and teachers. Alicia felt strongly that checking in with staff was necessary to see growth. She said, "It was a constant, constant cycle of feedback, goals, growth, progress." Both administrators shared how they often checked the progress of teachers' growth. Alicia related this continuous monitoring and adjusting of instruction to the achievement of students.

We're monitoring it. It's accountability. It's giving feedback. It's going back to our goal. Checking in...and just our PD always supports instruction. And I mean that's how you get the biggest bang for your buck with kids...Helping improving student achievement is making the teacher better. I mean, that's my belief.

Carolyn also spoke about ensuring that classroom teachers implemented the planned instructional strategies.

Obviously, we are participating in the scheduled professional learning community time, but looking at what we're doing there, and then going into that planning, and doing the walkthrough time. Is what's talked about in there actually what's happening in the classroom?

The administrative team frequently analyzed data from these walkthroughs to determine areas for continued reinforcement and professional development. They also used these data to celebrate the achievements of their staff. Appendix M displays an example of this walkthrough analysis.

The school administrators also used feedback and reflection forms after these walkthroughs to share the results and encourage teachers to examine their practice. Teachers would reflect on the questions posed by administrators and respond. This continuous monitoring held the staff accountable for implementing the instructional strategies they were learning about

during professional development. Alicia reported how important intentionality, reflection, and follow-through were for her staff.

I think being intentional and following through and reflecting like crazy through the whole thing. Just having them reflect, having them reflect on their own learning. And us too, I mean, we do it too...reflecting on the learning...and just making sure it's targeted.

Table 7 summarizes examples of their instructional walkthrough feedback related to the specific model of instruction (MOI) elements that had been the focus for the year.

Table 7

Example Walkthrough Feedback and Reflection Questions

MOI Strategy Connections	Questions
 Students showing thinking Formative assessment Goal setting Students monitoring progress Instructional feedback 	Why is it important to have academic expectations for students that are high and demanding? When you know students will struggle with what is presented, what do you do? How are students expected to persist with instruction to demonstrate progress towards mastery of learning?
 Differentiation Student accommodations Small-group instruction Off-task behavior addressed seamlessly 	How do instructional strategies address all students' learning needs? How do you provide differentiated instructional methods within your lesson? In what ways do you monitor student participation and performance? What student behaviors do you look for during the lesson as signals that differentiation may be needed?

The school leaders also used the formal teacher evaluation conferences to check in with teachers about their goals and the status of their growth. Often, the reflections about professional development were documented as evidence. Alicia shared:

They totally took charge of their own learning, but in the area that supported their goals. And then we just, as administrators, would check in with them on that when we had the first of our goal-setting conferences. And then we had checkpoints throughout the year that they would update their evidence on their T-TESS goals. And a lot of times the PD was documented as something that helped them grow.

Figure 5 shows an example of how a teacher connected a professional article with her goal related to student discourse. Longhorn Elementary leaders used these opportunities with teachers to measure the progress of their goals.

Bo Evidence Discourse: The Importance of Talk in the Balanced Literacy Classroom by Margaret Mary Policastro While reading this article Towns

While reading this article, I was immediately struck by a simple statement made by Fisher and Frey (2014). They stated, "Students love to talk. So do teachers. When there's a balance in the classroom between student and teacher discourse, good things happen." It reminded me of how much we teachers sometimes do the talking, and how often students are supposed to sit and listen. Then we wonder why the students are disengaged. This article addresses the importance of making talk, listening, and conversation a focus during your balanced literacy block.

Something that really struck me was how to deal with students who do not talk much within the classroom discourse. Quebec Fuentes (2013) talks about the nonparticipatory student as falling into two categories:

- (1) the student who struggles with a learning, and
- (2) the student who is able to complete the learning tasks but does not share his or her ideas with class members.

It is our jobs as teachers to identify these students and figure out which type of discourse works best for them. It is my goal to use this information to promote a culture that promotes shared talk to reach all learners.

Figure 5. Professional development evidence. This image is an example of evidence shared during a T-TESS evaluation conference.

The principal and assistant principal also made it a point to publicly share the results of their teachers' growth to recognize their efforts and celebrate the faculty. The fifth-grade teacher, Katherine, noted that school leaders recognize faculty members who "have gone above and beyond." Julie also mentioned these celebrations during her interview. She discussed how Alicia would recognize certain teams during faculty meetings.

She would highlight certain people that were doing...or PLCs that were looking at some number talks videos and applying it into their instruction. So just celebrating those places that it's doing really well.

Julie also took opportunities to celebrate teachers when she noticed teachers implementing the instructional strategies from professional development. She used her

newsletter to recognize teachers as "MOI MVPs." Appendix N has an example of one of these newsletter pages.

Longhorn Elementary leaders understood the importance of monitoring and accountability to ensure changes in instructional practices. Administrators conducted walkthroughs and held evaluation conferences to encourage continued progress. They also analyzed observation data to refine professional development plans in areas of need. When they saw teachers or teams successfully implementing effective strategies, the campus leaders officially recognized and celebrated these achievements. Because of this continuous cycle of progress monitoring and reflection, the teachers at Longhorn were able to connect their professional development to classroom practice.

What Are the Teachers' Perceptions of How Leaders Support their Professional Development? (RQ Sub 2): Culture of Learning and Growth, Trust and Professionalism, Focused and Ongoing Professional Development, Differentiated Professional Development, Building Capacity, and Collaboration

Teachers at Longhorn perceived that leaders supported their professional development.

The following themes highlight the ways in which the school leaders at this site supported their teachers' professional growth.

Culture of Learning and Growth

Longhorn Elementary has a strong culture of learning. The leadership and staff believe learning and growth are important and find opportunities to ensure they have the tools and strategies to ensure students are successful. This culture of learning has evolved over the years. When Alicia first came to the campus four years ago, this was not as strongly clear as it is today. She worked over the years to cultivate a growth mindset so that teachers are willing to

take risks and learn new things. Now, Alicia notices that teachers are open to change because they want to see growth in their students. She reported:

I'm really lucky because our teachers are really receptive. I mean, they will take on change... because they want to do what's best for kids in our school. But it's not always easy. But if they are a part of that and they know the why...and you celebrate along the way, they'll keep going with you.

The assistant principal, Carolyn, also confirmed that teachers want to learn so that they can make an impact on students.

Well, I think it just goes back to culture...we really have one of the best cultures on this campus that, really, I've ever been on, since I started teaching in 1993. People really want to do a good job. I really can honestly say I don't think there's any teacher out there that...you say skill versus will. It's not a will thing. They want to do the best thing.

One reason this culture has become embedded is because the administrators clearly communicate the expectation for growth and the importance of professional development.

Katherine affirmed:

I think a communication from the admin that, in order to become a better educator, this needs to happen. Which sounds really simplistic, but sometimes that's not communicated effectively as some other campuses. I think sometimes, I think admin sees professional development as very important to us as educators. I think they communicate that as well. It goes back to that checking of the boxes. Is this something that we're going to do just because we have to do it, or is this something that's going to be meaningful?

Other teachers felt that this culture of learning is part of the campus identity and does not even need to be explicit. Ashley maintained:

I think it's just an understood. I don't think she ever really has to say. I think here now, I think we're all invested enough. So, I don't hear it. Maybe others do, but she doesn't really talk much...That's just what we do.

Longhorn staff see the value in continuous learning to become more effective practitioners.

They believe that regular professional development is critical to improving student outcomes.

Administrators at Longhorn are passionate about learning new things and model a positive disposition toward change. The campus principal reinforces this culture of learning and

growth with her behavior. Julie shared how Alicia's enthusiasm toward learning affected the staff.

She kind of models being excited about the learning and how cool things are that she learns and she kind of models that herself too. Just through that excitement and how she portrays things, it's just immediately gets everybody on board. It's almost like it's magic that she's talking about that makes everybody want to do the learning.

Julie also observed that the administrators take part in the learning experiences of teachers. They use these opportunities to show that they prioritize learning, but also as ways to communicate with teachers. She said, "Administrators participate in meetings, PLCs, PD frequently. They model continuous learning and use these as a way of getting feedback from teachers."

Other teachers shared how the school leaders' model continuous learning, are visible at learning events, and participate in professional development alongside teachers. Jessica noted how her administrators engage in learning with the teachers and how this is a dissimilar experience than she has had with past administrators.

We learned the new TEKS [Texas Essential Knowledge and Skills] this year for ELAR [English Language Arts and Reading] for next year, and they went to that. So, just them being involved and going, when we go to [district learning conference] we'll see them there. It's not like when I started 20 years ago. The principals were just in their office.

The administrators at this site prioritize professional development and prove the importance of learning through their visibility and participation in learning alongside teachers.

Another key factor in the culture of learning and growth at Longhorn was the implementation of a model of teacher evaluation that emphasizes goal setting and reflection. In 2016, the state of Texas changed the evaluation system to the Texas Teacher Evaluation and Support System [T-TESS], which is a system specifically designed to support professional growth (Texas Education Agency, 2019). One of the main components in the evaluation cycle is goal-setting and professional development planning. At Longhorn, much of the professional

development teachers chose to take part in related to the professional goals they set for T-TESS.

Mistie explained that one driving force for her professional development choices is her T-TESS goals.

I decide what professional development I need based on the areas that I feel would benefit my classroom the most. So, if it is based on my T-TESS goals or just an area that I think would help my students, or an area of interest that I'm not strong in, then that's what I am going to go to.

Because setting goals and making professional development plans was part of the initial meeting between teachers and administrators, school leaders were aware of the teacher goals and interests and could use this information to supply relevant professional development. Figure 6 is an example of a professional goal set by a teacher at the beginning of the school year.

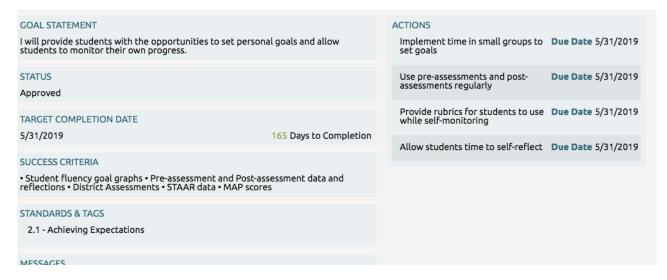


Figure 6. Sample teacher professional goal. This image is an example of a Longhorn teacher's goal statement. Teachers set goals for growth and share them with their evaluators.

Another component of T-TESS is a regular cycle of feedback and reflection between teachers and administrators. Throughout the year, the teachers at Longhorn met with their evaluator to receive feedback and reflect on their goals and professional development plans.

According to Zoe, these meetings provided a structure for administrators to discuss growth and check progress.

Through T-TESS, we have to set our goals and then...we have a meeting to discuss those goals at the beginning of the year so that we can talk about our plans to follow through with those goals and be successful.

These regular conferences also allowed teachers to reflect on how their learning and growth as a practitioner was affecting the students in their classrooms. Alicia explained:

And one of the questions we ask at those end-of-the-year conferences, that I always make sure to ask is, 'So how did your growth impact the students?' And man, they can answer that like, because they really did grow. They really saw the growth in themselves on certain areas.

Classroom teachers also connected this goal setting and evaluation process to the growth of their students. During her interview, Angel spoke about her success with assessment because of her T-TESS goals.

You have to select your goals and now us having to supply evidence and having to be accountable for them, I mean I know it has made me grow as far as assessing my students. I mean it's hard to assess 600 kids, but I have done it. And I don't know if I would have done it unless I hadn't set a goal to do it.

Having specific goals and focused professional development plans supported the growth of teachers and gave the administrators a vehicle to coach their teachers through this process.

At Longhorn, it was clear from the collected data that growth and learning infuse the culture of the school. School leaders value professional development and model being a continuous learner. Additionally, T-TESS encourages cycles of goal setting and reflection on teachers' growth as practitioners. The administrators in this case study used this aligned evaluation process to support their culture of continuous improvement and help teachers connect professional development to its impact on students.

Trust and Professionalism

Another factor supporting the job-embedded professional development of the participants in this study was the importance of trust and professionalism at Longhorn Elementary. The

administrators and teachers have a relationship built on trust. The staff perceives that their school leaders respect them as professional educators who can make critical decisions about their own growth and development. As Aidan commented, "They trust us to know what we need as individuals." This established trust was critical to the success of professional development at this campus.

Trust between administrators and teachers was critical to supporting professional learning and working through change at this site. One of the classroom teachers expressed that previously teachers did not necessarily have confidence that they would be supported through implementation of their professional development. Ashley said:

But that trust issue, like is this another thing we're just going to drop? Are we going to get yelled at if we don't do it? We were really lacking trust, in my opinion. But I feel that's being healed, if that makes sense.

The administrators at Longhorn have tried to build a culture of safety over recent years so that teachers feel supported as they make changes to their instructional practice. Carolyn explained:

I think to move teachers along, if you don't have that district-wide mindset of change, then you've got to play into the culture and the heart of that teacher, and I think trust and communication is the way to do that.

Riley added that because of their trusting relationship with administrators, teachers are willing to engage in certain suggested or mandated professional development.

Like I said, some things are just I think decided for us as a campus, so I guess we just trust our leadership that they know what's best for us or what we are going to need for what - I guess what initiatives they have for us or what we need.

The school leaders also take specific measures to build trust among their teacher teams. Ashley observed that trust has been built over time because the administrators encourage open communication and sharing between teachers.

It was smile, nod, close your door, do whatever you want to do, and disjointed. But I don't know, this is her fourth year here, especially in the last four years, I've seen a big

shift in, 'No, no, no. We have to talk. If you're going to do your own thing, let's talk.' And so that's trust building, I think.

Longhorn Elementary has an environment in which educators trust one another. Teachers trust their leadership team and as a result, they are willing to engage in professional development recommended or required by their principals. Teachers also trust each other and that allows them to have collaborative discussions for the purposes of improving their practice.

Similarly, administrators trust teachers to make decisions about their professional development and follow through with their expectations. During the team leader focus group, Sam commented that she appreciated the administrators "knowing that we are professionals and that we want to get it done and follow what they're asking us to do." Throughout this case study, teachers often commented on how their leaders treat them as professionals. Katherine shared:

I think they see us, and you ask another educator, and they may not give you the same answer, but I think they see us as, and I get the impression, that they see us as professionals. That we're able to manage our own learning needs and know what we want, and so I think treating that, that communicates over to us very well....I think it's been a good growth for us, in terms of professional development.

Mallory added that administrators use non-traditional and blended learning professional development because they know that teachers will follow up with their learning on their own time. She stated:

They ask us to do things, even pajama PD. 'We're going to present this to you now, let you sit and stew on it, and then come back to us on your own time, through technology means.'...I don't know that a lot of campuses - when I talk to friends like, 'Really? They let you do that?' And so, there's, sometimes, that sense of surprise by other campuses of how they let us conduct business. And then, definitely, trust is a huge factor, and that honor system of, 'Okay. We're going to honor your time. We've presented this. We know you have to follow-up on the backend.' And we do.

During this case study, teachers such as Mallory appreciated that their leaders set expectations and trusted the staff to complete professional development even when they were not present.

Principals at Longhorn know their teachers are professional educators who want to

continuously improve their craft. The teachers in this case study felt supported and trusted to make choices about their professional development. They also understand that administrators see a bigger picture and sometimes make recommendations or requirements for professional development. Because teachers trust their leaders, they willingly take part in learning experiences to support the school's improvement goals.

Focused and Ongoing Professional Development

Another aspect of the leadership supports of job-embedded professional development at Longhorn was the focused and ongoing nature of professional development. The data revealed that the principal, Alicia, has attempted to narrow the focus of professional development on well-connected initiatives based on the critical needs of the campus and teachers. She also noted that it is sometimes difficult to balance what the district is emphasizing while still focusing professional development on the specific needs of their campus. Where she can, she tries to help teachers make connections to the various initiatives.

In one of the collected documents, there was an example of a presentation the Longhorn leadership team shared with staff at the beginning of the school year. The school administrators clearly communicated four areas of focus with the staff: (a) effective instruction in every classroom (HRS Level 2), (b) a PLC framework, (c) an instructional coach model, and (d) positive behavior intervention and support (PBIS). Each of these focus areas relates to the overall district goals, but Alicia also tried to communicate how each of these initiatives work together so that teachers do not view this as an overwhelming endeavor. During her interview, Alicia commented:

So, we aligned everything. And that is really important to me as a leader...And that's where I do the work and making sure I figured out how it's all aligned, so I can teach them. Because then it doesn't feel like one extra thing.

Alicia also noted that her school tries to align specific professional development so teachers can see the connections to their learning and the overall district and campus focus. Appendix O is an example of how one of the school's collaborative teams aligned their school-wide book study with the district model of instruction (MOI), which is part of the HRS Level 2 initiative.

Alicia explained that while she implements the district-expected initiatives, she still uses campus-specific data to further refine and target professional development to the needs of her staff and students.

Well first choosing the things that... what's that the right word? I mean not just doing fluff...but you're choosing things that we need. And they know we need that, because we've looked at data or we've talked, figured it out together.

The assistant principal, Carolyn, also emphasized that student outcomes were a most major factor when they selected professional development.

Well, it all goes back to student achievement...If your PD is not bringing that student achievement, then you're not doing the right PD, no matter what teachers are saying or no matter what I think or [the principal] thinks.

Katherine, a 5th grade teacher, added that campus administrators are in constant communication with their staff. This helps them understand their needs and refine the focus of professional development. She shared:

I think they're probably a leader in the district when it comes to professional development. We have a very aware administration of our specific needs, what this campus specifically needs, as opposed to a general need. I think when it comes to professional development, they're much more targeted to what our students need and what our teachers need, probably more than some other campuses.

Focusing on fewer initiatives and connecting them to the overall focus helps manage the difficulties of the change process.

Although the school leaders at Longhorn attempt to narrow the focus to relevant professional development, balancing the district-required initiatives was still a challenge.

Campus administrators' decisions about professional development are sometimes influenced by central office curriculum staff or pilot opportunities. Team leaders are often part of the implementation planning of initiatives such as the online learning management system rollout I saw during one field observation. These teacher leaders understood that there are larger goals and the school must participate even if it will be challenging. Debbie explained this during the team leader focus group:

And like you heard earlier, we're about to roll out a pilot, so we really don't have a choice. That is a must-do duty that you must do to stay up with your campus and the plan, the direction they're going.

Classroom teachers also know that leaders look at the bigger picture of the district's overall improvement goals and what is expected. They noted that Longhorn will often volunteer to pilot or adopt early rather than wait until the district mandates participation. Mallory explained:

I think that our administration will look...because of what they're involved in, from a district perspective, they know things ahead of time. They do offer up in the...they have a history, at our campus, of not waiting for it to be pushed upon us. If there's something to be a pilot for, just go ahead and jump right in. And so, they've always done a good job with that, which allows us to just jump right into it and maybe not have second thoughts about it.

Volunteering to pilot can be problematic, especially when teachers do not feel as though they have ample time to apply their learning and master new strategies. Riley shared:

There's probably a lot that the leadership deals with that I don't even know about that's just because they do have to deal with a lot. But I know that one thing that I've noticed is that when you are piloting a lot of stuff or you're the guinea pig for a lot of things, it can be great. Maybe it looks great. But sometimes as a teacher you feel like we're trying too many things at once and spreading ourselves too thin. It'd be nice to be able to just focus on one thing for a long time instead of either a new thing every year or 10 things in one year, because sometimes it just feels like you just can't get a handle on all of them enough.

Zoe agreed that the campus takes on many of the district initiatives early and implementing these

is challenging because of the lack of time to deeply embed these new practices.

We like to be on the forefront of things, so I feel like we have a lot thrown at us at times as far as just different resources, users, times of planning. It seems like we just get a lot thrown at us. So that I personally don't always feel like I've really become strong in an area before, it's like, 'Well now here's the next thing.' So, I do feel like there's a lot that comes at us.

The teachers at Longhorn preferred professional development focused on fewer areas with substantial time for application in their classroom. They consistently acknowledged that having too many initiatives at once made it difficult to master anything. The campus leaders tried providing a narrowed focus but having district requirements added to the number of initiatives competing for teachers' time.

Even with this challenge, the Longhorn administrative team understood the importance of having routine follow up and time to implement. As a result, the school principals structured professional development to be ongoing with time for reflection. One classroom teacher commented, "They keep bringing it back around." Reese observed that having ongoing professional development relevant to her goals was more beneficial than a single training. She stated:

When you go to one thing, unless you're putting it on your mind that I have to do this and this, when you connect it to a goal, it changes everything...So it was like, 'I have to go back here. This is what I'm going to do for my kids.' It's something I was constantly working on back and forth versus one training one time and I might or might not use it kind of thing. So, I think, yeah, for sure. Something that's continuous over time has made the biggest impact.

It was important to school leaders that teachers had multiple opportunities to revisit their learning. As Julie noted, "It allowed them time to dig in a little bit deeper and see what else they need to work on."

The campus leadership often arranged activities at faculty meetings to reflect on instructional strategies and deepen understanding about expected practices. In one example, the

teachers used a strategy called Pass the Story to communicate their understanding of effective teaching. The leaders gave teacher teams an example of an instructional strategy that had been a focus of professional development. The team leader started the story with, "Once upon a time, there was a teacher who…" and filled in the sentence with an example of a teacher who had implemented this strategy. Then another team member continued to build on that story using specific details to highlight this example of practice. Team members continued adding to the story until each person had shared. Each team recorded their story using a collaborative online video recording tool called Flipgrid. Once the teams recorded their story, they watched the other team videos and posted reflective comments about that strategy.

It was clear from the data that the school leaders at this site focused professional development and structured learning to occur throughout the year. The administrators incorporated intentional reflection opportunities so teachers could constantly revisit new strategies they were using in their classrooms. Teachers had ongoing, collaborative interactions to reinforce new learning and clarify how they used their professional development in practice. Although it was challenging to balance the district and campus needs, the principal tried to show how all the initiatives connected so teachers felt empowered instead of overwhelmed.

Differentiated Professional Development

While the school leaders at Longhorn focused professional development for the whole campus on widespread needs, they also recognized the need to provide differentiated professional development that aligned with teachers' individual professional goals. Since goal setting is an important part of the evaluation and growth process at this campus, it was important for the leadership team to structure the professional development system so there were resources and support for personalized learning.

Several of the classroom teachers shared that differentiated professional development was more relevant and effective because it was more specific to their needs. They recognized that not all professional development could be personalized, but they were grateful for opportunities to have learning opportunities that directly related to their goals. Mallory said:

So, what I really appreciated was how we took our personal teaching goals and they sculpted some professional development opportunities around those. Not saying it lasted all year long, but it was just really nice that when we did have those in-service days that there were things focused on what I'm interested in and the areas that I would like to grow in. So, I really felt blessed. And I felt that that was a great opportunity.

Angel appreciated that her principal understood the unique pedagogy of PE and allowed her to read a book about assessment in elective classrooms. She commented:

We asked her if we could pick one [a book for the book study] that was designed specifically for specials, and she said yes. And we researched and found one and she's going to let us do that one together. So, that's going to be very beneficial to us. Because a lot of times we'll read. I know I use differentiation in class, but in PE it's a little different when it's used in class. Or you may use assessments. Well, I've had to modify that way I do assessments for 600 kids compared to what they do.

Katherine added that professional development targeted to her students' specific needs was motivating. She stated:

Really, the professional development that drills down to what best educational trends achieve growth with the children...I can backfill as an educator, and as an adult, what I need, but really what is important is what the professional development gives me to help my kids.

Other teachers contended that having some choice in their professional development made it more likely for them to implement the strategies in their classrooms. As Reese explained:

I think that any time people get to pick what they want, there's more buy in and they're more likely to make a change with it. I just feel like it's so different from when I first started - that we're all going to be in there for hours and hours and dreaded sitting there, you know?

Katherine also saw that teachers are at diverse levels of readiness for professional development. She reported that campus leaders have used differentiated professional

development to engage educators who may be more reluctant to changing their practices.

They have attempted different learning styles to get teachers engaged...I think that's a huge development, and I think, really, they strive very hard to make it relevant, timely, engaging, and useful to us at this campus level...The early adopters are going to adopt it, but those folks that are not, how do you get them involved? I think our leadership here has tried really, really hard to engage those educators that just maybe don't jump on the train quite as readily as some other people.

Classroom teachers at Longhorn noticed the attempts by the campus leaders to provide them with professional development related to their needs. This theme recurred throughout much of the data.

The school leaders also discussed the value of differentiated professional development at their school. The administrators both emphasized how the professional development related to teacher goals emerged during the summative evaluation conferences. Alicia commented:

The differentiated part this year was the best I've ever seen. I mean, I think they got the most out of it. When we sat down at end of the year conferences. I mean teachers were like, 'Wow, you made me grow this year.' Their reflections were so good...I mean, they really like dug, they really could reflect like, 'Oh my gosh, I did this, this and this. And this was the outcome of it.'

Carolyn also mentioned that teachers shared the choice boards and differentiated learning as evidence of growth in their evaluation conferences.

I didn't really know the power of it until I visited with teachers during their summative conferences. I'm telling you, I felt like bits and pieces of that aspect, it was just woven throughout our entire conversation. They obviously were able to choose, but then they really used...because they had chosen what to study about, what to try...I don't even think I've ever heard a teacher say that. I don't even really remember making that profound of a connection between professional development and my instruction in my classroom.

Having differentiated professional development was recognized and celebrated by both administrators because their teachers were able to connect their professional development to their growth and student outcomes.

Similarly, the instructional coach believed that having options related to growth goals and

time for collaboration was an influential factor in the successful professional development of Longhorn. She contended:

If I'm thinking of myself as a teacher, having somebody give me options that directly relate to what I'm wanting to learn anyways and then actually giving me time to do that. Giving me time to reflect and collaborate with other teachers. Just having that small group feel with your own professional learning goals I think was really effective, because it felt...You just feel more valued and your growth experience feels more valued, because you're given the time and you're given the opportunities and the choices that fit right into what you're wanting to do anyways.

Julie was also an instrumental part of helping teachers access differentiated professional development based on the needs of teachers. In addition to the previously mentioned choice boards seen in Appendix K, she scheduled coaching sessions to support the implementation of the teachers' learning. Julie said:

There've been choice boards that they've done. Been able to kind of self-select things that really go into their particular goal. A lot of what my coaching has been, has been kind of job embedded. Where I'll go into the classrooms for their particular goal and model or co-teach, observe and give feedback and it all just kind of goes back to what their goal is. So, we've tried to kind of differentiate and tailor it to each teacher's needs and kind of where they want to go in the path that they want to take.

Julie was able to directly see classroom practices and give feedback to teachers so they could continue to progress toward their professional goals. Appendix P has an example of an observation form Julie used to capture notes during a classroom teacher's lesson. The teacher's goal was to ask her students more questions with higher levels of cognitive rigor. Julie gathered data on this form during her visit to the classroom and then shared it with the teacher. The teacher and the coach then debriefed the lesson and made plans for additional action items. Julie then followed up with the teachers to support them through these next steps.

Differentiated professional development had an impact on the teachers and school leaders at Longhorn Elementary. Teachers perceived that learning experiences related to their growth goals were more motivating, and that they were more likely to apply them. Administrators noted

how teachers supplied evidence of learning during their evaluation conferences. The instructional coach was a critical support for teachers as they tried new strategies based on their new learning. Having more individualized opportunities for professional development was a strong factor in the successful learning system at Longhorn.

Building Capacity

Another emergent theme in this case study was building capacity. The administrators at Longhorn emphasized developing the skills of their teachers as leaders. They consistently encouraged teachers to share their expertise with other educators at the school or in the district. The school leaders had a strong belief in empowering teachers to lead learning and contribute to the professional development of their peers. This was a way of multiplying the impact of learning. Alicia asserted:

I mean, you're going to get the most bang for your buck when you use your people. So, I try to use our teacher leaders, or somebody that maybe is really good, whether it's learning walks or maybe they do facilitate a little PD, like at a staff meeting or something.

Carolyn added that they were able to support change by building on the campus values and strengths. This contributed to the culture they have at Longhorn. She asserted:

I think that Alicia has done a great job, and I've jumped on board with her process of play into what your positives are. The big thing about Longhorn is it's like a family. Yes, people have been here for a long time. Then use that to your advantage, and deepen the culture, and really validate people's strengths, and build on that trust, and push into teachers to build their capacity.

Both administrators understood the value of having teachers that could support the learning and professional growth of their peers.

The administrators' strategies to build capacity were especially clear in the ways they developed the team leaders at Longhorn. This group of teacher leaders met routinely with school leaders. These meetings provided a vehicle for two-way communication between teachers and

administrators. It also enabled the principal to cultivate the knowledge and skills of the team leaders. This year, Alicia wanted team leaders to deepen their understanding of PLCs so they could have more productive PLC meetings with their teams. One of the collected documents was the minutes of the October 2018 meeting (Appendix Q), which shows the structured opportunities the school leaders used to develop ability in their team leaders.

As a result of this effort to develop the Longhorn team leaders, the teachers reported positive experiences during their team meetings. Bridget shared:

Well, I think we have great leaders here. That's what I think. And my team leader, she's amazing. And she's really good about pulling stuff and saying, 'Hey, why don't you look at this,' or 'Why don't we try this.' But she's also not so bossy that she doesn't dominate and say, 'We are doing this.'

The skillful leadership of the teacher leaders was important to the overall improvement efforts of the school.

In addition to developing capable team leaders, the Longhorn administration team used other strategies to build capacity in their staff. Throughout the study, many of the teachers discussed their opportunities to either lead professional development or learn from other teachers. Mistie commented on the volume of teacher-led learning at this school.

There's a lot of teacher-led professional development for the campus as well as the district. Not so much as bring people in to teach and lead the professional development. They are very much teacher-led and teacher-guided professional development - as I've seen.

Some teachers volunteered to share learning based on strengths and passion. Administrators tapped into this potential to help grow the rest of the staff. They often encouraged teachers to share with other educators, even when it required teachers to be out of their comfort zone.

Jessica explained:

Well, she asked for volunteers, and then we kind of throw out a few ideas of what we could talk about, but I really feel like it's kind of like what we do with kids when you're

an expert. Then she's like, 'What do you feel really confident about presenting?' Which is always good for our team too, because we're like, 'Man, I'm an expert.' Then honestly, if you're not wanting to, she'll kind of push you to get out there.

Teachers were also able to share the results of their personal professional learning during organized professional development days. School leaders structured the day as an Edcamp-style conference. According to the Edcamp Foundation (2019), this style of conference is participant driven and centers on the actual classroom experiences of teachers. Julie discussed this day during her interview.

We had a day where the teachers kind of were leading their own Ed camp...we allowed them to kind of lead some of the learning and we're able to share what they've been doing with their things, with everybody else, even though they might not have access to it too.

Carolyn explained how this format was used to build the ability of teachers.

Well, I think building capacity teachers for them to lead and to facilitate, even if it's just the Edcamp-style, where you don't have to be the expert, but you at least are able to get the conversation going. I just remember...I haven't been out of the classroom that long... I'm more likely to really learn from someone who's in the trenches with me day in and day out and buy into it a lot more quickly.

Teacher-led sessions were highlighted throughout the research study. There was a variety of opportunities for teachers to share the results of their personal learning with peers.

Another way in which the Longhorn school leaders developed the capacity of their teachers was to supply opportunities for peer observation. Teachers could arrange to visit the classroom of a teacher and see strategies in practice. Julie, the instructional coach, arranged these learning walks based on what teachers wanted to see and what teachers volunteered to host. She explained:

A piece of my role was to develop these learning walks and they got to sign up for something based on their goal. Again, whatever model of instruction element they were working on. Teachers would also say, 'I'm very good at that or I'm okay with having people come in and observe that.' So, I scheduled it to where you would go in and watch somebody for 30 minutes, just watching that particular element that you're looking for and kind of have time to kind of debrief after that too.

Classroom teachers such as Ashley discussed how observing teachers based on goals impacted her growth.

It was nice to go into the classrooms when they arranged it based on our goals. That was nice too. It was another piece of evidence for T-TESS. But when I said, 'Hey, can I go to [another teacher's] room, I really want to see how she does morning stations,' or whatever. That was the most because it came from me. It was something I really wanted to see and change.

Zoe shared that the learning walks were especially helpful to her as a newer classroom teacher.

These walks helped her see the strategies she wanted to develop in the context of an actual classroom. She stated:

I know for me personally I, as being fairly new still, I enjoy doing the learning walks. Being able to go into another teacher's classroom in an area that I wanted to learn about and see how they perform that. Because then it allows me to see it. Because it's hard to know unless you actually see it modeled for you.

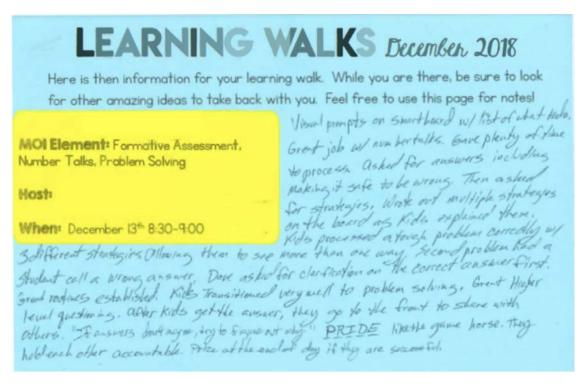


Figure 7. Learning walk reflection. This is a sample reflection completed by a teacher after observing a peer's classroom.

The Longhorn teachers took part in these classroom observations to deepen their

understanding of instructional strategies. These walks gave them an opportunity to reflect on what they learned from their peers that they could apply in their own classroom. Figure 7 is an example of a learning walk reflection tool.

Learning walks gave educators an opportunity for professional development within the school day and in the actual context of classroom practice. The school leaders used strategies such as this to develop their teachers' instructional practices. They also built the confidence of the hosting teachers by highlighting their areas of strength and extending this as a leadership opportunity.

Beyond developing teachers at Longhorn for the purposes of the school's achievement, the leadership team at Longhorn also believed in supporting the long-term professional growth goals of their teachers. Reese maintained that the principals were supportive of her desire to become a dyslexia specialist.

I feel like they're always wanting us to grow and learn. As a matter of fact, I'm going this summer to do my dyslexia. I'm going to take all the training for dyslexia to just because I'm just so interested in it...Anyway, so I'm taking training on that this summer, and the AP, principal, are just very supportive. Very much like, 'That's something you would be really good at. You should go for it.' Not like, 'We can't let you leave.' You know what I mean? So very supportive of growth goals just beyond what I do as a teacher.

Because Longhorn Elementary leaders value growth and learning, it follows that they would encourage teachers to pursue any avenue of professional development.

Building capacity was an important feature of this school's support of professional development. The leaders at Longhorn were intentional about creating opportunities for team leaders to develop their leadership skills. They also encouraged classroom teachers to present to other teachers during collaborative conferences and learning walks. Teachers appreciated the opportunity to learn from the expertise of their peers, especially when it was a self-selected topic.

Administrators tapped the potential of their staff and created authentic learning opportunities. Simultaneously, they reinforced the culture of continuous improvement at their school.

Collaboration

Throughout the analysis of this research, the theme of collaboration was clear. The participants consistently reinforced the importance of collaboration at Longhorn. The leadership team at Longhorn Elementary values collaboration and emphasizes the importance of collaborative problem-solving.

Documents collected from a team leader meeting highlighted how collaboration emerged as a theme. During this session, the team leaders read *The Promise of Collaboration* (Bauml, 2016). They discussed their insights from the article and the application to the collaborative planning of their teams. Appendix R displays an example from a team leader's reflection. This document shows how the school administrators expect collaboration from their teams and support the team leaders to develop abilities and skills to successfully lead a collaborative team.

Many of the participants noted that the culture of collaboration, growth mindset, and continuous improvement makes professional development successful at Longhorn. This collaboration is not limited to collaboration among teachers. Collaboration occurs on the leadership team as well. The principal, assistant principal, and instructional coach work together to support the campus. Additionally, it is not unusual to see the leaders collaborating with teachers. Julie maintained:

The culture here is, is that we learn, and our kids learn, and we work together. It's a very collaborative campus. Every decision we make, we get input or feedback from teachers and they're part of that. So, I feel like the PD that we do works. Because of that culture... we're all here to learn and grow and be better and that's kind of the mindset that they have going into it. I'm not sure if it would've been as successful without that.

Reese, a classroom teacher, believed that collaboration and learning from each other has helped teachers grow and the whole campus become stronger and more coherent.

We got to walk around and go have conversations. I felt like it was very valuable. It wasn't like somebody had created a presentation and we were learning about number talks, but we came together as a staff and talked about what things work. 'What are you seeing in your class, what could we try?' People shared different things. I feel like really a lot more people got things out of that, that you know, and become stronger as a whole because we're doing more of the same things.

Other teachers emphasized that collaboration was important because the shared ideas make a positive impact on students. Riley asserted that the instructional planning process the second-grade team implemented was successful at bringing the best ideas for instructing their kids.

We have started this year planning as a team. We plan in the same room all together, not like two people, two people, two people. We're all at the table and we plan at least three days a week together. I think that that's collaboration at its finest. We're all bringing ideas. We're all plugging in things and then discussing with each other what is best for our students and just making the plans as best as we can. I think that's been something that's been an initiative that they've started this year was us all planning together instead of, 'Oh, the science people in that room,' and this and that. We all have a part in the planning process.

Katherine described the collaborative culture of her fifth-grade team as "lightning in a bottle." She said:

We came around, we kind of sat down, we're very, very collaborative. We're in and out of everybody's classroom, helping students, helping ourselves...Somebody once said, 'This fifth grade team is like lightning in a bottle' in that we do have our ups and downs, but typically we come together because we see the greater goal for the kids. Very collaborative. We have meetings a couple of times a week to discuss kids. 'What can we do best with kids? What can we do to become better educators?' It's been a really great experience.

Beyond collaborating with grade-level teams, teachers have routine opportunities to collaborate in other ways, such as vertical teams or committee work. Specifically, the team leaders shared during their focus group that having groups of teachers learning with similar

professional goals was impactful. Mae contended that these learning groups gave them an opportunity to get ideas from teachers they did not routinely see in their grade-level PLC.

It gives an opportunity to almost PLC outside of our normal PLC, like us going to our different ones that we want to focus on and ensuring that our ideas and other things with our peers, you know, and help them out as well as give ideas that you might not necessarily have gone to or focused on.

Routine opportunities for collaboration are embedded in the structures and processes at Longhorn Elementary. The leaders believe that educators should learn from one another and solve problems as a team. Because the school leaders at this site value collaborative communities of practice, they rely on the strength of their well-established professional learning communities to ensure regular opportunities for teachers to collaborate.

It was clear during data collection that this campus had documented PLC structures and processes. Teams have collaboratively created collective commitments, norms, and goals for their PLC. Appendix S contains their PLC cycle and menu of work tasks. A sample third grade PLC agenda is included in Appendix T. These documents exemplify the processes and practices of the PLCs at Longhorn.

Several teachers shared how PLCs are collaborative opportunities for their team to identify needs and share practices. Katherine noted the PLC as a form of professional development in which they can learn from each other while solving problems.

In terms of PLCs, and what we do with our PLCs, ours is all data, not driven, but data, what's the new term? Influenced. Everything we talk about in fifth grade is how we can grow our kids from here to here. We talk a lot about data, and create opportunities for our own learning, really. Whether that means going to another teacher, and say, 'Hey, what are you doing with your math menus? Can I adapt that to language/arts? What are you doing with science? Can I adapt that to social studies?' Or 'What are doing in language/arts that you were pretty successful with in the last district assessment? How did you teach them, that maybe I didn't teach?' That's been really nice. It's been a really great year in terms of professional development here, and the resources that we've had available to us.

Jessica affirmed that teacher teams continuously use data to find strengths and weaknesses. The PLC is a vehicle for teachers to share practice and continuously learn from each other. Since their administrators are always present during PLC meetings, it also gives them a way to communicate if they need help or more professional development. Jessica stated:

We look at data all the time. We have an ongoing data Google Doc for our kids that we put every little thing in, and we're looking at where our weaknesses are, and we make CFAs [common formative assessments] for those weaknesses. I mean, they do have input, but it's more what are kids' needs. You know? We all look at it together, and it really takes an open mind to be like, 'Okay. I don't know how to teach this. I need help.' We really just, and PLCs, and we just talk about like, 'We need this.' Either they'll bring in somebody or we can go somewhere.

The principal, Alicia, also commented on how PLC meetings provide an opportunity to identify teachers' needs and provide "just-in-time" professional development.

PLC, too, I think you do a lot of that in there when you're talking about kids and you're talking about instructional strategies...Sometimes that's a great learning opportunity...we were talking number talks one morning and we pulled out the number talks video...then talked about it and that was just kind of random, spontaneous, but it was just needed at that time.

Teachers also discuss their professional goals during PLC meetings and receive ideas and support from their team. Additionally, teachers set student growth goals that were topics of conversation throughout the year. Mallory found this especially helpful because of the fresh perspective her teammates could provide. She commented:

And I think that we have discussed things, from a PLC perspective, of from a teaming of, 'Okay. Well, I'm working on that.' 'Oh, okay. Well let's make sure that you get to do this.' Or, 'What results did you see from doing that?' We also have our SLO [student learning objective] goals...we then report on that. We would do progress monitoring for that SLO goal. And we would bring that forth in our PLC meetings where - and it's different trying to tell math friends what you're working on, likewise them telling us what they're working on. But it's interesting sometimes to see trends in the students or things that we notice even if we're not teaching that content of, 'Oh, yeah. That would make sense if someone's struggling with a multi-step word problem in math, those are oftentimes our reading strugglers.'

Many of the classroom teachers found the collaboration in their PLC extremely helpful.

Mistie thought learning from her team was one of the most successful forms of professional development that year.

Having the PLCs and talking to the other second grade teachers, and asking, figuring out what works for them in their classrooms and just collaborating with the team during this time, probably helped me the most this year, and helped me get the kids to where they needed to be and helped me structure my classroom.

Professional learning communities were not only helpful for individual teachers and their growth goals. During the focus group interview, team leaders emphasized how the collaboration in PLCs contributed to the growth of the whole team. Kristin shared how her team sets goals and selects professional development that supports their identified areas of focus.

A lot of times we'll get together and we'll talk about what our areas of weakness that we need to grow in as a team. We've used data in previous years to focus on specific areas to better inform ourselves to be better educators. A lot of times we'll talk and communicate, piggyback off of each other, maybe split half the team go into one, half the team go into another so that we could swap and share information.

Debbie shared how the leadership team always takes part in PLC meetings. As a result, they can supply targeted support and resources based on what her team needs. She reported:

There's always someone that comes and supports that...and we have the resources, so she's there if we need extra resources for some kind of lesson...our instructional coach sits in on our planning time too, so if she can help us with things...There's always that support during our lesson planning and outside PLC planning.

Although the administrators and instructional coach are present, they do not assume the role of facilitators. They allow the team leaders to set the agenda and work through the collaborative cycles with their teams. Mae discussed:

You know, we're constantly learning off of each other, thinking, 'Oh my student is low in this area.' 'What have you been doing to help?' ...so I think the PLC and they've given us the opportunities, you know, to talk and plan about what we wanted to do in our PLC's, so they're not always telling us what we have to do in PLC's.

The school leaders understood that their team leaders had more frequent contact with teachers and knew the needs of their team. The principal trusted the team leaders as skillful leaders who

could facilitate the collaboration of their PLC.

Collaboration was a significant theme in the collected data at Longhorn Elementary.

Teams frequently interacted with each other to plan their instruction and address students' challenges. Professional learning communities provided a context in which teams could learn from each other and collaboratively solve problems. The school leaders at Longhorn continuously worked with team leaders to refine their leadership skills so that they could facilitate collaborative interactions such as PLC meetings. The result of this was a collaborative culture in which teachers work together to meet the goals of their campus.

Summary

The purpose of this research was to answer the overarching research question: In what ways do campus principals support job-embedded professional development? I collected data from semi-structured, one-on-one interviews, a focus group interview, document collection, and field observations. I then analyzed these data using a general inductive analysis approach and several rounds of coding. This chapter includes the themes that emerged in the data analysis: (a) vision and goals, (b) high expectations, (c) structures and resources, (d) communication, (e) monitoring progress and providing recognition, (e) focused and ongoing professional development, (f) differentiated professional development, (g) trust and professionalism, (h) culture of learning and growth, (i) building capacity, and (j) collaboration. A narrative discussion that highlights the findings and supporting evidence from each of these themes is included.

Chapter 5 includes a summary and discussion of the results and presents conclusions based on the findings of the analysis and interpretation of results in relationship to the conceptual

framework and previous literature. Finally, implications and recommendations for further study are shared in the final chapter.

CHAPTER 5

DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS

This final chapter contains a summary of the qualitative research study and the conclusions of the data analysis presented in the previous chapter. In addition to discussing the results, the findings are connected to the conceptual framework based on Hallinger's (2011) leadership for learning model and its relationship to job-embedded professional development. Concluding this chapter is a discussion of implications and recommendations for further study.

Summary of the Study

This research was a single case study of school leadership practices at a campus using job-embedded professional development. I designed the study to answer this overarching research question and subsequent questions: In what ways do campus principals support job-embedded professional development?

- 1. What leadership behaviors do principals employ to support job-embedded professional development?
- 2. What are the teachers' perceptions of how leaders support their professional development?

The critical case for this study, Longhorn Elementary, was selected because of its history of successful job-embedded professional development. Within this single case, I examined perspectives of a variety of participants, including principals, the instructional coach, and a stratified purposive sample of teachers. To ensure a robust data set, data collection procedures included one-on-one participant interviews, a focus group, field observations, and document collection and analysis. I used a general inductive approach to analyze these collected data.

Based on this analysis, the following themes emerged: (a) vision and goals, (b) high

expectations, (c) structures and resources, (d) communication, (e) monitoring progress and providing recognition, (f) focused and ongoing professional development, (g) differentiated professional development, (h) trust and professionalism, (i) culture of learning and growth, (j) building capacity, and (k) collaboration.

Discussion

School leaders have an important role in encouraging teacher growth and development at their campus so that students have access to the highest quality teaching possible. The rationale for this study was to explore the ways in which leaders support teacher development at a campus successfully employing job-embedded professional development. Alicia, the principal at Longhorn, has worked to ensure her teachers have opportunities to learn and grow. This case study revealed 11 major themes from the data that reflect the leadership characteristics at Longhorn Elementary and answer the overarching research question. The findings from the two subsequent questions combine to paint the picture of the overall leadership supports of job-embedded professional development. Throughout the analysis of the data in this case study, it was apparent that the school leaders at Longhorn use a variety of strategies to support the job-embedded professional development at their campus. The next section includes a discussion of the themes in relationship to the two subsequent questions as well as the connection to the overarching research question and conceptual framework anchoring this study.

Leadership Behaviors of Principals (RQ Sub 1)

Alicia and the leaders at Longhorn have a clear vision and regularly set goals to improve student outcomes and prepare students for the future. The school leaders also have high expectations for teaching and learning at their school. They use their knowledge as instructional leaders to expect and encourage effective teaching practices in every classroom. These findings

support the work of Leithwood et al. (2004) in which the researchers articulated the importance of setting directions in school reform. Leithwood and Sun (2012) added that setting directions encompassed the two specific practices of developing a shared vision and holding high performance expectations. In their meta-analysis, Leithwood and Sun found that these direction-setting practices of developing a shared vision had a significant influence on teacher commitment and satisfaction as well as an impact on student achievement.

According to Robinson, Hohepa, and Lloyd (2009), leaders also strategically allocate resources such as materials and human resources so that they are aligned with solid pedagogical purposes. Alicia and her leadership team ensure they have structures and resources that promote learning. Their intentional scheduling of the school day to include time for learning in PLCs reinforces that learning should be ongoing and routine. They also supply resources such as an instructional coach to support the individual learning of their teachers. This strategic resourcing by the campus leaders had an impact on the professional development of teachers and supports earlier research that resource allocation is important for student achievement (Learning Forward, 2011; Robinson et al., 2008).

Another leadership behavior present at Longhorn is clear communication. The Longhorn leaders use a variety of communication methods to share information with their staff about professional development. Additionally, the administrators value teacher feedback and invite transparent communication between the faculty and the school leadership team. Kelley and Dikkers (2016) noted that whether leadership behaviors produce intended actions depends on how others receive and interpret that information. For Alicia and her team, communication is an important feature of their professional development system.

Finally, school leaders regularly monitor the progress of professional development and recognize the successes of their staff. Ensuring implementation is a critical attribute of high-quality professional development (Learning Forward, 2011). The leadership members at Longhorn frequently conduct walkthroughs, meet with teams, and confer with individual teachers. They use these opportunities to encourage teacher reflection and celebrate growth. When school leaders see evidence of teachers implementing professional development, they make sure to highlight those achievements. Robinson et al. (2008) described the significance of school leaders emphasizing the importance of quality teaching and learning. Alicia and her team consistently look for the instructional impact of the professional development they design and recognize teachers when they make changes in their practice.

Teacher Perception of Leadership Support (RQ Sub 2)

The Longhorn Elementary administrators employ many strategies to support the professional development of their teachers. One critical way teachers perceive that their leadership supports them is that the leaders focus on a small number of coherent initiatives and provide time for teachers to repeatedly engage in related professional development. Bates and Morgan (2017) argued that sustained focus and support are essential for meaningful professional development. Learning experiences that do not include considerable time for discussion, implementation, and reflection are limited in their effectiveness.

Additionally, teachers appreciate opportunities for differentiated professional development. They feel motivated and more likely to implement strategies in their classroom when their learning is related to their professional growth goals. In many contexts, the need for differentiated adult learning is often overlooked (Drago-Severson, 2016). Sprott (2019) found when teachers were required to participate in professional development that did not relate to their

needs, they perceived that to be a barrier to their professional growth. Longhorn Elementary stands out as a learning organization that understands the unique needs of staff and responds accordingly.

The leadership team at this site also trusts teachers as professionals. Administrators at this site create a setting in which teachers feel they have a voice in their growth and development. Learning Forward (2011) authors asserted that a willingness to respect and trust colleagues is a prerequisite for creating a context in which learning can be successful. Other scholars also noted the importance of trust for a professional learning culture (Cole, 2004; Timperley et al., 2009). Having a trusting environment is a critical factor in the success of the professional development at Longhorn.

Another supportive feature at this school is the culture of learning and growth. The educators at Longhorn value continuous learning and improvement. To have a successful professional development system, a school must have educators with a disposition and readiness to learn (Learning Forward, 2011). School leaders model this by taking part in and encouraging professional development. The teacher evaluation system used at Longhorn also reinforces growth and helps teachers make the connection among professional development, classroom practice, and student outcomes. Having an integrated system of professional development and teacher evaluation can aid school leaders in their school improvement efforts (Kraft & Papay, 2014; Woodland & Mazur, 2015).

Alicia and her leadership team build capacity in Longhorn teachers to share their knowledge and expertise with fellow educators. Teachers at this site appreciate having many options to learn from colleagues. This finding supports the research conducted by the Bill and Melinda Gates Foundation (2014) in which teachers advocated for more teacher-led professional

development. Hirsch et al. (2014) also argued that leaders can affect the success of professional development by building capacity and empowering teachers. The school leaders at this site leverage the skills of their teachers to provide authentic and meaningful professional development for their staff.

Various scholars have noted the importance of collaboration or learning communities in a successful professional development system (Datnow, 2011; Hirsch et al., 2014; Kraft & Papay, 2014; Learning Forward, 2011). Similarly, the Longhorn teachers highlighted their opportunities for collaboration, such as PLCs, as a factor supporting their professional growth and development. Teachers there regularly rely on each other to share strategies and help solve problems and team leaders are empowered to use their leadership skills to facilitate these collaborative interactions.

Campus Principal Support of Job-Embedded Professional Development (Overarching RQ)

While many of the emergent themes reflect the personal leadership philosophies and qualities of Alicia and the other school leaders, others reflect the culture and identity of Longhorn as a whole. This makes it somewhat difficult to separate the leadership attributes from the impact they may have on campus culture. For instance, Alicia values and intentionally cultivates collaboration. Similarly, the culture of learning and the established PLCs are part of the context in which teachers learn at Longhorn. Additionally, many leadership characteristics are potentially interrelated. As an example, Alicia can set the vision and goals for professional development with input from her staff because they have transparent communication and trust her judgement.

What was clear from the participants was that leadership behaviors have an impact on professional development and its reception by the staff. Teachers appreciated Alicia's choices to

survey and gather input from her staff so that the professional development was relevant and manageable. They also appreciated her emphasis on designing opportunities in which they could learn from other teachers and add variety to their learning experiences. In addition, the staff at Longhorn were clear about the expectations for improving their practice and felt supported to do so. Alicia celebrates a growth mindset and risk-taking to change instructional practices that have limited success. As a result, teachers are willing to attempt new strategies in the quest to help their students achieve. The results of this case study support the idea that leadership is a critical factor in designing a job-embedded professional development system. The leadership themes that emerged from this study exemplify the characteristics of leadership that support teacher development in this context.

Table 8

Alignment of Research Findings to Hallinger's (2011) Leadership for Learning Dimensions

Leadership for Learning Related Dimensions	Emergent Themes
Values and Beliefs	Trust and professionalism
Leadership Focus	Vision and goals High expectations Monitoring progress and providing recognition Structures and resources Focused and ongoing professional development
Context	Communication Culture of learning and growth Collaboration
Sharing Leadership	Building capacity Differentiated professional development

The emergent themes from this study align well with the conceptual framework articulated in Chapter 1 and the previous literature related to leadership and professional development. As Hallinger's (2011) synthesized model of leadership for learning suggests, various components of leadership provide a supportive environment for teacher growth and student outcomes. Table 8 shows the alignment of the themes to the dimensions articulated by

Hallinger. In this single case, the identified leadership factors interact to influence the jobrelated professional development system for Longhorn Elementary.

Values and Beliefs

Several scholars have noted the importance of school leaders' values and beliefs to help them make leadership decisions and solve problems (Day et al., 2001; Hallinger, 2011; Warwas, 2015). In this example, Alicia and the leadership team at Longhorn believe all students can reach their fullest potential. They trust that their staff can achieve these student outcomes. The school leaders demonstrate how they value teachers and the experiences they bring, and this permeates the leaders' decisions for implementing initiatives and the subsequent professional development needed for these changes.

Warwas (2015) specifically articulated various value profiles of principals to conceptualize how values and beliefs shape principal leadership. The characteristics of the Longhorn administrators are most closely aligned with the input-oriented value profile of leaders. Warwas asserted that input-oriented principals concentrate on human resource leadership. These principals attach value to personal qualities, give support and encouragement, and delegate tasks with respect to teachers' needs. The school leaders in this case believe that cultivating an environment of trust and professionalism is a key factor in school achievement.

Leadership focus. It is critical for leaders to articulate a vision and goals to affect learning (Hallinger, 2011; Leithwood et al., 2004; Leithwood & Jantzi, 2005, 2008; Robinson & Timperley, 2007; Robinson et al., 2008). These are a foundation for strong professional environments (Leithwood, Harris & Hopkins, 2008; Robinson et al., 2008). The teachers at Longhorn trust their leadership team and embrace the vision and goals the team sets for the campus.

Having high expectations and accountability is another leadership focus that is linked to student outcomes (Robinson & Timperley, 2017; Robinson et al., 2008). Both Alicia and her staff have expectations for performance. In addition, the leaders at Longhorn regularly monitor the progress of their expectations. Teachers know their leaders will hold them accountable, but they also hold themselves to an equally high standard of performance. This balance of tension with the support of the leader ensures teachers rise to the challenges they face.

Aligning structures and resources with the school's goals and expectations also affects the performance of the school (Robinson & Timperley, 2007; Robinson et al., 2008).

Specifically scheduling professional development in the daily schedule is a critical factor in ensuring that teachers have time to focus on improving their practice (Croft et al., 2010).

Teachers at Longhorn have access to a variety of resources, including professional books, outside experts, and a full-time instructional coach. The leaders allocate time and resources in a way that shows they value professional development as a necessary component of achieving their school-wide goals.

Fullan and Quinn (2016) argued that focus and coherence is especially important when initiating organization-wide reforms. In this case, focusing professional development was a critical feature of Alicia's leadership. The leadership team at Longhorn Elementary uses multiple sources of data to determine professional development needs, including observations and surveys. They focus on a small number of high-leverage initiatives and connect learning when possible. The teachers at Longhorn appreciate that their leaders do not expect them to change everything at once. The focus and coherence of the professional development is an important strategy to help Longhorn's teachers embrace necessary changes in instructional practices.

Context

According to Spillane (2005), leadership can be variable depending on the context in which the leader practices. Each school has a unique context that a leader must understand for implementing successful leadership practices. Contextual elements that are especially evident at Longhorn are the culture of learning, collaboration, and communication. Learning communities that focus on growth are especially important for job-embedded professional development (Croft et al., 2010).

Tichnor-Wagner, Harrison, and Cohen-Vogel (2016) found that elements of a culture of learning often appear in highly effective schools. Present in those schools were factors like formal collaboration opportunities, such as PLCs, in which educators often meet and discuss classroom instruction and student achievement. They also noted that the school leaders took an intentional role in supporting this culture by reinforcing deliberate structures and norms. The findings in this case study support the elements described by Tichnor-Wagner and colleagues. Alicia models and communicates the importance of continuous learning and collaboration. As a result, she emphasizes these elements in the campus culture and creates conditions in which professional development can thrive.

A surprising factor in this study was the link between teacher evaluation practices and the culture of growth and learning. As Woodland and Mazur (2015) asserted, "educator accountability and professional learning are widely treated as separate policy initiatives" (p. 20). At Longhorn Elementary, teacher evaluation is a mechanism for individual goal setting and professional development planning. The administrators in this study used the interactions during the evaluation process as opportunities to check in with teachers about their growth goals and coach them through their development. Teachers often made connections among their individual

professional development, their classroom practices, and student achievement. This integration of the evaluation system and professional development enhanced the culture of learning that was present at this school.

Sharing Leadership

Shared leadership can be a powerful strategy for enacting change in an organization (Hallinger, 2011; Marks & Printy, 2003; Wahlstrom & Louis, 2008). Alicia values input from her leadership team and collaboratively makes decisions with them. She also uses her team leaders to give input and make decisions about professional development at Longhorn. Additionally, Alicia supports teacher leadership at her school. She and the leadership team value the expertise of their teaching staff. They consistently look for opportunities for teachers to share their successful practices with other educators. Seeing models of success in other classrooms is highly valued by the teachers at Longhorn.

According to Wiliam and Leahy (2014), professional development often fails because teachers are not supported through the process of changing their practice. To have a successful environment in which professional development results in teacher change in practice, they suggested five elements: (a) choice, (b) flexibility, (c) small steps, (d) accountability, and (e) support. The school leaders at Longhorn Elementary designed a differentiated professional development system with these characteristics. Teachers at this school have access to learning that aligns with their specific professional goals. The choice menus with curated resources supply the flexibility for teachers to decide how and when they want to learn. Alicia and the other leaders support and recognize the growth of teachers as they progress on their goals.

Conclusions

To ensure effective teaching and learning, school leaders must design school systems so teachers have ample opportunities to learn and refine their practice. In this single case study, I sought to examine the leadership practices at one elementary school that supported jobembedded professional development for teachers. Based on the inductive analysis of the qualitative data, 11 leadership themes emerged and support professional development: (a) vision and goals, (b) high expectations, (c) structures and resources, (d) communication, (e) monitoring progress and providing recognition, (f) focused and ongoing professional development, (g) differentiated professional development, (h) trust and professionalism, (i) culture of learning and growth, (j) building capacity, and (k) collaboration. These characteristics reflect individual leadership characteristics as well as the organizational aspects that leaders influence. The results also align with Hallinger's (2011) concept of leadership for learning and earlier literature relating to leadership and professional development. The findings of this case study have the potential to influence leadership policy and practice as they relate to designing school systems in a way that prioritizes the professional development of teachers and impacts student outcomes.

Implications for Practice

The findings from this case study have the potential to inform school leaders about the necessary conditions for successful job-embedded professional development. One relevant conclusion from this study is that leadership practices are an integral part of whether professional development is well-received by teachers. Leaders must find a way to articulate a vision and goals along with streamlining initiatives to focus on achieving those outcomes. Creating a collaborative learning culture also is an important aspect of leading schools for long-term changes in practice. Without the context of professional learning communities, new initiatives

do not have the fertile ground on which to grow. Leaders also support professional development when they model continuous learning and have high expectations for themselves and their staff. Teachers appreciate when their leaders hold them to a high standard but also give the support necessary to help them achieve challenging goals. Finally, leaders can enhance teachers' engagement in professional development when they provide a variety of options that meet the needs of teachers. This is especially relevant if teachers can have access to the expertise of their peers when learning new strategies for instruction.

Recommendations for Further Research

Although this research revealed several important themes related to leadership and professional development, there are other topics that were not fully explored in this study. One topic that emerged during the interviews was how district mandates affect the professional development decisions of campus leaders. Further research could explore how successful principals balance complying with required district professional development and basing professional development on the specific needs of their teachers. Another topic that could be expanded is how leaders manage planning long-term professional development systems yet maintain flexibility to change when the needs of their school change. Finally, professional development for school leaders is a topic worthy of further study. Alicia values continuous learning, attends professional development, and reads professional books. The professional development of principals and its impact on their school is an area requiring further study. Discovering how successful campus leaders access and engage in professional development and how districts support their learning would have significant implications for practitioners.

Summary

The purpose of this research was to conduct a single case study to explore and describe the ways in which a school principal successfully supports professional development at her campus. Through data collected in participant interviews and inductively analyzed, several leadership themes emerged that align with Hallinger's (2011) leadership for learning mode. Leaders in this study had vision and goals, high expectations for performance, and structures and resources for professional development. They also fostered two-way communication and monitored the progress of professional development implementation. Longhorn leaders focused professional development on a few initiatives while still allowing for differentiated professional development that met their teachers' needs. The school principal and her leadership team fostered a culture of learning and professionalism in which teachers felt trusted as professionals and could collaborate and engage with their peers for professional development. The findings of this case study have the potential to inform school leaders so they can create successful professional development systems and enhance the quality of teaching and learning.

APPENDIX A TEACHER INTERVIEW PROTOCOL

Introduction:

Thank you for agreeing to participate in this research. This research project will explore the ways in which educators engage and how leaders support professional development. This interview should take about one hour to complete.

I will ask you a series of questions. These may be followed by some additional probing questions to more fully explore your initial answer. Please answer as completely and honestly as you can. Your identity and school will remain anonymous, and you may stop this interview at any time. Do you have any questions about this process?

To ensure an accurate account, I would like to audio-record this interview, with your permission. Only I will have access to the recording, and it will be destroyed once transcribed.

Participant Background:

How long ha	ive you been
	in your current position?
	at this campus?
	in this district?

Describe your teaching experience and any leadership experience you have.

Interview Questions:

1. What professional development strategies are used at this campus for improving teaching and learning? (SQ1)

Probe: In what specific initiatives is your campus currently engaged?

Probe: What specific formats does your campus use for professional development?

2. How do you determine in which professional development experiences to take part? (SQ2)

Probe: What influences do your school leaders have on your choice for professional development?

3. What are some of the challenges this campus faces in attempting to change educational practices? (SQ1)

Probe: How were these challenges overcome?

Probe: How did your school administrators support this change?

4. How do leaders at your campus determine what learning opportunities are needed to improve instruction and assessment? (SQ1)

Probe: Describe how the faculty members at this campus set professional growth goals.

Probe: How is progress monitored on these goals?

Probe: With whom are the goals and progress shared?

- 5. What professional development strategies have had the most success at this campus for improving teaching and learning? (SQ1)
- 6. In what ways do you observe the leadership at this campus supporting professional development? (SQ2)
- 7. Describe how your campus leadership promotes collaborative learning within the school day. (SQ2)
- 8. What makes the professional development at this campus successful? (SQ2)
- 9. How are classroom teachers involved in the decision-making about professional development at this campus? (SQ1)
- 10. How does your principal communicate expectations for professional development? (SQ1)
- 11. Describe the job-embedded professional development experiences that helped you the most. (SQ2)

Probe: What motivated you to participate in these experiences?

Probe: Why were they the most helpful?

12. Please share any additional thoughts you have about professional development at your school.

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Other Topics Discussed:

Other Documents Obtained:

Post Interview Comments and/or Observations:

APPENDIX B INSTRUCTIONAL COACH INTERVIEW PROTOCOL

Introduction:

Thank you for agreeing to participate in this research. This research project will explore the ways in which educators engage and how leaders support professional development. This interview should take about one hour to complete.

I will ask you a series of questions. These may be followed by some additional probing questions to more fully explore your initial answer. Please answer as completely and honestly as you can. Your identity and school will remain anonymous, and you may stop this interview at any time. Do you have any questions about this process?

To ensure an accurate account, I would like to audio-record this interview, with your permission. Only I will have access to the recording, and it will be destroyed once transcribed.

Participant Background:

1?
1

Describe your educational experience.

Interview Questions:

1. What professional development strategies are used at this campus for improving teaching and learning? (SQ1)

Probes: In what specific initiatives is your campus currently engaged?

Probe: What specific formats does your campus use for professional development?

2. How do you determine which professional development experiences to offer for your campus? (SQ2)

Probe: How do you influence your teachers' choices for professional development?

3. What are some of the challenges this campus faces in attempting to change educational practices? (SQ1)

Probe: How were these challenges overcome?

Probe: How did the school administrators support this change?

4. How do leaders at your campus determine what learning opportunities are needed to improve instruction and assessment? (SQ1)

Probe: Describe how the faculty members at this campus set professional growth goals.

Probe: How is progress monitored on these goals?

Probe: With whom are the goals and progress shared?

- 5. What professional development strategies have had the most success at this campus for improving teaching and learning? (SQ1)
- 6. In what ways do you support professional development? (SQ2)
- 7. Describe how your campus leadership promotes collaborative learning within the school day. (SQ2)
- 8. What makes the professional development at this campus successful? (SQ2)
- 9. How are classroom teachers involved in the decision-making about professional development at this campus? (SQ1)
- 10. How does your principal communicate expectations for professional development? (SQ1)
- 11. Describe the job-embedded professional development experiences that have helped your teachers the most. (SQ2)

Probe: What motivated them to participate in these experiences?

Probe: Why were they the most helpful?

12. Please share any additional thoughts you have about professional development at your school.

Additional Information:

Other Topics Discussed:

Other Documents Obtained:

Post Interview Comments and/or Observations:

APPENDIX C PRINCIPAL INTERVIEW PROTOCOL

Introduction:

Thank you for agreeing to participate in this research. This research project will explore the ways in which educators engage and how leaders support professional development. This interview should take about one hour to complete.

I will ask you a series of questions. These may be followed by some additional probing questions to more fully explore your initial answer. Please answer as completely and honestly as you can. Your identity and school will remain anonymous, and you may stop this interview at any time. Do you have any questions about this process?

To ensure an accurate account, I would like to audio-record this interview, with your permission. Only I will have access to the recording, and it will be destroyed once transcribed.

Participant Background:

1?

Describe your educational experience.

Interview Questions:

1. What professional development strategies are used at this campus for improving teaching and learning? (SQ1)

Probe: In what specific initiatives is your campus currently engaged?

Probe: What specific formats does your campus use for professional development?

2. How do you determine which professional development experiences to offer for your campus? (SQ2)

Probe: How do you influence your teachers' choices for professional development?

3. What are some of the challenges this campus faces in attempting to change educational practices? (SQ1)

Probe: How were these challenges overcome?

Probe: How did you support this change?

4. How do you, as the campus leader, determine what learning opportunities are needed to improve instruction and assessment? (SQ1)

Probe: Describe how the faculty members at this campus set professional growth goals.

Probe: How is progress monitored on these goals?

Probe: How do you gather feedback about professional development from teachers?

- 5. What professional development strategies have had the most success at this campus for improving teaching and learning? (SQ1)
- 6. In what ways do you support professional development? (SQ2)
- 7. Describe how you promote collaborative learning within the school day. (SQ2)
- 8. What makes the professional development at this campus successful? (SQ2)
- 9. How are classroom teachers involved in the decision-making about professional development at this campus? (SQ1)
- 10. How do you communicate expectations for professional development? (SQ1)
- 11. Describe the job-embedded professional development experiences that have helped your teachers the most. (SQ2)

Probe: What motivated them to participate in these experiences?

Probe: Why were they the most helpful?

12. Please share any additional thoughts you have about professional development at your school.

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Other Topics Discussed:

Other Documents Obtained:

Post Interview Comments and/or Observations:

APPENDIX D INTERVIEW SUMMARY FORM

Interview Summary Form

This form is used to summarize the main ideas and notable points from each interview of principals, instructional coaches, and selected teachers.

Interviewee:

Date:

- 1. What were the main ideas or themes in this interview?
- 2. Summarize the information from this interview related to each of the study's research questions.
 - a. What leadership behaviors are present in schools that successfully implement job-embedded professional learning models?
 - b. What are the teachers' perceptions of how leaders support their professional development?
- 3. What else was interesting, enlightening, or important?
- 4. What new thoughts, speculations, or wonderings do I have following this interview?

APPENDIX E FOCUS GROUP PROTOCOL FORM

Introduction:

Thank you for agreeing to participate in this research. This research project will explore the ways in which educators engage and how leaders support professional development. This focus group should take about 90 minutes to complete.

I will ask you a series of questions. These may be followed by some additional probing questions to more fully explore your initial answer. Answer as completely and honestly as you can. Each of you has been assigned a number. Please state this number prior to answering questions. Your identity and school will remain anonymous, and you may leave this focus group at any time. Do you have any questions about this process?

To ensure an accurate account, I would like to audio-record this focus group interview, with your permission. Only I will have access to the recording, and it will be destroyed once transcribed.

Particina [*]	nt Backgrou	ind: (note	during	introductions)	١
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How long have you been
in your current position?
at this campus?
in this district?

Describe your teaching experience and any leadership experience you have.

Focus Group Interview Questions:

1. What professional development strategies are used at this campus for improving teaching and learning? (SQ1)

Probe: In what specific initiatives is your campus currently engaged?

Probe: What specific formats does your campus use for professional development?

2. How do your team members determine in which professional development experiences to take part? (SQ2)

Probe: What influences do your school leaders have on your choice for professional development?

Probe: What influence do you have on your teammates' decisions?

3. What are some of the challenges this campus faces in attempting to change educational practices? (SQ1)

Probe: How were these challenges overcome?

Probe: How did your school administrators support this change?

4. How do leaders at your campus determine what learning opportunities are needed to improve instruction and assessment? (SQ1)

Probe: Describe how the faculty members at this campus set professional growth goals.

Probe: How is progress monitored on these goals?

Probe: With whom are the goals and progress shared?

- 5. What professional development strategies have had the most success at this campus for improving teaching and learning? (SQ1)
- 6. In what ways do you observe the leadership at this campus supporting professional development? (SQ2)
- 7. Describe how your campus leadership promotes collaborative learning within the school day. (SQ2)
- 8. What makes the professional development at this campus successful? (SQ2)
- 9. How are classroom teachers involved in the decision-making about professional development at this campus? (SQ1)
- 10. How does your principal communicate expectations for professional development? (SQ1)
- 11. Describe the job-embedded professional development experiences that have helped your team the most. (SQ2)

Probe: What motivated them to participate in these experiences?

Probe: Why were they the most helpful?

12. Please share any additional thoughts you have about professional development at your school.

P	١d	di	tio	nal	Inf	orn	nation:
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Other Topics Discussed:

Other Documents Obtained:

Post Interview Comments and/or Observations:

APPENDIX F OBSERVATION PROTOCOL

GUIDING QUESTIONS	NOTES
What kind of job- embedded professional development is this?	
What is the purpose or focus of this professional development?	
What teacher behaviors were observed?	
What leadership behaviors or expectations were observed?	
What makes this observation relevant to this current study?	

APPENDIX G DOCUMENT ANALYSIS GUIDE

GUIDING	NOTES
QUESTIONS What kind of	
document is this?	
What is the origin	
What is the origin of this document?	
Who authored it?	
Who was the	
intended audience	
for this	
document?	
When was this	
document	
produced?	
For what purpose	
was this	
document	
created?	
What makes this	
document	
significant for the	
current study?	

APPENDIX H INFORMED CONSENT FORM



Informed Consent for Studies with Adults (IRB-19-83)

TITLE OF RESEARCH STUDY: A Case Study of Leadership Supports of Job-Embedded Professional Development

RESEARCH TEAM: Amber Jones, Department of Teacher Education and Administration,
. This project is part of a dissertation being conducted
under the supervision of Dr. Robert Voelkel, Jr., Department of Teacher Education and
Administration,

You are being asked to participate in a research study. Taking part in this study is voluntary. The investigators will explain the study to you and will any answer any questions you might have. It is your choice whether or not you take part in this study. If you agree to participate and then choose to withdraw from the study, that is your right, and your decision will not be held against you.

You are being asked to take part in a research study about school administrators' leadership practices that support job-embedded professional development.

Your participation in this research study involves being interviewed in either a one-on-one setting or a focus group exploring your school's leadership and professional development practices. In addition, participation involves being observed during meetings or professional development experiences. Finally, you may be asked for documents that pertain to professional development or campus practices. More details will be provided in the next section.

You might want to participate in this study if you would like to share your views about campus leadership practices that support your professional development and growth. However, you might not want to participate in this study if you do not have the time to participate in the interview sessions.

You may choose to participate in this research study if you are an educator on the selected campus that participates in or supports job-embedded professional development. The reasonable foreseeable risks or discomforts to you if you choose to take part is minimal privacy or confidentiality concerns, which you can compare to the possible benefit of participating in educational research to explore how leadership practices impact teacher growth. You will not receive compensation for participation.

DETAILED INFORMATION ABOUT THIS RESEARCH STUDY: The following is more detailed information about this study, in addition to the information listed above.

PURPOSE OF THE STUDY: You are being asked to participate in a research study which involves exploring school administrators' leadership practices that support job-embedded professional development at your campus.

TIME COMMITMENT: The expected total time for participation in the study is between one and two hours.

STUDY PROCEDURES: This study will use field observations, document analysis, one-on-one interviews and a focus group interview for collecting data. I will be visiting various campus meetings and activities such as team-leader meetings, coaching sessions and professional development experiences to gather evidence about your campus practices. These observations will take place during the school day or after school at scheduled meetings in the location in which these activities normally take place. During the observations, I will collect written observational data in a journal. I will also be asking for existing documents related to collaborative meetings, professional development, or coaching sessions. Additionally, you may be asked to participate in a 60-minute one-on-one interview or 90-minute focus group interview using open-ended questions about the leadership and professional development at your school. The interviews will be conducted in your classroom or a meeting room at a time that is convenient for you. One-on-one interviews can also be conducted off-site at your request. No students or other staff members will be present for the one-on-one interviews. The focus group interview will have other participating teachers present. I will request your permission to audio-record the interview for completeness of data collection, but audiorecording is not required. Once analysis of the interviews is complete, you will be asked to review the interpretation for accuracy.

AUDIO/VIDEO/PHOTOGRAPHY:

~	DIO VIDEO I NO TO GIVAL III.
	<u>I agree</u> to be audio recorded during the research study.
	<u>I agree</u> that the audio recording can be used in publications or presentations.
	<u>I do not agree</u> that the audio recording can be used in publications or presentations.
	I do not agree to be audio recorded during the research study.
Yo	u may still participate in the study if you do not agree to be audio recorded. The recordings
wil	I be kept with other electronic data in a secure UNT OneDrive account for the duration of the
stu	ıdy.

POSSIBLE BENEFITS: This study is not expected to be of any direct benefit to you; however, we hope to learn more about the leadership practices that support job-embedded professional development that results in teacher growth. We believe this study has the potential to provide insight into how school leaders can create professional development systems that improve teaching and learning practices.

POSSIBLE RISKS/DISCOMFORTS: This research study is not expected to pose any additional risks beyond what you would normally experience in your regular everyday life. However, if you do experience any discomfort, please inform the research team.

If you experience excessive discomfort when completing the research activity, you may choose to stop participating at any time without penalty. The researchers will try to prevent any problem that could happen, but the study may involve risks to the participant, which are currently unforeseeable. UNT does not provide medical services, or financial assistance for emotional distress or injuries that might happen from participating in this research. If you need to discuss your discomfort further, please contact a mental health provider, or you may contact the researcher who will refer you to appropriate services. If your need is urgent, helpful resources include the Lifepath Systems crisis hotline at (866) 260-8000.

COMPENSATION: There is no compensation for this study.

CONFIDENTIALITY: Efforts will be made by the research team to keep your personal information private, including research study records, and disclosure will be limited to people who have a need to review this information. All paper and electronic data collected from this study will be stored in a secure location on the UNT campus and/or a secure UNT server for at least three (3) years past the end of this research. Throughout the duration of this study, all participant data will be stored on a password-protected laptop with security provisions in the researcher's office. Following completion of the study, all data will be stored on a password-protected remote storage device that will be stored in a locked cabinet in the university office of the supervising investigator, for the required three years. Research records will be labeled with pseudonym and the master key linking names with codes will be maintained in a separate and secure location.

While confidentiality measures will be taken to protect confidentiality of shared information, other school personnel may be aware of your participation in this research. Please be advised that although the researchers will take these steps to maintain confidentiality of the data, the nature of focus groups prevents the researchers from guaranteeing confidentiality. The researchers would like to remind participants to respect the privacy of your fellow participants and not repeat what is said in the focus group to others.

The results of this study may be published and/or presented without naming you as a participant. The data collected about you for this study may be used for future research studies that are not described in this consent form. If that occurs, an IRB would first evaluate the use of any information that is identifiable to you, and confidentiality protection would be maintained.

While absolute confidentiality cannot be guaranteed, the research team will make every effort to protect the confidentiality of your records, as described here and to the extent permitted by law. In addition to the research team, the following entities may have access to your records, but only on a need-to-know basis: the U.S. Department of Health and Human Services, the FDA (federal regulating agencies), the reviewing IRB, and sponsors of the study.

CONTACT INFORMATION FOR QUESTIONS ABOUT THE STUDY: If you have any questions			
about the study you may contact Amber Jones	or		
Dr. Robert Voelkel, Jr. at	. Any questions you have		
regarding your rights as a research subject, or complaints about the research may be directed			
to the Office of Research Integrity and Compliance at 940-565-4643, or by email at			
untirb@unt.edu.			

CONSENT:

- Your signature below indicates that you have read, or have had read to you all of the above.
- You confirm that you have been told the possible benefits, risks, and/or discomforts
 of the study.
- You understand that you do not have to take part in this study and your refusal to participate or your decision to withdraw will involve no penalty or loss of rights or benefits.
- You understand your rights as a research participant and you voluntarily consent to participate in this study; you also understand that the study personnel may choose to stop your participation at any time.
- By signing, you are not waiving any of your legal rights.

Please sign below if you are at least 18 years of age and voluntarily agree to participate in this study.

SIGNATURE OF PARTICIPANT

DATE

*If you agree to participate, please provide a signed copy of this form to the researcher team. They will provide you with a copy to keep for your records.

APPENDIX I LONGHORN ELEMENTARY DEFINITIONS

Learning & Language Objectives: Objectives for whole group lessons, small group lessons, and stations are posted visibly in the classroom, discussed with students, referred to throughout the lesson, incorporated into assessments and communicated with parents. Objectives will include what students are learning and how they will show what they have learned in kid-friendly language.

Accommodations & Instructional Supports: Teachers will implement instructional supports for all learners based on pre-assessments and will be discussed through PLC meetings. Lesson plans will reflect instructional supports, such as differentiation and extension opportunities, usage of manipulatives, flexible grouping, and planning for possible misconceptions. Teachers will monitor and ensure that IEP, 504 & LEP accommodations and Rtl interventions are provided appropriately.

Students Showing Their Thinking: Students showing their thinking will focus on the process, not just the product. Teachers will provide modeling and a variety of opportunities and modes for students to show their thinking that incorporate research-based strategies, such as Kagan Structures, Marzano's Instructional Strategies, Lead4Ward Instructional Strategies, higher order questioning, Thinking Maps, and through various digital platforms.

Student Discourse: In classrooms, student talk in an academic environment is crucial to student engagement and achievement. Discourse will occur through whole group, small group, partner, and/or student-to-teacher opportunities. Students will collaborate through stations, book clubs, partner work, cooperative learning structures, shared writing and reading experiences, and digitally. Discourse opportunities will be derived organically in the classroom and intentionally planned for by the teacher, including opportunities to incorporate accountable talk.

Small Group Instruction: Small group instruction will occur daily through balanced literacy and incorporated into other content instructional blocks. Groups will be fluid and based on all student needs. Components of small group instruction include frequent formative assessments, strong management routines, and organized, up-to-date progress monitoring systems.

Chunking of Content: Chunking of content will be done to break up information in order to facilitate retention, retrieval of information, and comprehension. Teachers will use pre-assessment data to break instruction into mini-lessons, utilize graphic organizers, leveled stations, brain breaks, and implement strategies, including Marzano's Instructional Strategies, to build background knowledge and schema.

Formative Assessment: Formative assessment will be used frequently in all content areas to inform instructional decisions, progress monitor, determine student support needs, and guide grouping decisions, including small group instruction and flex grouping. Teachers will collaborate to design and analyze CFAs during PLCs, along with other TEKS-based formative assessments to determine trends provide teachers with a clearer pathway to student growth.

Student Goal Setting: Wilmeth students will be provided with opportunities to monitoring their own progress through goal setting experiences. Teachers will confer with students about their progress and facilitate tracking of student mastery based on various formative and/or summative assessments, such as IStation, MAP, district assessments, CFAs, and other assessments based on power standards.

Opportunities for Extension: Through PLC meetings, teachers will identify students who have already mastered content through pre-assessments and based on power standards. This includes deepening their understanding of a standard rather than skimming future grade-level content.

APPENDIX J LONGHORN ELEMENTARY DAILY SCHEDULE

	Specials	Lunch	Recess
PLC	7:30-8:25		
Kindergarten	1:10 <i>-</i>	11:25-	10:00~
	2:00	11:55	10:30
First Grade	11:00-	11:55-	12:25-
	11:50	12:25	12:55
Second Grade	9:15-	12:15-	12:45-
	10:05	12:45	1:15
Third Grade	10:10-	12:40-	1:10-
	11:00	1:10	1:40
Fourth Grade	8:25-	1:10-	1:40-
	9:15	1:40	2:10
Fifth Grade	2:05-	11:00-	11:30-
	2:55	11:30	12:00
Specials	12:20- 1:10 conference	11:50- 12:20	

APPENDIX K PROFESSIONAL DEVELOPMENT CHOICE MENU

Resource

Look at the MOI/Marzano table that the Lesson Design team created to pick some elements to implement into some upcoming instruction that aligns with your goals!

Browse the Lead4Ward Instructional Strategies Playlist for ideas to use

Resource

Twitter Search!

Search hashtags that apply to your goals and look for interesting ideas or resources. Here's some ideas:

#formativeassessment

@lead4ward #flipgrid #peardeck -> (Pear Deck is a great Google Slides Add-on formative assessment tool)

Reading

Click this link to access these journal articles that relate to student goal setting and instructional feedback. Choose ONE that you want to read and reflect on today.

These are fantastic, research-driven articles that will give you some ideas and things to think about!

ReadingBrowse through some of the books and resources in the "Formative Assessment" basket.

If you choose to check one out to take with you for further learning, please fill out one of these Google Forms:

> Library form books form

Feel free to browse through some of the other baskets!

Resource

Look through these technology-based tools for formative assessment to gather ideas:

Edutopia's list of tools

NWEA's list of tools

Formative Assessment

As you work your way through this, be thinking about these questions:

How do I show evidence that my students are mastering

How am I using the information gathered from formative assessments? How do I track that data? What role do students play in that?

For your time today, you have two tasks:

- Choose an article or book from the "Reading" activities to explore and post your reflection in the "Reading Reflection" post on Google Classroom.
- 2. Look at the "**Resource**" activities to find something you will commit to implementing. Then, post your commitment in the "Resource Commitment" post on Google Classroom.

If you have extra time, continue your learning by choosing another activity.

Don't forget to take time and document your learning today as T-TESS evidence!!

Resource

Example student TEKS monitoring page - Math

Example student TEKS monitoring page - ELAR

Extra Learning option:

Go Formative! Summit -Sign up for this free PD summit in October!

APPENDIX L

INSTRUCTIONAL COACH PARTNERSHIP AGREEMENT

What roles does the Common IC take on?	What are the specific job responsibilities the IC will take on?
 IC roles will include coaching, mentoring, co-teaching and modeling effective instructional strategies Plan with teams to assist with curriculum and instruction in order to increase student growth Collaborate with colleagues to analyze data and identify trends Facilitate professional development based on teachers' TTESS goals Perform duties as needed to support meeting the goals and objectives in the Campus Improvement Plan 	Collaborate with colleagues within PLC meetings each week Meet with teams on Tuesdays for lesson design Facilitate Lesson Design Team Co-teach and model lessons Support data collection and analysis Facilitate Instructional Rounds with teams Use effective communication to relay curriculum information from content coordinators
How and when will communication take place with the Land administrators?	How will implementation of classroom support take place at?
 Admin PLC meetings Report data collected from informal classroom observations Through email or face-to-face 	PLC grade level meetings Monitor implementation of instructional strategies Informal classroom observations Coaching cycles
How will the IC tell you about her work?	How will the IC support the campus?
 Instructional Coaching log sheet Admin PLC meetings Report updates on coaching as it pertains to TTESS goal support Through email or face to face 	 Leadership Team Lesson Design Team Facilitator Assist with campus data collection Supporting campus events New Teacher Mentor Coordinator TTESS goal support through job embedded PD
Administrator's signature	Date
turiiilisti ator 5 Signature	

Instructional Coach's signature ______ Date______

APPENDIX M WALKTHROUGH ANALYSIS

Document Analysis Report Date: 12/18/2018 12:45:10 PM Title: T-TESS Walkthrough-01-3

Documents: 52 Staff Members: 38 Average Score: 0

Dimension 2.1: Achieving Expectations

Group Score: NA

		Total	Percentage
High expectations set			
	Observed	43	83%
Students demonstrate mastery	5. 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1		
	Observed	31	60%
Address student mistakes	and National account to the introduction of the particular and the control of the		
	Observed	42	81%
Provides students initiative opportunities			
	Observed	44	85%

Dimension 2.2: Content Knowledge and Expertise

Group Score: NA

		Total	Percentage
Conveys accurate content knowledge	o en destant transmissioner i transmissioner de la companya de la companya de la companya de la companya de la		
	Observed	51	98%
Integrates learning with other disciplines			THE COLUMN TWO IS NOT THE OWNER, WHEN THE OWNE
	Observed	7	13%
Anticipates/addresses student misunderstandings	CT Propriet 1986 Trough Colonia (1984) 1887 1887 1888 1888 1888 1888 1888 1888 1888		
	Observed	48	92%
Reflects how lesson fits within discipline & standards	Carrie of Sun assessment and assessment a survival for		
	Observed	6	12%
Provides opportunities for different types of thinking	al former from 150 a. to the 150 of 15,000 report resort, consecutation (cm. 150 at 100 to 100 consecutation a		
	Observed	31	60%

APPENDIX N SAMPLE CAMPUS NEWSLETTER





Questioning Resources and Strategies to Try

From "Start with Higher-Order Thinking" by Susan M. Brookhart - click here to access full article: Strategy One: Open Questions

MOI MVPs

engaged students to show their thinking through daily weather exploration.

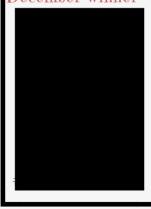
HELPING STUDENTS CREATE TEKS-BASED GOALS!

goal setting using #oneword with her students

using collaborative structures to create a culture of teamwork before launching book clubs

assing using a fun Connect Four review game

December winner



-Try to plan for two or three open questions in every lesson.

-Present students with a fictional student's work to critique "Do you agree with ______'s work? What would you tell ____?"

-Ask students to explain their reasoning ("Why?")

- -Encourage students to respond to each other
- -Give wait time
- -Plan follow-up questions

Strategy Two: Thinking, Not Retelling

-Start with a task that would require retelling (which is a lower level cognitive task) and have students ask and answer meaningful questions about the content.

-Example - instead of assigning students to create a poster showing their research of planets, have students pretend they are astronauts deciding which planet to settle and why. This will not only have students learning about the planets, but also will have them thinking critically and analytically.

Strategy Three: Student Self-Assessment

-Have students co-create the success criteria for the learning goals. This would require students to look at work samples, understand the TEKS being taught, and decide if the product is quality or not.

Resource (Click here) - HOT question stem bookmarks for ELAR-

Resource (Click here) - Elementary Math DOK Matrix

Resource (Click here) - Elementary ALL content areas DOK chart and examples

APPENDIX O SAMPLE OF CONNECTIONS CHART

Lesson Design Team 9/5/18

			rs

Norme

Take to teams and use during planning to show evidence of implementation

Goal: Creating and cultivating practices in every classroom to grow teacher effectiveness.

Today's agenda/minutes:

- MOI/book study connection chart
 - Partner up and split up the MOI elements and go through book to find connections and identify possible implementation ideas
 - o Take back to teams and ID elements in lesson plans
 - How to take this to our teams?
 - Documenting for HRS and best for our school and kids
 - Talk with HRS rep about gaining buy-in for team
- Topics for next time
 - o Objectives making them student-friendly and concise
 - How is it going with implementing these strategies into lesson plans?

MOI Element	Connections to <i>The New Art and Science of Teaching</i> Elements	Ideas for implementation
Students showing their thinking	Element 7 - Processing Content	Think-pair-share (Accountable Talk) Reciprocal Teaching (pg. 31)
Student discourse	Element 42- Asking In Depth Questions of Reluctant Learners	Wait time Question levels Encouragement (pg.99)
Small group instruction	Element 12 - Engaging Students in Cognitively Complex Tasks Element 13- Providing Resources and Tasks	Problem Solving Tasks Investigation Task (pg.48 Providing Resources Teaching Research skills (p49)

APPENDIX P EXAMPLE INSTRUCTIONAL COACH OBSERVATION FORM

Focus: HOT Questions

10/2 12:00

Question	Student Response
What do we notice about the picture here? Who might the characters be?	Mike and a parrot - he will have a surprise as a pet parrot
What do you think, who do you think already might be? Maybe he will learn a lesson	Parrot
Who can tell me what they think seized means?	Pulled off, yanked it
What was your clue? Was it a definition in there? Was it another word that helped us figure it out?	Is it a double meaning word?
Pulled it off - does that help us know what it means?	Nods yes
If he hopped in a swing and began to swing, what do you know about swinging?	Back and forth
What is he starting to teach him?	words
How do you think Mike is feeling based on the picture Why do you think he's starting with his name?	Excited Parakeet doesn't look too happy
What do you think scrambled mean? Yes, she's scrambling and moving quickly to hear	Fast Also, it said it in the other story
What can we conclude about how he feels about her?	empty
How do you think she's feeling	
What do you think that means that your brain is empty?	Sad Smart vs empty
If she hopped into her shavings, how might she be feeling? Mad, embarrassed, sad	Mad Sad They wouldn't want to be by them if they are sad.
What helps you know that she's sad here?	
	1

What do we notice?

-Need to give a little more wait time, felt like I jumped in -More 'why' questions, 'how do you know' questions -students using notebook to come up with their own words

Next steps:

-TEKS-based goal setting -plan more 'why' questions -interrupting teacher table, station management, what to do when finished -differentiate stations more intentionally and align groups with those levels

APPENDIX Q SAMPLE TEAM LEADER MINUTES

Team Leader Huddle

October 15, 2018 Minutes

Penny for your Thoughts

Learning by Doing Book Study (30 mins)

- Chapter 2- Defining a Clear and Compelling Purpose
 - Share out main points with <u>Think Square Share</u>
 - o The W Mission/Vision/Goals/Collective Commitments
- Book Study Calendar

Collaborative Planning (in progress)

- Article Jigsaw: The Promise of Collaboration
 - o Share out takeaways/summary of each section
- Tight & Loose Structures
- What is working/What is not/Next Steps
- Reflection questions exit slip

Looking ahead:

- Science Fair Coordinator
- Grade Level Career Day Rep
- Report Cards
 - o Oct. 18th-Report Cards Printed
 - Oct. 22nd- Report Cards Given @ Parent Conferences
 - Window for Conferences: October 22nd November 2nd
- October 20- Holiday Bazaar
- October 22- Parent conference day
- October 23-26 Red Ribbon Week
- October 23- Pumpkin contest
- October 24- Ninja Live
- October 25- Live Kind Crew 3-5 mtg- TBA on time
- October 29- Live Kind Crew K-2 mtg-TBA on time
- October 31- Lucky's Loop Fun Run & Drive Thru Trick or Treat with K & C
- Nov. 2- Support Staff Lunch
- Nov. 7- Fire Drill @ 8:15 & Staff Mtg
- Nov. 9- Veteran's Day Rally @ 2:00

Next Meeting: December 12th

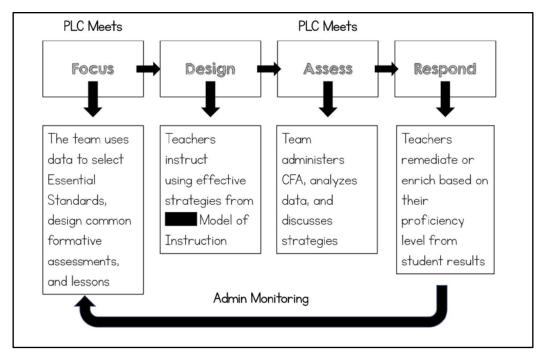
- Read Chapter 3- Building the Collaborative Culture of a Professional Learning Community
 & Chapter 4- Creating a Results Orientation in a Professional Learning Community
 - o Word, Sentence, Phrase from reading

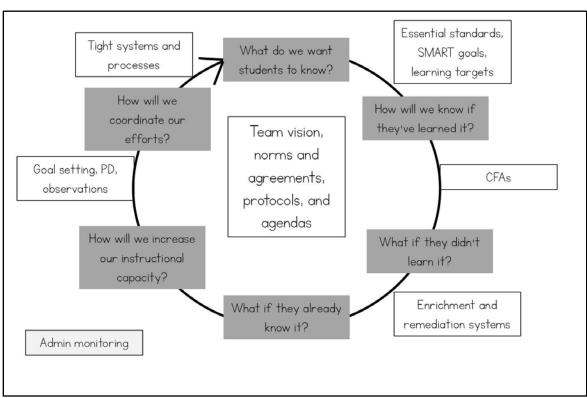
APPENDIX R

COLLABORATIVE PLANNING TEAM LEADER REFLECTION

low do you ensure that everyone	How do you ensure that everyone on your team has equitable contributions of the lesson plans?
on your team <u>understands and</u> lakes ownership of the lesson plans?	 I encourage everyone to bring ideas, templates, materials, etcto planning so we have already pre-taught about what we are needing to teach. Everyone shares out what they bring.
 We discussed as a team jobs/roles for each subject area. We discuss what is being planned to make sure everyone understands the TEK and how to teach concepts. 	
low do you ensure that everyone	Other reflections? Questions? Concerns?
on your team <u>feels safe, valued,</u> and respected during collaborative	 I think our team has made some progress with help. We've worked together to address many frustrations/concerns.
planning?	Areas We've Addressed (These were team frustrations/complaints):
 I ask everyone to share their thoughts/ideas. 	 Originally teammates were frustrated that we were spending all of our times planning ELAR/Math that science/social studie plans weren't getting done.
 I often ask, "Is there another way, or a better way we can do" 	 When planning with all 6 on the team too many people sharing ideas and not agreeing on what to doso nothing was gettir donealso due to conflict/differences and different teaching styles.
This gives others a chance to share.	 There have been complaints of strong personalities struggling to mesh and be flexible/compromise. There was some confusion on who was leading planning for each area.
I ask, "What do y'all think about?" or	 There was some confusion in understanding plans pieced together by everyone – they weren't fluid when planning all together because no <u>one</u> person planned the whole lesson from beginning to end (so it wasn't thought out).
"How do ya'll feel about	 Everyone was confused as to what had been done/needed to be done because they had their hand in too many subjects. What has helped us do to address team concerns/frustrations:
?" once an idea is shared.	 After listening to everyone's frustrations and concerns helped us make two planning teams consisting of three teammates each. One group plans math and science and the other ELAR and social studies. This helped spread out personalities. This also helped clear up confusion when planning by tightening the focus area/subjects for each person. The lessons are more fluid and everyone knows what they need to make/copy for plans. Then, due to doing two different plann groups she said we are required to share/discuss plans on Thursday.
	Concerns: 1) Our team has strong personalities that do not share the same philosophy or vision of planning. This makes it difficult for
	 everyone on the team to feel comfortable with sharing ideas. Some people are very stubborn and won't compromise on ideas. Instead they close the door and do their own thing. Some people just want to get lessons "done" and don't want to take the time to think about the design, the depth, the who the why, or the flow of lessons.

APPENDIX S PLC CYCLES AND MENU







PLC MENU



What do we expect students to know?	Но	ow will we know when they have learned it?
Prioritize essential standards and look at vertical alignments Group standards into units and determine what proficiency looks like Unpack standards to understand the learning targets Determine rigor needed for proficiency of learning Identify practices or processes students need to learn with the standards		Create and use CFAs Determine proficiency levels and examples Create student-friendly learning targets Use common scoring guides and rubrics to assess student learning Calibrate scoring of common assessments Analyze data and respond Identify trends in student work and respond Identify and plan for other formative assessments
What if they do not know it?		What if they already know it?
Look at trends in student work and re-engage all learners without lowering the cognitive demand of the standard Accelerate learning so students can access grade-level standards Base decisions on data Create a systematic pyramid of interventions to meet the needs of all learners	•	Look at trends in student work and re-engage all learners, including deepening their understanding of a standard <i>rather than</i> skimming future grade-level content Raise text complexity Base decisions on data Honor and advance student learning.

APPENDIX T SAMPLE PLC AGENDA

3rd Grade Agenda September 6, 2018

Collective Commitments

- We will model the acceptance of our differences by developing empathetic learners.
- We will forge a partnership with our learning community in order to promote student success
- · We will commit to cultivating a love of learning every day.
- We will collaborate to develop engaging learning experiences and monitor the progress for all students.
- We will practice professionalism, courtesy, and kindness with all students and adults.

3rd Grade Norms

Respect each other's differences
Be organized and prepared
Work together to do what's best for kids
Be helpful and supportive to each other
Listen with an open mind and agree to disagree

PLC Goals

- We can use the results of our common assessments to identify how to respond
 instructionally as part of an ongoing process of continuous improvement designed to
 help students achieve at higher levels.
- We have taught students the criteria we will use in judging the quality of their work and provided them with examples.

Next Meeting 10/1/18

Unit 2 Addition and subtraction - look at pre assessments to write CFA

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