

Leadership Characteristics of a Principal in a Title I School with Teachers Integrating the New Literacies of Online Research and Comprehension

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This article provides a deeper understanding of the many components involved in the leadership of a Title I school with classroom teachers integrating the new literacies of online research and comprehension. Using a qualitative design, specifically a case study, the researcher interviewed teachers and a principal in a Title I elementary school in Northeast Kansas to gain insight into the principal's role in the integration of new literacies. By focusing on both the importance of students learning 21st century skills and the importance of supporting teachers through a culture of trust and professional growth, the principal at Oak Hill Elementary was a leader in technology integration and the implementation of new literacies. The principal in this study created a culture of trust and professional growth through the following actions: goals and expectations were individualized; teachers felt safe to experiment and take risks; resources, encouragement, and support occurred; opportunities for ongoing, differentiated professional development were implemented; and opportunities to collaborate were provided.

Introduction

The principal is a key factor in the integration of technology into classrooms with a goal of improving instruction and learning (Bauer & Kenton, 2005; Dawson & Rakes, 2003). Unfortunately, too many schools see technology as an isolated way to improve student learning, when in fact, technology integration must be tied to instructional objectives and learning outcomes (Creighton, 2003). In their survey of over 1,400 literacy teachers in the United States, Hutchison and Reinking (2011) pointed out that despite the fact that teachers perceive literacy and technology integration to be important, it is not happening on a large scale.

It is critical that teachers recognize the new literacy demands brought about by the use of the Internet and 21st century literacy (Karchmer-Klein & Shinas, 2012). Twenty-first century literacy includes skills such as developing proficiency with the tools of technology; solving problems by working collaboratively and cross-culturally; designing and sharing information to meet a variety of purposes; managing, analyzing, and synthesizing multiple streams of simultaneous information; creating, critiquing, analyzing, and evaluating multi-media texts; and attending to the ethical responsibilities required by these complex environments (National Council of Teachers of English, 2013). However, Hutchison and Reinking (2011) argued that teachers cannot be expected “to bear the sole responsibility for increasing integration of information and communication technologies (ICTs) into literacy instruction” (p. 331).

This study sought to examine the instructional leadership characteristics of a principal in a Title I elementary school with classroom teachers integrating the new literacies of online research and comprehension. The research question guiding this study was, “How are the dimensions of instructional leadership evident in the leadership of an elementary principal in a Title 1 school with classroom teachers integrating the new literacies of online reading and research?”

Theoretical Frameworks and Literature Review

In order to learn about the leadership practices that were perceived as critical in establishing the new literacies of online research and comprehension in a Title 1 elementary school, it was important to understand the complexity of the integration of new literacies. The two dominant frameworks guiding this study were: instructional leadership and the dual-level theory of New Literacies. Instructional leadership was the first framework guiding this study and has been documented as having many different dimensions tied to student learning (Leithwood, Louis, Anderson, & Wahlstrom, 2004; Louis, Leithwood, Wahlstrom, & Anderson, 2010; Robinson, Lloyd, & Rowe, 2008; Waters, Marzano, & McNulty, 2003). The goals of instructional leadership focus on the improvement of teaching and learning and increasing student achievement (Hallinger & Murphy, 1985; Murphy, Hallinger, Weil, & Mitman, 1983). May and Supovitz (2011) explained the influence of instructional leadership on teachers' instruction depends on the actions of principals working with teachers.

The specific instructional leadership framework used in this study was the instructional leadership model by Hallinger and Murphy (1985) (see Table 1). The Principal Instructional Resource Management Scale (PIRMS) based on empirical and theoretical analysis. According to Leithwood et al. (2004), this model of instructional leadership has been the most researched model.

Table 1. Dimensions of Instructional Leadership Components

Defines the Mission	Manages Instructional Program	Promotes School Climate
• Framing school goals • Communicating school goals	• Supervising and evaluating instruction • Coordinating curriculum • Monitoring student Progress	• Protecting instructional time • Promoting professional development • Maintaining high visibility • Providing incentives for teachers • Enforcing academic standards • Providing incentives for students

This model of instructional leadership provides a broad lens to examine principal leadership. Defining the mission has been a key component in instructional leadership because of the importance of goal setting and defining expectations (Leithwood et al., 2004; Louis et al., 2010; Murphy et al., 1983). Managing the instructional program consists of the components that emphasize teaching and learning (Marzano, Waters, & McNulty, 2005; Robinson et al., 2008). Promoting a positive climate has been cited as important because it included building a school community where collaboration among teachers was encouraged, as well as building productive relations with families and communities (DuFour & Marzano, 2009; Fullan, 2007).

The second theoretical framework grounding the study was the dual-level theory of New Literacies (Leu, Kinzer, Coiro, Castek, & Henry, 2013). This theory was framed on two levels:

New Literacies (uppercase) and new literacies (lowercase). This dual-level theory accounts for the continuous changes taking place in literacy and the different perspectives. The New Literacies theory (uppercase) examined all previous research on new literacies, determined the changes to literacy, and noted key patterns being discovered. The authors explained that the new literacies (lowercase) theory is more focused and keeps up with the rapidly changing nature of literacy. This study focused on schools integrating the new literacies of online research and comprehension, which falls under the umbrella of new literacies (lowercase). Accordingly, they defined the new literacies of online research and comprehension as the following:

The new literacies of online research and comprehension include the skills, strategies, dispositions, and social practices necessary to successfully use and adapt to the rapidly changing information and communication technologies and contexts that continuously emerge and influence all areas of our personal and professional lives. Online research and comprehension is a self-directed process of constructing texts and knowledge while engaged in several online reading practices: identifying important problems, locating information, critically evaluating information, synthesizing information, and communicating information. Online research and comprehension can take place individually, but often appears to be enhanced when it takes place collaboratively. (pp. 1163-1164)

The new literacies perspective of online research and comprehension specifically focuses on reading comprehension as a problem-based inquiry process (Leu, Kinzer, Coiro, & Cammack, 2004). The five major functions of online research and comprehension are: developing important questions, locating information, critically analyzing information, synthesizing information, and communicating information (Leu & Zawilinski, 2007). Leu et al. (2013) explained that “digital natives” (p. 1168) may be skilled at texting and social networking but are not always as skilled with online reading and research. Students must be taught the skills they need to be successful online readers and researchers which include finding and locating information, answering questions, synthesizing information, and communicating their findings to others (Coiro, Knobel, Lankshear, & Leu, 2008; Dobler & Eagleton, 2015; Henry, 2006; Karchmer-Klein & Shinas, 2012). Effective instruction of online reading and comprehension skills includes modeling, scaffolding, practice, and feedback (Dobler & Eagleton, 2015).

Online research usually begins with a question or a problem to solve (Leu et al., 2013; Leu & Zawilinski, 2007). As readers begin to process information presented on the Internet, they must critically evaluate sources, making important decisions about quality and reliability of information (Karchmer-Klein & Shinas 2012). The importance of locating information by using Internet searches in an effective and strategic manner is critical for students reading online (Kingsley & Tancock, 2014). If students cannot access information, then they are not able to apply that information and move on to other elements of reading (Henry, 2006). Since the Internet is constantly changing, web browsing, database look-ups, and search engine technologies require greater strategic knowledge than is required with traditional texts (Dobler & Eagleton, 2015; Leu & Kinzer, 2000).

Gaps in Research

Research clearly shows the importance of new literacies and the skills students need to be successful online readers (Coiro & Dobler, 2007; Henry, 2006; Leu et al., 2013; Leu &

Zawilinski, 2007). There are also numerous studies involving the integration of new literacies into classrooms (Coiro et al., 2008; Coiro & Dobler, 2007; Dobler & Eagleton, 2015; Henry, 2006; Leu & Zawilinski, 2007; Karchmer-Klein & Shinas 2012; Kingsley & Tancock, 2014). In terms of leadership studies, the leadership skills involved in integrating technology in elementary school have been documented (Anderson & Dexter, 2005; Levin & Schrum; 2013; Schrum, Galizio, & Ledesma, 2011; Staples, Pugach, & Himes, 2005). Research has also documented that professional development, teachers' perceptions, and providing ongoing support are critical factors in the integration of technology in classrooms (Anthony, 2012; Bean, 2012; Ertmer & Ottenbreit-Leftwich, 2010; Hutchison & Reinking, 2011; ISTE, 2009; McKenna & Proctor, 2006).

Despite this knowledge base of research on technology integration and new literacies, there is limited research in the area specifically focusing on principal leadership and the integration of new literacies. The research on leadership and technology is focused on technology integration, not the integration of new literacies (Anderson & Dexter, 2005; Bauer & Kenton, 2005; Dexter, 2008; Levin & Schrum; 2013; Schrum et al., 2011; Staples et al., 2005).

Method

The case reported was part of a larger research project that informed my dissertation. According to Yin (2009), case studies examine a modern phenomenon in-depth and within its real-life context when the boundaries between both are not clearly evident. Case studies are the preferred method in examining contemporary events, when the behaviors are not manipulated, and when the goal of research is to contribute to the knowledge of an individual, group, or organization (Yin, 2009). In this case study, I did not have control over the events in this study. The study took place at the schools of the participants and the interviews included open-ended questions.

Using the case study design (Yin, 2009), my goal was to learn about the instructional leadership characteristics of a principal in a Title I elementary schools with classroom teachers that were integrating the new literacies of online research and comprehension. I selected Yin's (2009) model of case study design that included a study's questions; its propositions; its units of analysis; the logic linking the data to the propositions; and the criteria for interpreting the findings. Typically, case studies begin with a research question that is focused on "how" or "why" questions with a goal to develop propositions that would lead to further inquiry (Yin, 2009). Given that this study focused on a range of leadership skills of the principal, as well as having specific boundaries defined (Title I elementary schools with classroom teachers integrating new literacies), the case study design was chosen (Hatch, 2002; Yin, 2009).

According to Yin (2009), case study researchers should ask good questions, listen objectively, be adaptable, have a firm grasp of the issues being studied, and have unbiased preconceived notions about the findings of the case study. Even though I brought my educational experiences and perspectives on new literacies and leadership to the study, I did not have any preconceived ideas of potential results of this study. Additionally, I was open to various leadership characteristics that could develop through data analysis. The model of instructional leadership (Hallinger & Murphy, 1985) helped structure and organize the data analysis process and was considered when interpreting the findings (Yin, 2009); however, I was open-minded and aware that other potential leadership characteristics might emerge. This case study focused on the perceptions and experiences of principals and teachers, and as part of this case study, multiple sources of evidence were considered when interpreting the findings (Yin,

2009).

Setting

A criterion-based sampling method was used to determine the school site for this study (Creswell, 2012). The following criteria were used to determine the selection of the participating school: at least 40% of students were receiving free or reduced lunch; the principal had been in the building for at least two years; and students were engaged in new literacies of online research and comprehension. This included using technology to identify important questions, locate information, critically evaluate the information, synthesize information, and then communicate the answers to others (Leu et al., 2013). When students were engaged in new literacies, they were predicting, determining important ideas, and monitoring their comprehension while navigating multiple layers and links on websites (Dobler & Eagleton, 2015).

Characteristics of Oak Hill Elementary

Located in a small town surrounded by farms, Oak Hill Elementary (a pseudonym) was the elementary fourth and fifth grade building for school district. There were 171 students enrolled. Fifty percent of the students qualified for free and reduced lunch and seventeen percent had an Individualized Education Plan. State assessment data were not released the year of the study; however, the following year 91% of the students performed at grade level or higher in English Language Arts. This assessment was based on the Kansas College and Career Ready Standards.

Oak Hill Elementary was a recipient of a 21st Century Learning Grant, which was used to provide afterschool and summer programs to meet the academic needs of students. It was also used to purchase iPads. Students used the iPads for tutoring activities, club projects, and connecting their classrooms to initiatives developed in the afterschool program. Oak Hill Elementary did not have any district initiatives that mandated specific literacy programs to be taught during language arts time. The principal explained that teachers had freedom to choose resources that met the Common Core State Standards (CCSS, National Governors Association for the Best Practices & Council of Chief State Officers, 2010) when teaching. To help facilitate technology integration, the principal selected two teachers that served with her on a school technology committee and on the districts' technology committee.

Every Friday at Oak Hill Elementary, the principal could be found teaching a *POWER* class in the library. Lessons during *POWER* time focused digital citizenship and the International Society of Technology in Education (ISTE) Standards for Students (ISTE, 2016). Students were also taught how to check email and their grades, and also to use and find apps that supported classroom instruction. During *POWER* class time, the principal opened the school library to the public. She typically paired members of the community with the students. The students did most of the modeling, teaching, and answering of questions.

The principal at Oak Hill Elementary was very proud of the 1:1 technology ratio at her building. Many devices were purchased through fundraisers or the 21st Century Learning Grant. Teachers also had SMART Boards, Elmos, and document cameras in their classrooms.

New Literacies Integration

At the time of the study, students were researching owls and regions of the United States. At Oak Hill Elementary students scanned QR codes to take them to research sites that teachers had approved. Teachers' websites also had the links for students to use that would allow them to

search using approved research search engines. Teachers used Kidblogs.org for students to answer comprehension questions, write journal entries, and to collaborate with peers. In addition, students would read and comment on their classmates' blog posts. When making presentations on research topics, students used Doodle Buddy, Prezi, and Glogster.

Participants

Principal

Since this was a small school district, the principal's job included additional responsibilities. She was the Webmaster for the school district, as well as being in charge of the multi-leveled tiered support for the district. The principal at Oak Hill Elementary did not have support staff to help with technology integration and was very much active in the implementation of technology integration at the school. The principal would go into classrooms and set up new technology as well as model and demonstrate how to integrate technology. She discussed videotaping herself using technology and she also created a video bank for teachers to access that supported the technology being integrated at Oak Hill Elementary.

To help teachers implement the CCSS, the principal created a webpage for English Language Arts resources and websites. Parents had access to this website, so they could use these same resources at home. The principal at Oak Hill Elementary frequently sent teachers to technology integration conferences. As part of attending a conference, teachers were expected to provide professional development for their colleagues during PLC time when they returned. Teachers were also expected to share with colleagues how they were integrating technology at PLC meetings.

Teacher Participants

At Oak Hill Elementary, there were eight classroom teachers, and three teachers agreed to participate in this study (see Table 2). Until this study, I was not familiar with the school and needed a way to identify the levels of new literacies integration of classroom teachers if the study was to yield meaningful results about the school principal and their role in the integration of new literacies of online research and comprehension. The *Teacher Questionnaire* (see Appendix A) helped determine a level of integration for teachers in the study and awarded points based on how often teachers were integrating new literacies in their classroom. Prior to the study, it was field tested with a group of teachers I worked with on a daily basis.

The more often online reading and research activities were occurring, the more points teachers scored. The points ranged from zero (never) to five (daily). Some categories were not something that would be expected to occur daily, and this was considered when calculating the scores. The following points determined the teachers' level of integration: *Limited: 0-10 points; Emerging: 11-19 points; Integrating: 20-40 points or 4 activities weekly.*

Table 2. Oak Hill Elementary Teacher Participants

Code	Grade	NL Rubric	Years at this Grade	Years Exp.	Highest Degree	Years with Principal	How Teachers Acquired their Technology Knowledge and Skills
T1	4	Integrating	8	7	Bachelor	5	- Collaboration with Colleagues
T2	4	Integrating	0	0	Bachelor	0	- College Classes

							- Collaboration with Colleagues
T3	5	Integrating	11	9	Masters	4	- Self-Taught - Technology Rich Grant

Data Collection Process

Interviews were the primary form of data collection for this study and occurred at the schools. Interviews took approximately one hour. Interviews were transcribed, and participants were provided copies of the transcripts prior to the data being analyzed for member checking purposes. The principal interview was slightly different than the interviews for classroom teachers and certified support staff. Interview questions were focused on the knowledge, dispositions, and actions of the principal, as well as the role of the principal in terms of integrating new literacies. The questions for the principal were based on her perceptions of her role as an instructional leader (Hallinger & Murphy, 1985), while the interview questions for the teachers were based on their perceptions of the principal's role.

In addition, observations in the classrooms occurred. Documents were also collected from the principal to verify and provide clarification about themes that emerged. The following documents and artifacts were collected: school and classroom websites, evaluation rubrics, and websites and apps that were used in the classroom.

Data Analysis Procedures

Data analysis for this study included transcribing, organizing, and analyzing data from the interviews. Principal and teacher interviews were analyzed together. Prior to coding, coder consensus was reached with two peer reviewers. This process helped clarify coding definitions and create coding tables. There were multiple rounds of data coding. First, data were coded based on the knowledge, dispositions, and actions of principal. Once this round of coding was completed, I reviewed all of the data, highlighted key terms, and made comments in the margins to summarize what was discussed and to help develop subcodes. This same process was repeated based on the three dimensions of instructional leadership (Hallinger & Murphy, 1985). Once this round of coding was completed, I reviewed all of the coded data, highlighted key terms, and made comments in the margins to summarize what was discussed to help develop subcodes based on the Mission (M), Managing Instruction (MI), and Promotes School Climate (SC). Three tables with the subcodes for the dimensions of instructional leadership were then created.

After coding was completed, I reviewed the transcripts and used tallies to determine how many times the specific subcodes were discussed (Miles & Huberman, 1994). Tallies did not fully constitute establishing credible patterns, but helped organize the data (Creswell, 2012). The tallies should not be regarded as having any statistical significance because the focus of the data analysis process was finding patterns that had meaning as opposed to quantifying the tallies. If the tallies did reveal a possible pattern, it was then reviewed for credibility and meaning using the transcripts and artifacts.

Creswell (2012) described the data analysis process as a spiral process, as opposed to a linear process. As part of this spiral process, data were organized into smaller units, but to interpret the data for patterns, those smaller units had to be classified and interpreted. Patterns for the main codes (mission, managing instruction, and promotes school climate) emerged from subcodes. However, not every subcode yielded a singular pattern.

Finally, I focused on classifying and interpreting these patterns to find themes (Creswell, 2012). Creswell (2012) explained that themes consist of “several codes aggregated to form a common idea” (p. 186). As themes began to emerge, the transcripts were recoded to identify and verify the new themes that emerged. After reviewing the transcripts, and tables multiple times, I would continually would ask myself the following questions:

- How critical was the developing pattern to help teachers integrate new literacies?
- What does this mean in the larger scope of instructional leadership?

Findings

The Principal Created a Culture of Trust and Professional Growth

All aspects of instructional leadership (Hallinger & Murphy, 1985) were evident and embedded in actions the principal purposefully implemented in order to support teachers and students integrating the new literacies of online research and comprehension. This, in turn, created a culture rooted in trust and professional growth. At Oak Hill Elementary, goals and expectations were individualized; teachers felt safe to experiment and take risks; resources, encouragement, and support occurred; opportunities for ongoing, differentiated professional development were implemented; and opportunities to collaborate were provided.

Goals and expectations were individualized. The principal in this study believed personalized goal setting was a way to help teachers grow professionally and worked with teachers to create individual goals. She would conference with teachers to learn how they were integrating technology and have follow-up conversations with teachers after walk-throughs to make sure they had the support they needed to meet their goals. At Oak Hill, T1 described how the principal knew teachers comfort levels when they were learning new technology. “She knows where everyone’s level is. If she starts to go too far, people will tell her to slow down. It just...she knows people’s comfort zones.” The principal commented, “I’ve had to be accepting of where everyone is at.”

Experimenting and taking risks. Teachers were encouraged to take risks and try new ideas in their classrooms. T3 commented about how she was able to experiment with new ideas in her classroom, “She gives me time to work and figure out things, and makes me feel like it is okay to try it, even if it doesn’t work the first time. A safe environment to try things, explore and learn”. The principal at Oak Hill felt it was important to model taking risks and trying new ideas with technology. “Lots of times, I’ll try something, because I’d rather it flop with me, and not my teachers. I’ll try it, and let me mess up, or say, ‘you know this is working pretty good,’ and I’ll have one teacher try it out, and then say, ‘can you share it, or we’ll share it together.’”

Resources, encouragement, and support. Oak Hill Elementary did not have extra support staff beyond classroom teachers, so the principal provided the same support to teachers at her school that was typically provided by instructional coaches or the library media specialist. She would not only answer questions, but also created “how to” technology videos that teachers could watch. The principal would also model lessons for teachers. In addition, the teachers at Oak Hill Elementary helped one another. T2 discussed how he had questions answered by other teachers in the building, “I mean a lot of them are the ones that...if I ever have questions, I ask them and they’ll tell me or give me their feedback.” T1 explained how the principal answered questions, “Anytime we have questions or concerns or...she’s always coming in. She’ll watch if you need to.”

Ongoing, differentiated professional development. The principal in this study created opportunities for teachers to be engaged in professional learning and leadership. She provided

video recordings modeling uses of technology based on classroom observations and requests from staff. In addition, she coordinated professional development that was differentiated based on teacher needs, ability, and interest. Finally, conferences were a way that teachers continued their professional learning at Oak Hill Elementary. One of the principal's requirements of attending a conference outside the district was to train staff members during PLC time.

Opportunities to collaborate. Collaboration with peers contributed to professional growth. Teachers at Oak Hill Elementary were required to share how they were integrating literacy and technology at PLC meetings. The principal explained how she learned many years ago that checklists were ineffective ways to manage technology usage in the classrooms. By having teachers share projects that students had completed not only gave other teachers more ideas, but also helped her monitor teacher accountability.

In addition to the teachers collaborating, the principal at Oak Hill Elementary discussed the support she received from the teachers at her school and the teachers and principals that served on the district's technology committee. She also discussed how her ongoing collaboration with a college professor increased her knowledge of ways technology integration could be improved in literacy and other content areas.

Discussion

Students at Oak Hill Elementary were engaged in online research projects and the principal was an integral part of the process. By implementing instructional leadership components that included establishing a clear mission and managing the instructional program (Hallinger & Murphy, 1985), the principal at Oak Hill Elementary established a foundation of trust with staff. This foundation, along with specific actions related to developing a positive school climate, created a culture of trust and professional growth.

Establishing a Foundation

Defining a mission has been identified as a key component for school leaders because of the importance of goal setting and defining expectations (Leithwood et al., 2004; Louis et al., 2010; Murphy et al., 1983). According to the Wallace Foundation (2013), effective principals establish a vision for their school. Bryk and Schneider (2003) included establishing a vision as one of the foundations for establishing trust in schools. The principal at Oak Hill communicated her vision of preparing students to be 21st century learners. Multiple teachers at this school discussed how the principal had very high standards and expected students to be engaged in high-quality projects involving technology.

In addition, the principal worked with teachers to set individual goals related to integrating technology and literacy. Robinson et al. (2008) found that goal setting was a significant way of influencing student learning and pointed out the importance of the alignment between goal setting, the educational content based on the goals, and the relationship of the goals to student outcomes. "Without clear goals, staff effort and initiatives can be dissipated in multiple agendas and conflicting priorities, which, over time, can produce burnout, cynicism, and disengagement" (p. 666).

When principals manage instruction, they are focused on teaching and learning (Leithwood et al., 2004; Louis et al., 2010; Marzano et al., 2005; Robinson et al., 2008). In this study, managing instruction included the principal acquiring resources and supervising and evaluating instruction. In order for students to conduct online research projects and create presentations, students required Internet access and a device (e.g., computer, laptop, iPad). Leu

et al. (2008) discussed the importance of students having their own devices when conducting online reading and research. Through careful budgeting and fundraising, the principal managed to have students their own device when researching, which influenced the amount of research and presentations students were able to integrate presentations.

Part of managing the instructional program included ensuring staff received professional development and ongoing support. The principal in this study did not rely on one way to support teachers' ongoing professional development (Beers, Beers, & Smith, 2010; Levin & Schrum, 2013). Learning new technology can cause additional stress on teachers, but Bryk and Schneider (2003), explained that deliberate action by principals to help reduce a sense of vulnerability can build trust.

A Positive Climate Created a School Culture of Trust and Professional Growth

Promoting a positive climate includes protecting instructional time, promoting professional development, and maintaining a high visibility (Hallinger & Murphy, 1985). According to May and Supovitz (2011), the influence of instructional leadership on teachers' instruction depends on the actions of principals working with teachers. The principal's actions in this study influenced the integration of online research and comprehension activities in the classrooms at Oak Hill Elementary through multiple areas of support. These actions created a positive climate (Hallinger & Murphy, 1985) that developed into a culture of trust and professional growth.

The principal at Oak Hill Elementary protected instructional time (Hallinger & Murphy, 1985) by coordinating the schedule so teachers had time built into their schedule for new literacies. She also coordinated the schedule so that teachers with stronger technology integration skills were responsible for teaching the online research and presentation components of lessons.

By creating opportunities for teachers to be engaged in professional learning and leadership, the principal was promoting professional growth. From traditional professional development, such as attending conferences, to job-embedded professional learning, the principal provided numerous opportunities for teachers to engage in professional development. Part of the professional development model at Oak Hill Elementary included scheduled collaboration time. Researchers have considered a collaborative culture among teachers one of the aspects of promoting a positive climate in schools (DuFour & Marzano, 2009; Fullan, 2007; Leithwood et al., 2004; Louis et al., 2010). The goal of collaboration at Oak Hill Elementary was sharing and learning from one another and this included the principal as part of the collaboration teams. In addition, the principal ensured teachers were supported when there were technology issues (Staples et al., 2005).

From teaching a *POWER* class to students, to modeling lessons, to creating a video bank that teachers could reference, the principal provided instructional support to both teachers and students. All of these activities helped maintain a high visibility that increased interactions between the principal, students, and teachers and allowed for observations that guided the principal on the needs of students and teachers (Hallinger & Murphy, 1985).

Leithwood et al. (2004) explained that principals successful at redesigning the organization were able to strengthen their school culture, modify organizational structures, and build collaborative processes in the school. At Oak Hill Elementary, the teachers and principals trusted one another and relied on each other and the principal for support. Having trust in schools increases the likelihood that new initiatives will be accepted because establishing a culture based on trust reduces the sense of risk associated with change (Bryk & Schneider,

2003). Bryk and Schneider (2003) also explained that when schools are grounded in a trustful culture, teachers feel safe to experiment with new practices.

Bird, Wang, Watson, and Murray (2009) discussed how teachers' effectiveness improves if teachers have sense of belonging and a commitment to the success of their school. At Oak Hill Elementary, the principal created a culture where teachers were supported and encouraged to integrate literacy and technology and felt comfortable relying on each other and the principal for support. Ertmer and Ottenbreit-Leftwich (2010) explained that one of the key components in schools integrating technology was an encouraging culture. The teachers at Oak Hill Elementary discussed how they felt like they could take risks and try new ideas in their classrooms.

Limitations

The boundaries for this case study were limited to one Title I public elementary school in Northeast Kansas. Not all teachers participated in this study, which means that the perceptions of those in the study cannot be assumed to be the same perceptions of the staff members that did not participate. The case study did not consider other stakeholders such as parents. This study was limited to perceptions and did not include observations. Therefore, the results reflect what was believed to be true by the participants and not what was documented through observations. In addition, all the teachers that participated were considered "integrating" new literacies based on the *Teacher Questionnaire*. Their perspective might not be the same as a teacher that was not integrating new literacies at the same level. This study was also limited in the fact that it defined leadership in a way that focused on the actions of the principal. Another framework might have revealed different information.

Recommendations for Future Research

Additional research on literacy and technology will enable educators and school leaders to better understand the changes taking place in literacy instruction with the integration of 21st century skills (International Reading Association, 2009). Based on the analysis of data in this study, the following list includes suggestions for future research.

The beliefs of teachers aligned with the beliefs of principal. In this study when the data were analyzed, there were times when teachers discussed their own beliefs. This study was focused on the roles of the principal. There was not enough data to analyze if the teachers' beliefs were consistent with their principal's beliefs. When integrating technology into the curriculum, understanding teachers' beliefs has been documented as important consideration for principals when creating expectations and planning professional developments (Anthony, 2012; Hutchison & Reinking, 2011). Research on the consistency between teachers' and principals' beliefs might yield results that could help administrators when implementing new initiatives.

Potential for increased family engagement. Teachers and the principal discussed ways they were integrating new literacies and how they were sharing the presentations and information with families through the school and classroom website. This study did not focus on family engagement; yet, the responses showed promising potential on how to bridge the home-school connection. The principal in this study invited the community to attend technology POWER classes with the students. Recent research described how new literacies can be integrated in classrooms as young as first grade through Family Message Journals (Seeger & Johnson, 2014). Further research focused on new literacies and family engagement might show how schools can use technology integration in the classrooms as a way to increase family involvement.

Hiring practices of principals. This study included one teacher hired immediately after graduating from college without any teaching experience. It would be insightful to learn more about the hiring practices of principals in schools integrating new literacies and what qualities principals look for in teachers when they hire new staff.

Influence of new literacies on student achievement. The role of the principal influencing student achievement has been documented (Waters et al., 2003). Throughout this study, the researcher was present in the school, and was able to see evidence of students integrating new literacies through research projects and presentations. Student achievement was outside the scope of this study, but determining a link between the participation in new literacies and student achievement might provide insight into how new literacies impact student achievement.

Concluding Thoughts

This study provides a deeper understanding of the many components involved in the leadership of a Title I school with classroom teachers integrating the new literacies of online research and comprehension. By focusing on both the importance of students learning 21st century skills and the importance of supporting teachers through a culture of trust and professional growth, the principal at Oak Hill Elementary was a leader in technology integration and the implementation of new literacies.

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Appendix A

Teacher Questionnaire to Calculate Teachers' Level of New Literacies Integration

Activities	Never (0)	Infrequently (1)	Once a Month (2)	Weekly (4)	Daily (5)
Students use the Internet for research to answer questions.					
Students use the Internet for writing (blogs, message boards, etc.)					
Students are locating information on the Internet (using search engines such as Google).					
Students evaluate the information they find on the Internet to make sure it is reliable and that it is from a credible source.					
Students use multiple sources of information when they are conducting online research.					
Students summarize their online research.					
Students communicate their online research results using technology (for example iMovie, PowerPoint, YouTube, blogs, apps, etc.)					
Students collaborate with peers when working on research projects involving online resources.					