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Abstract

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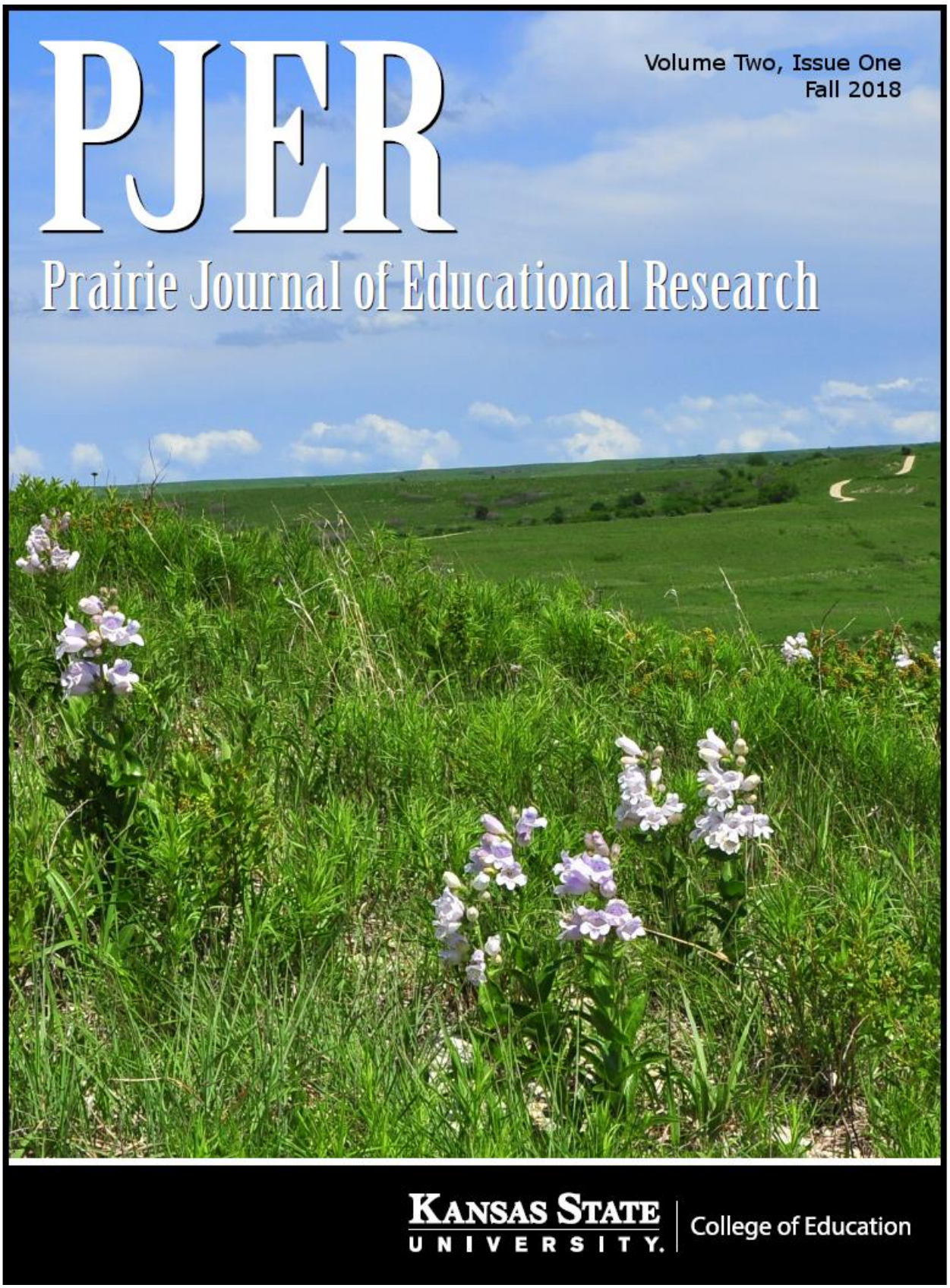
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Table of Contents

Welcome from the Managing Editors

Hello, and welcome to the second issue of the *Prairie Journal of Educational Research* (PJER). After an extended period of submissions, revisions, and an editorial transition, we are excited to present the second issue of the journal. The editors have selected three articles for this volume, exploring the experiences of three doctoral students in different areas of education. *English* explores the power of Project-based Learning in a high school American History course. Students wrote original histories of the Vietnam War while collectively raising money to fund an Honor Flight for a Vietnam veteran. *McCutcheon, Sponberg, Pazmiño, Murry, & Herrera* examine the work of a graduate student in exemplifying levels of the Accommodation Readiness Spiral (ARS). Utilizing evidence from the participant, the authors consider how the ARS framework can be utilized in working with culturally and linguistically diverse (CLD) students. Finally, *Stegman* investigates the role of school leadership in the adoption of new literacies in Title I schools.

We would like to thank those who assisted in the creation of this second issue of PJER. Firstly, those who submitted articles for consideration and the authors who showed flexibility and perseverance throughout the review process. Secondly, to the reviewers who gave their time and talents in providing feedback to the authors. The review process ensured the quality of PJER as a journal and assisted the authors, students in the College of Education, in improving their writing. The team at New Prairie Press provided extensive help during the transition, providing quick answers to questions about publication and the web server. Lastly, we would also like thank the previous editorial team, namely Paul Maxfield, in assisting with the transition and providing direction to the new editorial team.

A major thanks should be noted to the work of Dr. Kenneth Hughey, who took over executive editorial duties during the transition. Without his time, guidance, and support it is unlikely that the second issue of PJER would have made it to publication.

Sincerely,

PJER Managing Editors;
Seth Lickteig and Xinran Wang

Utilizing Project-Based Learning to Increase Engagement and Performance in the High School Classroom

Alan English

Project-based learning was incorporated into a high school American History course unit where students were expected to write an original history of the Vietnam War based exclusively on primary sources. Throughout the school year, students working as a collective unit worked to raise funds at school events for the purpose of surprising a class guest speaker, a Vietnam veteran, with a sponsored flight to Washington D.C. through Kansas Honor Flights. In addition to creating an experience of civic participation, student engagement (as measured by rate of completion of the project) and performance (as measured by average grade on the project) were tracked. Statistically significant improvements with a moderate effect size were found in student engagement as compared to previous school years. No statistically significant improvements in student performance were demonstrated. Results support previous literature linking project-based learning to increased student engagement but potentially indicate that student performance is best manipulated by an alternative mechanism.

Introduction

As a former high school teacher, my greatest struggle with student outcomes was not with inability but disengagement. When students failed my class, it was all too often not because of low scores on a multitude of assignments or inability to grasp key concepts. Rather, it was because far too many assignments were never handed in, far too many classes were missed, or a student lacked the engagement to put forth a legitimate effort. It was my observation that many of these students struggled to see a purpose in the education being offered to them or meaning to their attendance in school. My experiences as a high school teacher are not in isolation. In fact, it has been indicated that, "40 to 60 percent of high school students are chronically disengaged; they are inattentive, exert little effort, do not complete tasks, and claim to be bored" (National Research Council, 2004, p. 18). Additionally, Larson (2000) described America's youth as displaying "boredom, alienation, and disconnection" (p. 170). What's more, the stakes of improving student engagement are high. Marks (2000) reported, "Students who are engaged with school are more likely to learn, to find the experience rewarding, to graduate, and to pursue higher education" (p. 154). Indeed, educators, education reformers, and anyone concerned with youth development cannot afford to ignore student engagement. Larson (2000) stated, "A central question of youth development is how to get adolescents' fires lit, how to have them develop the complex of dispositions and skills needed to take charge of their lives" (p. 170). As a high school teacher, this is perhaps the most central issue for which I sought a solution.

One potential solution to this chronic problem of student disengagement is project-based learning (PBL). While there is no universally accepted definition of PBL, one commonly-cited list of criteria of PBL is that of Gijbels, Dochy, Vanden Bossche, and Segers (2005):

1. Learning is student-centered.
2. Learning occurs in small student groups.
3. A tutor is present as a facilitator or guide.
4. Authentic problems are presented at the beginning of the learning sequence,

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before any preparation or study has occurred.
5. The problems encountered are used as tools to achieve the required knowledge and the problem-solving skills necessary to eventually solve the problems.
6. New information is acquired through self-directed learning (pp. 29-30).

Whatever definition used, broadly speaking, PBL aims to give students more direct control over their learning experience by presenting them with authentic problems that they and their peers are collaboratively responsible for finding solutions. The aim of this paper is to demonstrate the application of a civic participation-themed PBL in a high school American history classroom and assess with a quasi-experimental design the effectiveness of the PBL in improving student behavioral engagement and student performance.

Literature Review

Defining Engagement

One of the most challenging aspects of studying student engagement is determining precisely what behaviors constitute a demonstration of engagement or disengagement. Furthermore, not all engagement is created equally. Engagement among students has been shown to be multifaceted in nature. One of the most common methods of dichotomization of engagement in an academic context is into the categories of behavioral, emotional, and cognitive engagement (Fredricks, Bluemenfeld, & Paris, 2004). Behavioral engagement is demonstrated by involvement, attendance, and effort in classroom activities (Fredricks, 2011). Most notably to this study, behavioral engagement has been previously measured by the completion of academic assignments (Connell, Spencer, & Aber, 1994; Finn & Rock, 1997; Fredricks et al, 2004). Emotional engagement includes prevalent positive emotions such as belonging, happiness, and interest as opposed to negative emotions such as isolation, anxiety, or boredom. Finally, cognitive engagement is defined as a willingness to put forth cognitive energies to understand complex ideas (Fredricks, 2011). Due to the multifaceted nature of student engagement, isolating factors that can demonstrate an influence upon engagement can prove problematic. This study, however, will emphasize behavior management and its role in completing assignments within a class.

Benefits of Project-Based Learning

Project-based learning (PBL) has been tied to a host of educational benefits. For example, PBL courses have demonstrated higher test scores in an Advanced Placement U.S. Government and Politics (Parker et al., 2013), science (Geier, Blumenfeld, Marx, Krajcik, Fishman, Soloway, & Clay-Chambers, J, 2008), and college entry-level chemistry (Barak & Dori, 2004). PBL has also demonstrated improved content knowledge and retention in a high school economics course (Mergendoller, Maxwell, & Bellisimo, 2006) as well as a master's level teacher education course (Garcia, 2016). PBL has been demonstrated to promote greater tolerance in diverse classrooms (Voronchenko, Klimenko, & Kostina, 2015). Additionally, in survey data collected in a graduate level PBL course, students demonstrated improved "responsibility, problem solving, self-direction, communication, and creativity" (Wurdinger & Qureshi, 2014, p. 283). In the same study, however, students demonstrated no benefits in "time management, collaboration, and work ethic" (Wurdinger & Qureshi, 2014, p. 283). Collectively, it can be seen that PBL represents a promising teaching methodology that justifies further research into its potential benefits.

Targeting Engagement through Project-based Learning

Although my teaching experiences and literature (National Research Council 2004; Larson, 2000) would indicate that student disengagement is a significant problem in America, engagement has also been shown to be a malleable quality that can be improved with effective instruction (Fredricks et al, 2004; Lerner, Almerigi, Theokas, & Lerner, 2005). It would seem logical that PBL, a strategy that specifically aims to increase the degree of student involvement in solving authentic, meaningful problems, would lead to increased student engagement if implemented effectively. Nevertheless, the data linking PBL's ability to improve student engagement is yet in its developmental stage. Several scholars have given theoretical support to giving students greater independence and authentic work in schools, a centerpiece of PBL, in order to increase engagement (Fredricks, 2011; Fredricks et al, 2004; Larson 2000; Marks, 2000). Lattimer and Riordan (2011) provided antidotal evidence of High Tech Middle School, a charter school which emphasizes project-based learning, leading to increased student engagement through practical, authentic project in all subject areas. Overwhelmingly, the content areas that had been able to produce the most promising data regarding PBL's potential to increase student engagement are science, technology, engineering, and mathematics (STEM). This is not surprising because PBL is most associated with STEM classes (Duke, Halvorsen, & Strachan, 2016). In STEM classes, PBL has been able to demonstrate increased student engagement (Chu, Minasian, & Yi, 2012; Holmes & Hwang, 2014; Robinson, 2013; Zhang, Peng, & Hung, 2009). While these results are encouraging, greater research needs to be done on PBL's ability to increase student engagement in social science courses, such as history. Additionally, greater attention is needed in differentiating between behavioral, emotional, and cognitive engagement among students (Fredricks et al., 2004).

Background

In 2010, I had the opportunity to attend the National Council for the Social Studies Conference in Denver, CO. Among the many excellent speakers I was able to see over the weekend was Dr. Eric B. Freedman. Dr. Freedman presented on a unit of instruction he had created on the Vietnam War and had based his dissertation upon. In the unit, students were asked to create an original textbook on the Vietnam War based exclusively on primary sources provided by the instructor. By creating their original history on the Vietnam War, they were simulating the work of historians. For a complete account of Dr. Freedman's original unit, see Freedman (2015). I was immediately impressed because of the potential I saw for creative and rigorous work with primary sources as well as an appreciation for the history-making process, the work of professional historians. I used an adapted version of Dr. Freedman's work as a focal point of my high school American History course for the last seven years.

Vietnam Textbook Project

In my unit adapted from Dr. Freedman's, students were presented a series of primary sources (see table 1). My choice of sources, which varied slightly from year to year but remained constant within the years included in this study, admittedly gave an American emphasis to the Vietnam War. This was not out of a desire to skew the unit toward an exclusively American perspective but rather out of recognition of content covered by the same students with my colleagues the previous year in their World History course. In retrospect, a more global perspective of the Vietnam War could have been taken, although at the time of this

study, I decided it necessary to keep the primary source selection consistent, as to not introduce unnecessary extraneous variables.

Table 1
Vietnam Textbook Project Documents

Document	Date
The Final Declaration of The Geneva Conference: On Restoring Peace in Indochina	July 21, 1954
Thích Quảng Đức Photograph/Dept. of State Telegraph on Ngo Dinh Diem	June 11, 1963/ August 24, 1963
Tonkin Gulf Resolution	August 7, 1964
Dean Rusk NBC Interview Excerpt	August 5, 1964
Lyndon Johnson/Robert Anderson Phone Conversation Excerpt	August 3, 1964
McGeorge Bundy Memo to Lyndon Johnson Excerpt	January 6, 1964
Lyndon Johnson Speech on Vietnam Excerpt	July 28, 1965
Richard Nixon Silent Majority Speech Excerpt	November 3, 1969
John Kerry Senate Hearing Excerpt	April 22, 1971
Martin Luther King Jr. Speech at Riverside Church Excerpt	April 4, 1967
A Marine's Guide to the Republic of Vietnam Excerpt	May, 1968
"Dear America: Letters Home from Vietnam"	1987
Treaty of Paris Excerpts	January 24, 1973
Vietnam Veteran Guest Speaker	**No Date**
Fall of Saigon News Coverage – NBC and BBC	April 30, 1975
What Should We Tell Our Children About Vietnam? Excerpts	1988

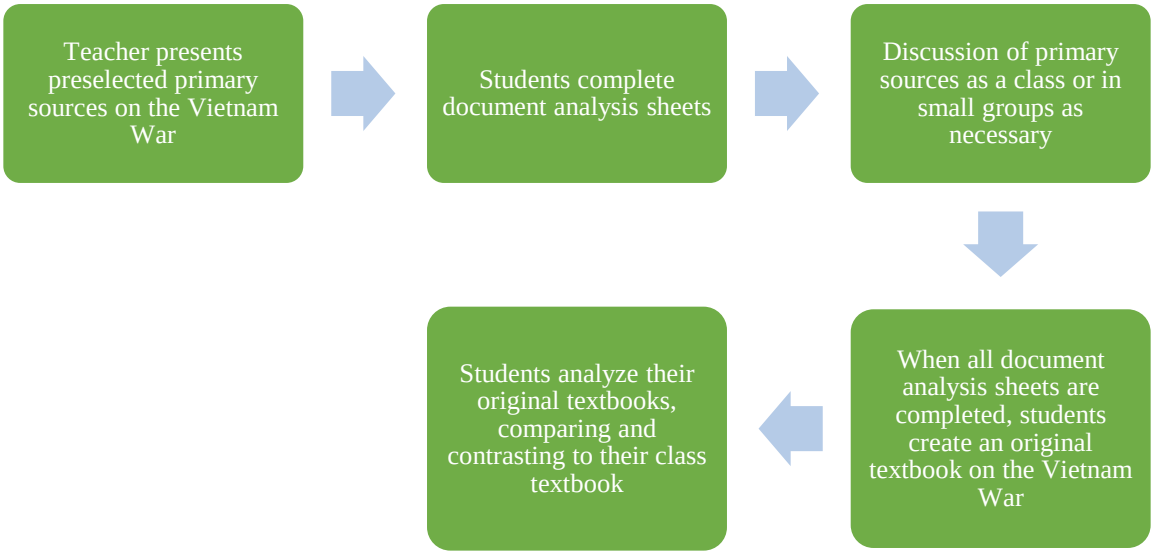
Note. The Vietnam Veteran Guest Speaker primary source is bolded for emphasis. Vietnam veterans came to speak to my classes every year the project was conducted, however, it only included a project-based learning experience during the 2016-2017 school year.

Additionally, I am aware that my definition of "primary" source is taken a bit liberally, particularly with the documentary, "Dear America: Letters Home from Vietnam". The video is based around a compilation of letters written by American Vietnam servicemen and servicewomen. Consequentially, my students watched the video as a convenient, efficient, and student-friendly substitution for reading dozens of letters. In many years, when students were absent the day of our class viewing of the video, I provided transcripts of several of the letters presented in the video. It was a seamless substitution, the only downside of which was that absent students reading the texts were exposed to less letters and therefore less content. Additionally, the video is of sufficient quality to justify its use in a unit of otherwise more "pure" primary sources. Finally, in two cases, I chose to combine two primary sources: first the Thích Quảng Đức photograph and Department of State Telegraph on Ngo Dinh Diem and secondly the NBC and BBC broadcasts of the Fall of Saigon. This was again done for efficiency's sake. In the case of the former, it was also done so that I could more directly show the relationship between the two documents. Protests against the Diem government due to its corruption were an important factor in the American government's reconsideration of its support for the Diem regime.

For each primary source, students were asked to complete a document analysis sheet, see Appendix A. It has been abbreviated only by reducing the spaces for students to write. This form, along with class discussion, encourages students to engage in the historical thought process about a document's perspective, bias, and message as well as its usefulness or limitations in the history-making process. Upon completion of their primary sources and document analysis sheets, students had compiled a large amount of data on the Vietnam War. Their greatest challenge was then deciding how to prioritize and organize that wealth of information. Students were asked to create a three-page textbook of the Vietnam War in a digital format. Each textbook was an original history of the Vietnam War with few limitations placed upon the students other than the inclusion of three pictures. Students were able to use any approved computer program, arrange their textbook in any fashion they found to be of the greatest historical effectiveness, and emphasize any aspect of the War they saw fit. Because of the limitation of three pages, however, students were forced to make difficult decisions about what to leave out or how to abbreviate.

Upon completion of the project, students were able to reflect on their history-making experience and use it to critique their classroom's textbook. This stage of the project offered perhaps the most fulfilling lessons for me as a teacher to watch my students realize. Once they had created an original textbook, students were able to realize the limitations of textbooks in general. They were able to see that textbooks are often forced to give limited coverage of important aspects of history. Finally, they received a basic introduction into being a critical historian, a creator, and a critic of history rather than a retainer of it. See figure 1 for a visualization of the textbook project from 2014-2016 school years.

Figure 1. Vietnam Textbook Project 2014-2016 School Years



Kansas Honor Flights Service Project

For several years, I was largely satisfied with my adapted version of Dr. Freedman's unit. I had overseen many students create content rich, professional looking textbooks. During the 2016-2017 school year, however, I decided that I could be successful at a higher level and with a higher purpose. In an effort to decrease the number of students who became disengaged and did not complete the assignment, I decided to imbed a project-based learning experience. As noted in table 1, I had been privileged to have had a number of Vietnam veterans come to my class and

share their experiences, stories, and insights with my students. Every year I had taught the Vietnam textbook assignment, I incorporated these guest speakers as one of our primary sources. It was always a highlight of the year. Our "authentic problem" (Gijbels et al., 2005, p. 30) presented in our project-based learning experience was to fund raise to surprise our Vietnam veteran guest speaker with a flight to Washington, D.C. through Kansas Honor Flights.

Kansas Honor Flights is an organization whose sole purpose is to raise funds to fly Kansas veterans to Washington, D.C. to visit memorials, meet representatives, and experience other points of interest as a small demonstration of gratitude toward those who served our nation. I first became familiar with Kansas Honor Flights when my grandfather-in-law, a Korean War veteran, was fortunate enough to be able to participate in a Kansas Honor Flight. Focusing on our oldest veterans, they are currently transitioning from primarily servicing World War II and Korean War veterans to Vietnam veterans. When I had the opportunity to meet my grandfather-in-law and the rest of the participants in that particular Kansas Honor Flight for their arrival flight, I was impressed by the mission and grassroots nature of the organization. It was not until after later reflection that I decided that an excellent project experience for my students would be to work to raise funds to sponsor our guest speaker for the year to participate in such a Flight.

The fund-raising project would take the entire school year with admittedly bold goals. I sought to facilitate a meaningful experience of civic participation through project-based learning. Additionally, I planned to study the impact of project-based learning on student behavioral engagement (as measured by rate of completion of the project) and student performance on the project (as measured by average percentage grade on the project). Because our guest speaker was a primary source in our Vietnam textbook project, our project-based learning experience was engrained into our class curriculum. While I had given the general structure of the project, much of the decision making and control of its ultimate success or failure was up to the students.

I first contacted my building principal who was immediately supportive of the project. Next, I contacted Kansas Honor Flights. They were not only open to but excited about my potential class project and interested in helping any way they could. I then contacted our building's athletic director about potential school-related fundraising opportunities. I was able to obtain opportunities for students to work tailgate events for our home football games in the fall and concession stand events for four track events in the spring.

Early in the school year, I presented my plan to my students. While they must have been taken aback by their new teacher introducing an unconventional class project, they were for the most part excited. I discussed each of the project committees I had created and told them that after I was able to discuss it with all of my classes, I would allow for open signups. Committees included grant writers, who would apply for a small grant through a local educational foundation; poster advertising, which would construct our physical advertising for the project; poster setup/tear down; social media advertising; and workers for the actual fundraising events. For all Kansas Honor Flights, in the weeks leading up to a flight, family members of the veterans are discreetly contacted and asked to write letters of thanks to the service men and women. To fulfill this aspect of the flight for our guest speaker, I created a committee of letter writers who would write to our veteran guest speaker and express our collective gratitude. I created committee chairs for several of the committees who acted as liaisons between the committee and myself and leadership within the committee. At the time, I decided that some of the committees were too small to justify a chair. All positions including committee chairs were entirely voluntary, but involvement in the project was an expectation of the class. See figure 2 for a visualization of the Vietnam textbook project for the 2016-2017 school year.

Figure 2. Vietnam Textbook Project 2016-2017 School Year

Method

Participants

All students involved in this project were enrolled in my American History course in the same Midwest urban high school. The overwhelming majority of students were juniors (age 16 or 17) with an occasional student taking the course a second time as a senior. The Kansas State Department of Education (2016) reports that through the years of the study, the school student population averaged approximately 1000 students. The free/reduced lunch rate averaged approximately 60 percent. The race/ethnicity breakdown averaged approximately 65 percent White, 18 percent Hispanic, 5 percent African American, and the remaining classified as "other." During the years of this study, no significant demographic changes to the school occurred.

Research Design

This study consisted of a quasi-experimental research design. The control group consisted of my students from the 2014-2016 spring semesters (n=302) who completed the

Vietnam textbook project but without a project-based learning experience. The experimental group was my students from the 2017 spring semester (*n*=70) who participated in the project-based learning experience. While this study lacked randomization, the cornerstone of experimental research, quasi-experiments if well-designed can be powerful research models, particularly in educational settings where randomization is not possible or appropriate (Schneider, Carnoy, Kilpatrick, Schmidt, & Shavelson, 2007). In my case, as a practicing high school history teacher with no control over my rosters from one year or even class to another, randomization would have been problematic or impossible. Furthermore, including certain groups of my students in a given year in the project-based learning experiment while excluding others would have likely made for a toxic environment in the control group classes and further introduce extraneous variables, thereby calling the validly of the randomization into question.

While I had assigned the Vietnam textbook project since 2011, only three years of control group were included in this study. This was in order to control extraneous variables such as improved instruction after having taught the project for several years and that I began teaching in a "class within a class" setting in 2014. This added a significant special education population to my classes and changed the teaching environment with my co-teacher also providing instruction. From 2014-2017, the textbook project remained nearly identical with no known significant changes to student population.

I tracked two dependent variables. First, student performance was measured by percentage grade of completed textbook projects. Scores for all groups were calculated by a class rubric, consistent for every year of the study. See appendix B for a copy of the project rubric. While an identical rubric was used for all students involved in this study, it was not a validated instrument. This study represents the utilization of previous school years' data in the Vietnam textbook unit and the introduction of project-based learning into the current year. Because of this structure, it was deemed necessary to keep the textbook project as identical as possible (outside the introduction of project-based learning). Consequentially, the previously-used rubric was retained. In that spirit, efforts were made to be consistent to the rubric, particularly in terms of expectations of the experimental group as compared to the control group. While the rubric for the textbook project lacked validation, it was my (as a classroom teacher rather than researcher) attempt to measure students' achievement in the creation of a complete, accurate, logical, and cohesive representation of the Vietnam War, expectations that remained consistent throughout all groups involved in the study. The second variable tracked was student behavioral engagement. This was measured by the straightforward measure of completion rate of the textbook assignment.

Results

This study had an 80.5% participation rate. While high school students proved problematic to get to complete a consent form and return it, considerable efforts were made to include as many of my students into the study as possible. Although they were not available yet, parents that came to parent-teacher conferences were alerted ahead of time that the consent forms would be coming. Students were given the forms and reminded of them daily. After approximately two weeks, all parents who had not yet signed a consent form were emailed. Parents that did not respond that week were then called as a reminder. Finally, another email was sent, this time to students, reminding them of the consent form.

Student Engagement

In order to quantify student engagement, the rate of completion of Vietnam textbooks was tracked. Students in the 2017 (experimental) group completed their textbook at a 12% higher rate than the 2014-2016 (control) group (92.9% verses 80.8%). In order to put greater meaning to that, an analysis of variance (ANOVA) was calculated. Because of unequal variances, the Brown unequal variance *F*-test was utilized to compare the effects of method of instruction (2014-2016 verses 2017) on rate of completion (Klockars, 2010). A statistically significant effect was found at the $p < .05$ level, [F (1, 152.78) = 9.853, p = 0.002]. Furthermore, the Cohen's *d* effect size was .361. This demonstrates that with a moderate effect size, students in the 2017 spring semester were statistically more likely to complete their textbooks than their peers in the 2014-2016 spring semesters.

Student Performance

Student performance was tracked by percent grade on the project-based on the project rubric. In order to avoid the influence of a change in student engagement (completion of the project), all zeros were removed from the data for this analysis. This way, only students who completed the project were compared. An analysis of variance (ANOVA) was used to compare the effects of method of instruction (2014-2016 verses 2017) on student performance (Klockars, 2010). Statistically significant results were not found at the $p < .05$ level, [F (1, 307) = 0.051, p = 0.82]. This means that students in the 2017 spring semester did not show statistically significant improvement in their performance on their textbooks than their 2014-2016 spring semester peers. It should be noted that the experimental group increased their average score compared to the control group by a very small, insignificant degree (70.2% average grade in the control group, 70.8% in the experimental group).

Discussion

These results suggest that incorporating project-based learning into course work can increase student behavioral engagement. This supports the growing body of literature indicating PBL's usefulness in increasing student engagement (Chu, et al., 2012; Holmes & Hwang, 2014; Robinson, 2013; Zhang, Peng, & Hung, 2009). Still, current inconsistency of both measurement of engagement and differentiation of the multiple facets of engagement (behavioral, emotional, and cognitive) make placing this study in the context of existing literature problematic. Still, otherwise disengaged students seem to benefit from PBL.

This study was not able to demonstrate improved performance on the class project with the introduction of PBL. While a number of studies have been able to demonstrate a positive impact of PBL on student performance, (Barak & Dori, 2004; Garcia, 2016; Geier et al., 2008; Mergendoller et al., 2006; Parker et al., 2013), most of this existing literature measured performance and/or knowledge retention as a test rather than a project that was embedded into the project-based learning experience. Despite the inability to demonstrate an association between PBL and student performance, it is worth nothing that student behavioral engagement demonstrated improvement without sacrificing student performance. In other words, this study demonstrated that more of my students completed their assignment but at the same average quality of previous years.

Implications and Conclusion

This study was able to demonstrate a significant increase in behavioral student engagement with the implementation of PBL. These results confirmed much of existing

literature that through creating an engaging experience aimed at a collective, worthwhile, authentic goal, students will be more engaged and inclined to complete academic work. It was not able, however, to demonstrate a significant increase in student performance. It should be noted that this study lacked a validated instrument to measure student performance and should therefore not be interpreted to negate the work of previous studies linking PBL to student performance.

As the classroom teacher that implemented the PBL experience, I was not surprised by these positive results linking PBL to increased behavioral engagement. Throughout the unit, I felt as though my students were engaged in a way I had not previously experienced. Time after time, I was impressed and humbled by seeing high school teenagers, perhaps at times the most difficult possible population to engage, truly seeing meaning in this project. I saw this when my poster-making committee decided to meet at a local coffee shop to make posters on a weekend. I saw this when one student, who transferred from my class after the fall semester and was therefore unable to complete her obligation to the project, approached me and asked if she could work a concession stand event just to help the cause. I saw this when a group of students were crying in the front row the day of our veteran guest speaker's presentation when I was about to surprise him with his sponsored flight. I saw this with the attentiveness with which my students listened to me read the local newspaper article that had been written about our project. Finally, I saw this in the resistance my students gave me when I suggested opening our guest speaker event to other classes in the school. As one student put it, "If they want a guest speaker, they can put in the work we did." Although the spirit of this comment was a bit more selfish than I would like out of my students, I can't imagine that any teacher has ever seen this sense of ownership, engagement, and class unity from students who have been assigned worksheets. My only question was if this increased engagement which I perceived based on my experience as a classroom teacher would lead to more students completing the assignment. This study indicated that it can.

This is not to say the project went perfectly. First, any teacher would love to improve student performance in addition to engagement. This study was not able to achieve this. Additionally, the structure of the project itself was imperfect. If I were to recreate it, I would create a committee chair for every committee. At the time of creating the committees, it did not seem necessary to give some of the smallest committees a chair. Several committee chairs, however, seemed to thrive when given a sense of leadership. I would have loved to have given this opportunity to a few more of my students. If given the chance, I also would do a better job at brainstorming with the social media committee. My intention was to give the committee considerable freedom, responsibility, and the sense of an authentic problem to solve. This was based on best practices by current literature (Fredricks et al., 2004; Larson, 2000; Marks, 2000). In my case, this was perhaps in error. The social media committee proved ineffective, uninspired, and unmotivated; the end result of which was the replacement of the committee chair. Had I given more direction and leadership to the committee, this potentially could have been avoided. Finally, I would have found more for my grant writing committee to do. The grant writing process proved very simple, and those students ultimately put in considerably less work than their peers in other committees. Those flaws considered, the project was a success, one that I hope other teachers are inspired to emulate, and the source of greatest pride in my secondary education career.

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Appendix A
Abbreviated Document Analysis Sheet

Name _____

Document Analysis Sheet

Document: _____

Author/Creator: _____

Type of document (diary, photograph, speech, etc): _____

Date the document was created (if known): _____

Who is the intended audience? _____

What is the purpose of the document? _____

How might the author's identity, intended audience, and the document's purpose affect what was written or depicted? _____

Give an overall summary of what the document is saying or showing: _____

How much space in your 3 page history of the Vietnam War does this author's perspective merit? (This is not binding but rather for the purpose of getting you to think about each source's importance)

1 2 3 4 5

Justify your answer: _____

Appendix B
Vietnam Textbook Project Rubric

Completeness of the Vietnam War Story					
0 Student does not tell the Vietnam War story in any meaningful way	**5** Student has some but little historical information	**10** Student has told the Vietnam War story but with several major gaps	**15** Student has told the Vietnam War story but with a few major gaps	**20** Student has told the Vietnam War story but with a few minor gaps	**25** Student tells a complete story with no significant historical gaps.
Use of a Variety of Sources					
0 Student uses no primary sources in any logical, historical fashion.	**3** Student has used a few sources only	**6** Major gaps exist in the student's use of sources	**9** Minor gaps exist in the student's use of sources and/or the student has unsuccessfully woven the sources together	**12** Student has largely woven the sources together in a logical fashion, but minor gaps may exist	**15** Student has creatively woven the primary sources together. All sources are used or any unused sources are for a clear, logical reason
Proper Formatting					
0 No clear effort to format paper was made (grammar, spelling, punctuation, 3 pages, 3 pictures, etc.)	**2** Many significant formatting errors (grammar, spelling, punctuation, 3 pages, 3 pictures, etc.)	**4** Several significant formatting errors (grammar, spelling, punctuation, 3 pages, 3 pictures, etc.)	**6** Many minor formatting errors (grammar, spelling, punctuation, 3 pages, 3 pictures, etc.)	**8** Only a few minor formatting errors are present (grammar, spelling, punctuation, 3 pages, 3 pictures, etc.)	**10** No significant formatting errors (grammar, spelling, punctuation, 3 pages, 3 pictures, etc.)
Completed Document Analysis Sheets					
0 None completed	**3** 1-5 completed	**6** 6-9 completed	**9** 10-12 completed	**12** 13-15 completed	**15** All 16 completed
Visual Appeal of Textbook					
0 Textbook looks sloppily done	**2** Major reformatting of the	**4** Reformatting of the textbook's	**6** Major errors exist that keep the textbook	**8** Minor errors exist that keep the	**10** Student clearly took pride in

and/or unacceptable	textbook's appearance is needed	appearance is needed	from appearing professionally done	textbook from appearing professionally done	creating a professional-looking textbook
Proper Use of Class Time					
0 Student refused to work in class	**1** Student accomplished little work in class	**2** Student required many major redirections in class	**3** Student required major redirections in class	**4** Student required only minor redirection in class	**5** Student diligently worked in class with no redirections needed

Total ___/80

Comments:

Case Study of the Accommodation Readiness Spiral as an Evaluative Framework for Action Research Plans

Stephanie McCutcheon, Erica Sponberg, Judith Mena Pazmiño, Kevin Murry, & Socorro Herrera

This study utilized qualitative research to examine student work for evidence of language exemplifying the progressive levels of the Accommodation Readiness Spiral (ARS). The goal of this research is was to consider how the ARS could be utilized as a purposive framework for the assessment of professional, capacity building potential as related to a teacher's readiness for the accommodation of culturally and linguistically diverse (CLD) students. Thus, we intended to explore the question, what examples of text within ECM participants' action research plans appear to correspond to levels of the ARS if used as a framework of evaluation for professional capacity building potential? The student text used for these purposes was a culminating action research plan required for graduation in a master's program in education. The topic of the project was unique to each student but was constrained to addressing a social/educational issue in their home country and preparing an action research proposal capable of exploring such an issue, including their role as an advocate for the marginalized population. The findings of content analysis conducted on one such proposal indicate the utility of this six-level theoretical framework for analyzing readiness within scholarly work. The particulars of even the most complex levels appeared to organize the author's thinking about challenging aspects of the action research plan. Such scaffolding may prove especially beneficial for teacher preparation programs and professional development for practitioners in areas related to teaching CLD students, reflective practices regarding teacher perception, and the role of an educator as an advocate.

Introduction

A variety of educational reform initiatives spearheaded by the Ecuadorian government since 2007 are aimed at enhancing teachers' qualifications and readiness to provide high-quality differentiated instruction. In 2013, such goals prompted the funding of the inaugural cohort of 43 Ecuadorian master's students at Kansas State University (KSU). In response to the diverse challenges facing Ecuadorian teachers, the Ecuadorian master's (ECM) program at KSU was developed to bolster participating teachers' capacities for biography-driven, culturally responsive teaching, content and language acquisition strategies, and action research on theory-into-praxis applications in the classroom and community. Associated service learning, as well as field and practicum experiences were designed to ensure the immediate applicability of strategies, theories, and concepts to the context of classroom teaching and community service in Ecuador.

Among essential outcomes of the ECM program was an individualized, action research plan, applicable to the ECM participants' professional practice or sphere of influence in Ecuador. Necessarily, each plan (at minimum) incorporated: (a) an annotated and targeted literature review, (b) one or more purposive research questions, (c) information on site and sample, (d) information on the research methods to be employed, (e) an explication of data collection to be completed, (f) detail on data analyses to be completed, (g) applicable criteria for trustworthiness of the research, and (h) plans to disseminate findings/outcomes of the research. Since the action

research plan was intentionally designed for implementation in-country, it was not possible for participants to conduct their research during the KSU program, or for KSU faculty to evaluate the efficacy of the plans in situ. Nevertheless, the action research plans accomplish more than a singular research purpose.

Lewin (1946) argued that action research is as much about *action learning* as it is about a new perspective on social research. Elliot (1991) asserted that knowledge production and utilization are subordinate to and conditioned by the *improvement of teaching practice* through planning for and conducting action research. Action research broadens the professionalism of teachers by presenting opportunities to participate in educational research and curriculum theorizing. Today, action research has evolved toward a socioconstructivist model that places as much emphasis on educative and professional capacity building purposes for teacher researchers as it does on the discovery and data building processes of the act itself. The socioconstructive perspective (e.g., Matsumura, Slater, & Crosson, 2008; Palinscar, 1998) maintains that learning and capacity building are social processes through which individuals construct knowledge and perspectives in tandem with interactions involving significant others in the social milieu. Accordingly, recent reconceptualization of the phenomenon has variously featured a wide variety of capacity-building emphases for the researcher, including: knowledge building, professional development, critical thinking, differentiation of practices for cultural and linguistic diversity, and advocacy (MacDonald, 2012; Ryan, 2013). Thus, within the EMC program these capacity building emphases play an important role in the design of curriculum and instruction for master's students. However, a framework for comprehensive evaluation of such personal development in abstract areas has proved difficult. This research explores the use of a purposive framework that aligns with the capacity building emphases previously mentioned.

Theoretical Framework

The *Accommodation Readiness Spiral* (ARS) is a framework developed by Murry and Herrera (2005) that emphasizes six levels of teacher readiness for differentiated practice with culturally and linguistically diverse (CLD) students (Herrera & Murry, 2014). This article introduces a case study from the ECM program wherein the ARS, as a purposive framework, is applied to analyze an action research report in order to evaluate students' level of accommodation readiness. Accommodation in this sense refers to the teachers' capacity to appropriately and situationally differentiate her/his practices for the multiplicity of both assets and needs that CLD students bring to instruction. Readiness is the current product of ongoing capacity building for six levels of differentiated professional practices. These six levels of professional readiness are presented in Figure 1.

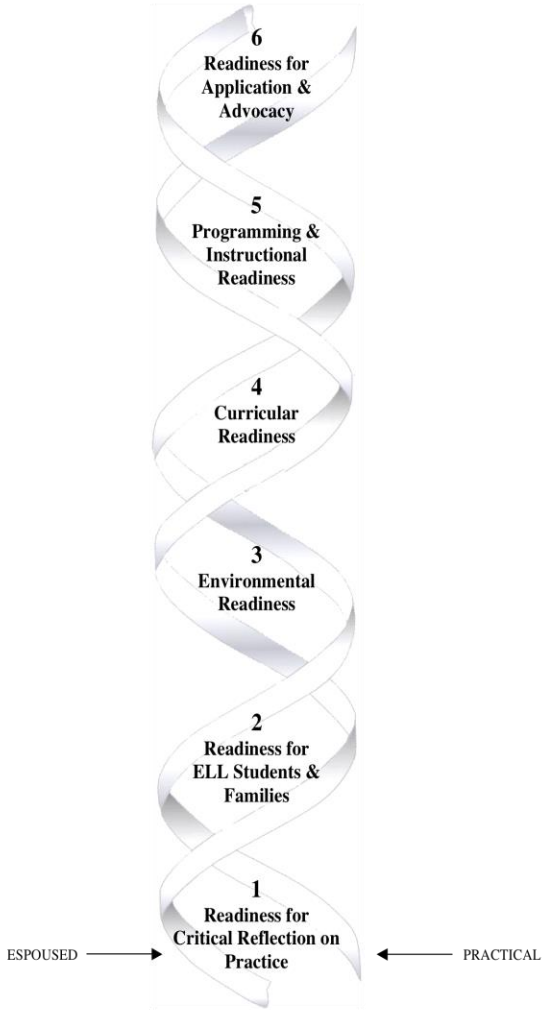

Figure 1. Accommodation Readiness Spiral. Reprinted from *Mastering ESL and bilingual methods: Differentiated instruction for culturally and linguistically diverse (CLD) students*, by Authors S. G. Herrera & K. G. Murry, 2014, Boston: Pearson. Copyright [2014] Pearson Education. Reprinted with permission.

The ARS is pictured as a double helix (Figure 1). The levels are hierarchical, as capacity building is considered progressive. Therefore, advancement from the first level of the helix, *Readiness for Critical Reflection on Practice*, to the second level, *Readiness for CLD Students and Families*, requires mastery of level one. Subsequently, each level is essential preparation for the next. However, movement along the levels is not necessarily continuous and regression to prior levels is possible. Herrera and Murry (2014) state multi-directional movement along the spiralis possible because, "building a capacity for consistent, critical reflection on practice often requires radically different perspectives in thinking as well as a great deal of reflective practice with CLD students in the school and/or in the classroom" (p. 142). Therefore, as the practice dynamics change, the educator's capacity may become insufficient to enable effectiveness at a particular level of capacity building for best practice. In this case, the educator may (albeit temporarily) revert. Herrera and Murry (2014) explain further:

> This is so because effective and productive interactions with CLD students and families require reflection on the range of cross-cultural assumptions in which teachers may engage as they interact with individuals of a culture and situational practice contexts different from their own. Such interactions also require a capacity for critical reflection because it is one's prior socialization in a particular culture (a culture different from that of the CLD student) that is typically at the core of misconceptions and incorrect assumptions about CLD students and their family members. (p. 134)

However, as teachers learn situations of practice from their cross-cultural and cross-linguistic interactions with CLD students and families, regression along the many levels of the spiral tends to become progressively less recurrent (Herrera & Murry, 2014).

The spiral aspect of the illustration is related to the intertwining, but distinctly discrete concepts of espoused readiness and practical readiness. Herrera and Murry (2014) describe espoused readiness as a teacher's perception of their own readiness for accommodation, whereas practical readiness exemplifies their actual readiness for accommodation. Espoused readiness can be easily altered as it operates at a conscious level. With new data, or experience, teachers can gain new espoused readiness. Practical readiness is more difficult to transform as it is dependent on socialization and professional practices, some of which are so ingrained as to be undetectable; frequently, practical readiness guides action and is dependent on teachers' unrecognized assumptions and beliefs (Herrera & Murry, 2014). Thus, the difference between espoused and practical readiness is essentially thoughts versus actions. Practical readiness (actions/practices) may not correspond to espoused readiness (thoughts/beliefs), and as educators attempt to progress through the levels of the ARS it is important for their espoused and practical readiness to equally advance (Herrera & Murry, 2014). Otherwise, when only the espoused readiness advances and the practical readiness does not, the structure of the double helix of the ARS collapses.

The levels of the ARS were described originally in work by Herrera and Murry (2014). Level 1 of the ARS describes readiness to surface assumptions about practice with cultural and linguistic diversity, test the validity of those assumptions, and examine whether their origin lies in the teacher's prior socialization in a culture different from that of the student. Level 2 describes the capacity to acknowledge, assess, capitalize upon, and share those assets (i.e., value placed on education, bilingualism, cross-cultural biography) that CLD students and their family/extended family members may bring to the learning environment. Level 3 describes the capacity to pre-assess, monitor, and maximize both the internal (i.e., classroom arrangement, literacy support) and external (i.e., status of CLD students' native languages in the community, family/community involvement) environments for learning. Level 4 describes readiness to emphasize those curriculum essentials (i.e., focus on adopted curriculum, benchmarking, access to the curriculum) that are critical to the classroom success of CLD students. Level 5 describes readiness to evaluate the efficacy of programming (i.e., bilingual, dual language, ESL) for CLD students and differentiate classroom instruction for these students. Finally, level 6 describes readiness to advocate for critical facets of student rights, appropriate programming in the school, accommodative classroom instruction, authentic assessment practices, and more.

Research Question

The purpose of this research was to investigate the use of the ARS as a purposive framework for evaluation of accommodation readiness, an essential outcome of ECM programming. Therefore, the guiding question for the study was: What examples of text within

ECM participants' action research plans appear to correspond to levels of the ARS if used as a framework of evaluation for professional capacity building potential?

Methodology

Content analysis was selected as the appropriate qualitative methodology to approach the guiding question. Content analysis is commonly viewed as a qualitative mode of analysis by which analytical categories are used to construct a coding frame to be applied to data. It is typically a systematic, objective methodology couched in a positivist perspective that is primarily concerned with statistical analysis of content (Hardy, Harley, & Phillips, 2004). However, this same understanding of applying a coding frame to textual data can be applied in a qualitative sense. Qualitative forms of content analysis do not operate within a positivist perspective. They extend beyond fixed-meaning frequency counts, and include a more complex, interpretive perspective. It acknowledges the context in which the text is found, a sensitivity to the usage of words, and reflexivity regarding interpretation (Hardy, Harley & Phillips, 2004; Rossi, Serralvo & João, 2014). Such a qualitative approach is appropriate when the research outcomes surround descriptions and interpretations (e.g., researcher interpretations of participant descriptions within action research plans) (Yin, 2003). This interpretive form of qualitative content analysis is compatible with a discourse analytic approach in that they are "exercise[s] in creative interpretation that seek to show how reality is constructed through texts" (Hardy et al., 2004). The researchers' used content analysis to examine the performative links between participant language, and espoused understanding and practical readiness. The study intended to model ARS use as a framework to analyze the complexities of knowledge construction represented in student language; particularly to analyze abstract notions, unchecked biases, or readiness for the classroom.

The action research plan of an ECM participating teacher was selected primarily due to her willingness to participate in the research, but also embodies a common representative of the cohort. The ARS served as the theoretical framework from which the coding frame was formulated for data collection. The ARS paradigm guided the analyses of capacity building for practice in diverse and complex educational settings. The necessity for participant anonymity was superseded by the permission of the participant to study the text and the reciprocating inclusion of the participant as a reviewer and an author of the study.

Methods

To analyze the text, *hypothesis coding* (Saldaña, 2013) of the student's action research plan was conducted. According to Saldaña (2013), *hypothesis coding* consists of applying predetermined codes formulated from a theory. Here, the theory describing the codes is the ARS, and the six codes utilized correspond to the six levels of the ARS. Saldaña (2013) noted that this process of data collection and analysis is appropriate for content analysis, which parallels the purpose of using the ARS as a framework for understanding and evaluating student development of practical readiness for accommodation, as well as the more abstract, espoused readiness for advocacy, through analysis of action research plans.

Trustworthiness criteria are the relevant benchmarks for establishing the truth value of qualitative research (Shenton, 2004). Research design in this study targeted the trustworthiness criteria of transferability and credibility. The former was addressed through *thick description* (Korstjens & Moser, 2017) of the EMC program purpose and goals, the intent and context of the action research assignment within the program, the levels of the ARS framework, and the

systematic effort to document the context of the findings, and nature of the interpretations of discourse in relation to the theoretical framework. Credibility was established through member checking via the ECM student author of the action research plan. Such checking afforded her the opportunity to confirm or disconfirm researchers' interpretations of her vernacular.

The narrative which follows is a synopsis of the participant's action research plan. This annotated (433-word) plan encompasses the research context, relevancy arguments, the theoretical framework, the research question, and the methodology. The student's complete version for implementation in country was a 5,023-word action plan. The annotated version is presented here to provide context for increased understanding of the analysis and findings.

Context: Participant's Abbreviated Action Research Plan

English now plays a significant role in Ecuadorian society, as it does in much of the world. The government has accelerated formal education for English acquisition, K-16. Absent, however, is such education within the prison system. Yet, research (e.g., Vacca, 2004) indicates that prisoners who participate in these programs while incarcerated are less likely to return to prison. The University of Illinois has developed a college-in-prison program, the *Education Justice Project* (EJP), that demonstrates the positive impacts of higher education upon incarcerated people, their families, the communities from which they come, the host institution, and society in general (Ginsburg, 2014). Were EJP implemented in Ecuador, well-educated, bilingual and productive citizens are likely and significant outcomes.

Therefore, action research is proposed, in a prison setting, which would emphasize the research question: How might English language instruction be implemented in an Ecuadorian prison to facilitate post-release opportunities for occupational and personal productivity and sustainability? Proposed research outcomes will target improvement in the quality of life of this group of underrepresented people, through education. The prison context for the study houses 569 inmates and is located in the capitol. About 87% are aged 18-45 years – a comparatively young target population for Ecuador.

The participant researcher for this qualitative, action research will also lead the collaborative tutoring sessions where inmates with high English language proficiency will be trained to teach their language skills to other inmates. Through session observations, the researcher will develop a full training curriculum with the lessons and academic content to be taught according to students' profiles – that is biography-driven instruction (Herrera, 2010).

Observation, as well as demographic and biographical data on the participants, will be analyzed according to repetitive coding and categorization toward the identification of themes. Coding will begin using the ETP model and will end with themes in participant voice and/or action. Selected interviews will address gaps in the data arising from initial coding. The credibility of the study will be sought through prolonged engagement -- transferability through the researcher's thick description of the study.

Potential challenges and limitation of the research include: (a) Bureaucracy -- Permits, approvals, and documentation can take considerable periods of time and patience to obtain. (b) Space and risks in the facility -- Prior fieldwork suggests that there is not a functional area to conduct instruction, observation, or interviews. This must be addressed with the Director. It will be essential to follow security protocols inside the prison. (c) Altruism -- The researcher must explore what economic incentives will be sufficient to obtain the necessary cooperation and assistance, when creating and using the *budget for this study*.

Thematic Research Outcomes

ARS Level 1: Readiness for Critical Reflection on Practice

Readiness for Critical Reflection on Practice is the first of the six levels of the ARS. The tenet of this level is the ability to reflect. However, reflection in this sense requires more than introspection. Herrera and Murry (2014) provide a five-step process of reflection on practice that begins with *assumption checking*, *reflection* and *critical reflection*.

First, it is important to understand how Herrera and Murry (2014) differentiate between introspection and reflection. Introspection is an examination of one's own mental state as objective but fails to examine the mental state as subjective to our background and cultural/sociological influences that are responsible for the development of our state of mind. Assumption checking not only requires introspection, but also takes it one step further by requiring the participant to consider how their mental processes have formed and in doing so what assumptions are they making in their mental processes. These added attributes, *assumption checking* (a willingness to search for potential assumptions), *reflection* (confronting assumptions and testing their validity), and *critical reflection* (validity testing focused on prior socialization) differentiate introspection as traditionally defined from the authors' understanding of reflection for the purposes of the first level of the ARS. The fourth and fifth steps of this level are *applications to personal growth* and *applications to professional development*, in effect, development of a new or altered worldview and changing actions to match the new worldview, especially in relation to improving efficacy as a professional educator.

Several findings were found to support one or more of the five steps of level one of the ARS, consider the following excerpts:

Participant excerpt 1. *However, this weakness can become a strength if that bilingualism is taken advantage of, which means that incarcerated people with this language skill, would . . ., spread their, which leads to the achievement of a successful transition from prison to employment. (p. 3)*

There is indication that the author recognizes a common assumption that bilingualism is treated as a disadvantage within the U.S. context and asserts her own assumption that bilingualism can aid in a successful transition from prison to employment in Ecuador. Understanding that there is a difference in assumptions regarding second languages or bilingualism in a U.S. context versus an Ecuadorian context indicates that she has acknowledged her own assumption as it pertains to the culture in which she participates. This is suggestive of critical reflection, i.e. validity testing focused on prior socialization.

Participant excerpt 2. *The Select Committee on Narcotics Abuse and Control (SCNAC) conducted a study to determine the uses and usefulness of prison literacy and vocational programs of 65,000 inmates in the Federal Prison System in the USA. The results of this study showed that ex-prisoners who participated in employment and vocational education programs in prison had a better chance of maintaining their jobs and earning slightly more money than similar ex-prisoners who had not participated in those programs (SCNAC, 1991). . . . Gerber and Fritsch (1993) evaluated the outcomes of the adult education programs in prison and concluded that besides lower recidivism rates in participant inmates, in contrast with those who did not participate, education programs lead to a reduction of criminal behavior, continued education after release from prison, and fewer disciplinary problems in the prison setting. (p. 5-6)*

In this excerpt she participates in assumption checking of her research hypothesis regarding the improvement of life after incarceration by developing English abilities and

promoting bilingualism as she provides empirical evidence from research in the field supporting her hypothesis and ultimately the foundation of her action research plan. Her validity testing of the critical assumptions related to her action plan exhibit reflection. The final excerpt represents her application to personal growth and professional development.

Participant excerpt 3. *In the case of Ecuador, the same pattern occurs: the access to education in prisons is scarce (Gallardo & Nuñez, 2006). Nevertheless, in December 2013, the new Ecuadorian Criminal Code was approved with a chapter related to rights and guarantees of inmates, where it establishes that the State recognizes their right to education, culture, and recreation and ensures their conditions for the exercise of these rights and the reduction of the limitations arising from the deprivation of liberty. The implementation of this section of the Code is the responsibility of the Ecuadorian National Education System, which will provide mandatory academic services to inmates: initial and basic education plus bachillerato, with a necessary adaptation of the pedagogical methodology to the special circumstances of penitentiaries (Entenza, 2012). In this context, a positive picture is shown: an open door for the development of academic programs in Ecuadorian prisons.*

Within this discourse, she illustrates personal growth and professional development as she recognizes the need for a change within her country's educational practices. These changes directly relate to educational access for prison populations by altering her perception of adequate education to include a marginalized community (personal growth). Additionally, the author suggests the possibility for enacting change under the new criminal code, which is the essence for her action research plan (professional development).

ARS Level 2: Readiness for ELL Students & Families

Level 2 of the ARS describes development of teacher professionals in acknowledging the importance of the sphere of influence affecting each student. Understanding the variety of experiences, relationships, and educational levels that students bring to school that affect learning, motivation, and academic outcomes is the main tenet of this level. Readiness at this level would be indicative of maximizing student potential by incorporating schooling with cultural and language experience into the classroom. Doing such increase instructional relevancy and student interest (Herrera & Murry, 2014). It emphasizes semi-structured conversations with such stakeholders (including the students themselves) to gather information, form relationships, and promote engagement (Herrera & Murry, 2014).

Participant excerpt 4. *Previous collections of general statistics about prisons in Ecuador do not show enough information for a baseline for this study. Specific data is required, such as inmates' country of origin, legal status, reasons for incarceration, levels of instruction, and language. . . . through a demographic survey including close-ended questions. (p. 10)*

Participant excerpt 5. *[Semi-structured conversations will be] concentrated on inmates' thoughts about sharing their language skills with their peers. . . . receiving instruction in a second language. . . . their awareness of the benefits of their contribution and participation. . . . focus on the possible opportunities for their professional and personal sustainability post-release. (p. 11)*

Participant excerpt 6. *All. . . . data obtained. . . . will be displayed on [the students] personalized. . . . Student Biography Card. This instrument, due to its flexibility, will be adapted to the purpose of the study in order to get integral insights about inmates' sociocultural, linguistic, cognitive, and academic dimensions. (p. 12)*

Excerpts 4, 5, and 6 show the participant's capacity for recognizing the need to gather information about her target population so that she can create an effective and beneficial program on their behalf. She compensates for the lack of information gathered by the prison system by organizing a demographic survey (Excerpt 4). In addition to the demographic survey, she seeks information regarding inmate perceptions through semi-structured conversations about the program (Excerpt 5) and asks the inmates to participate in developing the curriculum. Excerpt 6 illustrates her capacity to use the data gathered as a reference tool for the continuous maturation of relevant curriculum with careful consideration for inmates' sociocultural, linguistic, cognitive, and academic dimensions.

ARS Theme Level 3: Environmental Readiness

At the Environmental Readiness level, the educator must be able to consider and analyze both internal and external environments. Students draw meaning from their experiences, previous learning and socialization, and interactions; thus, the internal and external environments become the context from which students make meaning. As a teacher it is important to know these contexts, both internal-"atmosphere of the school and classroom" and external-"sociopolitical context of the community, state, and country" (Herrera & Murry, 2014, pp. 155-156).

Two excerpts from the participant's work illustrate this level, or code:

Participant excerpt 7. *Studies show that "prisoners who attend educational programs. . . . are less likely to return to prison" (Vacca, 2004, p. 297). Unfortunately, this type of research has not been conducted yet in Ecuador, which means that there is a huge gap related to the influence of education in jails and its post effects. . . . Every year. . . . prisoners return home. . . . after having spent long periods of time in jail with reduced access to education and [no access to a] training program that could assist in their transition upon release (Lynch & Sabol, 2001). (p. 2-4)*

Participant excerpt 8. *Appropriate instruction of English as a second language has developed many key dimensions which has enabled prisoners in this correctional center demonstrate self-confidence and self-esteem, critical thinking skills, effective self expression, commitments and behaviors as agents of positive change in the environment in which they live: prisons, and for those released, within their home communities (Education Justice Project, 2014). (p. 7)*

These excerpts from the participant's action research plan demonstrate that she has explored both the external (Excerpt 7) and internal (Excerpt 8) contexts of the environment for education in prisons. Her evaluation of the former reflects appropriate attention to the sociopolitical environment for programming and the need for such programming within the context of society. The latter reflects her analysis of socioeconomic threats to participants' reintegration into the workforce after education and the particular needs of this underserved minority group.

ARS Level 4: Curricular Readiness

The essence of level 4 is captured in a statement from Herrera and Murry (2014), "The curriculum must be adapted to meet students' needs rather than requiring students to fit the curriculum" (p. 163). Critical reflection (see level 1) is emphasized here as a necessary action of all teachers when considering curriculum and instruction in the classroom. Curricular issues are not simply constrained to planning, scope, sequence, and consistency. They pertain to complex

concerns of multiculturalism. Educators must be able to critically reflect on the curriculum to make it relevant and also consider differentiated learning opportunities. Herrera and Murry (2014) explain that, at this level, educators utilize materials and make curriculum decisions that represent their students' histories and lived experiences. Therefore, evidence of readiness in this area would represent a movement away from teacher-centered curriculum, wherein the teacher is the expert and deliverer of information, to a student-centered curriculum wherein students' backgrounds and biographies are an important aspect driving the curriculum and instruction within the classroom. The following excerpts exemplify this critical reflection in the participant's work.

Participant excerpt 9. *[For] foreign inmates whose first or second language is English. . . . this weakness can become a strength if that bilingualism is taken advantage of. (p. 3)*

Participant excerpt 10. *The programs should be participatory and they should use the strengths of the learner to help them shape their own learning. Literacy should be put into meaningful contexts that address the learners' needs (Kerka, 1995). Instruction should involve engaging topics that motivate and sustain the inmates' interest. It should also use literature that is written by prisoners because it provides relevant subject matter as well as writing models. (p. 6)*

Participant excerpt 11. *The teacher/researcher will have to develop a. . . . training curriculum with the lessons and academic content to be taught according to the students' profile. (p. 9)*

From these excerpts, the participant has critically reflected on how to establish a program that can accommodate the needs of her target population. She recognizes that for this program to be effective it needs to utilize and maximize the prisoners' assets while building their confidence. She identifies multilingualism as a positive attribute and requires active participants in order to tap into their interests and needs. Finally, she not only considers the unique needs of the target population, but also recognizes her commitment to individuals within the group by acknowledging the need to adjust curriculum according to individual profiles.

ARS Level 5: Programming & Instructional Readiness

Readiness at level 5 of the ARS is represented by a teacher who is informed of programming, or lack of programming, for CLD students in their school/district and can maximize site-specific effectiveness while working to advocate for improved, research-based programs to accelerate academic achievement. Important aspects of this level are collaboration and implementation of evidence-based best practices (Herrera & Murry, 2014). Consider the following excerpts as examples of the participant's understanding of programming option for inmates in Ecuador:

Participant excerpt 12. *There is a huge gap related to the influence of education in jails and its post effects. . . . there are not any academic programs being executed in the Ecuadorian penitentiary system (Gallardo & Nuñez, 2006). (p. 2)*

Participant excerpt 13. *The researcher. . . . will. . . . lead the collaborative tutoring sessions where inmates with certain English language proficiency will be trained to teach their language skills to other inmates. (p. 9)*

Participant excerpt 14. *The Ministries of Interior, Coordination of Social Development, Social and Economic Inclusion, and Labor and Employment have not developed a program to reintegrate ex-prisoners into a work-life. They should be aware of this study in order to envisage a plan for the entrance of prisoners into the labor market, according to their new skills. (p. 16)*

In Excerpt 12, the participant notes that there is no current program model in place for inmates in Ecuador and asserts the need for a program model for this marginalized group. Her intent to create a collaborative environment with the population in order to implement best practices is expressed in Excerpt 13. In Excerpt 14 she acts as an advocate by identifying stakeholders' lack of programming for this group and her intent to share her research-based programming ideas through action research wherein her biographical findings on inmates become pivotal to responsive programming and instruction.

ARS Level 6: Readiness for Application & Advocacy

As the levels are hierarchical, it is important to carefully consider the sixth level, Readiness for Application and Advocacy, when arguing that that ARS model can be used as a purposive framework for evaluating professional capacity-building potential. This level emphasizes transferring theory into practice by positioning teachers as critical researchers and advocates for students and continual progress within the field of education. This level of personal and professional development exemplifies the teacher as a leader, advocate, and activist, and is the level all educators should strive for continually.

Professional capacity building at the sixth level of the Accommodation Readiness Spiral has two tenets, application and advocacy (Herrera & Murry, 2014). When referring to the application aspect, there are three realizations required of teachers to successfully transfer theory into practice. The first is a critical lens of educational models and theories. Teachers must become critical analysts of the plethora of education related theories, practices, and models. Secondly, teachers must ground practice in the needs of the student population, this will require flexibility in developing accommodations from theoretical, research-based models to fit the specific learning requirements of a population. Lastly, teachers with a readiness for application must understand sociocultural dynamics and consider how culture and language interplay in the socialization in the classroom.

When considering the second tenet, advocacy, three characteristics must be evaluated. Currency as a feature of readiness for advocacy is the extent to which a teacher's understanding of best practices is grounded in contemporary research and supported by empirical data as well as recognition of the obstacles to provide adequate accommodation (Herrera & Murry, 2014). The second aspect, defensibility, requires teachers to articulate and defend rationales for the accommodations and best practices employed. They must have a philosophy of teaching and learning that reflects the importance of accommodation and differentiation, while also be willing to advocate that colleagues and administrators develop culturally and linguistically sensitive thinking. Finally, futurity requires teachers to act as leaders in educational communities, reflecting on the inequitable opportunities for culturally and linguistically diverse students and the implications of such inequity within the larger society.

Using the Accommodation Readiness Spiral for the 6th level as a framework to assess the capacity building of participants must consider both application and advocacy. Consider the following excerpts:

Participant excerpt 15. *Kerka (1995) highlights that successful prison literacy programs are learner centered and they should be tailored to the prison culture. Ripley (1993) suggested that moral education, critical thinking, and problem-solving skills should be included in any academic programs for inmates. Newman, Lewis and Beverstock (1993) recognized different learning styles, cultural backgrounds, and multiple literacies of inmates. The programs should be participatory, and they should use the strengths of the learner to help them shape their own*

learning. Literacy should be put into meaningful contexts that address the learners' needs (Kerka, 1995). Instruction should involve engaging topics that motivate and sustain the inmates' interest. It should also use literature that is written by prisoners because it provides relevant subject matter as well as writing models. Most of all the programs must enable inmates to see themselves and be seen in roles other than that of prisoners (Paul, 1991). (p. 6)

In this excerpt the author demonstrates her ability to modify and apply general educational practices to benefit a target population as well as to conduct research regarding the specific population. She supports common educational practices such as student-centered, differentiated and contextual learning, but uses researchers who have worked specifically with prison populations and their findings to support the use of such practices in a prison setting. This reflects a degree of critical research and flexibility grounded by student needs, as well as *currency*, an aspect of advocacy, as she references contemporary educational practices and authors who have had success with such practices with her target population. Finally, she addresses sociocultural dynamics and culture and language when she considers using literature written by inmates to have relevant subject matter and writing models, and also when she expresses the importance of the program to empower the prisoners by cultivating identities beyond the label of prisoner.

Participant excerpt 16. *Unfortunately, the penitentiary system in Ecuador does not include education practices as a policy. For this reason and according to the supportive literature, a study of this type might lead to deep understandings about the impact of English language instruction in Ecuadorian prisons, not only to enhance rehabilitative aspects of inmates within jail, but also to provide them a tangible tool for success after their release. Therefore, a project of these characteristics might be the first glimmer of hope for ex-prisoners to escape the cycles of poverty and violence that have dominated their lives. (p. 7)*

Here the author explicitly defends the need for such a program by stating that prisoners are an educationally marginalized group in Ecuador. They are not afforded educational opportunities and implementation of a program such as the one she proposes would lead to better understanding the effects of English language instruction on both the rehabilitative process and as preparation for the workforce. Her ability to articulate how an English language program could benefit the prisoner population is related to the capacity for *defensibility* within the ARS. She also shows a capacity for futurity as she discusses the lack of educational opportunities afforded to the prison population in Ecuador. Her excerpt not only considers inequity in education for those in prison, but how accommodating education within this setting can affect the ex-prisoners as they are released, their families, and the sociocultural and socioeconomic cycles in Ecuador that are perpetuated by such inequity. It becomes evident by analyzing the participant's action research plan that evidence for each aspect of application and advocacy can be found in the author's work.

Conclusions

The findings of this qualitative content analysis indicate that the ARS can provide a purposive, evaluative framework for assessing the capacity-building potential of proposed research, as reflected in teachers' action research plans. The action research plans are designed specifically to elicit educators' notions of accommodation readiness by requiring that they apply their learning to a real-world context involving CLD students, thus the ARS framework is applicable for analysis. As demonstrated, the particulars of even the most comprehensive level (six) appear to organize the author's thinking about challenging aspects of the action research

plan. This would support the argument that the participant is capable of practicing espoused concepts of application and advocacy as an educator; signifying that the ARS could be used as a purposive framework with which to evaluate the personal and professional capacity of teachers to connect theory to practice as they participate in a master's program.

While this research only considered the ARS as a framework for evaluation for action research plans, the complexity of each of the six levels allows for diversity of content that may align and be applicable to the ARS. The authors postulate that the ARS may be a useful evaluative tool in other such settings pertaining to the assessment of teacher readiness such as teacher preparation programs, professional development for practitioners in areas related to teaching CLD students, reflective practices regarding teacher perception, and the role of an educator as an advocate. Further research across various settings and participants is needed to better define the applicability and capability of the ARS to be an evaluative framework. However, this analysis provides evidence of how it may be effectively used when considering and evaluating participant text as an indicator of accommodation readiness. The authors call for those interested to utilize the ARS as an evaluative framework within their respective educational settings.

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

Brigette Stegman

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 of 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 & Zawilinksi, 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 determined 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.					