MIDDLE SCHOOL ENGLISH SECOND LANGUAGE (ESL) TEACHERS'

USAGE OF TECHNOLOGY FOR LITERACY INSTRUCTION AND THEIR

ENGLISH LANGUAGE LEARNERS' (ELL) RESPONSES

A DISSERTATION

SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS

FOR THE DEGREE OF DOCTOR OF PHILOSOPHY

IN THE GRADUATE SCHOOL OF THE

TEXAS WOMAN'S UNIVERSITY

DEPARTMENT OF READING

COLLEGE OF PROFESSIONAL EDUCATION

by

CHIEKO HOKI, B.A., M.A.

DENTON, TEXAS

DECEMBER 2013

DEDICATION

I wish to dedicate this dissertation to my parents who always encouraged me to pursue my dream. Thank you, Mom and Dad, for your love and encouragement!

ACKNOWLEDGEMENTS

Many of my true friends also supported me. My friend, Dr. Jennifer Roberts, stepped into my life as a gift from God. Her words, "Of course!" lifted my heavy burden instantly. I do not know why I deserve such a wonderful friend. Thank you for being there for me when I needed help! You are my eternal friend.

Thanks to my friend Dr. Denise Ford, who was constantly standing by me throughout this process. I communicated with her so often. Her deep devotion to God reminded me that I was not alone and I could reach my goal. Thank you for your constant support and friendship.

I also want to thank my brother-in-law, Dr. Craig Talbot. His encouraging words kept me going in so many ways. His knowledge and ideas triggered my thoughts as well. We are a big family.

I do not know how to start to express my gratitude to my family. My parents passed away before the completion of my dissertation. I wish I could have completed before their passing. However, after completing my dissertation, I realize that I could not push this process of writing. It evolved as I continued to write. I know they were proud of me reaching the goal I set when I was much younger. I think of them often and they are with me always.

I owe tremendous debt to my brother. He was a caregiver for my parents. Since the distance separated me from my parents, he took care of our parents with love, willingness, and devotion. Thank you for all your support. Without your love and kindness, I could not have reached this goal.

ABSTRACT

CHIEKO HOKI

MIDDLE SCHOOL ENGLISH SECOND LANGUAGE (ESL) TEACHERS' USAGE
OF TECHNOLOGY FOR LITERACY INSTRUCTION AND THEIR ENGLISH
LANGUAGE LEARNERS' (ELL) RESPONSES

DECEMBER 2013

Digital technologies surround our lives today and many adolescent students are

actively engaged in reading and writing through multimodal digital technologies. The

omnipresence of digital technologies in today's society inevitably influences students'

literacy practices. Thus, there is an imminent need on the teacher's part to infuse

technologies as instructional tools in the classroom in order to connect with students'

lives. Recent research evidences teachers' and researchers' responses to this need.

English language learners (ELLs) are included in this generation of youths

actively engaged in digital technologies outside the classroom. However, little is known

about ESL teachers' use of technologies for literacy instruction in the classroom and their

ELLs' responses to these technologies. The purpose of this qualitative case study was to

examine middle school teachers' use of technologies for literacy instruction and their

ELL student's responses.

Two middle school ESL teachers and four ELL students (two student members of

each teacher's classroom) attending a middle school located in a suburban city in north

Texas participated in this study. Data gathered and analyzed over a five-month period included digitally recorded interviews, field notes of classroom observations, digital and/or handwritten participant journals, teachers' lesson plans, students' written work, and impromptu conversations.

The ESL teacher participants made literacy instruction accessible and comprehensible for students through the use of technologies. Instruction became multimodal; a variety of technologies scaffolded the language and literacy needs of middle school ELL students. The unique socio-cultural interactions and classroom contexts constructed by the teachers and students were mediated through technologies.

Students used a variety of semiotics to complete their work. In a classroom where instruction took place in a small group setting, the students interacted with group members in the completion of instructional work and supported each other in their groups by sharing ideas, negotiating with their ideas, engaging in shared writing, taking turns reading, and sharing the use of technologies. In a classroom where instruction took place in an individual instructional setting, the students collaborated with the teacher by sharing and negotiating their ideas. All the student participants were interested in literacy activities mediated by technologies, and their engagement with literacy learning was active, interactive, collaborative, and negotiated.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

CHAPTER I

INTRODUCTION

Nature of the Problem

Research provides evidence of adolescents' active engagement in digital

literacies, particularly outside the classroom (Coiro, Knobel, Lankshear, & Leu, 2008;

Lenhart, Ling, Campbell, & Purcell, 2010; Prensky, 2001; Rhodes & Robnolt, 2009).

Adolescents' participation in reading and writing through the Internet and Information

and Communication Technologies (ICTs) are prolific, as evidenced by their engagement

in text messaging, blogging, social networks (e.g. Twitter, Facebook, Quora), gaming,

music/video remixing, and more.

As a result, many adolescents have developed digital textual skills (Ito, Horst,

Bittani, Boyd, Herr-Stephenson, Lange, Pascoe, & Robinson, 2008; King & O'Brien,

2004; MacArthur, 2006; Prensky, 2001; Prensky, 2005). Thus, digital technologies are

omnipresent in today's society and inevitably influence students' literacy practices

(Beaufort, 2009; Miller, 2007; Patterson, 2000; Unsworth, 2001; Ware & Warschauer,

2005; Weigel & Gardner, 2009).

Students who have grown up in the digital world have acquired sufficient

competency in creating and interpreting meaning through these media (Prensky, 2001;

Prensky, 2005). It is therefore critical for teachers to incorporate technologies in literacy

and language instruction in order to connect with students' lives and learning (Ajayi, 2009; Grabill & Hicks, 2005; Lankshear & Knobel, 2006; Ware & Warschauer, 2005).

This generation of students, including English Language Learners (ELLs), actively engages with technology and digital literacies (Black, 2009; Knobel & Lankshear, 2005; Lam, 2008). Their learning is mediated by pixel- or screen-based texts that incorporate multiple modes of semiotic representations, such as visual, aural, spatial, gestural, and linguistic modes (Cope & Kalantzis, 2000; Kress, 2003, 2004; Lankshear & Knobel, 2006; Leu, Kinzer, Coiro, & Cammack, 2004; New London Group, 2000). Yet, we know little about the digital literacy practices of ELLs in school. The gap widens in knowledge about how ESL teachers use technologies for literacy instruction and how their ELLs respond. This qualitative case study attempts to lay a foundation of understanding needed in response to this gap in ESL classroom-based research.

Purpose and Significance of the Study

The purpose of this case study was to examine middle school ESL teachers' use of technologies for literacy instruction and their ELL students' responses. The following questions guided the study:

1. How do middle school ESL teachers use technologies for literacy instruction in the classroom?

2. What are their ELL students' responses?

The following data were gathered and analyzed over a five-month period: digital recordings of interviews with teachers and students, field notes of classroom observations, digital and/or handwritten participant journals, teachers' lesson plans, students' written work, and impromptu conversations.

Classrooms are one of the places where teachers and students display their literacy practices based upon their social, cultural, and linguistic backgrounds and experiences. This study was unique in using the sociocultural perspective of literacies to focus on middle school ESL teachers' use of technology for literacy instruction and their ELL students' responses.

Definitions of Terms

A review of literature revealed the inconsistent use of some of the following terms. As such, I constructed the following definitions of terms for the purposes of this study. In Chapter 2 further explicates these terms within contexts that are more specific.

- English language learners (ELLs): An English language learner is a person who is in the process of acquiring English and has a first language other than English.

- ESL teachers: Teachers who hold an "English as a Second Language" teaching certificate. In this study, teacher participants taught ELLs English and literacy in their classrooms.

- Digital technologies: Pixel- or screen-based technologies which are mediated by network (internet), hardware, and software technologies and provide digital text with

3

multiple modes of semiotic representations such as textual, visual, aural, spatial, and gestural modes. Users navigate between hyperlinks when needed.

- Scaffolding: A strategy to support ELLs in their acquisition of language and literacy. Students are supported during the learning process, assisted by knowledgeable teachers who help the students to meet the learning goal and achieve more than they could achieve alone.

- Texts: Semiotic representations which include some or all of the features of print-based, visual, and digital signs and symbols with color, sound, movement, still images, videos, animations, and alphabets.

- Digital literacies: Skills, strategies, and dispositions to read, write, access, analyze, evaluate, create, collaborate, distribute, and participate in meaning making. Pixel- or screen-based multimodal digital texts that incorporate multiple modes of semiotic representations mediate this kind of meaning making. These literacies are built on traditional literacy. Traditional literacy: Print-based literacy instruction for developing listening, speaking, reading, and writing skills and literacy strategies.

Definitions of Acronyms

- ELLs: English language learners
- ICTs: Information and communication technologies
- IT: Information technologies

Summary

In this chapter, I presented the need and purpose of the study. In the next chapter, I present an analysis of related literature.

CHAPTER II

LITERATURE REVIEW

The researcher conducted this case study in two middle schools located in a north Texas suburban city. Research conducted within and outside the United States informed the design. In this chapter, I present the results of my analysis of literature relating to: literacies in the 21st century, the history of literacy, sociocultural perspectives of literacy, new literacies, the implications of digital literacies in the 21st century, students' engagement with digital technologies, connecting to youths' digital engagement, effective ESL instructional approaches, and culturally relevant pedagogy and funds of knowledge.

Literacies in the 21st Century

Literacy in the 21st century has transformed dramatically since the affordance of Information and Communication Technologies (ICTs) and the Internet in the educational environment. One sees different kinds of technologies in many places throughout the school, from the library and science class to the literacy classroom. In our work as educators, we can no longer approach literacy with only paper and pen as tools. Literacy teaching and learning need to be inclusive of ICTs in the classroom. Further, one should take into account the inclusion of ICTs in order to discuss the literacy education of youth growing up and entering the global workforce in the 21st century.

6

Today, people have many opportunities to utilize digital technology in their lives. In 2007, Sugimoto depicted the presence and usage of the Internet and ICTs of people in Japan as follows: Japanese people use information and communication technologies very widely and frequently in their daily lives. When riding in a train, you will find many people around you looking at the small screens of their cellular phones and reading and writing email messages. Others may check train schedules on online timetable services through their mobile phones. Still others may play games on Nintendo DS, PlayStation 3, or cellular phones. These cell-phone users are not restricted to business people but include elementary school pupils up to men and women in their 70s and 80s. They use Internet functions via cellular phones. Besides these mobile devices, they use computers and the Internet (p. 317).

The explosive presence of the Internet and ICTs is prevalent all over the world. In the United States, ICTs have taken a similar path and people use them broadly with high frequency (Kuiper & Volman, 2008; Lawless & Schrader, 2008).

Similarly, this phenomenon is visible in the daily lives of American youth (Coiro et al., 2008; Ito et al., 2008; Pew Internet and American Life Project, 2013). Ito and her research team (2008) conducted a research project jointly with the University of Southern California and the University of California, Berkeley and the presence of multimodal digital technologies in youths' daily lives in the United States. The research team

described digital technologies as a necessity of their culture, providing an array of opportunities for youth to engage in communicating with friends, download and upload music and videos, and engage in online gaming through mobile phones and IPods (Ito et al., 2008).

According to Coiro et al. (2008), 87% of all students ages 12 to 17 in the United States use the Internet. Additionally, the Pew Internet and American Life Project (2010) reported that, in 2009, 54% of adolescents participated in daily texting, compared to 38% of teens in 2008. Among those adolescents who texted daily, half of them sent 1500 text messages a month in 2009. As for gaming, 80% of adolescents played five or more different genres of games and 50% of daily game players played eight or more different types of games (Lenhart, Kahne, Middaugh, Macgill, Evans, & Vitak, 2008).

It is apparent that the affordance of digital technologies has not only increased the volume of reading and writing in adolescents' lives, but also created a variety of literacy practices (Lankshear & Knobel, 2006; Luke, 2004; Walsh, 2008). Current research portrays that the use of digital technologies shapes different forms of representations for meaning making because meaning making is based upon peoples' different social practices (Kress, 2003; Lam, 2008; Luke, 2004).

Recognizing changes in meaning-making processes, Luke (2004) began to explore how digital technologies influence meaning construction and how these technologies influence traditional literacy. Her questions necessitate the redefining of

what counts as literacy in the 21st century, since the representations of texts are now mediated not only through written language but also through moving images, graphics, symbols, sounds, gestural movements, and space using a variety of multimodal digital technologies (Kress, 2004).

History of Literacy

Literacies of the 21st century are clearly different from literacy previously defined and practiced. Meaning making through reading, writing, viewing, listening, composing, and communicating information has changed due to the inception of the Internet and ICTs (Coiro et al., 2008). Thus, the changes necessitate a redefinition of what counts as literacies in the 21st century (Cope & Kalantzis, 2009; New London Group, 1996; Rhodes & Robnolt, 2009).

Before the 1970s, one did not commonly use the term 'literacy' to describe reading and writing in the formal educational setting (Street, 1984). It was only when the educational discourse focused on educating illiterate adults outside the formal educational setting that the term 'literacy' was used to indicate programs used to assist illiterate adults in gaining basic reading and writing abilities skills. Inside the formal educational setting, most used the term 'reading', rather than 'literacy', to describe the field grounded in psycholinguistics to teach students skills of encoding and decoding texts in the classroom (Lankshear & Knobel, 2006).

In the 1970s, 'literacy' became a popular term and replaced 'reading' and "writing' in the formal educational setting. Lankshear & Knobel (2006) identify three reasons for this change: (1) the emergence of critical literacy, defined by Freire (1972) as learning to read and write critically to understand the world; (2) a public and political call for an overhaul of reading education to ensure students gained a basic and functional level of literacy; and (3) an emerging sociocultural perspective that juxtaposed literacy with social, cultural, historical, mental, and political backgrounds and experiences of people (Lewis, Enciso, & Moje, 2007; Street, 1984). The term 'literacy' may fit better today to describe our practices with meaning making, because it covers a wider and deeper meaning of reading and writing in the technology dominated 21st century.

A Sociocultural Perspective of Literacies

A sociocultural framework approaches reading and writing as human practices that are founded in social, cultural, political, economic, religious, and historical perspectives and contexts (Gee, 2003; Lankshear & Knobel, 2007; Street, 1984). Gee (2003) argues that "we never just read or write; rather, we always read and write something in some way" (p. 14). Hull and Schultz (2001) affirm that writing and [reading] itself differ because of varied sign systems in varied cultures and historical contexts. These statements elucidate that literacy is translated as an individual practice associated with uniqueness of a person's diverse backgrounds and experiences as they engage in meaning making. In other words, approaching literacy with social practices,

more broadly human practices, inclines us to understand ways of production, dissemination, exchange, cooperation, and negotiation of information. Lankshear and Knobel (2007) added, "There is no practice without meaning, just as there is no meaning without outside of practice" (p. 2).

Thus, a sociocultural-based definition of literacy views human practices and meaning making as tightly intertwined. Knobel and Lankshear (2007) further explained that including these elements in the definition of literacy is needed in order to "make sense of reading, writing and meaning-making as integral elements of social practices" (p. 2).

Since meaning making has shown different forms, shapes, and representations according to the different digital technologies and engagements by peoples' social practices, the definition of literacies that include digital technologies need to build upon these social practices (Coiro et al., 2008; Knobel & Lankshear, 2007; Luke, 2004). After all, digital technologies provide a means to a variety of new social and literacy practices (Coiro et al., 2008; Knobel & Lankshear, 2007; Luke, 2004). Bruce (2004) and MacArthur (2006) posited that changes in technologies bring changes in sociocultural contexts that result in changes in the literacy practices of human beings.

However, the perspective grounded in a sociocultural definition of literacy alone is not sufficient to define literacy and what counts as literacy in the 21st century within the contexts of complex technologies and related social practices. We need to approach

literacies with the perspective of New Literacies. The next section presents the

perspective of New Literacies to explain literacy in relation to technologies.

New Literacies

Leu et al. (2004) argued that the world is hastily changing with the positioning of

the Internet and ICTs as tools of contemporary society. The impact of technology in our

lives has also changed how we engage with literacy (MacArthur, 2006). Chen (2011), a

technology writer, stated:

> Millions of us are carrying these devices that have a constant Internet connection
>
> and also access to hundreds of thousands of applications of very smart interfaces
>
> tailored to suit our everyday needs…If you think of that phenomenon [of being
>
> constantly connected], everything has to change: the way we do policing, the way
>
> we do education, [and] the way we might treat medicine." (para.3)

The consensus is that technology has changed our daily lives in tandem with how we

engage with literacy (MacArthur, 2006).

Gilster (1997) used the term digital literacy to embrace a literacy practice evolved

from digital technology. His concept of literacy differentiated digital literacy from

traditional literacy by clarifying that digital literacy is the skills and ability to evaluate

and integrate information from multimodal texts. Merely acquiring key strokes does not

equate to digital competency, either. His concept of competencies in relation to digital

12

literacy signifies navigating the Internet and hypertext, gathering critical information, and evaluating it for synthesis (Lankshear & Knobel, 2006).

The development of the definition from digital literacy to new literacies evolved over time as researchers and scholars noticed that consumers needed different skills, abilities, mindsets, and attitudes to engage with the Internet and ICTs. Attaching the word 'new' to literacy indicates a distinction from the traditional, psycholinguistic paradigm of literacy. Changing the term "literacy" to "literacies" distinguishes the emergence of a variety of textural multiplicities, (Kress, 2000) such as textual, visual, aural, spatial, and gestural modalities and practices (Street, 1998; Street, 2003) associated with a variety of digital technologies (Cope & Kalantzis, 2000; MacArthur, 2006; New London Group, 1996, 2000).

Coiro et al. (2008) stated that there are significant variations in the concepts of new literacies; some are merely terminological while others refer to an observable event. The array of terms referring to new literacies are "21st century literacies, Internet Literacies, digital literacies, new media literacies, multiliteracies, information literacy, ICT literacies, computer literacy and so forth" (Coiro et al., 2008, p. l0). Used interchangeably, all these terms designate new literacies (Coiro et al., 2008).

Knobel and Lankshear (2007) continue to argue that new literacies have two components: "technical stuff" and "ethos stuff" (p.7). "Technical stuff" means "different kinds of applications (for text, sound, image, animation, communications functions, etc.)

13

on digital-electronic apparatuses, computers, game hardware, CD and mp3 players, etc."
(p.7). Different kinds of applications make a user, even with a basic knowledge and experience of general software applications, capable of producing images, voice recordings, music, video, animations, remixing, and more. Unlike "technical stuff," "ethos stuff" represents a new kind of mindset and approach, amore participatory, collaborative, and distributive orientation and less focus on publication, individualization, individual expertise, and "author-centric" practices.

Knobel and Lankshear (2007) pointed out the different "ethos" between traditional literacy and new literacies in relation to cyberspace and physical space. In their views, cyberspace and physical space exist together at the same time, but only cyberspace represents new literacies. Currently, researchers identify the concept of "ethos stuff" with the emerging concept of Web 2.0 sites that "enable us to move beyond being consumers of content to engaging in communication and collaboration online" (Ludlow, 2012, p.1). Furthermore, "ethos stuff" denotes that users' worlds are progressively transformed as people explore "new ways of doing and new ways of being," (Knobel & Lankshear, 2007, p. 10).

Leu et al. (2004) approached a construct of new literacies with the inclusion of adaptable skills, strategies, and attitudes towards ever-changing, multimodal digital technologies so that users are able to search, find, evaluate, and incorporate for meaning making.

New London Group (1996, 2000) evaluated literacies with the concept of multiliteracies. According to the Group, the need to accommodate changes in the globalized world, a world that has become increasingly diverse culturally and linguistically, with the production of multiple modes of text through digital technologies, necessitated the coining of the word "multiliteracies." Of all these changes, multimodality is the most significant, due to the production of a dynamic synergy among various modes of representation (Cope & Kalantzis, 2000). The modes of meaning making through linguistic, visual, audio, gestural, and spatial representations have altered literacy in socially and culturally diverse terrains (New London Group, 1996, 2000).

Regardless of the various views of new literacies, Coiro et al. (2008) established four characteristics commonly found in the field of new literacies:

- New literacies are seen as "new social practices, skills, strategies, and dispositions for their effective use" (p. 14);

- The participatory nature of new literacies are seen at civic, economic, and personal levels;

- New literacies are deictic, multimodal, and multifaceted in nature.

At present, the field of new literacies is a contested area because, as creators introduce new technologies, new definitions continue to emerge.

Implications of Digital Literacy in the 21st Century

Because of the nature and relationship of contemporary society with the Internet and digital technologies, educators need to acknowledge that students require the knowledge and skills necessary to navigate digital literacies as well as traditional literacy (Black, 2009; Rhodes & Robnolt, 2009).

The National Council for Teachers of English (2008) asserts, "The 21st century demands that a literate person possesses a wide range of abilities, competencies, and many literacies" (p. 1). Students cannot attain the range of "abilities, competencies, and many literacies" that NCTE (2008) described solely from print-based instruction (p. 1).

The uses of pen and paper are different from using digital technologies that use a variety of modes and tools for multiple representations, practices, and texts (Gee, 2003; Gee, 2004; Heath, 1983; Kress, 2000; Miller, 2007; New London Group, 1996). These new literacies also require different kinds of skills and strategies to read and write (Ajayi, 2009; Lankshear & Knobel, 2006; Leu et al., 2004). Incorporating these abilities, competencies, and many literacies are critical components of being literate in the 21st century.

Thinking of today's global economy, which has become more competitive and fierce due to the affordance of the Internet and ICTs, one realizes that the 21st century workplace is a competitive and demanding environment. Employers expect workers to find, retrieve, analyze, and apply vital information as well as quickly solve problems

using multimodal digital texts (Leu et al., 2004). Therefore, possessing digital literacy

skills are fundamental for securing and safeguarding employment in a global and

competitive job market (United States Department of Commerce, 2011).

 Outside of school, the digital generation spends many hours on social networking

sites, playing online games, texting, and using iPods and other digital tools without the

supervision of teachers or parents (Ito et al., 2008). Rather than accepting that the digital

generation is meant to grow up alone in the digital world, adult leaders and teachers can

become their mentors and models by guiding youth in their engagement with multimodal

digital literacies. This will help prepare the youth for their future engagements and

participation in the 21st century digital workforce (Ito et al., 2008; National Writing

Project with DeVoss, Eidman-Aadahl, & Hicks 2010; New London Group, 1996;

Tarasiuk, 2010).

In order to engage today's students in academic literacy, it is necessary to bridge

the gap between their engagement with digital literacies inside and outside the classroom.

The teachers of the 21st century need to aim to achieve this goal—educate students to

become literate in the digital literacy world so that they are able to obtain adequate

employment in the competitive global economy and sustain their lives as workers in the

21st century.

Traditionally, schools were in charge of assuring students obtained knowledge

and skills necessary to succeed in life (MacArthur, 2006). This goal remains the same in

contemporary society. Teachers are still required to teach, though now with digital technology (National Writing Project et al., 2010).

Tarasiuk (2010) conducted a mixed methods case study in her sixth, seventh, and eighth grade classrooms. The researcher investigated how she could combine reading, writing, and technology to address the literacy needs of students in her classrooms.

First, she organized students into groups to generate and post vocabulary, summaries, and characterization on wikis. This activity motivated students to explore other tools to embellish their wiki texts with images, sounds, chat boxes, and avatars. The students' engagements with digital literacy transcended Tarasiuk's expectations. They posted and edited information about the books they read onto Wikipedia, even creating movie trailers based upon their reading materials.

Tarasiuk (2010) discovered that, when given the freedom to incorporate their knowledge, her students' actively engaged with digital literacy. In this context, even struggling readers enjoyed digital literacy activities as much as the competent users of digital technologies. Thus, creating relevancy in literacy instruction may result in active literacy engagement and creating literate individuals in the 21st century.

Students' Engagements with Digital Technologies

Many students have been reading and writing using digital technologies for some time. Prensky (2001) coined the term "digital natives" to identify adolescents who grew up with multimodal digital technologies. From their multifaceted and copious

18

engagement with digital technologies, it is evident that literacy for these natives is obviously not just reading and writing with a pen and paper. Digital technologies that produce hypertexts now greatly meditate the literacy of these students. These hyperlinks contain multimodal semiotics and allow non-linear meaning-making procedures to take place.

The literacy and cultural practices of adolescents clearly includes meaning making with multimodality using digital technologies (Ito et al., 2008; Tarasiuk, 2010). However, educators do not often capitalize on students' literacy practices outside school as viable resources for literacy learning (Moll, Amanti, Neff, & Gonzalez, 1992). The lack of instruction aligned with students' digital literacy engagement outside school creates an increasing gap between students' inside- and outside-school literacy practices (Ware & Warschauer, 2005).

Connecting to Youths' Digital Engagement

MacArthur (2006) stated that new technologies would continue to play an important role in our schools as tools for composing, learning, and communicating. However, a phenomenon called "digital disconnect" implies a divide between digital literacy practices of today's youth outside school and digital immigrant teachers' instructional practices in the classroom. The classroom reality is that teachers struggle to become competent with digital technologies, let alone implement digital literacy in the classroom (Black & Steinkuehler, 2009; National Writing Project et al., 2010).

19

Moreover, according to Levin and Arafeh (2002), digital natives view Internet activities in the literacy classroom as irrelevant to their digital practices outside school.

Regardless of the disconnect between teachers and students, teachers cannot ignore that it is the culture of today's youth to engage in ICTs on a daily basis outside of school. Walsh (2008) emphasized that digital literacies are the reflection of students' unique literacy world. Therefore, teachers need to approach literacy teaching inclusive of social, cultural, technological, and economic factors related to students' daily lives.

Prensky (2005) asserts that even the most engaging teacher who practices traditional literacy will not captivate most of her students' attention. Ajayi (2009) argued that today's literacy teaching in American middle schools relies heavily on practices that are outdated and insufficient to meet the needs of students in the 21st century. To create a relevancy in literacy instruction for students, teachers need to reconsider how to integrate students' digital literacy engagement outside of school into the classroom (Ajayi, 2009; Grabill & Hicks, 2005; Lankshear & Knobel, 2006; Ware & Warschauer, 2005).

The digital reality of ELLs is that they also engage in digital literacies outside school; therefore, the fundamental inquiry from ESL teachers needs to be how to make pedagogical choices that integrate ELLs' language, discourse, life experience, knowledge, interests, perspectives, and identities (Ajayi, 2009; Cope & Kalantzis, 2000).

There are theorists who emphasize meaning making needs to be based on effective ESL instruction and that which students are accustomed (Ajayi, 2009; Black,

2009). Ladson-Billing (1995) and Moll et al. (1992) advocate the need for instruction to be relevant to students' language and culture.

Culturally Relevant Pedagogy and Funds of Knowledge

Ladson-Billing (1995) explored how to empower African-American students in school through culturally relevant pedagogy. This pedagogy emphasizes integrating students' culture and language for academic instruction instead of coercing students to assimilate to the preexisting social and economic practices (Ladson-Billing, 1995). Ladson-Billing (1995) advocated that teachers must value their language and culture and take initiative to be part of their students' lives and the community. Ladson-Billing observed three principles culturally relevant teachers practiced.

First, teachers valued the community in which their students lived. Teachers sought to be part of the community by becoming residents of that community or visiting there to understand how the students lived. In Ladson-Billing's description, these teachers made an effort to connect with the students' lives and used the community's way of life as a source of instruction in the classroom.

Second, Ladson-Billing (1995) asserted that social relationships between the teachers and the students were established as a flexible relationship in the classroom. Ladson-Billings noted that this relationship influenced classroom practices. In all the teacher participants' classrooms, teachers allowed students to function as teachers as well. She described one classroom where "the teacher regularly sat at a student's desk,

while the student stood at the front of the room and explained a concept or some aspect of student culture" (Ladson-Billing, 1995, p 480). In the contemporary classroom, digital natives may take the lead to instruct teachers' and students' in the use of digital technologies.

Moll et al. (1992) researched Mexican-American communities in Tucson, Arizona and found the importance of skills and knowledge located in local households and communities. This research team generated the term 'funds of knowledge' to illustrate the availability of rich resources of knowledge and information children acquire through their households and the network of people outside their homes. They claimed that recruiting the funds of knowledge students gain could fill the existing gap between the classroom and students.

Teachers, however, seldom capitalize on the funds of knowledge the students bring to their school (Moll et al., 1992). It is therefore vital to observe teachers' digital literacy instruction and their students' responses in ELL classrooms if we hope to draw on students' resources and engage them in digital literacy in the classroom (Hull & Schultz, 2001).

Effective ESL Instructional Approaches

In recent years, we have seen an influx of students with diverse racial, cultural, and linguistic backgrounds fill our classrooms. Consequently, this poses a challenge for ESL teachers on how to educate ELLs effectively because many of them struggle to learn

academics while also becoming proficient in English (Walqui, 2006). Thus, these students need effective teachers; however, educating them is a daunting task. The complex nature of educating English language learners prompted Allison and Rehm (2007) to explore effective pedagogies so that students from diverse backgrounds would be successful in learning literacy in the classroom.

Allison and Rehm (2007) carried out research by sending survey questionnaires to 16 families and Consumer Science teachers in Florida middle schools. Fifty percent of students in this public school system come from culturally and linguistically diverse backgrounds. The aim of their research was to find out these teachers' practices of effective strategies in the classrooms.

Allison and Rehm (2007) found out that these teachers ranked visuals as the most effective teaching tool for ELLs because visuals offered alternative modes of representing concepts. Through the visuals, students were able to identify pictures, photos, maps, cartoons, videos, and other visuals, regardless of their diverse backgrounds. Based upon the survey, Allison and Rehm posited that teachers could universally use visuals to teach concepts. In addition to visuals, the teachers also included "hands-on materials" as effective tools to achieve the same goal, because students with diverse backgrounds have a tendency toward being tactile and kinesthetic.

Teachers in the Florida study ranked peer tutoring as the second most effective practice for teaching culturally and linguistically diverse students (Allison & Rehm,

2007). Teachers named teaming up students with different levels of "abilities and backgrounds" as an effective strategy, especially for Hispanic students (Bradley & Bradley, 2004; Snowman & Biehler, 2003).

Cooperative teaching is another strategy to help students with multilingual and multicultural backgrounds. Adolescents' interest in socializing with their peers promotes collaboration with friends (Allison & Rehm, 2007; Palincsar & Brown, 1984).

Scaffolding is another effective teaching strategy for linguistic and academic learning (Bruner, 1983). Based upon Vygotsky's Zone of Proximal Development, students are supported during the learning process, assisted by knowledgeable teachers who help them to meet the learning goal and achieve more than the students could achieve alone. For this theory, social interaction is necessary (de Guerrero & Villamil, 2000).

Walqui (2006) listed modeling as an important component of student learning. ELLs need examples for new tasks. When teachers explicitly demonstrated new tasks, English language learners could imitate the task.

Connecting new lessons to students' prior experience or background knowledge supports language learning. Building background knowledge is another element of scaffolding. Walqui (2006) stated that contextualizing new learning by associating it with manipulatives, visuals, and "authentic objects and sources of information" (p.173) makes new knowledge and language attainable.

Approaching effective ESL instructional practices from language acquisition theories, Krashen (1982) presented the theory of Comprehensive Input Hypothesis while Swain (1993) presented the Output Hypothesis. According to Krashen (1982), the Comprehensive Input Hypothesis explains that language acquisition takes place when the acquirer is exposed to language that is slightly beyond his/her present level of proficiency $(i + 1)$.This acquisition is related more to meaning or semantic structure than accuracy or syntactical structure.

Swain's (1993) output hypothesis proposed that opportunities to use language promote oral and written language acquisition because "one gains fluency by using the language as frequently as possible." Moreover, using language might position English language learners to focus on accuracy. In order for English language learners to acquire fluency, meaning, and accuracy, they need input as well as output opportunities.

Research presented here explained literacy instruction that meets the needs of English language learners. We cannot overlook the best or most effective practices in order to help ELLs to achieve success in academics.

This chapter presented a review of literature related to technologies, literacies, ELLs, and ESL practices. In the next chapter, I present the design and methodology of this study

CHAPTER III

DESIGN AND METHODOLOGY

The purpose of this qualitative case study was to examine middle school teachers' use of technologies for literacy instruction and their ELL students' responses. Data were gathered over a five-month period included digitally recorded interviews, field notes of classroom observations, digital/handwritten participant journals, teachers' lesson plans, student work samples, and impromptu conversations.

The researcher conducted data collection in two middle school classrooms in a north Texas school district. Two middle school English as a Second Language (ESL) teachers and two English language learners (ELLs) from each teacher's classroom participated in the study. In total, four students participated in the research.

The following research questions guided the methodological design:

1. How do middle school ESL teachers use technologies for literacy instruction in the classroom?

2. What are their ELL students' responses?

In this chapter, I present the theoretical framework that guided the design and methodology. I also present details of site selection, participant selection, data collection, and analysis procedures.

Overall Approach to the Study

Qualitative research case study design guided the research methodology utilized for this study (Stake, 1995; Yin, 2009). Qualitative case study design provided the ability to focus empirical inquiry on the ordinary and particular thoughts, activities, and behaviors of participants in order to gain a better understanding of their academic lives (Stake, 1995; Yin, 2009). This case study specifically inquired about the language learning and teaching aspect of ESL teachers and their English language learners' responses to instruction. Case study design aims to answer "how" questions (Yin, 2009) and offers the ability to focus on particular issues or concerns through prolonged engagement with participants as they go about their daily lives. Through case study, we can explore "how all the themes, issues, and processes interplay" (Richards, 2009, p. 180).

Gaining Access

Table 1 indicates the timeline and phases of my research focus. I will provide full details of each phase below this chart.

Table 1

Timeline of the Study

Time Line	Phase I **Teacher 1** September 201 1 - November 2011 **Teacher 2** December 2011 – January 2012	Phase II **Teacher 1** November 2011-Mid-December 2012 **Teacher 2** End of January 2012	Phase III **Teacher 1** January 2012-February 2012 **Teacher 2** February 2012	Exit Phase **Teacher 1 &** **Teacher 2** May, 2012
Gaining Access to the District	* Entry to the school district through the superintendent * Received a consent from the district and the principal	* Met a principal * Recruited the first and second groups of participants	N/A	
Gaining Access to Participants	N/A	* Field Entry * Sent a consent form teachers/parents/ students participants * Gained consents * Establishing trust * Negotiating role as researcher in the classroom	* Established trust * Negotiating role as researcher in the classroom * Establishing trust * Negotiating role as researcher in the classroom	N/A
Data Collection	N/A	* Interviews * Field notes * Digital/handwritten journal * Lesson plans * Work samples		
Data Analysis		* Continuous data analysis by reading * Transcribed interviews verbatim * Generated ideas * Wrote memos as engaging analysis process * Searched ideas, categories, patterns	* Continuous data analysis by reading * Transcribed interviews verbatim * Generated ideas * Wrote memos as engaging analysis process * Uploaded to NVivo 10, generating nodes, organizing nodes by tree nodes * Asked critical questions to review data and NVivo codes * Member-checked * Searched ideas, categories, patterns	

Phase I

My goal in Phase I was entry to the school district and research campuses. The district superintendent first approved the application to request entry. Then, the superintendent contacted the principals of the potential teacher participants with whom I had already spoken.

Phase II

After I gained permission from the school district, I visited two potential teacher participants in their classroom to gain their consent. After I secured two teacher participants, I recruited student participants from their classrooms. During this phase, I also received the consent from the parents.

As my visibility in the classrooms increased, I became more acquainted with the teachers and students in an attempt to establish rapport with them. I also collected data such as field notes, interviews, and artifacts. Additionally, I also started reading and analyzing data, generating ideas, asking critical questions, transcribing interviews, and making memos.

Phase III

During this stage, I visited the teacher participants' classrooms as often as possible, my goal being two or three visits per week. Some weeks, I was able to visit three times a week while other weeks I could visit only once or not at all due to the teachers' schedules. I also established a trusting relationship with the teachers and

students by aligning my behaviors with what the consent forms described, such as keeping the participants' identities anonymous. I respected the needs of the teachers and students in the classroom. For example, when the teacher asked me not to come for observation due to a school event, I honored it. When my location in the classroom became intrusive to the students' learning, I moved to another location in the classroom so the students and teachers could engage in learning. Further, I was careful with my verbal and physical behaviors so I could remain an unobtrusive observer in the classroom. During this phase, data collection also continued and my analysis was ongoing as I gathered the data.

Phase IV

During the last stage of data gathering, I continued to collect data and analyze it. I also uploaded all the data to NVivo 10 to organize my data digitally and created nodes based upon the terms from data I gathered. Then, I grouped the terms to generate parent nodes and tree nodes to refine my data analysis.

<div align="center">

Participant Selection

</div>

The research participants for this study were two middle school ESL teachers and four ELLs. The criteria for selecting potential teachers included:

1.) Teachers who were currently teaching ELLs in their mainstream classrooms or in pullout ESL classrooms;

2.) Teachers who held an ESL teaching certificate;

3.) Teachers who had experience using digital technology; for example, social

networking, blogs, texting, instant messaging, or using computer software.

I recruited student participants from the focal teachers' classrooms. I based the criterion for selecting ELLs in part on the Texas English Language Proficiency Assessment System descriptors (Texas Education Agency, 2011) and included:

1.) ELLs at least at an intermediate level – These are ELLs who have some ability to understand and use English. "They can function in social and academic settings as long as the tasks require them to understand and use simple language structures and high-frequency vocabulary in routine contexts" (p.7).

2.) ELLs identified by their teachers as having experience in using digital technologies inside and outside the classroom.

Teacher Recruitment

The teachers selected for this study were two middle school teachers in a north Texas school district that offered ESL and mainstream English programs to ELLs. To recruit teachers initially, I asked the district coordinator to distribute a recruitment email to English Language Arts teachers and ESL teachers who met the selection criteria. After receiving responses from potential teacher participants, I emailed them directly and followed-up by phone. After I gained entry to the schools, I further explained details to the teacher participants during a face-to-face meeting and provided individual research instructions.

Student Recruitment

I then recruited students for participation from the focal teachers' classrooms. I visited two teachers' classrooms in person to recruit potential student participants. I verbally explained the purpose and intent of the research to all students. At the conclusion of the classroom visits, I gave interested students a prepared card with the research information printed in both English and Spanish. To allow me to contact the students' parents about my research, I asked students to obtain their parent's signature on the permission form.

I selected the student participants from the group of responding students. I reviewed and identified potential student participants using teacher input and the selection criteria to confirm students' eligibility to participate. The teachers' focal role was to verify that the selected student participants met the research criteria.

Once I identified potential student participants, I contacted their parents by telephone. Because the target research participants were Spanish-speaking students, I utilized an interpreter fluent in both English and Spanish to ensure clear communication with the parents. I worked with the interpreter prior to contacting the parents and students to ensure the interpreter understood the study and expectations of the student participants.

While my intention was to provide parents sufficient time after our phone conversations to decide whether their child would participate, all parents expressed

interest in their child's participation during the phone conversation and promptly returned a signed consent form.

Data Sources and Collection Procedures

The sources of data were digitally recorded interviews, field notes of classroom observations, digital/handwritten participant journals, teachers' lesson plans, and students' work samples. Impromptu conversations were another source of data.

Digitally Recorded Interviews

The interview is one of the most critical sources of data for a case study (Yin, 2009) and provides opportunities to learn about others' social lives and how their experiences influence their thoughts and feelings.

Stake (1995) and Wise (1994) assert that researchers need to approach the interviews with the purpose of receiving "description of an episode, a linkage, an explanation" (Stake, 1995, p. 65). Thus, the interviewer is required to plan and approach the qualitative interview with "issue-oriented questions" (Stake, 1995, p. 65). Another strategy for conducting effective qualitative interviews is to be a listener. With this approach, the interviewer might be able to avoid controlling the interview because "the interview is a collaboration" (Weiss, 1994, p. 78) and is "not about the interviewer" (p. 79).

Weiss (1994) offers several guidelines for interviews. The interviewer must communicate to research participants "this is what is needed" (p. 66). Good questions are

those that make it easier for the participant to provide information needed for the research.

I attempted to incorporate all the interview techniques and strategies suggested by Stake (1995) and Weiss (1994). For this research, participants engaged in one semi-structured interview. Some participants participated in additional open-ended interview sessions due to their availability. Each interview was one-on-one and varied from 20 minutes to 30 minutes. Teacher participant interviews took place before or after school to accommodate the teachers' schedules. Two student interviews took place at the students' home while two other student interviews took place at the school. I ensured that non-participating teachers and students were not present. I recorded all the interviews with a digital audio recorder, and I transcribed them verbatim.

Field Notes of the Classroom Observations

The recording the field notes by the researcher is not a clear-cut process of writing an observed reality with words (Emerson, Fretz, & Shaw, 1995). If the researcher thinks that she is describing what she hears and sees as accurately as possible, she assumes that that is the best account of the observation (Emerson et al., 1995). However, Emerson et al. (1995) argued that there are many ways to describe the particular event based upon the observer's perception and interpretation. Emerson et al. (1995) stated that an investigator constructs "scenes on a page through highly selective and partial descriptions of observed and revoked details" (p. 65). Field notes are selected reflections of what the researcher

witnessed in space and time as she used her lens to glean a particular event and capture what was meaningful and important to the participants (Emerson et al., 1995).

They further suggested three implications for writing field notes: (1) Information captured in field notes as data or findings is an integral part of the observational process. (2) As the researcher writes field notes, she must pay special attention to research participants' locally informed meanings and concerns. (3) Field notes written contemporaneously provide wider and more lucid descriptions of people's daily lives and activities. This framework of field notes and observations structured my approach to recording the participants' meanings and concerns in the classrooms. Table 2 shows the dates of my observation.

Table 2

Dates of Observation

Mrs. King		Mrs. Padilla	
Month	Date: 45 minutes/visit	Month	Date: 45 minutes/visit
November, 2011	30		
December, 2011	6, 7, 12, 13		
January, 2012	10, 12, 18, 19, 24, 26	January, 2012	26, 31
February, 2012	1, 2, 6, 10, 13, 14, 15, 16, 20, 21, 22, 23, 29	February, 2012	1, 2, 14, 15, 21
March, 2012	1, 6	March, 2012	
May, 2012	21, 22, 23	May, 2012	18

Table 2 shows that I spent 45 minutes in each classroom for each observation. I did not visit the classrooms in April due to state-mandated standardized test preparation and testing. I did not start visiting Mrs. Padilla's classroom until January, when I gained entry. I also could not visit Mrs. Padilla's classroom in March either.

The location of my observation was critical in order to maintain classroom engagement as naturally as possible. While observing how teachers and students carried out their engagement with digital literacies, I sat in the corner of the classroom and maintained a sufficient distance from the participants, trying not to disturb or interrupt their classroom engagement.

As the observation of both teachers and students engaging in multimodal digital literacy took place, I took field notes contemporaneously using a computer to keep record of what unfolded in the classroom. After each classroom observation, I reviewed field notes.

I gave all participating teachers and students a pseudonym to ensure anonymity. I used the pseudonyms to identify the participants in all the data, including field notes, interviews, journals, and artifacts.

Digital/Handwritten Participant Journals

For a case study, Yin (2009) recommended the use of a variety of data sources to triangulate observations and interviews. In addition to interviews and observations, I also gathered journals from each participant. The teachers' journals were a digital record

describing the participant's thoughts, feelings, and any reflections they had regarding digital literacy. The students wrote responses in a notebook. Teacher and student participants wrote in their journals as often as they could throughout the research period.

Teachers' Lesson Plans

Lesson plans were another form of documentation used to triangulate the interviews, field notes, and participant journals. The North Texas Independent School District required each teacher to submit his or her lesson plans to the school administrator. I collected copies of the lesson plans developed by the teacher participants. This datum assisted with discovering teachers' thoughts and ideas about the 'why', 'how', 'when', and 'what' of using multimodal digital literacies as well as their decision-making processes prior to implementing multimodal digital literacy instruction.

Students' Work Samples

Student work samples also supported this research. Student work was a collection of their experiences in the form of texts generated by engaging with multimodal digital literacy. Their work illustrated how they responded to the teachers' multimodal digital literacy instruction in the form of texts while observations illustrated their experiences in the form of physical and verbal responses. Teachers assigned homework, projects, and other tasks as part of their instruction. Copies were made of the students' original works for review.

Impromptu Conversations

I was able to gather some information from my impromptu conversations with the participants. I wrote those pieces of information in my research journal or at the bottom of the field notes.

Data Analysis

I analyzed the data throughout the entire research process. Analysis of data followed Richards' (2009) analytical procedures: (a) organizing data; (b) becoming familiar with the data; (c) coding data; and (d) organizing ideas.

I organized data according to kind of data, participant's name, and site. Time of the data collection was included in the field note itself. For example, FN_ Ms. P_1.26.12. This indicates that it is a field note about Mrs. Padilla (pseudonym) collected on January 26, 2012. I transcribed and stored interviews on my computer as soon as possible. I converted the field notes, digital/handwritten journals, teachers' lesson plans, and student work samples into Microsoft Word documents. This made reviewing and revisiting the documents easier to search and sort. I imported all these data to NVivo 10 Qualitative Research Software for coding and analysis.

According to Richards (2009), researchers need to "meet" data sensitively and carefully if she/he wants to learn from it. To achieve this goal, I read the data numerous times to gain familiarity and maintained memos of my developing insights. Then, I took this process to the next level by implementing Spradley's (1979) domain analysis.

"Every language contains a vast number of folk terms people can use to refer to things they experience" (Spradley, 1979, p. 108). When we speak, we convey our meaning using folk terms. For example, a teacher says students are reading a book. When you approach a few students to see what they are reading, you find them looking at photos and pictures which fill a page. You ask the students what they are doing and they respond that they are reading the book. For them, looking at the pictures and photos is a kind of reading. I carried out the extensive domain analysis to create semantic relationships followed by Spradley's (1979) domain analysis method. Domain Analyses 1 and 2 represent the folk terms used by the teacher participants, Mrs. King and Mrs. Padilla respectively, to show the semantic relationship.

Table 3

Domain Analysis 1

1. Semantic Relationship: Strict Inclusion		
2. Form: X (is a kind of) Y.		
3. Example: An oak (is a kind of) tree.		
Included Term	Semantic Relationship	Cover Term
Computer	is a kind of	technology
Document Camera	is a kind of	technology
Internet	is a kind of	digital technologies

Table 4.

Domain Analysis 2

1.Semantic Relationship: Function		
2. Form: X is (a way to do) Y.		
3. Example: Telephone is (a way to) communicate with people.		
Included Term	Semantic Relationship	Cover Term
Video	is a way to lead to	discussion
Blog	is a way to do	pre-writing

Spradley (1979) stated that finding semantic relationships is not clear because "they lie beneath the surface, hidden by the more apparent folk terms for things and actions" (p.108). I read and reviewed my data many times to find the folk terms used by the teachers and the students. Then, I generated the semantic relationships. While I was doing domain analysis, I also uploaded my data to NVivo 10. Creating the semantic relationships was helpful when I started coding my data. Later, I refined the relationships based upon the folk terms and generated more coding categories.

Coding is a multi-layered process for constructing and organizing data as the researcher contemplates the meanings held by the participants. Software enhances the opportunity to code within and across large data sets, carefully navigating from simple text searches to more complex analyses, leading to interpretations necessary for

answering research questions. I did not only code my data according to frequently

appearing terms but also by categories generated based upon semantic relationships.

The nodes I created were easily retrievable for later use and for searching

evidence to support my findings. The multi-layers of coding provided deeper analysis

from my data. Coding Example 1 and Example 2 (Figures 1 and 2) show the NVivo 10

screen with the coding I generated from Mrs. King's and Mrs. Padilla's data respectively.
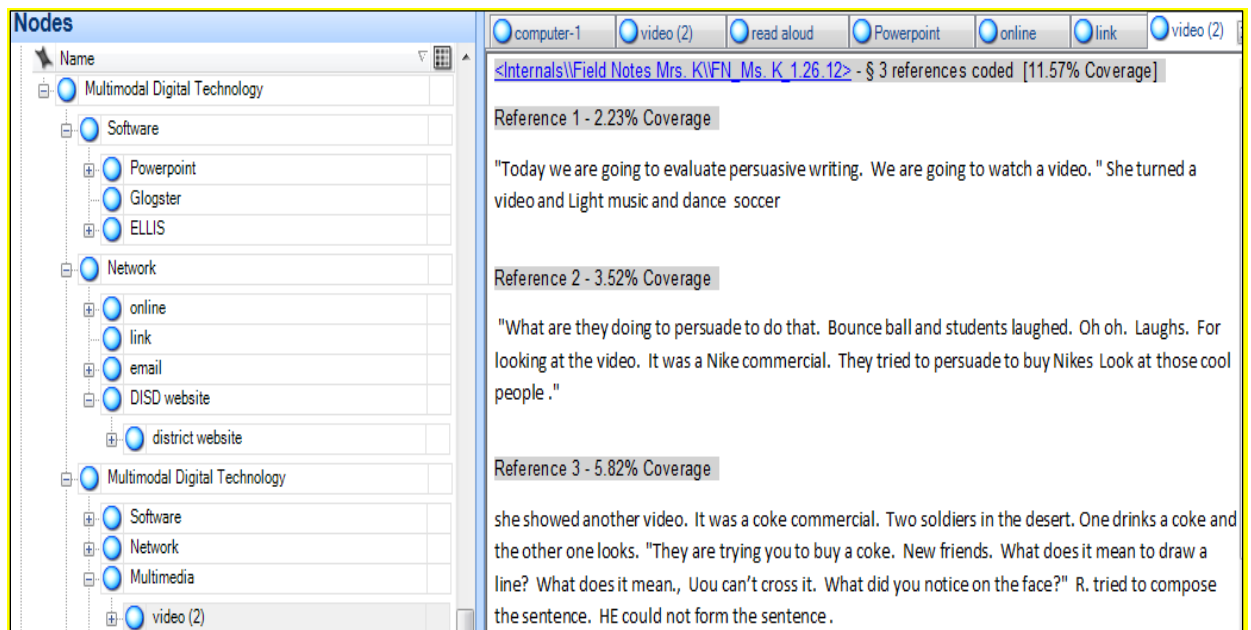
Figure 1. Coding Example 1: Nodes From Mrs. King's Data.

Nodes

Name

Digital Scaffolding or

Perception

Multimodal digital techn

Software

Network

Muldimedia

video (2)

videos

video and E

useful linked

useful

terms

Teladon

technical ter

talked

video and ESL | videos | useful | terms | technical terms | narrations | vid

<Internals\Interviews\TR_Interview_ Ms.P_2 [2]_5.19.12> - § 1 reference coded [1.09% Coverage]

Reference 1 - 1.09% Coverage

I mean I think that watching the videos and being able to put their thoughts on the blog and use the computer, which they wanna do is important

<Internals\Interviews\TR_Interview_Ms.P_2[1]_5_15-12> - § 3 references coded [14.53% Coverage]

Reference 1 - 4.50% Coverage

They didn't know what wreck was. So I could stop the video and talk about what wreck was and, ahh, some other words that they, ahh, like a city block, because the Titanic was as long as 4 city blocks. So we were able to talk about what block was and gave them a kind of idea how big the Titanic was even we talked about what titanic means. So that video led to a lot of good discussions and we were able to build a lot of background.

Reference 2 - 7.75% Coverage

Figure 2. Coding Example 2: Nodes From Mrs. Padilla's Data.

Cross-examining ideas is a critical part of building up "firm constructs" (Richards, 2009, p. 116). The recognition of meaningful patterns or themes can reveal possible relationships between and among them. Stake (1995) called this "categorical aggregation," (p. 75) though sometimes a single event will suffice to make a "direct interpretation." This is the time when the investigator gradually identifies evidence and makes meaning from data. I arrived at this stage of data analysis to generate the common threads for each teacher as well as differences from Mrs. King and Mrs. Padilla's data.

After categories emerged, I started writing the results of data analysis based upon the findings, followed by discussion and implications for instruction and future studies.

Trustworthiness

Yin (2009) does not recommend using a single source of evidence when carrying out a case study. In order to strengthen the validity and reliability of the case study, the researcher needs multiple sources of evidence. The most common strategy for establishing trustworthiness in my qualitative research case study is triangulation, which utilizes field notes, interviews, participants' journals, and other artifacts.

The researcher uses triangulation to confirm established meaning, observation, and interpretation. This confirmation should resonate with participants' accounts (Stake 1995; Yin, 2009). Researchers use triangulation to confirm meaning, observation, and interpretation. This should resonate with participants' accounts (Creswell, 2007; Stake 1995; Yin, 2009).

Another strategy I implemented for establishing trustworthiness was to select only those participants who were willing to participate in the research because willing participants would provide information in response to the researcher's questions (Shenton, 2004). In addition, establishing a good relationship with the informants and ensuring "there were no right answers to the questions" (p.67) helped participants give their answers freely.

Creating an organized database is another way to construct trustworthiness (Yin, 2009). The database includes case study documents and researcher's notes. The notes are about the results of observations, interviews, and document analysis. Case study

documents can be organized and stored electronically. Using NVivo 10 supported

generating organized case study documents with coding. The purpose of this practice

was to make the document easily retrievable for later use as well as making evidence

available directly from the nodes.

Ethical Considerations of the Study

There were many ethical issues to consider before beginning the research.

Perhaps the most important and imminent issue is related to how to maintain the

participants' anonymity. Stake (1995) emphasized that there is no value in the best

research if a researcher causes injury to a research participant by violating his or her

privacy. Their thoughts, behaviors, affiliations, and identities are part of their private

world, and the researcher should not reveal these to anyone else. In order to achieve this

goal, I assigned a pseudonym to each participant, and I strictly maintained identities

throughout the research process.

Researcher Biography

When I was twenty years old, I immigrated to the United States. In Japan, I had

completed twelve years of formal education, with six years of English language

education oriented in the Grammar Translation method. My goal was to earn a college

degree in the United States, but I quickly discovered that six years of English training

under the Grammar Translation method left me ill prepared to engage in conversations

with native English speakers. Furthermore, my English language education failed to

provide me with the knowledge necessary to comprehend college textbooks and classroom lectures. From the beginning, I found my educational endeavors difficult and continuously struggled with learning the English language. Having had this kind of experience for many years has helped me to empathize with other ELLs as they struggle through the process of acquiring the English language, regardless of their age and educational background.

When I began learning English in the United States, there were few innovative resources, tools, and strategies available to make learning English more effective and efficient both inside and outside of school. The approach to language acquisition has changed. Today, teachers and students have many supplementary resources to support teaching and learning English. These resources include digital technologies, which one finds in every aspect of our lives, from banking and online shopping to gaming, email, text communication, and smart phones.

While digital technology is now deeply and widely integrated into our lives, school, and work, I did not foresee multimodal digital technology as an accepted teaching tool when I first started teaching in 2000. However, after a few years of teaching, I began to sense that digital technologies were becoming permanent teaching tools. While I realized I did not widely implement a variety of technologies, I did utilize a digital lesson plan template, digital registration for staff development, digital lesson supplemental websites, email for daily communication, and the Internet. As far as classroom

instruction was concerned, I admit that I did not fully take advantage of digital technology in my classroom. My instruction was limited to a video production for teaching comprehension, Microsoft Word for writing, Internet searches, and research for academic papers, and PowerPoint for student presentations. My lack of knowledge and training in digital technology caused my cursory use of technological resources.

This experience has prompted me to recognize that it is essential for educators of English language learners to receive digital training so they may capitalize on digital technologies in literacy teaching. As a result, educators will be able to help ELLs become literate in digital literacies in the 21st century. Being a former teacher of ELLs and a novice user of digital technologies, I am deeply interested in discovering how other teachers of ELLs use technologies in literacy instruction and how ELLs engage in digital technologies in language and literacy learning.

As for my role in this research, I was strictly a researcher who observed and documented focal students' and teachers' activities in the classroom. My intention was not to exert any influence on digital literacy lessons, teachers' plans, or students' engagements in digital literacies. Rather, my role was as a non-participating observer throughout the duration of the research period.

In this chapter, I introduced my research design and methodology. In Chapter 4, I present the results of the multi-layered analysis of the data based upon my research questions.

CHAPTER IV

THE RESULTS OF ANALYSIS OF DATA

Introduction

The purpose of this qualitative case study was to explore how ESL teachers used technologies during literacy instruction in their classroom and their students' responses. The previous chapter presented the methodology for gathering and analyzing the data set, which included digitally recorded interviews with two ESL teachers from different schools, two focus students from each teacher's classroom, field notes of classroom observations, digital and handwritten participant journals, teachers' lesson plans, and digital artifacts of students' work, and notes on impromptu conversations.

As explicated in the previous chapter, the existence of a common framework and approach for examining how everyday life in each classroom was socially constructed in and through the practices of the teachers and students provided a basis for analytic induction and identifying a set of *telling cases* of literacy events. These telling cases provide greater depth and understanding of the culture of each classroom and how each teacher/class engaged in social construction of meaning. For example, understanding how each of the teachers used technologies during literacy instruction and how their student's responded to this instruction required a theoretically driven methodology in

order to go beyond the mere construction of decontextualized lists of literacies and technologies.

The following research questions guided study:

1. How do middle school ESL teachers use technologies for literacy instruction in the classroom?

2. What are their ELL students' responses?

Looking within Mrs. King's Classroom

I present Table 5 and Table 6 to provide information in regard to Mrs. King's professional information and her students' personal profiles respectively.

Table 5

Mrs. King's Professional Information

Grade/Subject	Age	Teaching Years	Major/MA	Certification
6th grade ESL Reading	Mid 40s	17 years	Reading	1. ESL 2. Reading Specialist 3. General Education

Mrs. King

Mrs. King is a Caucasian teacher in her 40s who is married and has two school-aged daughters. She is a veteran teacher with 17 years of experience in both elementary and middle schools.

Mrs. King received her undergraduate degree in 1986 from Trinity University in San Antonio, Texas. While there, she majored in History and minored in Spanish and English. She continued her education and obtained a master's degree in Reading from the University of North Texas in Denton, Texas in 1999. Mrs. King also went on to earn Texas teaching certifications for English as a Second Language, Reading Specialist, and General Education first - eighth grade. To earn her ESL certification, Mrs. King completed four ESL courses, including a course on the theory of language acquisition, at the University of St. Thomas in 1993, before taking the certification exam.

In the interview, Mrs. King reported that she has always been interested in language, which is what led her to pursue a minor in Spanish. In addition to her academic interest in learning languages, she also made the decision to study Spanish in particular because Texas has a high population of Spanish-speaking students. She started learning Spanish in high school and continued her studies throughout her college years. In the summer of 1984, Mrs. King lived abroad in Oxford, England, but she never pursued the immersion experience of living in a Spanish-speaking country.

After the completion of her studies in 1993, Mrs. King started her first year of teaching as a Spanish/English bilingual, first-grade teacher in a district near Houston, Texas. After one year, she moved several times due to changes in her husband's job and eventually moved back to north Texas in 1997. There, she obtained a position teaching in a bilingual second-grade classroom.

Shortly after she started teaching in the north Texas district, the school combined the two bilingual second-grade classrooms due to a low number of students. As a result of this, Mrs. King's position at that school was eliminated and she transferred to a middle school as an ESL teacher. Although this change was unexpected, the experience of teaching in a middle school led her to realize that she enjoyed teaching middle school and ESL students. In 2006, she had the opportunity to transfer to another school district in north Texas and did so, having decided to remain an ESL teacher for middle school students.

Mrs. King's personal use of the technologies encompassed transmitting schoolwork from home to a school computer, sending emails, and researching current events via the Internet. She also used the phone to generate text messages. At home, she used her laptop to read news and find out about weather and to research topics for work.

During the year of this study (2011- 2012), Mrs. King taught ESL reading to sixth-, seventh-, and eighth-grade students. She taught classes in the morning and served as an inclusion teacher in the afternoon. Table 6 presents the demographic information of student participants from Mrs. King's classroom.

Table 6

Student Participants' Demographic Information

Student	Gender/Grade/Age	Country of Origin	Ethnicity	Length of Residence
Juan	Male/6th/12 years	United States	Mexican-American	Birth-Present (12 years)
Raul	Male/6th/12 years	Honduras	Honduran	From 3rd grade (2 ½ years)

Juan

Juan, a 12-year-old, sixth-grade English language learner, was born in the United States in 2000. In 2003, he entered a bilingual pre-kindergarten program and made the transition to an ESL program as a sixth- grade student in 2011. According to his student folder, his home language was Spanish. Juan stated that he spoke only Spanish at home and was more comfortable speaking Spanish than English; however, he often communicated with his friends inside and outside of school in both languages.

Mrs. King noted that Juan was one of the most proficient English learners in her ESL classroom. According to his scores on the Texas English Language Proficiency Assessment (TELPAS) at the end of his sixth-grade year, Juan was at an advanced/high level of language proficiency in speaking, listening, reading, and writing. Juan had a quiet demeanor inside and outside of the classroom. However, his quiet personality did

51

not stop him from engaging in discussions. Juan often showed his knowledge and engagement as Mrs. King asked questions and solicited the students' responses.

As for Juan's personal use of technologies outside of the classroom, his family did have a computer with an Internet connection. He shared that he was not a frequent user of social media or other Internet resources, such as Facebook or Google; instead, he often liked to play games on the computer. Contrary to his infrequent use of technology other than gaming engagement outside school, Juan was often the first one in his ESL class to pick up the laptop computer and start using it wherever Mrs. King allowed students to use the computer in the classroom. His interview at his home revealed his interest in engaging in technologies. There, he stated that he would like Mrs. King to use the computer every day in the ESL classroom.

Raul

Raul, a 12-year-old sixth-grade English learner, moved to the United States from Honduras in 2009. He entered the district as a fourth-grade bilingual student and moved up to Mrs. King's ESL class in the 2011-2012 school year after making the transition from the bilingual class to the ESL program.

When I made initial contact with Raul's mother, I had asked a translator to communicate with her due to my limited proficiency in Spanish. However, once I stepped inside his house, his mother eagerly attempted to communicate with me in English. This led us to engage in a small conversation in English. As for Raul and his

mother's exchanges in front of me, they code switched, mixing Spanish with a little bit of English. Like Juan, Raul stated that he was more comfortable speaking Spanish than English in the classroom. My field notes captured that he used Spanish to communicate with his classmates. His TELPAS scores at the end of his sixth-grade year showed that he was at an advanced level in English proficiency in speaking, listening, reading, and writing.

Raul always had a smile on his face and often made others laugh or smile because of what he said and the way he behaved in the classroom. He actively used Spanish and English to socialize with his peers. He also actively responded to the teacher's questions and participated in whole-group discussions. Nevertheless, he sometimes had some challenges in following the teacher's instructions.

As for technology use, when it was time to use the computer, Raul always jumped out of his seat, almost running to the computer station. He said he enjoyed making PowerPoint presentations in the classroom and particularly enjoyed searching the Internet to find the right kind of clip art to insert into PowerPoint presentations. After pasting the clip art, his group members often had fun looking at them.

Raul's interview revealed that his personal use of technology at home included texting his friends and playing games on the smart phone.

Mrs. King's Classroom

When I began my data collection in Mrs. King's classroom, she had nine students—eight male students and one female student. The composition of the classroom changed in February after one male student joined the class, changing her classroom composition to nine boys and one girl. All ten students' first language was Spanish. However, some students in Mrs. King's classroom were born in the United States and others emigrated from Spanish-speaking countries, predominantly Mexico.

North
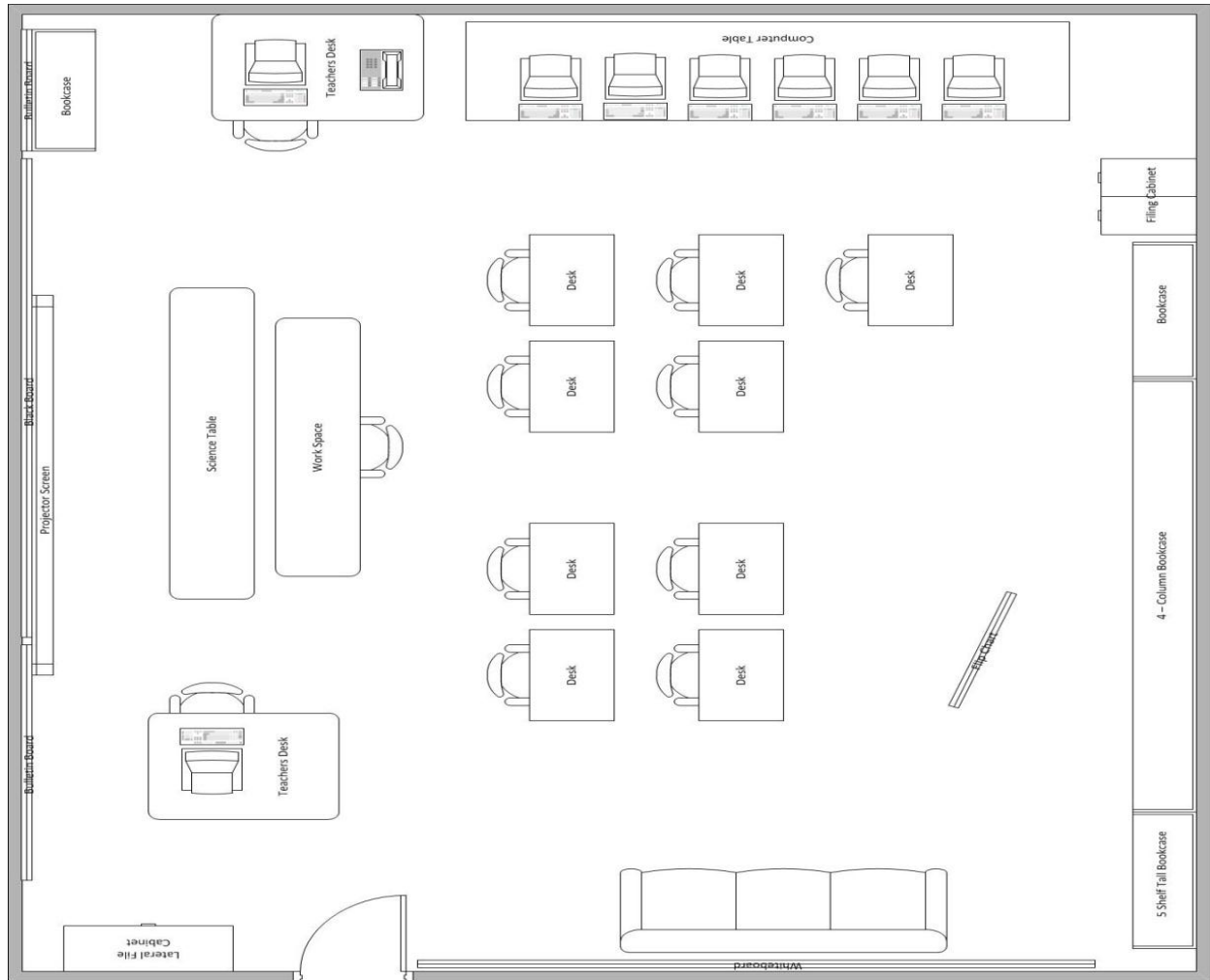
South

Figure 3. Mrs. King's Classroom.

Mrs. King's classroom was located on the first floor of the school, on the east end of the building. There was only one entry into the classroom. Two ESL teachers shared this room. Mrs. King used the room in the morning while the second ESL teacher followed her own students in their content classrooms. In the afternoon, Mrs. King followed her students to their content classrooms and helped them as an inclusion teacher.

There were five main areas in the classroom where Mrs. King and her students engaged in learning. The first area was the computer station, which was against the north wall. The station was comprised of a row of six computers on desks placed against the wall, with a world map covering most of the wall above the computers. Because two of the six computers were not working during my research period, Mrs. King provided two extra laptop computers for her students to use. These laptops were stored in a cabinet when not used. When the students were engaged in literacy learning with a desktop computer, they sat at the computer station. However, the students who were using the laptop computers sat somewhere in the middle of the room or on the couch.

Mrs. King's desk sat in the northwest corner of the classroom, next to the student computer station. She was able to project written or visual texts from her computer at her desk via the projection system connected to her computer. She also had a document camera, which she placed at the end of her desk next to the computer station. She used the camera to project her teaching materials or students' work onto the screen.

The projection screen occupied the west wall of the classroom, covering the chalkboard. Mrs. King normally kept the white projection screen down but she pulled up the screen at times to access the board whenever she needed to write on it. There was a science table with a built -in sink located right below the projection screen. Mrs. King used this table to place her books and papers. The second ESL teacher's desk was next to the science table, in the southwest corner of the classroom.

The couch and the chalkboard were located on the south side of the classroom. The couch was just below the chalkboard, right next to the door. It functioned as an area where two or three students could sit together to do collaborative work. When the students engaged in collaborative work, they often moved to the couch with their laptops to work there (see Figure 3).

In the southwest corner of the classroom was a tall, wooden cabinet where the two teachers kept books and other instructional materials. The east side of the classroom stored boxes, filing cabinets, and bookshelves to keep English dictionaries, Spanish dictionaries, content area books in Spanish, novels, and expository books (see Figure 3). In front of the 4-shelf bookcase was a large flip chart that Mrs. King used for writing students' input, her drawings, and instructions. Student desks occupied the middle of the classroom. Mrs. King had nine students, eight male students and one female student. The male students occupied the individual desks located in the center of the classroom. These desks were clustered into two groups – one group of four and one group of five.

One desk was vacant until another male student joined the class at the end of February. He sat at the desk closest to the flip chart (see Figure 3).

The female student sat at the long rectangular table against the science table, which was located on the west side of the classroom. She faced the projection screen, but when needed, she moved her chair to face the world map while sitting at the same table. Mrs. King arranged the other desks in positions that would maximize the students' ability to see projected materials.

The use of the classroom was fluid once the students started working on a small-group or independent project. They could get up, if necessary, to take turns using the computer, check out books, or go to other students' desks to see their work. Mrs. King moved around freely as well. When the students asked questions, when she checked their work, or when she helped students one-on-one, she moved from one person to another or from one group to another, assisting the students. She also moved to monitor students' work and their progress. In the next section, I will present the results of the analysis related to technologies and literacy instruction in Mrs. King's classroom.

Mrs. King: Locating the Use of Technologies

The analysis of the data revealed what kind of technologies Mrs. King used in her classroom. Moreover, the analysis showed Mrs. King's use of literacy and how she used technologies for literacy instruction. First, I will present Table 7 to show the technologies Mrs. King used in her classroom.

Table 7

Technologies Mrs. King Used

Computer Hardware					
Kinds of Computer	Desktop			Laptop	
Peripheral Devices External devices for computer input (entering) and output (generating)					
Input Peripheral Devices	Keyboard		Mouse	Document Camera	Touchpad
Output Peripheral Devices	Monitor	Projector	VCR	Printer	Speaker	Head-phones
Input and Output	Flip Camera				
Data Storage	Hard Drive			Flash Drive	
Auxiliary device Supports technology usage					
	Projector				
What	Software				
Application Software	Microsoft Word	Microsoft PowerPoint	Web browser	Educational Software
Type	Word Processor	Presentation Program	Run information and communication resources on the World Wide Web	Instruction
Example	Word	PowerPoint	1. Internet Explore 2. Firefox 3. Safari	Glogster Ellis
What	**Internet Resources:** Communication channels comprised of computers and hardware mediated by a global network system called the Internet to share resources and communication				
Type	Websites		Search Engines		
Example	1. School 2. Library 3. E-book 4. E-textbook 5. Other educational websites-science		1.Google 2.Nettrecker (from the library) 3.One Place (from the library)		

I will describe Mrs. King's use of digital technologies according to the
instructional divisions. Usually she divided her instruction into three sections:
introduction (about 2-10 minutes), the whole-group instruction (13-30 minutes), and the
small-group/independent instruction (5-30 minutes).

Introduction: Before Whole-Group Instruction

During the introduction, Mrs. King used a projection screen to show the day's
agenda from her computer. Once the agenda was on the projection screen, her students
wrote it down in their journal notebooks.

Whole-Group Instruction

During the whole-group instruction time, Mrs. King used a combination of
technologies, such as the computer, the projector, the projection screen, and the document
camera, to show her writing, the students' writing, general information, and photos,
pictures, and other images from Internet resources. For example, Mrs. King used
Microsoft word to type texts and then project them on the screen. Mrs. King used search
engines, as well as individual websites, for quick research when she needed to find more
information or images pertaining to literacy activities. She also used the e-textbook
version of their textbook for shared reading activities. Mrs. King used a different e-book
from the school library digital resources for demonstration purposes during this period so
that students would know how to use it later for their small-group/independent research

60

projects. However, I only observed Mrs. King using digital technologies during whole-group instruction.

Small-Group/Independent Instruction

Students' actual technology usage took place during the small-group/independent instructional time. During this time, students had opportunities to use two laptops and four desktop computers, the speaker, the Flip camera, Microsoft Word, Microsoft PowerPoint, the e-book, the video, the e-textbook and other Internet resources for their literacy activities; however, Mrs. King determined what specific technology opportunities would be given to the students. During this small-group/independent instructional time, Mrs. King used her flash drive to save students' work.

An example of students' use of technologies in small-group/independent instruction was their use of Microsoft Word to write a poem. For this literacy activity, they also used a search engine, Google, to find clip art to paste into Word documents. Another tool the students used for their writing was Microsoft PowerPoint. They used slides to write summaries of the stories. Then, they incorporated clip art or other images from Internet resources onto the slides. The students also used the Flip camera to produce a video based on the book they had read.

The students also engaged in research using an e-book from the school's library resources, which was comprised of the video and written texts in a form of the book. In

order to complete that research assignment, the students read from the e-book and viewed a video.

Mrs. King set aside a presentation time after the students had completed their assignment. When that literacy activity took place, the students went to the teacher's computer station to use the document camera. They placed their papers under it and shared their work on the projection screen. Sometimes, students saved their work on Mrs. King's flash drive. Once Mrs. King retrieved their slides from the flash drive, the students presented their entire PowerPoint presentation. During this instructional time, Mrs. King had opportunities to show the students how to use specific features of these technologies.

Mrs. King: Locating the Use of Literacy

Mrs. King provided literacy instruction through a variety of literacy activities. The sequences of the instruction from whole group to small group changed according to instructional needs. For example, Mrs. King reversed or repeated the sequences from whole-group instruction to small-group instruction based upon her students' needs and her instructional decisions.

Introduction: Before Whole-Group Instruction

Mrs. King used this portion of instructional time to show the agenda on the projection screen. If the students asked questions related to the agenda or other school matters, she provided answers verbally. However, she did not spend more than five

minutes on this part of the instruction and quickly moved on to whole-group instruction, except on one occasion when she prepared her students to receive teachers from Korea. In that instance, Mrs. King and her students spent about ten minutes generating questions they wanted to ask the Korean teachers.

Whole-Group Instruction

The transition from introduction to whole-group instruction included Mrs. King's announcements to prepare students for the next activity. This included descriptions of what the work entailed, directing students' attention to written texts on the projection screen, or telling the students to do certain tasks, such as writing down what was on the projection screen. Once she announced the signal for starting whole-group instruction, Mrs. King engaged the students in various literacy activities.

These literacy activities included reading aloud, shared reading, teaching academic vocabulary, brainstorming, discussion, sharing facts and opinions, shared writing, and more. For example, when Mrs. King taught a unit on space, she planned a brainstorming literacy activity and asked the students to think of what they knew about space. As she had planned, the students started sharing their knowledge; at the end of this brainstorming activity, she said that they now knew a good amount of information about space.

Mrs. King also used literacy activities as a means to teach literacy concepts, such as fluency, vocabulary, background knowledge, and comprehension skills and strategies,

as well as teaching knowledge of genres, oral language, research, and writing. When she

taught poetry writing, she presented the students with several literacy activities to build

background knowledge during whole-group instruction. Then, when the time for small-

group/independent instruction began, the students were all ready to engage in

independent work. During poetry instruction, Mrs. King wrote five incomplete line

sentences, including *I see…* and *I hear…* on the white board. These phrases began each

line of the students' poems. First, the students copied these incomplete sentences in their

notebook. Next, Mrs. King took the students outside, let them observe their

surroundings, and asked them to write in their notebooks what things they had noticed.

Once they had returned to the classroom, she used a sample poem in the e-textbook and

read aloud from the projection screen. In addition, the students shared their written

words in the notebooks with each other. As a result, after building background

knowledge for writing a poem, the students were ready to write one using Microsoft

Word as a group during small-group/independent group instruction.

In order to provide literacy activities, Mrs. King used strategies such as visually

presenting different kinds of semiotics (digital texts, pictures, photos, maps) on the

projection screen for the purposes of showing or modeling. For example, when Mrs.

King taught the students how to conduct research using the e-book, she first demonstrated

how to access and use the entire e-book. Then, she projected the research guiding paper

and modeled how to find and glean information from the e-book to fill out the paper.

Afterwards, when the students started small-group/independent work, they consulted with each other as they read the e-book and viewed the video.

Mrs. King often utilized several literacy activities during whole-group instruction to teach literacy concepts like vocabulary, comprehension, and writing. For example, when Mrs. King engaged her students in reading *The Sign of the Beaver*, she taught fluency, vocabulary, and comprehension through several literacy activities using digital images from Internet resources. As Mrs. King read the book aloud to her class, she identified a vocabulary term the students did not know, and then used the computer to search on the Internet and retrieved a few images relating to the word. After Mrs. King provided this visual support, she then switched her focus from the images to engaging the students in a discussion to understand the story better.

Small-Group/Independent Instruction

Mrs. King sometimes allocated time for small-group/independent instruction for her students. During this time, students formed groups to collaborate with each other. During my observation, the students worked independently only a couple of times, working in small groups on my other visits. Small-group/ independent instruction was the time for the students to use a computer for accessing Microsoft PowerPoint, websites, the e-textbook, the e-book, search engines, and the Flip camera. While students worked independently, Mrs. King functioned as a facilitator to monitor students' progress and provide needed support to the students.

During small-group/independent instruction, she assigned students to do various tasks, such as silent reading, writing, note taking, reading aloud, searching information and images, and making a movie. During one class, Mrs. King asked each group of students to read a myth from the e-textbook website. After they finished reading, each group wrote a summary collaboratively. Later in the semester, she asked the students to create a movie collaboratively based upon the book they had read.

Table 8 represents Mrs. King's curriculum schedule and the literacy activities she taught in her classroom during my observations. She taught different elements of literacy using various literacy activities with different strategies on different days. Thus, this table does not imply that Mrs. King used top-down sequencing to teach literacy for every instruction. She was flexible in how she used her time. For example, whole-group instruction lasted from 13 minutes to 30 minutes, depending on the literacy activities she presented; the total time usage for each instructional segment is an approximation.

Table 8

Mrs. King's Curriculum Schedule and Literacy Activities

Introduction : 2-10 minutes	
Overview of the day's lesson, school business, announcements, etc.	

Whole-Group Instruction: 13 -30 minutes	
Literacy Concepts	Literacy Activities (examples of observed literacy activities)
Related to Fluency	Read Aloud, Shared Reading
Related to Vocabulary	Academic Vocabulary, Homophones, Loaded Words, Multi-Meaning Words, Rhyming
Related to Background Knowledge	Brainstorming, Prior knowledge, Read Aloud
Related to Comprehension Strategies	Author's purpose, Compare/Contrast, Context clues, Evaluate, Facts/Opinions, Inferences, Main Ideas, Multiple choices, Persuasion, Prediction, Retell, Silent Reading, Summary
Related to Genres	Cartoon, Drama, Expository, Myths, Mystery/Suspense, Narrative, Sensory Poetry,
Related to Oral Language	Listening, Speaking
Related to Research	Citation, Finding information
Related to Writing	Answers, Cartoon, Compare/Contrast, Poetry, Revision, Shared writing, Summary

Small- Group/ Independent Instruction : 5 -30 minutes	
Literacy Concepts	Literacy Activities
Related to Fluency	Read Aloud
Related to Vocabulary	Academic vocabulary
Related to Background Knowledge	Background knowledge, Prior knowledge
Related to Comprehension Strategies	Inference, Main idea, Retell, Read Aloud, Silent Reading, Summary
Related to Genres	Expository texts, Myths, Personal Narrative, Sensory Poetry
Related to Oral Language	Listening, Speaking,
Related to Presentation	Cartoon, Constellation, Myths, Poem, Summary
Related to Research	Expository texts, Finding information
Related to Writing	Answers, Interrogative Sentences, Note taking, Myth, Poetry, Revision, Shared writing, Spelling, Summary

The Synthesis of Mrs. King's Technologies and Literacy Instruction

Table 10 below provides the overview of the use of technologies and literacy

instruction by Mrs. Padilla and her students. In Table 9, I provided notations to explain

how to read Table 10. The notations *T* and *S* indicate the teacher, Mrs. Padilla, and her

students, as the users of technologies respectively, while *t* and *s* indicate those who

responded to technology usage.

Table 9

Notations

T=Teacher	S=Student
*User of Technologies -Teacher: T	*User of Technologies- Student: S
*Responder of Technologies-t	*Responder-Students: s

Table 10 also includes the demarcation of whole-group and small-

group/independent instruction in Mrs. King's classroom. The vertical notations of Table

10 are based upon Table 8. The horizontal notations are based upon the technologies

Mrs. King used, as presented in Table 7.

I further analyzed the usage of technologies in relation to how Mrs. King used

each for literacy instruction. When she used them for literacy instruction, the students

became the responders to her technology usage. When the students used the technologies

for literacy instruction, Mrs. King became a facilitator to support their literacy learning.

Table 10

Overview of Mrs. King's Technologies and Literacy Activities

Technologies / Literacy	Document Camera	Projector	Flip Camera	Microsoft Word	Microsoft PowerPoint	Internet Resources			
						Search Engines	Website	E-book E-textbook	Video
Whole-Group Instruction									
Fluency Read Aloud -------------------- Shared reading	T ------------- T/S	T ------------- T/S						T --------- T/S	
Vocabulary Academic voc. Homophones Loaded words Multi-meaning Rhyming	T-Showed/ Illustrated/ Modeled/ Reviewed/ Discussion s-looked/ copied/ wrote/ shared/ read aloud	T-Showed/ Illustrated/ Modeled/ Reviewed/ Discussion s-looked/ copied/ wrote/ shared/ read aloud		T- Typed Predictions/ Typed vocabulary words		T- Looked for images	T- Retrieved E-book and E-textbook	T-Showed words Modeled Discussion	T-Showed Discussion
Background Knowledge Brainstorming Prior Knowledge Read Aloud	T- Showed illustration Discussion	T- Showed photo, Discussion s-Discussed Questions				T- Showed, Modeled, discussion s-Looked, discussion	T-Showed , Modeled Research, Discussion s-Looked, Discussion	T-Showed, Modeled, Read aloud s-Discussion	T-Showed Discussion S- Discussion, Watched

Category									
Comprehension Strategies Author's purpose Comp/Contrast Context clues Evaluate Facts/Opinions Inferences Main Ideas Multiple choices Paraphrasing Persuasion Prediction Prediction Read Aloud Retell Shared writing Summary writing	T- Showed Modeled Shared- writing Discussion Read aloud s-Discussion Copied Looked Read Wrote	T- Showed Modeled Shared-writing Discussion Read aloud s-Discussion Copied Looked Read Watched Wrote		T-typed			T- Showed Discussion Discussion s-Watched Discussion	T- Showed Discussion Discussion s-Discussion	T-Showed Discussion s- Discussion
Genres Cartoon Expository Myths Narrative Poetry	T- Showed, Modeled, Read aloud s-looked listened	T- Showed, Modeled, Read aloud, Discussion s-looked listened		T- Showed				T- Showed Myth, Expository Writing, Read aloud poem s- listened	T- Showed Narrative
Oral Language Listening Speaking	T S	T S						T- Showed Discussion s- Discussed	
Research Citation, Finding information		T- Showed				T- Showed, Modeled, Searched	T-, Showed, Modeled, Searched	T- Showed, Modeled, Searched	T- Showed, Modeled
Writing Inferences Poetry Shared writing Summary	T- Modeled/ Shared writing	T- Modeled/ Shared writing					T-Modeled s- Looked	T-Modeled s- Looked	T-Modeled s-Looked

Small-group/Independent Instruction									
Fluency Read Aloud	S- Poem	S- Poem	S- Paragraphs	S- Paragraphs	S		S	S- Read aloud t- Read aloud	
Vocabulary Academic voc.	S t- Question	S t- Question		S t- Question	S		S	S t	
Comprehension Strategies Inference Main idea Read Aloud Retell Silent Reading Summary	S	S		S	S			S t	S
Genres Drama Historical Fiction Expository texts Mystery Myths Personal Narrative Poetry		S- Created genre cards		S- Wrote				S- Read Aloud from the E-textbook	
Oral Language Discussion Listening Speaking	S	S	S				S		S
Presentation Cartoon Constellation Myths Poem Summary	S- Showed Read aloud	S- Showed Read aloud	S		S			S	
Research Expository texts							S- Read answered	S- Read Answered	S-Watched

Writing Answers Interrogative sen. Note taking Myth Poetry Shared writing Spelling Summary	S- Showed, Read	S- Showed, Read	S- Summary, Spell checking	S- Wrote t- support teaching	S- Summary		S- Copied	S- Filled activity sheet	S- Note taking
Technology				T- Modeled S-print/ Save	S-clip art/ Slides/ screen t-tch				

Table 10 provides a snapshot of Mrs. King and her students' use of technologies during literacy activities. The table describes what kind of literacy instructions Mrs. King taught in relation to certain kinds of technologies, how her students responded to her instruction, and what kind of engagement they showed.

Looking within Mrs. Padilla's Classroom

Table 11 and Table 12 provide information about Mrs. Padilla's professional information and her students' demographic information respectively.

Table 11

Mrs. Padilla's Professional Information

Grade/Subject	Age	Teaching Years	Major/MA	Certification
Mix grades/Writing 6th, 7th, and 8th grades	Early 40s	17 years	Secondary Education	1. Secondary Language Arts, 2. English Literature, 3. ESL.

Mrs. Padilla

Mrs. Padilla is a teacher who is in her 40s and married with two children— a toddler and a second grader. She is an experienced teacher with 17 years of teaching experience in secondary schools.

Mrs. Padilla majored in English Literature and obtained an undergraduate degree in 1993 from the University of North Texas (UNT). She then continued her education to receive a master's degree in secondary education from UNT in 1994. She has also earned

teaching certifications for Secondary Language Arts, English Literature, and ESL. She

took ESL and linguistic courses in 1994 from UNT before taking an ESL certification

examination. According to Mrs. Padilla, taking the ESL and linguistic courses

augmented her knowledge of the nature and progression of second language acquisition

as it relates to academic listening, speaking, reading, and writing.

Mrs. Padilla's parents immigrated to the United States from Guatemala in their

20s, before she was born. She asserted that she did not possess a native-like fluency of

Spanish because her parents only spoke English to their children in order to prepare them

for school in the United States. Due to the lack of use of her heritage language at home,

she decided to take Spanish courses in high school and in college. However, she was not

comfortable speaking in Spanish until she had an opportunity to visit Guatemala and

other countries in Central America. In addition, while she was in her 20s, she had the

opportunity to teach English in a private high school in Honduras .This enhanced her

confidence in speaking and using Spanish.

Mrs. Padilla's teaching career started in 1995 teaching English to seventh-

through eleventh-grade students in a private school in Honduras. After teaching there for

one year, she taught high school English Literature in north Texas for six years, and then

taught middle school English Language Arts in California for five years. In 2007, she

returned to north Texas and obtained a high-school position to teach ESL reading and

writing. After one year at that high school, she moved to teach middle school ESL in a

different school district in north Texas. For the last five years, she had taught middle

school ESL writing and reading classes as well as seventh- and eighth- grade Sheltered

Reading. The class I observed was a mixed sixth-, seventh-, and eighth-grade ESL

writing class. Mrs. Padilla's interest in teaching ESL derived from her love for teaching

English language learners and the necessity of providing for her young family.

Mrs. Padilla has been using technology for literacy instruction since 1996. She

identified the overhead projector, television, and VCR as technologies for her classroom

in her early teaching career. Her current, personal technology usage included the iPhone,

texting, the computer, Facebook, AOL, her school email, and accessing applications from

her phone. Table 12 presents the demographic information of student participants from

Mrs. Padilla's classroom.

Table 12

Student Participants' Demographic Information

Students	Sex/Grade/Age	Origin of Country	Ethnicity	Length of Residence
Alicia	Female/8th /14years	Mexico	Mexican	2 months
Selena	Female/6th /12years	Mexico	Mexican	2 months

Alicia

Alicia, a 14-year-old eighth-grade student, came from Mexico in January of 2012

and immediately entered into the ESL program in the north Texas district. Her family's

home language was Spanish. Mrs. Padilla stated that Alicia's father spoke some English but her mother was only a Spanish speaker. Alicia has two younger siblings, a younger brother, and a sister, who was another participant of my research in Mrs. Padilla's classroom.

When the data collection of this research started, Alicia had been in the eighth-grade ESL program only for one month. Prior to starting her education in Texas, she went to a bilingual Spanish and English school in Mexico for seven-and-a-half years. In spite of a short period of immersion in the English language and American culture, she was willing and able to converse with teachers and her counterparts in school using her growing social language, even though she faced occasional breakdowns of communication. She continued to progress in her language acquisition, and at the end of the observation school year, her English proficiency level was advanced in speaking, listening, and reading, while writing was an intermediate level on TELPAS scores. Alicia was an outgoing student who was eager to communicate in English with Mrs. Padilla and her friends in the school. Mrs. Padilla described Alicia as a risk taker who was not afraid to give answers in English even though sometimes she was not sure whether she could say them correctly. Another personal attribute of Alicia was her academic diligence. Mrs. Padilla noted that Alicia completed all the assignments and participated in class discussions. However, when the matter of communication became

76

more complicated, emotional, or personal, Mrs. Padilla noted that Alicia had to switch from English to Spanish in order to establish clear communication.

In the classroom, Alicia always asked Mrs. Padilla to allow her to use the computer, since she preferred to read and write with the computer. In Alicia's interview, she stated that computer education was a part of the curriculum at the bilingual school in Mexico. Consequently, while in Mexico, she was able to acquire skills in using the computer and continued to enjoy using it in Mrs. Padilla's classroom. She rarely asked Mrs. Padilla how to use PowerPoint. When Mrs. Padilla showed the students, Alicia was able to understand the path to Mrs. Padilla's blog site.

Alicia's outside of school experience with multimodal technologies varied, ranging from social media such as Facebook, Twitter, and Tumblr, to texting, Skype, email, Word, Excel, and PowerPoint. She used Facebook daily to connect with her friends in Mexico in addition to using Skype and email.

Alicia mentioned that her family had more than one computer. Thus, when one computer broke down, she said she usually moved to the next computer to continue engaging in technologies.

Selena

Selena is the younger sister of Alicia. At the time of data collection, she was 11 years old, a -sixth-grade student from Mexico. Although her sister started school immediately after her arrival in Texas, Selena did not start attending Mrs. Padilla's multi-

grade level ESL class until February due to an illness that required an almost two-month stay in the hospital. Like her sister, Selena had also attended the bilingual school in Mexico for six-and-a-half years prior to coming to the States.

When I first started coming to Mrs. Padilla's classroom, Selena struggled more in communicating with Mrs. Padilla in English than Alicia did. In addition to her difficulty in pronouncing English words correctly, Selena often asked her sister or Mrs. Padilla to translate English words, sentences, or utterances in Spanish. However, by the end of the school year, she showed progress in her English. She scored advanced/high in reading and advanced in listening, speaking, and writing on the TELPAS.

Selena was shy and more reserved in nature compared to her sister, according to Mrs. Padilla. Mrs. Padilla shared that Selena had gone through the silent period of language acquisition when she had started school. Even after a few months of immersing in the new culture and school environment, Selena remained shy and quiet. Mrs. Padilla asserted that overall, Selena was much more interactive when she worked with her in a one-on-one setting than when she was part of whole-group instruction.

Selena enjoyed using the computer in the classroom. Like her sister, Alicia, Selena had also received some computer training at the bilingual school in Mexico as a part of the curriculum there. Thus, she was accustomed to using Word, Excel, and PowerPoint, including the functions of cut and paste and creating transitions in the slides.

She stated that she liked to read from the computer as well as writing a blog as a literacy activity.

When asked about her personal technology usage outside the school, Selena mentioned in her interview that she started using the computer when she was about nine years old and she spent about 120 minutes a week to communicate with her friends in Mexico using Facebook, Skype, and email, which she learned from her older sister, Alicia.

Mrs. Padilla's Classroom

When I began my data collection in her classroom, Mrs. Padilla had a small class composed of three students—one male and two female students. When Selena joined the class, the number of the students changed to four students: one male and three female students. All of the students' first language was Spanish. Among the three original students, one had been born in the United States and two had emigrated from Mexico.

North

South
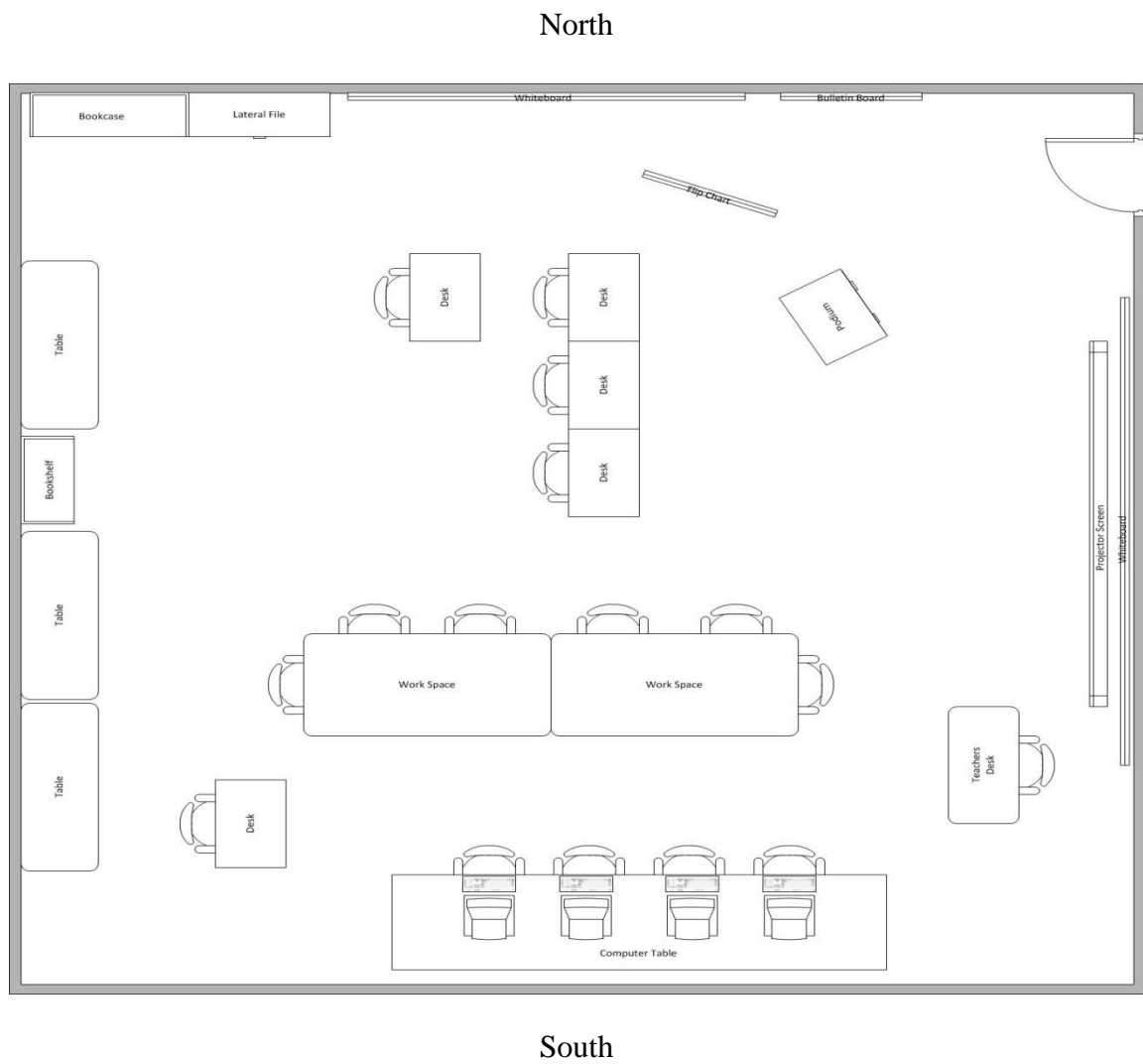
Figure 4. Mrs. Padilla's classroom.

Harrison Middle School was a two-story building and Mrs. Padilla's room was located in the seventh-grade hall on the second level of the building, close to the main hall of the floor.

Mrs. Padilla was the only ESL teacher on this campus; therefore, she had a private classroom. There were four main areas in Mrs. Padilla's classroom. The south wall was the computer station, with a row of four desktop computers on the table against the wall. This was the main area for the students to engage in literacy. The class I visited consisted of four students, so each student could claim their own computer for research, working on a literacy project, and writing using the computer.

Mrs. Padilla's desk with the computer and the document camera was located in the southeast corner of the classroom. Her desk and the end of the computer station created the corner, and a space to accommodate a large table was formed with five desks being put together, allowing the students and the teacher to sit close together for discussions led by Mrs. Padilla (see figure 4).

Mrs. Padilla's desk faced the students' desks, which were lined up facing the projection screen in order to give the students a full view of any images there and to face Mrs. Padilla when she situated herself at the desk (see figure 4). Most of the time, the students stayed in their seats, but when she implemented literacy projects, they could move about in the classroom.

The large projection screen covered the east wall. The screen covered a third of the east wall as well as some part of the chalkboard. Students' drawing and a few motivational posters filled the space not covered by the screen. The projection screen was down every time I observed Mrs. Padilla's classroom. Consequently, I never saw the white board completely exposed for instructional use. However, she had another white board located on the north wall, which she used frequently for writing.

The big flip chart situated right in front of the white board was another tool that Mrs. Padilla used for writing. She used the flip chart to keep some information that she used to review or for the students to copy into journals and their notebooks. Mrs. Padilla also used the flip chart continually to add information.

A large shelved cabinet, which contained books, binders, and bags, occupied the northwest corner of the room. The west wall housed a rectangular table, two desks, a small bookshelf, and two small cabinets. On the desks were more books, such as independent reading materials—mainly novels and expository texts—dictionaries, textbooks, a thesaurus, and workbooks. Mrs. Padilla also kept school supplies, such as markers, glue sticks, paper, etc., on the small bookshelf.

In the next section, I will present the results of the analysis related to technologies and literacy instruction in Mrs. Padilla's classroom. I will also include Mrs. Padilla's curriculum schedule and the synthesis of her technology use and literacy instruction.

Mrs. Padilla: Locating the Use of Technologies

The analysis of the data revealed what types of technologies Mrs. Padilla used in her classroom. Moreover, the analysis showed Mrs. Padilla's use of literacy and how she used technologies for literacy instruction. Table 13 illustrates the technologies used by Mrs. Padilla in her classroom.

Table 13

Technologies Mrs. Padilla Used

Computer Hardware			
Kind of Computer	Desktop		
Peripheral Devices **External devices for computer input and output**			
Input Peripheral Devices	Keyboard	Mouse	Document Camera
Output Peripheral Devices	Monitor	Projector	Printer	Speaker
Auxiliary Device: Support technology usage			
Projector			
What	Software		
Application Software	Microsoft Word	Microsoft PowerPoint	Web browser	Other Software
Kinds	Word Processor	Presentation Program	Run information and communication resources on the World Wide Web	Viewing multimedia
Examples	Word	PowerPoint	1. Internet Explorer 2. Firefox 3. Safari	Adobe Flash Player
	Internet Resources = Communication channels comprised of computers and hardware mediated by global network system called the Internet to share resources and communication		
Kind	Websites	Search Engines	Blog	Distance Learning
What	1. School 2. Library 3. Other educational websites 4. Encyclopedia Britannica 5. Infotrax	Google	Social Media	

I will describe Mrs. Padilla's use of technologies according to the instructional framework she had. Mrs. Padilla divided instruction into two sections: the whole-group instruction (25 minutes) and the small-group/independent instruction (20 minutes).

Whole-Group Instruction

During the whole-group instruction, Mrs. Padilla used a combination of technologies, such as the document camera, the projector, videos, websites, the e-textbook, and a blog. Mrs. Padilla used the document camera and the projection screen to show her instruction to the students. She demonstrated a few examples together before the students started independent work.

Mrs. Padilla also used videos within her teaching. For example, when teaching about hurricanes, she used a video to show the effect of Hurricane Katrina on the region and the people. The Internet resources she used were a variety of websites and a blog site. Since the students were going to use the websites and blogs during the independent instructional time, Mrs. Padilla demonstrated how to use them before the students could start using them. During her demonstrations, she was the only one to use the technologies as the students observed.

Independent/Individual Instruction

Mrs. Padilla used individual instruction instead of small group instruction to engage the students in literacy activities. This could be due to several reasons. First, her class was comprised of 4 students. Compared to Mrs. King's class, she has a smaller

number of students in her classroom and it could have been difficult to form groups. Second, two of her students were newcomers and sisters. In addition, the third student had been in the United States for less than a year. The students talked to each other but their conversation was limited. Thus, all independent instruction activities were carried out individually. During independent/individual instructional periods, the students had opportunities to use the computers, Microsoft PowerPoint, search engines, websites, and the blog for their individual work; however, Mrs. Padilla determined what technology opportunities to give to the students.

During one lesson, students used Microsoft PowerPoint to create text on a slide. They also inserted still images such as photos and pictures from websites in the slides. For this activity, the students used search engines to search for information and images to paste on the slides.

The students also engaged in reading from a website Mrs. Padilla found from the e-textbook digital library. They opened the website and identified the stories they would want to read.

A blog was another technology tool Mrs. Padilla used to engage the students in a writing activity. The students wrote a blog post and posted on Mrs. Padilla's blog after they accessed the site.

During this time, Mrs. Padilla helped the students to complete their assigned tasks. She often went to students' computer stations to provide technical as well as instructional support.

Mrs. Padilla: Locating the Use of Literacy

Mrs. Padilla provided literacy instruction through a variety of literacy activities. The sequence of her literacy schedule changed according to instructional needs. For example, Mrs. Padilla often reversed or repeated the sequence of the curriculum from whole-group to independent instruction during instruction. Sometimes, she gave the entire time to the students for individual/independent instruction based upon students' needs and her instructional decisions.

Introduction: Before Whole-Group Instruction

Mrs. Padilla did not have an announcement time like Mrs. King had. She started right into her literacy instruction. When she needed to take care of school business or other non-academic matters, she took time out of whole-group instruction to take care of it. During my observation, the only time she took a few minutes of the classroom time to complete a non-academic matter was to introduce me to the students and allow me to recruit potential student participants from her classroom.

Whole-Group Instruction

Mrs. Padilla introduced the students to this part of instruction by distributing handouts, projecting the activity sheet, directing the students to the whiteboard, or

starting instruction immediately after the bell. During whole-group instruction, Mrs. Padilla's teaching included continuing a previous lesson, teaching a new lesson, explaining an independent project, giving a quiz, and assessing students' understanding. She taught literacy concepts such as vocabulary, writing, building background knowledge, promoting comprehension, teaching different kind of genres, research, and developing oral language through implementing various literacy activities.

When Mrs. Padilla taught vocabulary, she taught homophones and synonyms by visually presenting different kinds of semiotics. One of these was drawing. For example, when Mrs. Padilla used the words listed in the handout and taught homophones, she also drew a corresponding picture below each word. While showing a video, Mrs. Padilla took time to teach the vocabulary that appeared in the video. To provide such vocabulary instruction, she often stopped the video and asked the students whether they knew the meaning of certain words. If they did not comprehend the meanings, Mrs. Padilla then started a discussion to clear their confusion.

Mrs. Padilla also built background knowledge using the videos when she introduced the students to narrative or expository writing. For example, after watching a video about Hurricane Katrina, Mrs. Padilla helped the students build their understanding of the hurricane. She asked them to share what kind of information they had jotted down while watching the video. This was one way of Mrs. Padilla to assess students'

comprehension. After students' contributions, she added more information about the hurricane from the video.

Mrs. Padilla implemented discussions for assessing her students' comprehension of videos. During one observation, she stopped a video at key points, asked questions about the content, and informally assessed whether the students had some misunderstandings or confusions. If the students had questions, she clarified them. This process of clarification continued even after the students finished watching the video. Afterwards, she initiated a discussion to assess the students' comprehension of the video.

She also shared the e-textbook in her read alouds as an additional way to build students' background knowledge. When the students learned about different genres, for example, Mrs. Padilla provided opportunities for the students to listen to her reading from various books.

Independent/Individual Instruction

Mrs. Padilla allocated time for independent/individual instruction for her students. During this time, each student worked independently and had an opportunity to use a desktop computer for accessing Microsoft PowerPoint, websites, the e-textbook, search engines, and a blog. While the students worked independently, Mrs. Padilla functioned as a facilitator to monitor the students' progress and provide needed support to them. Since Mrs. Padilla had only four students, she supported her students with one-on-one instruction.

She assigned students several types of independent work, such as silent reading, note taking, writing, drafting, and revising. For example, during the Hurricane Katrina Narrative Reading Event, Mrs. Padilla asked the students to read three stories from a website related to Hurricane Katrina. These stories were personal accounts of people who had experienced the hurricane. Mrs. King introduced the readings as a type of genre called narratives. After they finished reading, the students retold the three stories to Mrs. Padilla and together as a class, they talked about the text and why it was called a narrative. Later in the semester, the teacher introduced the students to expository writing when they engaged in a research project about the Titanic; they used search engines to look for information and images. Students used the blog to complete a narrative pre-writing exercise. Table 14 represents Mrs. Padilla's curriculum schedule and literacy activities described above.

Table 14

Mrs. Padilla's Curriculum Schedule and Literacy Activities

Whole-Group Instruction: 25-30 minutes	
Literacy Concepts	Literacy Activities
Related to Vocabulary	Academic Vocabulary, Homophones, Synonyms,
Related to Background Knowledge	Read Aloud, Prior Knowledge, Note Taking
Related to Comprehension Strategies	Clarification, Note Taking, Summary, Read Aloud, Retell
Related to Genre	Expository, Personal Narrative
Related to Oral Language	Listening, Speaking
Related to Research	Citation, Finding Information
Related to Writing	Combining Sentences, Note Taking, Expository, Personal Narrative, Shared Writing, Spelling

Independent Instruction :15- 45 minutes	
Literacy Concepts	Literacy Activities
Related to Vocabulary	Academic Vocabulary
Related to Background Knowledge	Silent Reading, Note Taking
Related to Comprehension Strategies	Main Idea, Note Taking, Read Aloud, Silent Reading, Retell,
Related to Genre	Expository, Personal Narrative
Related to Oral Language	Listening, Speaking
Related to Research	Citation, Searching Information

Related to Writing
 	
    *Draft
 	
    *Revision
	Summary, Prewriting (Activate Background Knowledge, Gathering Ideas, Organizing Ideas, Retell, Writing)
	Spelling, Organization,
	
	Reread, Revise,

The Synthesis of Mrs. Padilla's Technologies and Literacy Instruction

Table 15 below provides the overview of the use of technologies and literacy instruction by Mrs. Padilla and her students. Table 15 below provides the explanation of notations. The notations *T* and *S* shown in Table 14 below indicate the teacher, Mrs. Padilla, and her students, as the users of technologies respectively, while *t* and *s* indicate they responded to users' technology usage. The notations presented here are as follows:

Table 15

Notations

T=Teacher	S=Student
*User of Technologies -Teacher: T	*User of Technologies- Student: S
*Responder of Technologies-t	*Responder-Students: s

The table also includes the demarcation of whole-group and independent/individual instruction in Mrs. Padilla's classroom. The vertical notations of Table 16 are based upon Table 14. The horizontal notations are based upon the technologies Mrs. Padilla used, illustrated in Table 13.

I further analyzed the usage of technologies in relation to how Mrs. Padilla used technologies for literacy instruction. When she used them for literacy instruction, the students became the responders to her technology usage. Then, while the students used

92

the technologies for literacy instruction, Mrs. Padilla became a facilitator to support their

literacy learning.

Table 16

Overview of Mrs. Padilla's Technologies and Literacy Activities

Technologies / Literacy	Document Camera	Projector	Microsoft Word	Microsoft PowerPoint	Internet Resources				
					Search Engines	Website	E-textbook	Video	Blog
Vocabulary Academic voc. Homophones Synonyms	T-activity sheet, homophones, showed, Modeled, discussion s- read aloud, wrote, showed	T-activity sheet, homo-phones showed, modeled, discussion, s- read aloud, wrote, showed		S				T- discussion	T-discussion T-discussion, clarified s- discussion s-discussion
Background Knowledge Note taking Summary Read aloud Retell		T-showed a video s- watched			T-Showed how to get to the site	T-retrieved from E-textbook	T- showed discussion s-watched discussion		
Comprehension Strategies Clarification, Note Taking Summary Read Aloud Retell	T- Modeled, discussion s-listened, discussion	T- Modeled discussion s-listened, discussion			T-showed the site s-Retell	T s	T-discussion, clarified s-Listening, Discussion, Note taking		T- read aloud, writing prompt
Genre Expository writing Personal Narrative	T- Showed, Modeled expository features	T- Showed Expository features				T- Showed Expository tests	T- expository text s- watched		T- Narrative text
Oral Language Listening Speaking	T-Speaking Listening s-peaking listening	T-Speaking Listening s- discussion			T	T-check video comprehension	T- Video comprehension		T-discussion s-discussion about blogs

94

Technologies / Literacy	Document Camera	Projector	Microsoft Word	Microsoft PowerPoint	Internet Resources				
					Search Engines	Website	E-textbook	Video	Blog
Research Citation Search Information		T- Showed, Modeled Citation s-looked			T- Search Inform.	T- Search Inform.			
Writing Combining sentences, Note Taking, Expository, Personal Narrative, Shared writing Spelling	T- Modeled, Combined sentences, Discussion, Shared writing s-looked discussion	T- Modeled, Combined sentences, Discussion, Shared writing s-looked discussion	T- typed				T-showed Expository features s-looked	T-showed s- note taking	
Independent Instruction									
Vocabulary Academic vocabulary						S- question t- discussion	S t		
Background Knowledge Silent Reading						S- Silent reading	S		
Comprehension Strategies Main Idea, Note Taking, Read Aloud, Retell, Silent reading					S	S- Silent reading Retell	S- Silent reading Retell		
Oral Language Discussion Listening Speaking						S- discussion t- read aloud	S-discussion t- read aloud		
Research Searching info.					S- Images Info.	S			

95

Technologies / Literacy	Document Camera	Projector	Microsoft Word	Microsoft PowerPoint	Internet Resources				
					Search Engines	Website	E-textbook	Video	Blog
Writing Blog, Draft, Revision, Spelling Summary			S- wrote personal narrative to post on the Blog site	S- expository Writing, Revised spelling		S-Note taking Summary	S-Note taking Summary	S-note taking	S-wrote personal narrative and posted it
Technology			S T				T- demonstrated		

Telling Cases from Mrs. King's Classroom

The purpose of the qualitative case study research was to explore how ESL teachers used technologies during literacy instruction in their classrooms and their students' responses. In the previous section, I shared the descriptive data about the teachers and students and their uses of technology and uses of literacy. In this section, I present the results of the data analysis from five specific literacy events observed during the study as telling cases in Mrs. King's classroom.

Telling Case 1: Native American Indian Research Event

The focus students, Juan and Raul, were participants during this whole-class literacy event. On December 13, 2011, during the second week of observation, Mrs. King began a lesson on research using the e-book. A few students were in the classroom five minutes before the bell rang and Mrs. King started talking with them about a research project the class would complete. She explained that the project required computer use before a class began. This conversation took place before class started. She then walked to the blackboard and wrote the online address, *SMS (Sampson Middle School), Library, Online Resources, School, Home Access* on the board. This outlined the steps the students would need to complete to get to the website for the day's lesson.

(00:00) The bell rang and the students started writing down the day's agenda, which Mrs. King displayed on the projection screen.

(02:00) Mrs. King looked at the seven students in the classroom and introduced the, researching the Native American Indians, in which the students were about to engage. She then turned their attention to the projection screen, which displayed the North Texas School District website. Starting from the district website, she then demonstrated systematically how to use the e-book website that the students would use for their research during small-group instruction.

Using the computer on her desk, Mrs. King opened the library's website from the school website and displayed the e-book in the school library. The e-book she had selected contained a video and digital book that the students could access for research. Once she opened the e-book, she showed her students the book, flipping the e-book page by page to show its entire contents. It had illustrations, photos, information about different tribes, and maps. Mrs. King also accessed a video about Native American Indians from the e-book and showed it to them.

One student said, "It's cool!" as he viewed the e-book on the projection screen. The e-book also had an audio feature, which provided the recorded voice of a person reading the text, so Mrs. King clicked on the audio button on her computer, but the sound did not start. She again clicked the audio button. However, she was not able to initiate the audio book. After a few attempts, she commented that she would have to learn the tricks to access the audio function. During this demonstration, Juan's and Raul's heads were up, looking at the screen.

Next, Mrs. King got up from her computer desk and handed out a hard copy of the research project sheet, which included questions the students would answer during their research. She also handed out a hard copy of a map the students could use. After the students received these papers, Mrs. King displayed the question sheet on the projection screen from the document camera to start demonstrating how to answer a few research questions. For example, she used the word *source* in the paper and posed a question about the definition of the word *source*. Juan answered and defined *source* as " "something like food." She responded to clarify, saying he misunderstood the word as "sauce." Mrs. King said that sauce is "something like food, but 'source' is a different word with a different meaning." However, she did not give them a definition for *source*.

Next, Mrs. King moved from the document camera to her computer and started showing the e-book pages, displaying the page containing the title of the book and the author's name on the projection screen. She explained that the pages shown were the examples of sources about which she was talking. Then, Mrs. King turned to the next page of the e-book, which showed the publication date and the publisher. Mrs. King pointed this out to the students and said that they only needed to list the author, the publisher, and the publication date as their research sources.

After this instruction, Mrs. King told the students that they would need to include a few important pieces of information for the research questions. She used another question from the sheet in her hand and read aloud what important information pertained

to the question. After completing this modeling exercise, Mrs. King instructed the

students that they could do this research individually or in pairs. Figure 5 shows the

assignment Mrs. King distributed to the students to guide their small-group/independent

research.

Native American Research

Go to **True Flix** through the SMS Library website. Choose the book about the tribe you chose. Read the book and watch the

video about your tribe. Answer the following questions. Make sure you cite your source, but do not copy what the book says.

Read it and then write what you find most important in your own words. You may draw your answers for some questions.

You will present your information to the class.

1. Name of Tribe and pronunciation

2. Location

3. Way of living

4. Housing

5. Ways of communication

6. Meeting with Europeans or European Americans

7. Roles of men and women

8. Customs and traditions

9. Clothing and hair styles

10. Food

11. Famous people

12. Source

Figure 5. Native American Indian Research.

As the research topic, each pair or person could choose a tribe they would like to

research. Juan and Ronald each chose to work with another student as a pair. Each boy's

partner sat in the desk behind him. However, some students chose to complete their

research individually.

Mrs. King also gave the students a choice of using the laptop computer or the

desktop computer to complete the project. Juan and his partner chose a laptop. Juan

pushed his desk and his partner's desk together to make a larger work area. Then he went

up to a cabinet next to the computer station and took a computer out of the cabinet. Raul

and his partner chose a desktop computer, so they went to the computer station and pulled

their chairs close to one of the desktop computers.

(20:00) Once the students turned their computers on, Mrs. King turned the

projector screen off and started walking around while she repeated how to get to the

website to access the e-book. She also said that the students were to help each other to

complete this research project, if they worked with a partner. Circling around the

classroom, Mrs. King noticed one group had accessed a video from the e-book. Looking

at them, she commented that the video could provide answers to the questions just as well

as the e-book.

Both Juan and Raul interacted with their partners to engage in this literacy

activity. For example, when Juan and his partner opened the e-book, they first turned to

the page with a map. After glancing at that page a few seconds, Juan and his partner

closed the page and started talking. Then they opened a page in the e-book that contained

the information about Native American Indian tribes. Knowing that the e-book also

provided an audio version of the text, Juan started the audio option to read along in the e-book with his partner, following the green cursor as it moved from word to word. Juan and his partner also utilized the video options in the e-book. While Juan and his partner watched the video, they stopped the video frequently, discussing the material with each other before continuing the video.

As for Raul's engagement, Raul left the classroom with an excused hallway pass from Mrs. King before he even accessed the e-book. By the time he returned to the classroom, his partner had started browsing through the e-book. Mrs. King circled around the classroom and came back to Raul's station, where Raul and his partner were watching a video. She told them that they could also find answers in the video. Raul read the research questions aloud, and his partner read aloud from the e-book. The boys interactively participated in their assignment together. During their research, Raul and his partner came to the word *housing,* and they started talking about the meaning of the word. However, neither could understand what it meant, so Raul's partner called out for Mrs. King's help.

Mrs. King rarely gave complete answers to her students; rather, she opted to provide information that would help the students answer the question themselves. She offered suggestions, hints, or asked her students more questions in order to stimulate deeper thinking and reasoning. In this instance, when she walked to their computer station, she gave the boys a hint, stating that the definition included the structures in

which the Indians lived. She asked them to find additional information in the e-book. Raul and his partner then reviewed an additional three to four pages in the e-book as Mrs. King suggested, engaging in reading aloud, talking to each other, and silently reading to find the information they needed. Raul wrote their answers down on the paper after he consulted with his partner, sharing his ideas during the activity.

(45:00) Before they completed the work, the bell rang and the students shut down the computer.

Telling Case 2: Persuasive Writing/YouTube Watching Event

The focus students, Juan and Raul, were participants during this whole-class instruction. On January 25, 2012, during the fifth week of observation, Mrs. King began a lesson on persuasive writing. There were two students in the classroom a few minutes before the bell rang. Mrs. King asked them to start reading a text she had projected on the screen. She told them they would be experts on the paragraph.

(00:00) When the class started, Mrs. King pointed to a paper under the document camera and explained to the class that they would become experts on certain paragraphs. She assigned paragraphs to five students in all. Juan was assigned the fifth paragraph. As soon as he was given his assignment, he looked up at the screen, instead of the paper, and began reading. Raul had not yet arrived in class.

After Mrs. King assigned each student a paragraph, she gave tokens to those students who had arrived to class on time the day before. Mrs. King gave Juan a token;

103

however, he did not want it, so he gave it away. After Mrs. King gave a token to each

student who had earned one, she began discussing the next day's schedule related to

College Week. Then the students stopped looking at the screen and turned their

attentions to Mrs. King as she talked about College Week. She pointed at two hats, each

with a college initial on it, that were sitting on the bookshelf. When Juan noticed the

hats, he got up from his seat and walked to the bookshelf to pick up one of them. Since

Mrs. King did not stop him, Juan tried the hat on. He then took it off and returned to his

seat, all without saying a word.

(05:00) Mrs. King spent 5 minutes on the first part of the instructional time before

whole-group instruction. After that, the students resumed reading from the projection

screen. Raul came into the classroom and approached Mrs. King, who was standing in

front of the projection screen. He showed her a cut on his finger. Mrs. King inspected

the cut, then went to her desk, got two bandages, and gave them to Raul. Mrs. King

exchanged a few words with Raul and then sent him to the restroom.

(10:00)   While Mrs. King was helping Raul, Juan stopped reading from the

screen and began chatting with the student who sat behind him. Juan and his friend

flipped through the pages of a book together and continued talking. When Juan heard

Mrs. King instruct the class to review the three paragraphs in the text, he quickly closed

the book and repositioned himself towards the screen. When Mrs. King asked about the

main idea of the first paragraph, Juan quickly answered, "Benefit of video games." Mrs.

King asked the class if they agreed with Juan's answer. The students said "yes" in unison. Mrs. King listened to their answer and then underlined a sentence in the first paragraph as the main idea. Next, she asked what the main idea was of the second and third paragraphs. One student responded, "A sister is learning from the video game." Mrs. King did not affirm or deny the answer, but instead continued asking questions related to paragraph three. After Mrs. King listened to the students' responses, she underlined one sentence in paragraph three as its main idea. During the discussion, Raul had returned to the classroom and sat down. He suddenly stood up and then walked closer to the projection screen to see the text on it. Mrs. King asked him if he had a question. He said he did not have a question, but he wanted to read the text. Raul then returned to his seat a few seconds later. Mrs. King then moved on to the next paragraph. She noticed that it was the longest paragraph in the text and decided to read it aloud. Both Juan and Raul looked at the screen as she read aloud. When she finished reading the paragraph, Mrs. King asked, "Who got some information?" Again, Juan answered the question. Mrs. King pointed at paragraph 5 and asked Juan another question – "What did he say about video games?" Juan responded, "It is good to play an hour."

After listening to his answer, Mrs. King wrote, "Video games encourage kids to finish other work so they can play games" on the sheet of paper. The students could see what she had written because the paper was still being projected by the document camera. Mrs. King then asked Juan another question about paragraph five. After Juan had given

his answer, she told him that he had answered correctly. She then turned to Raul and asked him to read the questions related to choosing a correct answer from multiple-choices on the projection screen. After he had finished reading the questions, Mrs. King used them and asked the students to choose the right answer from answer choices. For example, she read a paragraph and then asked the students "What is personal experience?" As before, Juan answered this question using his own words, "that's what people encounter with." Mrs. King praised Juan, saying "Wow! That's a good answer." Then, she lowered the document so the students could see that part of the paper and read a few more answer choices aloud from the projection screen. After engaging in a short discussion with her students, Mrs. King wrote "probably" next to one answer choice. She then went back to the paragraph and asked the students more questions. By engaging in this exercise, the students were able to eliminate answer choices to find the correct answer.

Mrs. King taught the students another strategy to answer multiple-choice questions correctly. Using this strategy, Mrs. King asked the students to raise their hand if they thought the answer was *A*. Raul raised his hand, but quickly put it down. Mrs. King asked Raul which answer he chose. Raul said, "B." Mrs. King next reviewed each answer choice, read the paragraph aloud, led a classroom discussion about each answer choice, and finally, identified the right answer.

(25:00) After this lesson ended, Mrs. King reminded the class that they had learned the word *evaluate* the day before. She asked the students if anyone remembered the meaning of the word. Juan answered, "Expiration date." Mrs. King added to Juan's answer, pointing out that customers evaluate expiration dates and pointed out that coaches evaluate their players. The students added that coaches evaluate the skills, abilities, speed, and concentration of their players. After this brief discussion, Mrs. King instructed the class that they were going to evaluate persuasive writing. She further stated that they were going to watch a video. However, before starting the video, Mrs. King introduced the video and asked the students to pay attention to what the video persuaded people to do.

Mrs. King then started a Nike commercial she had downloaded from YouTube. The students laughed at the commercial, which showed people bouncing a ball on a basketball court. At the end of the commercial, Mrs. King said, "Look at those cool people. They tried to persuade us to buy Nikes." Without making any more comments, Mrs. King started the second commercial. A Coke commercial showed two enemy soldiers guarding a border in the desert. One soldier took a Coke from an ice chest and started drinking it, while the other soldier watched. The first soldier then offered his enemy a Coke, which he accepted. Mrs. King remarked, "They are trying to sell you a Coke. Look at the new friends. What does it mean? What did you notice on their

faces?" She further observed that the soldiers' faces were sweaty, which makes you

thirsty.

(35:00) Next, Mrs. King told the students that they would read an article

together. The students would decide then if the article she read was persuasive. She

switched the display on the projection screen from YouTube to a page from the e-

textbook. Lastly, she asked the students to identify any facts or opinions in the passage.

Juan and Raul looked up at the screen while Mrs. King read aloud. Once she had

finished reading the passage, she asked the students to share their thoughts regarding

what the text was trying to persuade them to do. She informed them that they should use

the facts in the text to support their position. Next, Mrs. King explained what a *fact* is,

using the example of astronauts walking on the moon. She then asked the students for

examples of facts. Raul suddenly got up from his seat, went to the projection screen, and

used his pencil to trace a sentence on the projection screen. As a result, Mrs. King

stopped her instructions for a few seconds. Raul quickly went back to his seat once he

had finished.

(45:00) Before the students could share facts from the text, the bell rang and the

class was dismissed.

Telling Case 3: Poetry Writing Event

The focus students, Juan and Raul, were participants during this whole-class

instruction. On February 10, 2012, during the seventh week of observation, Mrs. King

began a lesson on poetry. For the last three days, Mrs. King had been away attending staff development on effective strategies for Dual Language instruction. As shared in her journal entry about this training and her reasons for this specific poetry lesson, she had learned about the power of having students working together in pairs in order to build academic language. The training suggested pairing a higher-level language student with a medium-level language student to help support language and higher-level thinking. Within this training workshop, she had learned about how this structure and approach allowed students to help each other and therefore accomplish more than they could on their own.

A few minutes before the bell rang, Mrs. King announced to those who were already in the class that today they would be using the computers to write poems. She then wrote, "*I see, I hear, I smell and I feel*" on the whiteboard. Then she took a moment to locate a specific section of an e-textbook on her computer and projected it onto a screen covering the classroom's whiteboard. Juan arrived in class just before the first bell and started talking with his friends on the couch. Even after the bell rang, the students continued to enter the classroom, greet classmates, and settle into their seats. On this day, three students were absent.

(00:00) Once the bell rang, Mrs. King began her overview of the instructions for the day and waited for the students to write down the agenda.

109

(02:00) Mrs. King resumed telling them they would be writing a poem using their senses and pointed to the writing on the board. Then, she took her students through each phrase, telling them that they would be taking notes on things that they would see, smell, feel, and hear when they went outside to observe their surroundings. She asked the students to write down each phrase as a heading across the top of their papers. Mrs. King then stated that, as the students observed, they would be capturing a word or phrase to place under each of these headings. Before taking them outside, she quickly paired them up for this activity and gave each partner group a different colored marker and clipboard to hold their papers.

(10:00) Once outside, Mrs. King repeated the directions about recording what they "feel, smell, see, and hear" and added that they were welcome to use either Spanish or English to write these observations. She also told them to be sure to talk to each other as they walked around and recorded their observations. She then stated that they would only have four minutes. As the students began to split off with their partners, she walked around with them and continued to look down at her watch, sharing how much time was left, "you have two more minutes…you have one more minute."

All student pairs walked around together but went to different locations, and all stayed close to the building. As Raul and his partner started walking away from the door, Raul held the paper on the clipboard, gazed at the streets around the school building,

around the playground, and up into the trees as he talked to his partner. They both took turns writing by passing the clipboard back and forth.

Juan and his partner walked out in a different direction and talked with one another as Juan held the clipboard and wrote down some words on their paper. They also switched and Juan gave the clipboard to his partner to write. When the four minutes were up, Mrs. King called them all back into the classroom.

Back in the classroom, Mrs. King told the student pairs that they were now going to circulate around the room and talk with different groups as they shared what they had written. She told them that, if another pair had written something that was new that they wanted to include, they were to take that pair's colored marker and write the note down on their own paper. She asked them to try to capture at least three or four new notes in different colors from other pairs to add to their list. As they did this, she continued to walk around and share comments, such as "I like the way Raul and Daniel are looking at the others' lists" and "write it down on your list." She moved around listening in on their talking and sharing. She only gave five minutes for this activity and then asked the students to go back to their seats.

Mrs. King stepped back to her computer and projected the example poem from the e-textbook onto the screen. She read it aloud to the students and discussed each line and the author's descriptive language. Before assigning them a computer to use with their partner, she let them know that they would be using their list to create a poem.

(25:00) Once the students were set up on the computers, Mrs. King asked if any groups needed help. Several of the students needed help, so she helped one group at a time. For example, when Juan asked her where to go to begin, as she walked over to help, he and his partner had figured it out. Then, they asked a new question about scrolling up and down. Responding to their request, she told them how to do it by pointing the cursor. Mrs. King then continued to walk around the groups and, as she noticed a specific technical issue, she would stop to help.

As the pairs continued to work together, it became apparent that Juan and his partner did not know how to insert clip art. Using their assigned computer, Mrs. King showed them how to insert the images by clicking the *Insert* icon and then choosing *Clip Art*. She told the pair they could change the size and showed them how to make it bigger or smaller. The students then found a picture of a car wrapped in a ribbon, discussed it, and together decided where to position the picture within the document.

As the students worked together to compose their poems, Raul and his partner were not talking together. Mrs. King noticed their lack of interaction, so she came over and suggested they talk to each other more as they composed. Raul and his partner then started talking to one another and took turns using the computer to write their lines of the poem. Raul's partner read their line that said *I smell trees*, turned to Raul, and laughed. Raul and his partner then continued to work on their own in this manner.

Juan and his partner were talking but not writing. Mrs. King stopped by their

computer station, reviewed what they had written so far, suggested they add more

description to the first line of their poem, and then walked away. In response to her

suggestion, Juan and his partner changed the line, *I see cars and trucks* to *I see cars

passing trucks*. Mrs. King circled back around to Juan and his partner's desks, reviewed

the addition, and said, "I like that." She then walked away again. After the two students

finished writing their next line, Juan silently read to himself the poem displayed on the

computer screen. He then added the word *ice* to revise the sentence to *I feel ice cold

wind*. He then asked Mrs. King how to write the word *icy*, and she replied that he did not

need to worry about how to spell as he was composing, but could do that later. She also

shared a poetry book with Juan and his partner to review how different poems were

formatted and punctuated. Juan and his partner picked up the book, glanced through it,

and then resumed writing and revising their poem. They went back to the line *I see cars

passing trucks* and decided to add more detail. Their revised sentence said *I see cars

passing trucks like a slingshot*. Juan was still concerned with spelling and asked Mrs.

King whether *slingshot* was one word or two. Her response was for Juan to talk to his

partner to solve their concern. Later, Mrs. King stopped by their computer station and

suggested they use an image of a slingshot because she thought that might be "cool."

Juan immediately started looking for the clip art from the Microsoft Word clip art

collection and found one. He and his partner discussed where to insert the clip art,

moving it around the screen and experimenting with its size before finalizing its

placement on the screen.

(45:00) At this point, the bell rang and Mrs. King asked the students to save the

poems and close their computers. She informed them that they would continue their

poetry composing the next day.

Night Time

I see cars passing trucks like
slingshots.

I hear the cold wind passing
through me.
I smell the fresh air.
I feel the icy cold wind.
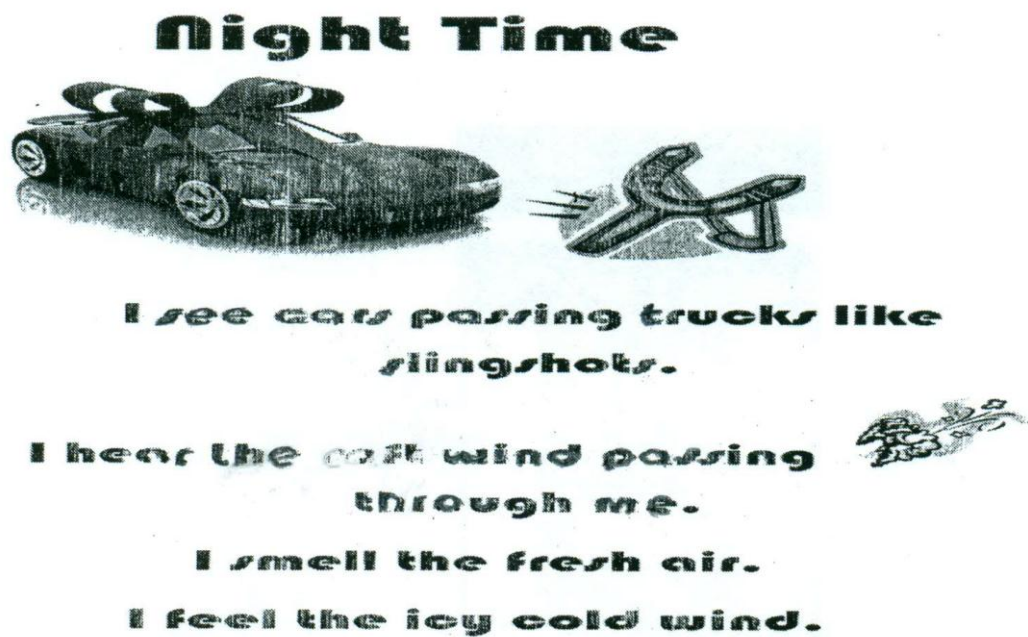
Figure 6. Juan's Work sample.

Night Time

I see a police car, the bus stop, threes, water, cars passing, apartaments.

I hear water **dripping**, soft wind birds, and cars passing.

I smell the **food** of the cafeteria, wet air.

I feel the **wind**, the water, **the grass**, the cars, and the water dripping.
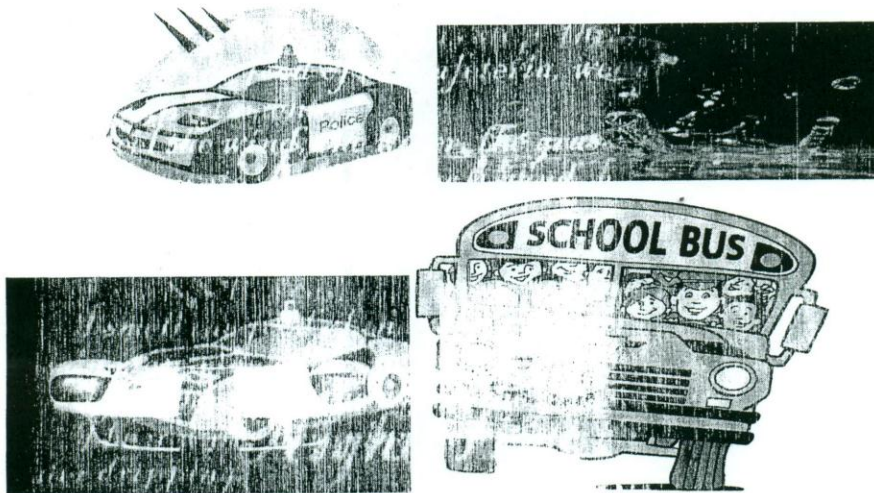
Figure 7. Raul's Work sample.

Telling Case 4: Multiple Meaning Word Event

The focus students, Juan and Raul, were participants during this whole-class instruction. On February 2, 2012, during the third week of observation, Mrs. King began a lesson on vocabulary. Mrs. King and the other teachers on her campus met with a group of visiting English Language teachers from Korea before the bell rang.

(00:00) After the bell rang, the students first wrote the day's agenda. Then, Mrs. King announced that the Korean teachers would visit her classroom the next day. Thus, she started preparing the students for their visit. Mrs. King guided her students to brainstorm questions they could ask the teachers. The students generated questions about things like the visitors' schools, dress, shoes, food, about famous Korean people, and about how to say a few words in Korean. Then, Mrs. King wrote them on the flip chart. Mrs. King did not provide time for small-group/individual instruction during this literacy event. She used almost the entire instructional period for whole-group instruction.

(10:00) After preparing for the next day's event, Mrs. King stood in front of the projection screen, which displayed an e-textbook that she had set up before the first bell rang. She started reading a page from the e-textbook under the subtitle *Use Context Clues for Multiple-Meaning Word* aloud. After a few sentences, Mrs. King stopped reading and began writing on the chalkboard located behind the couch. She wrote the word *light* and drew a light bulb. Below the word *light*, she wrote, *takes darkness,* and drew a light bulb. She then wrote *not heavy* and drew a feather next to the phrase. Mrs.

King pointed out that *light* had multiple meanings and she had just defined two meanings

for *light*. She then walked back to the screen, and, using a ruler, started reading from

where she had left off in the same e-textbook passage. After a few more sentences, Mrs.

King solicited the students to read four sentences from that passage. One student

volunteered to read. As the student read, Raul followed along by looking at the screen

and reading along with the student who was reading aloud. After the student finished,

Mrs. King asked all the students if they had used context clues before. Juan responded

loudly, "Yes." Then, referring back to the e-textbook, Mrs. King pointed at two

underlined words in the text: *point* and *tip*. Almost immediately, Juan said, "point of the

desk" as he pointed and touched the corners of his desk. Mrs. King walked a few steps to

the world map and pointed to north Texas on the map. Juan and Raul also stood up and

walked to the map, looking at the location identified by Mrs. King. Mrs. King said that

the word *point* had different meanings: a verb usage and a noun usage. Raul suddenly

interjected in the middle of Mrs. King's instruction, stating that *tip* meant giving money

to a person. Acknowledging his comment, Mrs. King changed the instruction and instead

discussed the definition of *tip*. She further explained that a person will "give a tip to a

person who waits on [him]" and then asked more questions about how the word *tip* could

be used. As the students replied, Mrs. King listed their comments on the blackboard.

(20:00) Mrs. King used a discussion strategy to encourage the students to share

their ideas. At the initiation of any topic discussion, she often engaged the students to

117

think. For example, when one student contributed "tip of the mountain," Mrs. King

asked, "Where is it?" Another student replied, "Summit." Mrs. King continued to solicit

more definitions of *tip* from the students. Another student used the expression "tip of my

tongue." Mrs. King asked if the tip of the tongue was at the very end of the tongue or at a

different place on the tongue. Mrs. King next used the example of *tipping a glass over*

from the e-textbook. She asked the students what would happen if a glass tipped over.

One student responded that the contents would spill out of the glass. Mrs. King stopped

the discussion to write down *tip over* on the chalkboard. Then returning to the e-textbook

on the projection screen, she read the next sentence, "It is at the tip of the handle of the

Dipper." Mrs. King asked the students to find the appropriate meaning for this usage of

the word *tip*.

(30:00) After the exercise, Mrs. King engaged the students in shared reading

using a different text from the e-textbook. During the shared reading, she used a ruler to

point to each word as she read along with the students. Juan and Raul followed along,

reading the text on the projection screen together with Mrs. King.

After the shared reading activity, Mrs. King returned to teaching more about

multi-meaning words. She asked the students to write several words in their journal

notebooks: show, fan, figures, dust, and bright, which she wrote down on the whiteboard.

Then she asked the students to provide one meaning of fan. Juan answered that using a

fan resulted in cooling the air. Building on Juan's response, Mrs. King started fanning

with her hands. Another student commented that a person could be a fan of someone

else. Mrs. King wrote down *admirer of someone* on the chalkboard. She then

differentiated between the noun and verb usages of fan.

(40:00) As the end of class approached, Mrs. King allowed the students to discuss

multi-meaning words with their fellow classmates during the last five minutes of class.

Juan and Raul turned to the students who sat next to them and talked to them until the

bell rang. Mrs. King then dismissed the class.

Telling Case 5: Vocabulary and Myth Writing Summary Event

The focus students, Juan and Raul, were participants during this whole-class

literacy event. On February 21, 2012, during the seventh week of observation, Mrs. King

began a lesson on summarizing myths. The students would use the computer for this

literacy activity. Raul and his group now understood they would use the desktop

computer while Juan and his group would use the laptop computer. This had been

decided during a previous lesson.

(00:00) The students finished writing down their agenda from the projection

screen.

(02:00) Mrs. King began whole-group instruction. She switched from the image

of the agenda on the screen to the image of the sentence, *How does the hunter find

animals?* Next, she read the sentence aloud and asked the students to provide an answer

to that question. When the students answered, they did not have to raise their hands to

provide answers. Students started contributing using the word *tracks*. It was getting difficult to hear their answers, so Mrs. King stopped the students and named a few of them to provide answers.

During this whole-group instruction, Mrs. King implemented shared writing and reading aloud. For example, using the students' responses, Mrs. King wrote the sentence *The hunter uses tracks to find them* and projected this onto the screen. Then she read that sentence aloud. Before making the transition to small-group instruction, she asked them whether they understood this activity. Hearing the students say yes, Mrs. King asked them to select one word from the list they had written down in their notebook the day before. Then, they were to use that word to generate an interrogative sentence and an answer to that sentence. After this instruction, Mrs. King grouped the students into three groups for the small-group/independent activity.

(10:00) After Mrs. King completed this whole-group instruction, she asked one member of each group to turn his or her computer on. Raul and the other students ran toward their computer stations to log on to their computers. Since Juan's group used the laptop computer, Juan picked up his laptop and logged on. After they logged on, she asked the students to come back to their seats for the first small-group/independent vocabulary activity without using the computer. While the students were engaged in this small-group/independent instruction, Mrs. King went to a student's computer and opened

120

the e-textbook for the next small-group/independent instruction. Since the students had

logged in earlier, it did not take much time for Mrs. King to access the e-textbook.

During the first small-group activity, Mrs. King's role was to provide support for

the students in a variety of ways as she walked through the students' desks. Raul asked

Mrs. King to come to his desk, because he and his partner were confused about what they

needed to do. She went to his desk and explained the steps again to them. Mrs. King told

the students to use one word from the vocabulary list in their notebook. Then, she asked

Raul to open the notebook and read from the list of vocabulary that he had written down,

asking them which word they would use. After they provided an answer, she redirected

them to the screen again and asked Raul and his partner to look at the example they had

done together.

When Juan requested Mrs. King's help, she went to his computer as well and

suggested Juan and his partner to work together. Mrs. King asked Juan's partner which

word they had selected to use, and its meaning. Then, she told them that they knew the

meaning of the word *opposite*. Once more she asked them to work together to generate

an interrogative sentence. The students agreed and started talking and exchanging their

ideas with each other. As class progressed, Mrs. King continued to provide assistance

specific to the students' needs in the classroom.

(25:00) After their independent work, the students had an opportunity to present

their interrogative sentences using the document camera and projector. When the groups

121

presented, Mrs. King made this presentation an interactive learning opportunity. For example, Raul read the sentence aloud, "Why do you want to remain in a good team?" He used the word *remain* in this sentence and provided the answer. After his presentation, Mrs. King asked the students to provide their answers in response to the question presented by the group. When the students shared their answers, Mrs. King engaged the students in a discussion to find out whether the answers shared by the others were appropriate responses to the question presented by Raul's group. Before she asked another question, Mrs. King commented that they had different answers and pointed out that the question had several possible answers.

Next, she asked the purpose of this vocabulary activity. One student responded that they could become familiar with the words. Without adding any comments, Mrs. King continued to ask why they needed to become familiar with the words. The students could not come up with the answer. She waited for the students' response. When she saw that they were not going to respond to her questions, she said that they would be able to understand the story better if they knew the meaning of the words.

(30:00) Mrs. King introduced the students to the small-group/independent activity. She asked each group to read one myth from the e-textbook and write a summary as a group. Then, she went to her computer and started typing their reading assignment using Microsoft Word. This enabled the students to see their group assignment on the projection screen. Before starting their group project, Mrs. King

encouraged the students to talk with each other and come to an agreement about writing a summary. For example, Mrs. King used expressions such as "You all have to agree," and "The work will represent the whole group."

During this literacy activity, Mrs. King provided literacy support as well as technical support to the students. For example, when Juan's group could not find the assigned story from the e-textbook, she went to his computer station and guided him as he scrolled up and down until he found his story.

As the students engaged in reading, shared reading and peer teaching occurred, though Mrs. King had not specifically directed them to implement these strategies in their group project. During this shared reading using the computer, the students provided support to each other, just as Mrs. King provided her support to the students in the whole-group instruction. For example, Raul's group started taking turns reading one sentence per person. When it was Raul's turn to read aloud, he came to the word *circling*, but he could read the word. Confused, he looked at one of the group members for help. Understanding Raul's cue, the other member read the word aloud for him. Since Mrs. King encouraged the students to read their myth a few times for comprehension, during the second round of reading, Raul was able to read the word without any problem.

In this literacy activity, Juan and his group also took turns reading from the computer screen. While one member read, Juan listened to him, and then the group

talked about the passage they had just read. Once they reached a consensus on a

summary, the third member started writing on the paper.

(40:00) Toward the end of the class period, Mrs. King engaged the students with

one more literacy activity, differentiating the genres they had studied. For this activity,

she did not use any technologies or form any groups. First, Mrs. King reviewed the

fiction and non-fiction stories they had studied. Then, she asked where myth, drama,

mystery/suspense, personal narratives, and informational/expositive stories fit in with

these two broad categories that they had studied. Mrs. King took outstrips of paper that

had different genres written on each. These were the products of a previous day's work

by the students, when they had cut the strips and written down one genre on each strip.

At this time, Mrs. King spread them out on the oblong table; she and the students then

discussed the stories they had read and reviewed into which category- narrative,

informational, mystery, etc- those stories should be placed. For this activity, the students

only needed to sort the subcategories under one of the two main categories—fiction and

non-fiction. When the students started engaging with this activity, collaboration took

place. They asked each other questions and moved the strips around while they consulted

and negotiated with each other about where the items should go, whether what they were

doing was right or wrong, etc. These interactions continued until the students finally

placed the subcategories under the right category. Juan asked the others what the

definition of non-fiction was as he looked at the strip in his hand. Someone said it was

something true. Mrs. King heard this comment and said, "Yes." As for Raul's engagement, he asked the other students where he could move the mystery/suspense category since he did not know where to place it. It turned out to be group collaboration where everyone had to think together, including Raul, about where to place the strips of the paper correctly. Finally, the students who were helping Raul came to an agreement that it could be placed under both categories. The class only had a few minutes to work with this activity, but the students debated, discussed, and exchanged their thoughts and ideas as Mrs. King encouraged them to do so.

(45:00) Just before this activity ended, the bell rang, and Mrs. King dismissed the class.

Scattered stars

Once upon a time their was a mother of all people. one day she gave a bag full of white cottan ball to girl.

The girl didn't follow the orders. That the mother of all people gave to her but when the opened the bag stars escaped, but when she closed the bag only a few stars were left.

Before the mother of all people gave the bag to the little girl she told her not to open the bag.

Figure 8. Work done by Juan and his group.

Telling Cases from Mrs. Padilla's Classroom

In this section of paper, I present the results of data analysis from four literacy events as telling cases in Mrs. Padilla's classroom. The purpose of the qualitative case study research was to explore how ESL teachers used technologies during literacy instruction in their classrooms and their students' response.

126

Telling Case 1: Hurricane Katrina Video Event

The focus student, Alicia, was a participant during this whole-class literacy event. On January 31, 2012, during the first week of observation, Mrs. Padilla began a lesson on video comprehension using a video about Hurricane Katrina. Alicia and another female student were already in the classroom before the bell. The students each went to pick up their own book bags, which contained their notebooks, textbooks, and workbooks, from the back of the room. Five minutes after the bell rang, a male student came to the class.

(00:00) When the bell rang, Mrs. Padilla distributed a handout for the first literacy activity for the day and began her instruction, using the words *aunt* and *ant* from the sheet to explain homophones. Next, she wrote down these two words on the whiteboard. She drew an insect and a female under the corresponding word. When she finished drawing, Mrs. Padilla started writing down the two words, *bare* and *bear*. Again, she drew a corresponding picture below each word. After that, she pronounced the two words as she pointed at them. Next, she found a paper bag in the classroom and put it on an empty desk. She said the desk was not bare any longer. After saying it, she removed the bag from the desk and said the desk was bare. Next, she removed her shoes and said, "I have a bare foot." Mrs. Padilla continued teaching a few more homophones in the same manner, drawing pictures on the whiteboard or using objects. During this homophone lesson, the students and Mrs. Padilla used a few Spanish words. For example, Mrs. Padilla used the words, *buy* and *by* as another example of a homophone.

127

After her explanation, one student said "buy" means "comprar" in Spanish. Following

her comment, Mrs. Padilla moved from her chair she was sitting in and went to the flip

chart. Standing next to the flip chart, she said, "I am by the chart." Once she had done

all this, Mrs. Padilla asked the students to write the definitions of the homophones, which

were on the whiteboard, as they worked together. Then, she announced that the students

would have a test on homophones in a few days.

(15:00) After the whole-group instruction, Mrs. Padilla asked the students to

finish the rest of the handout by providing the definition for each word. As soon as the

students started working individually, she started moving from student to student to

provide support. For example, when she came to one student, the student handed her the

paper to show her their work. Mrs. Padilla responded to the student by saying something

like, "That's good." When Mrs. Padilla came to Alicia's desk, Alicia asked for the

meaning of *weak*. For her question, Mrs. Padilla replied, "Not strong." Alicia said,

"Ahh," and did not ask any further questions. During this individual work, Alicia looked

at the whiteboard, which had the homophones and picture examples of each, several

times.

When Mrs. Padilla went to another student's desk, she looked at the student's

paper and asked her to spell correctly. At one point during this individual work, Mrs.

Padilla looked at the clock on the wall and told the students they would have about one

more minute. Then, when the time was up for this activity, Mrs. Padilla asked the students to take the handout home with them to study for the quiz.

(25:00)   Next, Mrs. Padilla asked them to take out a textbook from their bag. Once the students had their textbooks, she asked them to open it for instruction. She made the comment, "Volcanoes. What is a natural disaster?" as she looked at the textbook. A girl said, "It was made by people." Mrs. Padilla continued after the student's comment, saying that they were talking about volcanoes. She again asked what a natural disaster was and how volcanoes caused a disaster. A male student said ash and lava. Listening to his response, Mrs. Padilla continued asking about hurricanes and how they caused disasters. He said, "Rain. Wind." Mrs. Padilla continued to ask where hurricanes were formed. For this question, Mrs. Padilla answered saying, "In the ocean." Another student asked whether tsunamis were the same as hurricanes. Mrs. Padilla clarified that they were different and provided additional information that volcanoes could cause tsunamis.

After this clarification, she asked the students to open to the page which had information related to Hurricane Katrina and directed them to look at the title, *Fleeing the Hurricane Katrina*. She added vocabulary information, saying, "Fleeing means escape, run away." She added that Katrina was a huge hurricane that took place in 2008. After this introduction to Hurricane Katrina, she announced that the students were going to watch a video about Katrina. Before Mrs. Padilla started the video from the e-textbook,

she distributed a handout, which the students would use to write down things that interested them as they watched the video. The handout also contained questions related to the video.

(30:00) Mrs. Padilla went to her computer to open an e-textbook website to retrieve the video. Even before the video started, the students' eyes looked up at the screen. The first scene of the video was of huge waves crashing onto the shore. The trees were swaying violently as the wind and rain hit them. The narrator's voice from the video explained how the waves were formed. Alicia looked back and forth between the projection screen and the handout and wrote on the paper. Then, a map of New Orleans showed up, followed by a scene of a long line of cars evacuating the city. The narrator said that Katrina was the most expensive hurricane in U.S. history. The video also included photos depicting the aftermath of the hurricane.

(35:00) As soon as the video ended, Mrs. Padilla engaged the students in a short discussion to find out what they had comprehended from the video. She asked the students what they found interesting from the video. One girl said that it was the most expensive hurricane. Mrs. Padilla agreed with what she said. Turning toward Alicia, Mrs. Padilla asked her what she had written down. Alicia read from her notebook, but she could not explain what she had written. Therefore, Mrs. Padilla approached Alicia and looked at her paper. After reading from her notebook, Mrs. Padilla asked Alicia how long the hurricane had been in the ocean. Alicia said that it was there for weeks. Then,

Mrs. Padilla asked another student what he had written down. He said that the hurricane destroyed homes. Mrs. Padilla continued this literacy activity based upon the video by providing information about the hurricane. For example, she said that New Orleans was below sea level and was easily flooded. She added that the whole city had evacuated to Houston, Dallas, and other cities. She said some evacuees were still living there. Then a male student said that people from Japan came here. Mrs. Padilla corrected his comment. After this exchange, she asked the students to complete Part B of the handout. For this, she asked them to identify the purpose of the video.

(40:00) Students used the last five minutes to finish the rest of the handout individually. As the students were completing the paper, Mrs. Padilla moved around the classroom to observe what the students wrote down. Alicia asked in Spanish, "Como se dice___?" Mrs. Padilla responded saying, "Last," and spelled out, "L, A, S, T." She asked them to finish questions two and three by providing the most interesting things they had learned and what they would have wanted to save if they had been there. Alicia said she would want to save her family. Mrs. Padilla agreed and commented that they would have had to evacuate, too. Suddenly the bell rang and this literacy activity ended.

Telling Case 2: Hurricane Katrina Narratives Reading Event

The focus students, Alicia and Selena, were the participants during this whole-class literacy event. On February 14, 2012, during the third week of observation, Mrs. Padilla began a lesson on Personal Narratives on Hurricane Katrina. She started the

131

day's literacy event with a homophones activity, which was a continuation from the previous day.

Selena, the second participating student, had just started coming to the class. This week was her first time attending school in the United States.

(0:00) Mrs. Padilla started writing down the diagram below on the whiteboard and asked the students to replicate the diagram (see Figure 9) in their notebooks when she stopped writing. Mrs. Padilla used the words "homophone practice," which she had used for the previous day's instruction.

Homophones	Sentences	Picture
due	My homework is <u>due</u> tomorrow.	(Mrs. Padilla drew a picture)
dew	In the morning, the grass was covered with <u>dew</u>.	(Mrs. Padilla drew the picture of rain drops)

Figure 9. Homophones practice exercise in Mrs. Padilla's class.

Mrs. Padilla told the students to add three more homophones to the two words listed in the first column. Since Mrs. Padilla had taught homophones such as *bare* and *bear* and *beat* and *beet* in a previous lesson, she said that they could use their knowledge of homophones to fill in the columns. Additionally, she told them that they could start on the computer when they finished this activity.

(10:00) The students started making the columns and filling the inside with the example Mrs. Padilla showed on the whiteboard. During this literacy activity, Selena and

132

Alicia had many questions about vocabulary. For example, as Mrs. Padilla moved around the students, Selena stopped Mrs. Padilla and spoke to her. Selena said she did not know what to do with this activity. Mrs. Padilla explained what Selena needed to do. Next, Alicia, speaking in English, asked Mrs. Padilla how to translate a Spanish word, "hay." Mrs. Padilla repeated, "Hay?" She hesitated a few seconds and then provided the translation of the Spanish word *hay* as *there is*. Alicia received the translation in English and started writing on the paper. Then, Selena asked, again using English, how an English word, *I* was spelled. Mrs. Padilla provided Selena with the English spelling. Selena continued to have questions about English usage and asked Mrs. Padilla another question. Mrs. Padilla responded that, "We never paint hair, but we dye it to change the color."

When Alicia informed Mrs. Padilla that she had finished the assignment and showed her work to her teacher, Mrs. Padilla looked over Alicia's notebook and praised her work. Then, Alicia asked whether she could start the computer and got permission to begin. She went to the computer station and turned three computers on. After that, Alicia returned to her seat and waited for the others to complete their work. The other students soon completed the homophone activity. During this individual work, Mrs. Padilla moved from student to student to provide support.

(25:00) Once everyone completed the first activity, the students moved to the computer station. Mrs. Padilla announced, once the students were seated in front of the

133

computer, that they would go online and read three personal accounts from *Collecting and Preserving the Personal Stories of Katrina and Rita* in the e-textbook. From the e-textbook, they could access a collection of photos about the effects of the hurricanes, feature stories, and maps. Mrs. Padilla added that first, the students would browse through the stories, and then they would choose the three stories they would like to read from the collection of the stories.

Mrs. Padilla continued to explain that, after reading the personal narratives of other people, the students would write a short summary for each story. She asked them if they knew what the definition of a narrative was. One student said a narrative was something about an opinion. Mrs. Padilla asked her again what a narrative was. This time she said a narrative was someone telling a story. Mrs. Padilla restated her answer that a narrative was a story told by a person. She then asked who was telling the story. Without waiting for an answer from the students, Mrs. Padilla said that a person writes about his/her experience. She told them to pay close attention to how people described their experience. She also asked them to pay attention as they read the stories to how the natural forces changed people's lives as well as how people felt about their experiences. Mrs. Padilla asked them again to write a summary of each story they read. After this overview of the literacy activity, Mrs. Padilla asked them to log on to their computers.

(35:00) Since Alicia had set up each computer while the others were working on homophones, Mrs. Padilla went to each student's computer after they started using it,

helped them open the website, and helped them find the collection of stories. For example, when Mrs. Padilla was at Selena's computer, she said things such as, "You can click on this," "Here is one story," "Here is the collection," and "There you go." "You are going to click *Browse…* see that blue tab? It is a collection of personal narratives. Browse and choose the story." After helping Selena, she helped Alicia in a similar manner. Then, Mrs. Padilla went to a third student's computer station. Since the computers were next to each other, all the students were able to hear Mrs. Padilla's technical support. The third student already had a reading passage on the screen. Mrs. Padilla leaned toward the computer, touched the screen, and read the story the student had selected aloud. Mrs. Padilla noted that the story was not written in the first person. She suggested the student choose another story for reading.

When Mrs. Padilla came by Selena's station, she stood over Selena and started reading a passage on her computer screen. Then she listened to Selena retell the story. Mrs. Padilla asked Selena what *evacuation* meant, since that word appeared frequently throughout the story. Selena did not know what it meant in English, but she described it in Spanish. Mrs. Padilla nodded her head and continued asking more questions, such as how the person felt about the hurricane. Selena answered, "Panic." Mrs. Padilla wanted to know the meaning of the word *panic*. Selena explained to Mrs. Padilla, using both English and Spanish. Mrs. Padilla continued to ask questions related to Selena's reading: why the writer's heart broke, whether the writer felt the same when her home was

destroyed. After Mrs. Padilla engaged Selena in this discussion, she then went to help the other students while Selena wrote in her notebook.

While Mrs. Padilla helped Selena, Alicia found the website and started searching for stories that might interest her as she scrolled up and down the screen. When she found the first story, Alicia started reading it. Then, Alicia said to Mrs. Padilla, who was standing almost next to her, that she did not understand a certain part of the text she had read. To help alleviate Alicia's confusion, Mrs. Padilla went to her computer and first read aloud to her the text Alicia did not understand. Then, Mrs. Padilla asked Alicia to retell the story. After Alicia's retelling, they engaged in a short discussion about how the disaster had changed the writer and how Alicia felt about the writer's experience.

The students continued reading from the website until the end of class, with Mrs. Padilla providing assistance.

(45:00) Just before the bell rang, Mrs. Padilla asked the students to shut off their computers.

*Figure 10. C*ollecting and Preserving the Stories of Katrina and Rita. This is the website Mrs. Padilla used for students reading.

Telling Case 3: Blog Writing Event

The focus students, Alicia and Selena, were the participants during this whole-class literacy event. On February 15, 2012, during the third week of observation, Mrs. Padilla began a lesson on pre-writing using a blog. She included several literacy activities before introducing the students to writing a blog.

137

(00:00) Mrs. Padilla started the class by engaging her students in a synonym activity. She told them to get out the supplemental workbook for their textbook from their book bags. Then, she directed the students to open to a certain page and asked one student to read a paragraph from the page. After his reading, Mrs. Padilla asked the student to tell the class about the paragraph. He said it was about a house. She asked, "What is a similar word to building or house?" He was not able to provide an answer to this question. She then started explaining what synonyms were, using the vocabulary word, *dwelling,* from the workbook. She explained that dwelling was one of the synonyms for the word, *house.* She then added that construction, structure, dwelling, and housing were all synonyms of the word *house.* She explained further, "Some of them were big like castles, mansions, villas, and plantations while mobile homes, apartments, and flats were small." Listening to Mrs. Padilla listing different kinds of dwellings, Alicia added, "shack.' Using Alicia's response, Mrs. Padilla expounded on the subject by stating, "The materials for building shacks were made out of cardboard and pieces of wood." After doing one example together, Mrs. Padilla asked the students to read the remaining paragraphs to identify one synonym for each paragraph from multiple choices listed in the pages.

(10:00) As Mrs. Padilla saw the students start the independent work, she asked them to spell correctly when they filled out the paper with their answers. She checked Alicia's paper, and then she checked Selena's paper. As she stood next to Selena,

looking at a certain item on the paper, she asked Selena to think about another option. During this individual independent work, Mrs. Padilla got up from her chair and walked to the students' desks, helping students understand sentences they were reading to select a correct answer from the multiple choices. For example, when she came to a student who was staring at the paper, Mrs. Padilla bent down a little bit, looked at the student's paper and then read aloud. "Two families live." She waited for a response, but the student remained silent. Then she provided an answer, "That is a duplex."

(20:00) A few students could not complete the independent work, so Mrs. Padilla told them that they would move to the next activity and that she would give them time to finish the activity sheet the next day. She then asked the students to get their spiral notebooks from their individual book bags. She waited for a minute until everyone had his or her notebook. Then Mrs. Padilla took a minute to remind the students to read from the website that they had visited a few days ago. The next literacy activity students were to engage in was retelling, using one experience from website reading. Mrs. Padilla asked Alicia to retell the experience she had read. Alicia read her summary aloud from her notebook. After Alicia completed her reading, Mrs. Padilla then asked Alicia questions to elicit a little more detail in her own words. Mrs. Padilla asked how the hurricane changed that person's outlook and how the person knew she had been changed. A few other students who had read the same account shared their thoughts. Mrs. Padilla said they had read a narrative account of a person's experience.

139

For the next literacy activity, Mrs. Padilla asked the students to get their

textbooks from their book bags and put their notebooks back into the book bags. When

everyone had their books, she directed them to open to a certain page and noted a writing

prompt at the bottom of the page. She announced that it was their turn to write about

their experiences with a natural force. She read the prompt aloud from the textbook,

"Write a little about an experience you had with a destructive force of nature (storm,

earthquake, windstorm, and blizzard). What happened? What did you see, hear, and

feel? What were your emotions? What decisions did you make? How did this

experience change you?" To explain more about this writing activity, she used a tornado

as an example. Alicia did not know the word *tornado* and asked what it was. Mrs.

Padilla used her personal experience with a tornado so that Alicia could understand what

the tornado had done to Mrs. Padilla's life. Seeing that Alicia did not ask more

questions, Mrs. Padilla resumed instruction regarding their writing, saying that they

would go to her writer's blog under her website. She added that, once they posted to the

blog, the students could see each other's postings. No one asked what a blog was or the

meaning of *posting*. Mrs. Padilla used her computer and the projection screen to show

the entire class the steps to get to her website.

(30:00) First Mrs. Padilla accessed her website. From there, the students could

see a tab on the left side of her website, *Writer's Blog*. Mrs. Padilla clicked it open and

pointed to the writing prompt, which she had posted on her blog site. She reminded the

students that they had read online about the personal accounts of people who experienced a hurricane. She continued explaining that the students would write a blog about their own experience with a natural force they had encountered previously, similar to what they had read from the website. Mrs. Padilla further explained that they were to answer all the prompts.

(35:00) After this instruction, Mrs. Padilla asked the students to move to their computer stations. Even though Mrs. Padilla showed them how to access the blog site during the whole-group instruction, the students needed one-on-one technical support. Mrs. Padilla provided technical support to most of the students to access the Writer's Blog. The two focus students were able to open the blog, and Mrs. Padilla asked them if they had read the prompt. She also stated that, once they posted their blog, it would show up immediately on the blog site. As Mrs. Padilla pointed to the prompt, she reminded them to write about their own experience. Once Alicia started writing, she kept typing as she composed the sentences. Then she stopped to go back to what she had written, read silently, and resumed writing. When Selena started writing, she wrote without hesitation, but she stopped to read what she had written, looked at the screen, removed some of her writing, and started writing again.

(45:00) Before Alicia and Selena had completed their blogs, the bell rang, and Mrs. Padilla dismissed the class.

What was your experience?

Posted by Mrs. Padilla at />

Write a little about an experience that you had with a destructive force of nature (storm, earthquake, windstorm, and blizzard). What happened? What did you see, hear, and feel? What were your emotions? What decisions did you make? How did this experience change you?

Alicia
on February 15, 2012
Reply
i have expirenced an earthquake in Acapulco, Mexico when i hava 13 years old. it was in the middle of the night all the thing of the departmen start to move a lot, it was very strong, so my father think we have to evacuate but inmidiatly the earthquake stops, so all came back to their beds an then of 5 minutes start another earthquake less stronger, but my mom think that maybe water of the ocean is going to come so, all my family was very scared, the second earthquake was vety short so we stay in our department. but in the whole night i cant sleep because i was so scared.

Selena
on February 15, 2012
Reply
my expirience was in Puebla,Mexico.I have 9 years old.I was in the school and it start an earthquake we evacuate but then the teachers say us that talk to our moms and go.I go with a friend because my mom was not there but first I panicked then I was better.

Figure 11. Writing prompt and blogs. This includes the writing prompt written Mrs. Padilla as well as the blog posts written by Alicia and Selena.

Telling Case 4: Titanic Research Event

The focus students, Alicia and Selena, were the participants during this whole-class literacy event. On May 18, 2012, during the fifth week of observation, Mrs. Padilla began a lesson on a research project which had been going on for a few days. The class was comprised of four students, and all of them were present during this literacy activity when Mrs. Padilla used the entire time for the students' individual, independent work.

Mrs. Padilla prepared the students to reach this stage of research by providing various literacy activities. These included reading an expository or informational book aloud as an example of expository or informational writing, teaching expository features from the book, showing a video from the e-textbook, stopping the video to teach academic vocabulary, teaching how to cite sources, and presenting expository writing outlines.

(00:00) After the bell rang, Mrs. Padilla announced that the students would start making a poster board presentation. Hearing this announcement, Alicia asked whether she could start printing her PowerPoint slides. The students had been using Microsoft PowerPoint to write their research paper. Responding to Alicia, Mrs. Padilla asked her to print one page from one slide.

(05:00) Alicia got up from the desk and went to the computer station. She opened Microsoft PowerPoint, clicked the *File* icon, and moved her curser to the *Print* icon. However, she did not pursue printing the document; instead, she closed the window and retrieved the paper she had written so far. She started looking at the pages one by one, moving the cursor up and down. Next, she used Google to search for an image about a life jacket on the Titanic. She found the picture of the life jacket and pasted it on the slide. She saw it was not the size she wanted and started adjusting the image. After adjusting the size and location of the image, she started looking for a picture of the Titanic, using the same method she had used to find the photo of the life jacket. Once she

143

found a picture of the Titanic, she pasted it on the second slide and adjusted its size and location. Thus, she had two slides back to back, with a photo on one slide and a drawing on another slide.

Next, Alicia opened the slide of her expository writing and started reading it. Before beginning their research, Mrs. Padilla had asked her students to record in their notebooks the information they had found. Alicia used that information to write her paper. She commented, "I found a lot of information from the Internet." She then got up from her computer seat and got a book from her backpack. It was a hardcopy, expository book she said belonged to her brother. She placed the book on her lap and started writing on the paper.

(15:00) The students continued to engage in individual/independent instruction. During this literacy activity, Mrs. Padilla assisted her students' work by moving from one student to another. Some of the students were working on organizing the structure of the writing, while Alicia was using the computer to write. For example, Selena was working on organizing the structure of the expository writing and needed Mrs. Padilla's assistance. To meet Selena's needs, Mrs. Padilla took time to guide Selena in the method to complete the outline of the expository writing that she had taught to the students before they began writing. Mrs. Padilla's guidelines included the following:

Topic
Important Idea
  Supporting Idea
  Supporting Idea

Supporting Idea
Important Idea
        Supporting Idea
        Supporting Idea
        Supporting Idea

      Mrs. Padilla asked Selena how she could start a sentence. Selena responded with

a raised intonation, "Because?" Mrs. Padilla agreed and said, "This happened

because…" Then, she asked Selena to start completing the outlines. After this, she

moved closer to two other students to see how they were doing.

      (25:00) While Mrs. Padilla was helping Selena and the other students, Alicia

continued working independently. She explored the size of the title she created. To

facilitate this, she got up from the computer chair to get the book Mrs. Padilla used for

read aloud. After about ten seconds of glancing at the book, Alicia went back to her

computer and asked Mrs. Padilla, who was standing nearby, whether she could use

Sinking of the Titanic as the title. Mrs. Padilla responded with a positive answer. After

this, Alicia wrote a little more and started adjusting font sizes. Now Alicia asked Mrs.

Padilla to come to her computer. Mrs. Padilla sat down next to her and started helping

her. After Mrs. Padilla looked at the slide containing writing, she told Alicia, "Format it

so that it's all together in paragraphs. You're gonna indent that one. Bring the cursor

here and bring it back." Mrs. Padilla provided this support as she was touching the

computer screen, showing where she was directing Alicia. Alicia started editing revising

her paper as instructed. During one point, while Mrs. Padilla engaged in one-on-one

instruction with Alicia, Selena called out Mrs. Padilla's name and asked, "Can I write to… explain?" Mrs. Padilla said, "Yes."

Mrs. Padilla continued to sit next to Alicia during her instruction and asked Alicia to save her document first. Then, Mrs. Padilla reviewed her writing, asked where the source of the quote Alicia used in writing came from, what kind of text features she would use, and taught her how to cite the quotation in the document. After this assistance, Mrs. Padilla went to help the other students and Alicia continued working on the project.

(35:00) When Mrs. Padilla eventually returned to Selena's desk, she looked at her outline and then asked whether Selena was ready to write in PowerPoint. She also asked Selena which expository text features she had decided to use for her writing. Selena was prepared for that question and told Mrs. Padilla that she would like to have pictures from websites and titles. After this conversation, Selena went to open Microsoft PowerPoint and started writing.

In the meantime, Alicia finished writing and went to the printer to pick up a printout of the paper she had written. Then, she started cutting out the pictures, photos, and titles from the main body of writing. Alicia used the oblong table next to the computer station for this work. Selecting from the pictures, photos, titles, and writing on the table, she laid each one on the poster board to see what they looked like. She moved them several times to different places on the poster board. While she was doing this,

Alicia began speaking in Spanish to Mrs. Padilla, who was standing next to her, observing her work. Mrs. Padilla responded to Alicia in English. I observed that Mrs. Padilla always communicated with her students in English, even if they spoke to her in Spanish. Mrs. Padilla used Spanish only when the students became confused or could not understand the English spoken to them.

Mrs. Padilla remained standing next to Alicia and looked at her poster board as Alicia moved the cutouts around. Then she asked Alicia what the main title was, since she did not see one. Alicia explained that she had two titles. For this response, Mrs. Padilla agreed that Alicia had two main titles as she pointed to the two cutout pieces. Then Mrs. Padilla went to her desk and retrieved the expository book she used for teaching. Next, she showed Alicia several pages from the book and asked her to look at how titles and subtitles were organized. Alicia took the book from Mrs. Padilla and looked at the pages Mrs. Padilla showed her. While Alicia examined the pages, Mrs. Padilla looked at Alicia's poster board again and suggested she divide one big poster board into two by drawing a line in the middle in order to place each topic on half of the poster board. Alicia agreed and laid out the two titles, *Sinking of the Titanic* and *The Life Boats,* on separate sections of the poster board.

(45:00) By the time Alicia was ready to paste the titles, the bell rang.

147

Summary

In this chapter, I presented the descriptive data about the teachers and students and their use of technologies and use of literacy. Furthermore, I presented the results of the data analysis from literacy events as telling cases. The next chapter presents the results of cross-case analysis.

CHAPTER V

LOOKING ACROSS THE TEACHERS

In the last chapter, I presented the results from five literacy- event, telling cases in Mrs. King's classroom and four telling cases of literacy events in Mrs. Padilla's classroom as well as descriptive data about the teachers and the students.

In this chapter, I present the results of cross-case analysis of the two teachers and four students.

Technology Use by Mrs. King and Mrs. Padilla

Figures 12 and 13 detail the number of days I observed each teacher using technologies in her classroom. I observed on 29 days in Mrs. King's classroom. However, due to not gaining access to the second teacher until the second semester, as previously described in Chapter 3, I only observed on eight days of observation in Mrs. Padilla's classroom.

The analysis of technology use by the two teachers revealed that both used a variety of technologies during their literacy instruction. They shared a common usage of five technologies: the document camera, the projector, websites, e-textbooks, and videos. Among these five technologies, the most frequently used technology by both was the projector to display different texts or semiotics. In Mrs. King's case, she used the projector during all 29 observations. The reason attributed to her frequent use was that at

the beginning of every classroom instruction, she showed the daily agenda to the students

as a digital document from her computer.

Both teachers used the document camera frequently as well. When they used it,

they displayed a variety of texts on the screen. These images were magnified forms of

these texts.
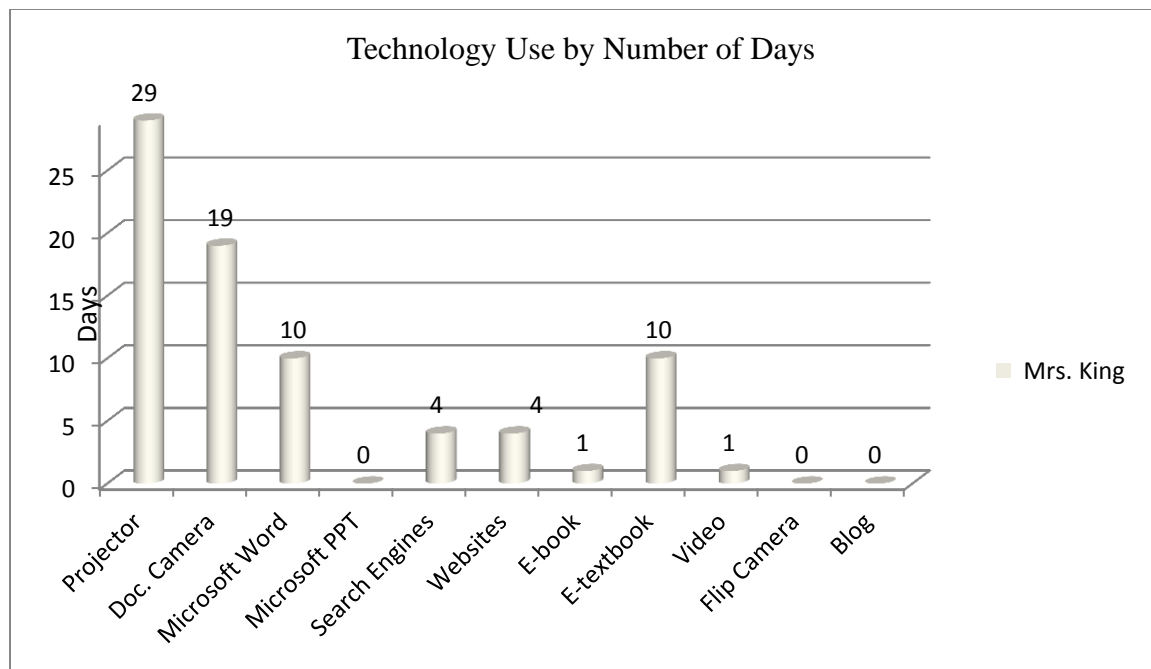
Figure 12. Mrs. King's use of technologies by number of days.
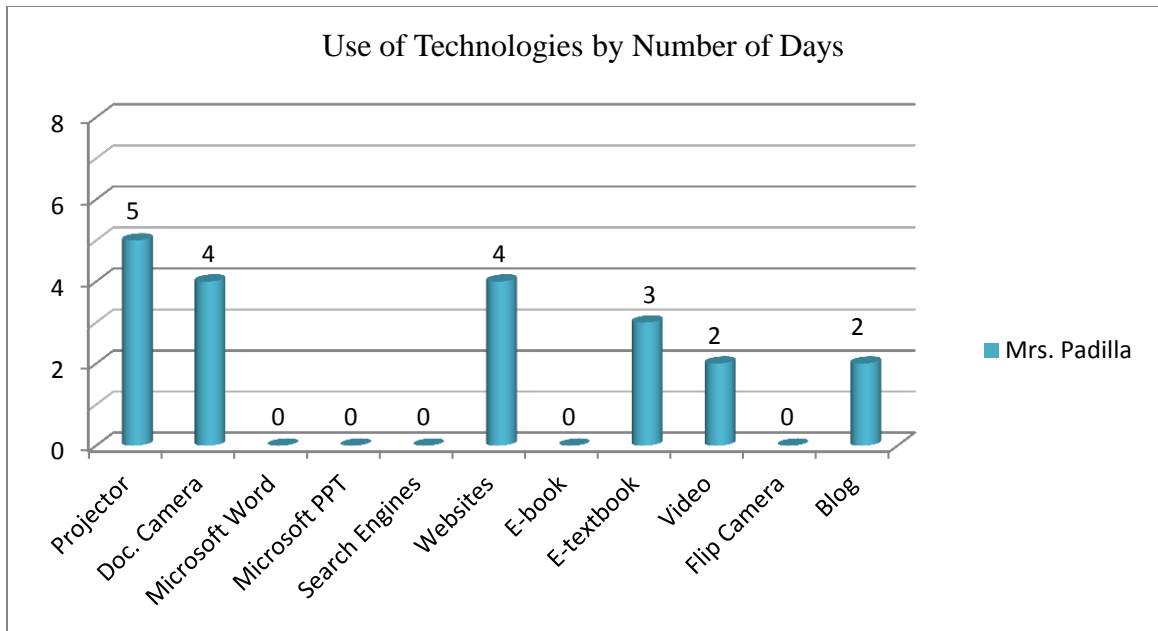
Figure 13. Mrs. Padilla's use of technologies by number of days.

Figures 12 and 13 indicate that both teachers shared the use of many of the same technologies, and some were even used similarly. When both teachers used websites, for example, they used their campus website. In addition, both teachers retrieved the e-textbook from its website. Mrs. Padilla used this site to find videos, while Mrs. King used the YouTube website to find her videos.

As shown in Figures 12 and 13, Mrs. King's class used the Flip camera and PowerPoint. Mrs. Padilla's class used PowerPoint; however, neither teacher used them for their instruction during whole-group instruction. Students had the choice to use these technologies during small-group and individual guidance to help them to complete their projects.

Mrs. King used eight technologies, while Mrs. Padilla used six technologies. Mrs. King was observed using Microsoft Word, search engines, and the e-book from the library in her teaching, while I did not observe Mrs. Padilla using these technologies within her instructional time. Mrs. Padilla, in contrast, used blogs, which Mrs. King did not use.
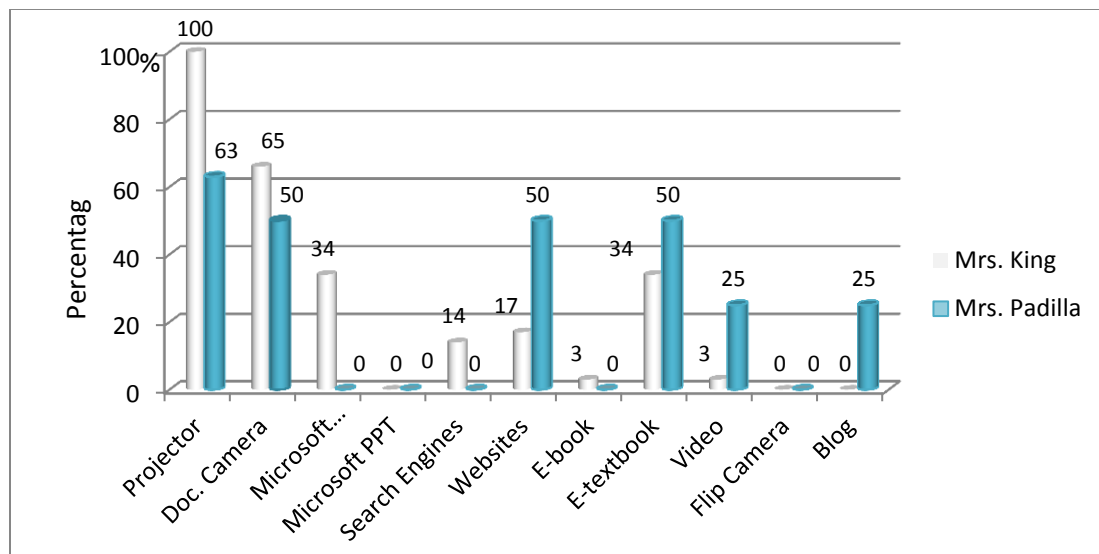
Figure 14. Technology use in percentage by Mrs. King and Mrs. Padilla.

Figure 14 indicates the percentages of frequency use for both Mrs. King and Mrs. Padilla. I converted the data denoted in days to percentage based upon the number of days of use in relation to the total days of observation. For example, Mrs. King's use of the projection screen was 100%, which translates as she used the screen 29 days out of 29 observation days.   Figure 14 illustrates that there are variations in percentage among the projector and document camera-used by both teachers. Figure 14 displays the wide

152

variation among the technologies used by Mrs. King, ranging from 3% the e-book and the videos to 100% for projector use. Mrs. Padilla's technology use ranged from 50% for use of the document camera, websites, and the e-textbook to 63% for projector use. This shows that Mrs. Padilla evenly distributed her use of these technologies throughout the days I observed, while Mrs. King relied more on the projector and the document camera for her literacy instruction. Her use of Microsoft Word, the e-textbook, and the videos was supported by the projector, resulting in an increased percentage for of use of the projector.

Use of Time by Mrs. King and Mrs. Padilla

The results evidenced by analysis showed that both teachers displayed a division of time usage—whole-group and small-group/independent instruction. However, there was little difference between the amount of time spent in whole-group and small-group/independent instruction across the two teachers' classrooms. Tables 17 and Table 18 below show the abridged versions of Mrs. King's and Mrs. Padilla's curriculum and their use of time. These tables were created based upon Table 8 and Table 14.

Table 17

Mrs. King's Curriculum Schedule and Literacy Activities

Introduction : 2-10 minutes
Overview of the day's lesson, school business, announcement, etc.
Whole-Group Instruction: 13 -30 minutes
Literacy Concepts: Fluency, Background Knowledge, Vocabulary, Comprehension Strategies, Genres, Oral Language, Research, Writing
Small-group/ Independent Instruction : 5 -30 minutes
Literacy Concepts: Fluency, Background Knowledge, Vocabulary, Comprehension Strategies, Genres, Oral Language, Research, Writing

Table 18

Mrs. Padilla's Curriculum Schedule and Literacy Activities

Whole-Group Instruction: 25- 30 minutes.
Literacy Concepts: Vocabulary, Background Knowledge, Comprehension Strategies, Genres, Oral Language, Research, Writing
Independent Instruction : 15-45 minutes
Literacy Concepts: Vocabulary, Background Knowledge, Comprehension Strategies, Genres, Oral Language, Research, Writing

I observed both Mrs. King and Mrs. Padilla to allocate the time to whole-group instruction and to small-group/independent work instruction. Mrs. King spent from 13 to 30 minutes in whole-group instruction, as compared to spending 5 to 30 minutes for

small-group/independent instruction. The time allocated between these two instruction times was narrow. Mrs. Padilla's whole-group instruction time was 25-30 minutes compared to 15-45 minutes of individual/independent instruction.

I observed both teachers to vary their schedules for a specific lesson or lessons. For example, during one observation period, Mrs. Padilla dedicated the entire instructional time to independent/individual instruction for her students to complete the Titanic research project, as evidenced in Telling Case 4 (Titanic Research Event).

I saw this kind of decision making during one lesson in Mrs. King's teaching as well. Mrs. King's Telling Case 4 (Multiple Meaning Word Event) describes how she allocated the time for literacy activities. First, she spent an extra 10 minutes during Introduction time for preparing the students for the next day's visit by the Korean teachers' before making the transition to whole-group instruction. The next 30 minutes of whole-group instruction involved teaching multi-meaning words. She utilized the last five minutes for small-group instruction, when Mrs. King provided time for the students to talk among themselves about multi-meaning words they had learned during whole-group instruction. These two examples, one from Mrs. Padilla and one from Mrs. King, revealed that both teachers structured their time consistently but were also seen to be flexible in their use of time, based on instructional objectives and the needs of the students.

In comparison, the analysis of time usage showed one significant difference

between Mrs. King and Mrs. Padilla. Mrs. King reserved an introductory time (5 minutes) for her students to write down the day's agenda and take care of school business, as described in Telling Case 3 (Poetry Writing Event). Taking care of school business and non-academic matters occurred before whole-group instruction in Mrs. King's class, whereas Mrs. Padilla began whole-group instruction at the bell and would address any items unrelated to the curriculum as needed within this timeframe.

Mrs. King and Mrs. Padilla had clear instructional division of time, setting apart the whole-group focus from the small-group/independent focus of their literacy instruction. During whole-group instructional time, they utilized the technologies to demonstrate/model, teach new instruction, review old instruction, assess students' understanding, and prepare students for small-group/independent instruction. During small-group/independent instruction, both teachers gave their students specific support, allowing the students to apply what they learned during whole-group instruction and through the students' own use of the technologies. The evidence supports that the teachers allocated almost an equal amount of time to the students for small-group/independent instruction and to themselves for whole-group instruction. The analysis showed this clear pattern in both teachers' classroom.

Use of Literacies and Technologies by Mrs. King and Mrs. Padilla

In this section, I present the results of cross-case analysis of the teacher participants' use of technologies for literacy instruction. Table 19 presents the overview

of Mrs. King's technologies and literacy activity, while Table 20 represents the overview

of Mrs. Padilla's technologies and literacy activities.

Table 19

Overview of Mrs. King's Technology and Literacy Activities

Technologies ⟍ Literacy	Document Camera	Projector	Flip Camera	Microsoft Word	Microsoft PowerPoint	Internet Resources			
						Search Engines	Website	E-book E-textbook	Video
Whole-Group Instruction									
Fluency Read Aloud -------------------- Shared reading	T ------------ T/S	T ------------ T/S						T --------- T/S	
Vocabulary Academic voc. Homophones Loaded words Multi-meaning Rhyming	T-Showed/ Illustrated/ Modeled/ Reviewed/ Discussion s-looked/ copied/ wrote/ shared/ read aloud	T-Showed/ Illustrated/ Modeled/ Reviewed/ Discussion s-looked/ copied/ wrote/ shared/ read aloud		T- Typed Predictions/ Typed vocabulary words		T- Looked for images	T- Retrieved E-book and E-textbook	T-Showed words Modeled Discussion	T-Showed Discussion
Background Knowledge Brainstorming Prior Knowledge Read Aloud	T- Showed illustration Discussion	T- Showed photo, Discussion s-Discussed Questions				T- Showed, Modeled, discussion s-Looked, discussion	T-Showed , Modeled Research, Discussion s-Looked, Discussion	T-Showed, Modeled, Read aloud s-Discussion	T-Showed Discussion S- Discussion, Watched

158

Comprehension Strategies Author's purpose Comp/Contrast Context clues Evaluate Facts/Opinions Inferences Main Ideas Multiple choices Paraphrasing Persuasion Prediction Prediction Read Aloud Retell Shared writing Summary writing	T- Showed Modeled Shared- writing Discussion Read aloud s-Discussion Copied Looked Read Wrote	T- Showed Modeled Shared- writing Discussion Read aloud s-Discussion Copied Looked Read Watched Wrote		T-typed			T- Showed Discussion Discussion s-Watched Discussion	T- Showed Discussion Discussion s-Discussion	T-Showed Discussion s- Discussion
Genres Cartoon Expository Myths Narrative Poetry	T- Showed, Modeled, Read aloud s-looked listened	T- Showed, Modeled, Read aloud, Discussion s-looked listened		T- Showed				T- Showed Myth, Expository Writing, Read aloud poem s- listened	T- Showed Narrative
Oral Language Listening Speaking	T S	T S						T- Showed Discussion s- Discussed	
Research Citation, Finding information		T- Showed				T- Showed, Modeled, Searched	T-, Showed, Modeled, Searched	T- Showed, Modeled, Searched	T- Showed, Modeled
Writing Inferences Poetry Shared writing Summary	T- Modeled/ Shared writing	T- Modeled/ Shared writing					T-Modeled s- Looked	T-Modeled s- Looked	T-Modeled s-Looked

	Small-group/Independent Instruction								
Fluency Read Aloud	S- Poem	S- Poem	S- Paragraphs	S- Paragraphs	S		S	S- Read aloud t- Read aloud	
Vocabulary Academic voc.	S t- Question	S t- Question		S t- Question	S		S	S t	
Comprehension Strategies Inference Main idea Read Aloud Retell Silent Reading Summary	S	S		S	S			S t	S
Genres Drama Historical Fiction Expository texts Mystery Myths Personal Narrative Poetry		S- Created genre cards		S- Wrote				S- Read Aloud from the E-textbook	
Oral Language Discussion Listening Speaking	S	S	S				S		S
Presentation Cartoon Constellation Myths Poem Summary	S- Showed Read aloud	S- Showed Read aloud	S		S			S	
Research Expository texts							S- Read answered	S- Read Answered	S-Watched

Writing Answers Interrogative sen. Note taking Myth Poetry Shared writing Spelling Summary	S- Showed, Read	S- Showed, Read	S- Summary, Spell checking	S- Wrote t- support teaching	S- Summary		S- Copied	S- Filled activity sheet	S- Note taking
Technology				T- Modeled S-print/ Save	S-clip art/ Slides/ screen t-tch				

Table 20

Overview of Mrs. Padilla's Technology and Literacy Activities

Technologies \ Literacy	Document Camera	Projector	Microsoft Word	Microsoft PowerPoint	Internet Resources				
					Search Engines	Website	E-textbook	Video	Blog
Vocabulary Academic voc. Homophones Synonyms	T-activity sheet, homophones, showed, Modeled, discussion / s- read aloud, wrote, showed	T-activity sheet, homo-phones showed, modeled, discussion, / s- read aloud, wrote, showed		S			T- discussion	T-discussion / s- discussion	T-discussion, clarified / s-discussion
Background Knowledge Note taking Summary Read aloud Retell		T-showed a video / s- watched			T- Showed how to get to the site		T-retrieved from E-textbook	T- showed discussion / s-watched discussion	
Comprehension Strategies Clarification, Note Taking Summary Read Aloud Retell	T- Modeled, discussion / s-listened, discussion	T- Modeled discussion / s-listened, discussion			T- showed the site / s-Retell		T s	T-discussion, clarified / s-Listening, Discussion, Note taking	T- read aloud, writing prompt
Genre Expository writing Personal Narrative	T- Showed, Modeled expository features	T- Showed Expository features					T- Showed Expository tests	T- expository text / s- watched	T- Narrative text
Oral Language Listening Speaking	T-Speaking Listening s-peaking listening	T-Speaking Listening s- discussion			T		T-check video comprehension	T- Video comprehension	T-discussion s-discussion about blogs

Research Citation Search Information		T- Showed, Modeled Citation s-looked				T- Search Inform.	T- Search Inform.		
Writing Combining sentences, Note Taking, Expository, Personal Narrative, Shared writing Spelling	T- Modeled, Combined sentences, Discussion, Shared writing s-looked discussion	T- Modeled, Combined sentences, Discussion, Shared writing s-looked discussion	T- typed					T-showed Expository features s-looked	T-showed s- note taking	
Independent Instruction									
Vocabulary Academic vocabulary						S- question t- discussion	S t		
Background Knowledge Silent Reading						S- Silent reading	S		
Comprehension Strategies Main Idea, Note Taking, Read Aloud, Retell, Silent reading				S		S- Silent reading Retell	S- Silent reading Retell		
Oral Language Discussion Listening Speaking						S- discussion t- read aloud	S-discussion t- read aloud		
Research Searching info.					S- Images Info.	S			
Writing Blog, Draft,			S- wrote personal narrative to post on the Blog site	S- expository Writing,		S-Note taking	S-Note taking Summary	S-note taking	S-wrote personal narrative

Revision, Spelling Summary				Revised spelling		Summary			and posted it
Technology			S t				T-demonstrated		

Patterns

After analyzing the data, I identified overarching patterns. The first recurring pattern noted was that both teachers used multimodal representations to provide literacy instruction. The second pattern was that they also provided a scaffold for students in meaning making, implementing many different kinds of literacy activities. Another pattern that surfaced was the social and cultural contexts both teachers and the students created in their classrooms. A final pattern was the actual technology instruction in the classrooms.
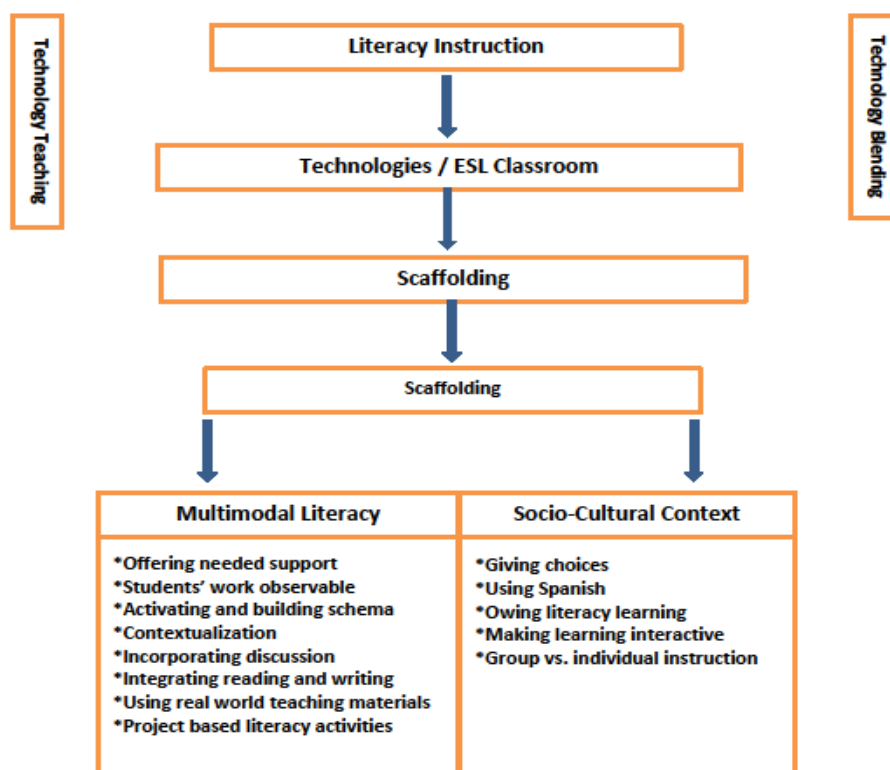
Figure 15. Literacy instruction using technologies in ESL classrooms.

Making Literacy Instruction Multimodal

Both teachers instructed literacy by using different semiotic representations or multimodality. Mrs. King and Mrs. Padilla taught all the concepts of literacy using a variety of modalities, including auditory, visual, written, oral, gestural, spatial, and tactile. In visuals more specifically, both teachers treated illustrations, pictures, photos, maps, and web pages as part of their instruction to support students' reading and writing. Videos added a dimension to the multimodal nature of their literacy practice through

166

audio, visual, gestural, and spatial elements. These different modalities provided a wider

range of teaching and learning opportunities for both teachers and their students. This

was particularly beneficial to students who best learned with a visual or auditory

approach as opposed to a more hands-on approach.

Aligning with their own practice of using a variety of modalities, both teachers

encouraged and accepted their students' use of multimodalities as their literacy practice.

This was observed when Mrs. King asked the students to draw a picture for a vocabulary

item in free hand or add images such as clip art to the poems the students wrote. I

observed this when Mrs. Padilla asked her students to draw pictures and paste

corresponding images from websites as expository features for their research on the

Titanic. This scaffolding did not require the students to use language, which they were

still in the process of acquiring. Using visual representations translated to tactile

activities for the students when they used the computer to search images.

When Mrs. King used technologies, she showed the e-textbook, activity sheets,

handouts, her writing, videos, photos, and pictures in an engaging format using the

projector. When written texts were up on the screen, she often read aloud from the screen

as well as providing shared reading activities with the students so that they could hear

and see what she was teaching. When Mrs. King engaged her students with read aloud

and shared reading, she followed the written texts, using a pointer as she read from the

167

big screen. In this way, she modeled how to read for the students so that they could hear and see the sound and image of the texts.

Mrs. King used the two videos for the same purposes. In Telling Case 2 (Persuasive Writing/YouTube Watching Event), when she used the videos (visual modality) from YouTube, the sound (audio modality) as well as moving images (gestural and spatial modalities) were heard and seen by the students. The videos that she showed provided these four modalities and taught the students what persuasion meant. After showing each video, she then connected how the scenes from the videos were played out to persuade viewers. According to Mrs. King, the students comprehended the messages and she was able to lead them to the next literacy activity, reading persuasive writing to analyze how writers persuade readers with facts through writing.

As a result of using the projection screen, written texts were presented in a digital format and Mrs. King achieved teaching literacy on a large screen rather than using a paper-based semiotic representation when each student holds his/her own textbook. The e-book provided the same effects when the students used this technology. Telling Case 1 (Native American Indians Research Event) described how the students were not only able to hear the narrator's voice when reading written texts but also able to see the written texts and the video on the computer screen. Juan and Raul stated that listening to the narrator helped their comprehension of the texts in the e-book.

Vocabulary instruction was mediated through aural and visual ways in Mrs.

168

King's classroom. She provided photos o that the students could see visual representations of the word meanings in addition to hearing the definitions of the words read aloud. Mrs. King also incorporated drawing into her teaching as she visually presented the meaning of the word on the chalkboard. She used this method when she taught multiple-meaning words, as well. First, she identified the word, *light*, from the e-textbook. Then, she wrote the word and drew a picture of a light bulb and a feather below each word on the chalkboard to indicate that *light* has more than one meaning. Similarly-structured literacy instruction took place in Mrs. Padilla's classroom. She projected a video, a blog, the e-textbook, and a website to make literacy visual, auditory, spatial, gestural, written, tactile, and oral for the students. When she showed videos, students heard the narrator's voice and saw the moving images. As for the blog, after the students wrote their blog posts, they saw other class members' posts on the projection screen as Mrs. Padilla read them aloud. Similarly, Mrs. Padilla read aloud a narrative text from a website to support the students' comprehension. Although Mrs. Padilla carried out some of the vocabulary instructions in a traditional way of drawing on the whiteboard or chalkboard without technologies, it was still visual and oral. Thus, Mrs. Padilla also provided visual, oral, auditory, written, spatial, gestural, and tactile modalities to facilitate her literacy instruction.

One contrast between the teachers' literacy instruction was that Mrs. Padilla did not use read aloud for teaching fluency. She used it for the students' comprehension of

written texts. This is because Mrs. Padilla's instructional focus was teaching writing more than teaching reading.

Scaffolding for Meaning Making

Teachers' use of scaffolding is an important instructional technique to support ELLs in their acquisition of language and literacy. ESL teachers have used this technique in their classrooms for some time. When students are guided, they are assisted by knowledgeable teachers who help the students achieve more than they could achieve alone. Even though the technologies they use were basic, the technologies served to provide another way to scaffold many literacy instructions that the teachers used to promote their students' language acquisition and enrich the literacy learning activities. Patterns in the scaffolding for meaning making were as follows:

- Offering needed support

- Students' work observable to the students and the teachers

- Activating and building schema

- Contextualization

- Incorporating discussions

- Integrating reading and writing

- Using real-world teaching materials

- Project-based literacy activities

Scaffolding is conceptually like a ladder, with each rung taking the students to the

next learning opportunity and helping them become independent learners. Only a steady and strong rung will make the climb easy and safe for the learners; shaky rungs will falter students' learning. As Mrs. King and Mrs. Padilla guided the students' learning, it was observed that the technologies were a rung on the scaffold for the students.

Offering Needed Support

The level of support during whole-group instruction was comparable between the two teachers. Mrs. King and Mrs. Padilla built background knowledge, engaged the students in discussion, asked questions to prompt students' thinking, demonstrated teaching, used different multimodality, made suggestions, and repeated instruction. These strategies were consistent between the teachers, regardless of the technologies the teachers used to engage the students in literacy activities.

During small-group/independent instruction, both teachers physically moved between and around the students, always ready to provide assistance. The type of assistance they offered, however, differed. Mrs. King provided a more group-oriented approach, as described in Telling Case 1 (Native American Indian Research Event), Telling Case 3 (Poetry Writing Event), and Telling Case 5 (Vocabulary/Myth Writing Summary Event). Mrs. Padilla offered a one-on-one approach, as described in Telling Case 2 (Hurricane Katrina Narratives Reading Event) and Telling Case 4 (Titanic Research Event). Mrs. King formed student groups, promoting student collaboration during small-group/independent instruction and facilitating a group-oriented approach to

171

provide needed assistance. Meanwhile, Mrs. Padilla retained individual student work, facilitating a one-on-one approach when assistance was needed. Regardless of the form of support, both I noted both teachers to be at the students' computer or desk to offer assistance, support, and guidance.

Making Students' Work Observable to both Teachers and Students

The teachers both gave students, during small-group and independent instruction, many opportunities to use technologies that resulted in making their progress and their products more easily identifiable to teachers and students alike. The technologies such as PowerPoint, websites, Microsoft Word, and blogs helped the teachers see how the students were engaging with their work and helped the teachers provide needed assistance to the students. For example, when Alicia was engaged in writing about the Titanic (see Telling Case 4), Mrs. Padilla could see where Alicia needed help with her writing as she pointed to the document on the screen and guided Alicia. Alicia also reviewed the PowerPoint slides and moved, deleted, added, and revised her writing. When Alicia used images, she took time to search, find, change, and move them according to Mrs. Padilla's specifications. Use of the blog helped the students both during the writing process and with the end product. Mrs. Padilla noticed during a blog activity that her students' positively engaged with the blog. Her observation of the students in her interview noted that they enjoyed using the blog, as it helped them get comfortable writing down their ideas. Mrs. Padilla stated that she was able to show all of

172

the students' blog posts at one time on the projection screen. With their posts on the screen, she was able to engage the students in discussion and provide needed linguistic assistance.

The same kind of activities took place in Mrs. King's classroom. For example, Telling Case 1 (Native American Indian Event) illustrated how Mrs. King noticed one group accessing the video while the other students used only the e-book for research. Mrs. King then suggested that all the students could use the video as another source, in addition to the e-book. Telling Case 3 (Poetry Writing Event) also illustrated effective use of the computer. As Mrs. King passed by Juan's desk, she suggested that he and his partner add more description to the first line of their poem. In response, they changed the line. When she passed by them again, she commented that it would be cool to have a certain piece of clip art in the document. Juan and his partner immediately embarked on searching for the clip art that Mrs. King had suggested.

Telling Case 3 (Poetry Writing Event) also showed how the students were able to observe their own work more carefully when using the computer. When Juan and his partner finished writing a line in their poem, Juan reviewed the poem displayed on the computer screen using Microsoft Word, and then he decided to add the word "ice" to the sentence. Then he reread the new line and wanted to change the form of the word from a noun to the adjective "icy". Although he did not know how to spell the word, he saw the

173

need to change the word from the noun to the adjective form when he read the sentence from the computer screen.

When students displayed their work through the document camera, this made their learning observable. In Telling Case 5 (Vocabulary and Myth Writing Summary Event), Mrs. King described how the students had an opportunity to present their work from the document camera. She used this group presentation to engage the students in discussion as the screen displayed their work.

Activating and Building Schema

Schema or background knowledge was one of the literacy concepts that I observed Mrs. King developing and using throughout the data collection period. My analysis of the data revealed that she used whole-group instruction to activate and build background knowledge so that, when the students engaged in small-group/independent instruction, they were prepared to complete the tasks using their background knowledge as a resource.

Modeling was one way she built background knowledge for the students. When Mrs. King started providing necessary information, she provided visual support to show how to do certain literacy activities using the document camera and projector. For example, she showed how to fill in the Venn diagram during a shared writing activity to teach compare and contrast. She used what the students would do on Fridays and Saturdays as a modeling example for this literacy activity. When students were able to

see and learn how to fill in cartoon bubbles using target vocabulary because she modeled it for them. Through these examples, it was evident that the students could not only hear the information shared by the other students and Mrs. King but also view how she was engaging them in the tasks.

Mrs. King also implemented discussions to activate the students' background knowledge. When she introduced them to the space unit, she first showed a photo of space from the e-textbook and then engaged the students in discussion. The students' knowledge related to this topic was abundant, and at the end of the discussion, Mrs. King told her students they knew a lot about space. Thus, discussion served to activate their background knowledge during this literacy activity.

Mrs. Padilla a used a video, the e-textbook, activity sheets, and various written texts to help her students activate and build background knowledge. For example, when she showed videos about Hurricane Katrina and the Titanic, she also employed discussion to clarify and solidify their knowledge about certain topics, as presented in Telling Case 1 (Hurricane Katrina Video Event). Then, she provided the next activity based upon the previous one to scaffold students' completion of the tasks. For her students to write a personal narrative, Mrs. Padilla employed this method and guided the students to write their personal narrative. Before that assignment, though, Mrs. Padilla showed the video, talked about their video comprehension, provided them opportunities to read from the website, assessed their understanding of the reading materials, and asked

them to write a blog post. Similarly, when she taught vocabulary, genres, research, and writing, she employed the scaffolding approach to build background knowledge.

Contextualization

The technologies provided contextualization to the literacy activities Mrs. King and Mrs. Padilla provided their students. The instructions were not in the form of isolated words, sentences, strategies, or skills but were instead contextualized in the visual, aural, oral, spatial, gestural, tactile, and written contexts that the students learned. The literacy concepts were embedded in multimodal platforms instead of presented as bits and pieces isolated from sentences, figures, photos, pictures, movements, gestures, colors, and sounds. Both teachers presented literacy instruction so that students could make a connection between small pieces of literacy to whole literacy concepts. When Mrs. King used a story about the benefit of the computer game, for example, the digital text on the projection screen facilitated read aloud, discussion, shared writing, identifying main ideas, and summary writing (see Telling Case 2: Persuasive Writing/YouTube Watching Event).

As for Mrs. Padilla, she used technologies such as the projector, videos, websites, the blog, and the e-textbook to frame literacy activities. Telling Case 1 (Hurricane Katrina Video Event) explains how she used a video for building background knowledge, vocabulary, comprehension, and writing. She also used a video for a similar purpose

when, before the students started engaging in independent/individual work, she introduced the students to research about the Titanic.

Incorporating Discussion

Both teachers incorporated discussion or dialogues in their instruction. Through discussion, the students had opportunities to hear others' speech as well as present to their classmates their thoughts related to various topics. Discussions sustained the element of aural and oral modalities in both teachers' instruction. During the discussion, each used different kinds of semiotics to initiate or sustain discussion, as these remained displayed on the projection screen for the students' reference.

Using discussions, Mrs. King and Mrs. Padilla introduced the students to new learning and assessed the students' understanding of a current or previous literacy activity. In addition, both teachers utilized the discussion format to identify their students' level of prior knowledge and comprehension. Moreover, when both teachers facilitated class discussions, they initiated the dialogues so that the students could brainstorm their knowledge and add this new information. The discussions resulted in helping the students build background knowledge and enhance their comprehension. Discussion, therefore, served to engage the students in learning.

In order to engage the students in discussions, Mrs. King employed questions related to topics from the e-textbook, e-books, and videos. The students became active participants in the discussion as they provided answers. She used this strategy for

177

teaching the concepts of literacy. The questions she asked were not simple questions but instead were questions the students needed to think over to provide the desired answers. The questions employed by Mrs. King followed a cyclical pattern, where students' answers to the questions led to the next cycle of questioning.

She used discussions for the students to brainstorm their knowledge and add what they knew to new information, which resulted in helping them build background knowledge. Telling Case 3 (Poetry Writing Event) illustrated how Mrs. King engaged the students in discussion of multiple-meaning words. They then provided their knowledge of the meaning of words. In this case, Mrs. King's discussion stimulated students' thinking, initiating dialogue among the class regarding the topics Mrs. King chose for the instruction.

When discussions started, Mrs. King used Microsoft Word to type their responses or she wrote down their responses on the paper and projected this. Before Mrs. King's class started reading the last chapter of *The Sign of the Beaver,* she asked the students to predict how the story would end. As the students contributed their predictions, Mrs. King typed and projected them on the screen. Mrs. Padilla employed discussion for teaching in a similar way as Mrs. King, using a cyclical pattern with the inclusion of the images. In contrast, her she used discussion more during independent instruction time, compared to Mrs. King, who used it more in whole-group instruction. As the discussion took place, Mrs. Padilla asked questions to one student at a time during independent/individual

instruction. In Mrs. King's classroom, she utilized a whole-group discussion among all the students.

Mrs. Padilla also asked questions that made the students think more about how to support their thinking or understanding based upon the goal of the lesson. Mrs. Padilla's Telling Case 1 (Hurricane Katrina Video Event) supported that she employed the discussion to clarify their understanding. Telling Case 2 (Hurricane Katrina Narratives Reading Event) and Telling Case 4 (Titanic Research Event) supported Mrs. Padilla's engagement with discussion. When she asked questions, Mrs. Padilla used questions more to clarify the students' thinking or understanding based upon their literacy experiences.

Integrating Reading and Writing

Both Mrs. King and Mrs. Padilla integrated reading and writing instruction within their instruction but in slightly different ways. For example, Mrs. King provided a variety of opportunities and methods for her students to engage in writing. Her students used PowerPoint to write summaries, took notes in their notebooks during the e-book engagement, and shared their written products from the projection screen. They also used Microsoft Word to write poetry, wrote inferences based upon a newspaper clip from the document camera, wrote answers to the questions, wrote research information in a research guiding paper, and used the e-book as a source of research. She also included her students in shared writing to fill a Venn diagram, write main ideas or summaries, fill

179

cartoon speech bubbles using targeted vocabulary, and write short sentences using target vocabulary. Mrs. King also used the document camera to mediate shared writing. Overall, these writings were not in the same format as the narrative and expository writings Mrs. Padilla's students read and wrote. Regardless of the difference in the form of writing, Mrs. King used writing to support reading.

When Mrs. Padilla integrated reading and writing in her curriculum, she introduced her students to examples of writing using websites. When the students read narratives about people's experiences on Hurricane Katrina from a website, the students learned what narrative writing entailed, sounded like, and looked like through reading other people's accounts. Mrs. Padilla built the background knowledge by first engaging the students in reading the personal narratives from the website silently. During their independent reading, Mrs. Padilla moved from one student to another to support them in their reading and asked them to retell the stories they had read in order to check their understandings. She also read aloud from short passages from the published form of the e-textbook and students' blogs before she introduced the students to writing their own narrative and expository pieces. Although integrating reading into writing instruction was part of Mrs. Padilla's curriculum, the reading materials for her students were not in the form of commercial trade books or longer reading passages from the e-textbook, as used by Mrs. King in her reading classroom. As shown here, resources and materials use

180

differed; however, the analysis of both teachers' instruction revealed that they practiced integrating reading and writing as part of their curriculum.

Using Real-world Teaching Materials

Mrs. King and Mrs. Padilla were able to access real world events/topics to connect their literacy objectives to their students' lives. Search engines particularly helped the teachers access the information that resonated with the students' lives. For example, Mrs. King accessed videos from YouTube (Telling Case 2) on topics such as basketball or Coca-Cola, which were subjects the students watched on TV regularly.

When the students went outside to observe their surroundings, their observations became the subject of their poetry writing. The information they collected was based upon what they encountered at the school ground. When Mrs. King taught about main ideas, using text related to the computer, she studied five paragraphs and identified the main idea of each paragraph (see Telling Case 2). Both Juan and Raul were interested in using technology. When they were asked about their interest, both students expressed that they enjoyed using technologies like the phone, computer, or the internet. Thus, reading a text about computer use was relevant to their daily lives.

Mrs. Padilla introduced the students to the topic of Hurricane Katrina to prepare the students to write about their own experiences with a natural disaster. Showing the video on Katrina made this disaster more real to the students, especially as Mrs. Padilla had the students read the narrative accounts of people's experiences. After the students

identified the peoples' feelings in their writing, the students wrote about their own personal experiences with a natural disaster. This was an authentic writing topic based upon the students' life experiences.

Project-based Literacy Activities

Mrs. King and Mrs. Padilla asked the students to complete projects using technologies. I observed that the document camera, Microsoft Word, PowerPoint, and the Flip camera were used in Mrs. King's classroom. The students used the technologies during small-group/ independent instructional time to:

- complete Native American Indians research projects (see Telling Case 1)

- write a poem (Telling Case 3)

- draw an illustration about a word they selected (Telling Case 5)

- summarize a myth they were assigned (Telling Case 5) and

- produce a video with illustrations and narrations based upon the book they read.

- Mrs. Padilla also provided her students with the opportunity to use the blog and PowerPoint for their projects. With this allowance, the students recorded their experiences with natural forces using a blog (Telling Case 3) and through expository writing on a PowerPoint presentation on the Titanic (Telling Case 4).

<div align="center">

Socio-Cultural Context

</div>

The students in Mrs. King's and Mrs. Padilla's classrooms came from linguistically, culturally, socially, and economically diverse backgrounds. Consequently,

the different backgrounds shaped their classroom and influenced learning. Several socio-cultural contexts were revealed in both classrooms as the teachers and the students engaged in literacy activities mediated by technologies. The following themes relate to socio-cultural context:

- Giving choices

- Using Spanish

- Owning literacy learning

- Making learning interactive

- Group vs. individual instruction

Giving Choices

During the literacy events, both teachers gave the students many opportunities to make choices. Mrs. King gave the students a choice in selecting partners, their computer, and topics for research, which I described in Telling Case 1 (Native American Indian Research Event). In addition, the students had choices of presentation formats: a PowerPoint presentation, a demonstration with a puppet, or a visual display using a cartoon. Students were also provided the opportunity to choose a word to create an interrogative sentence and formulate their vocabulary presentation. In the classroom, Mrs. King provided the students the option of using Spanish and English. The students were welcome to use their first language along with English, as illustrated in Telling Case 3 (Poetry Writing Event). I observed the same linguistic choice in Mrs. Padilla's

183

classroom. She accepted the students' use of Spanish if they could not express themselves in English during instruction. This linguistic practice was recorded in Telling Case 2 (Reading Hurricane Katrina Narratives Event). In addition to the use of Spanish for academic purposes, the students could converse among themselves in Spanish in the classroom.

In contrast, the choices in collaboration with other students did not occur in Mrs. Padilla's classroom. This might have been because she only had three to four students in her class. However, she gave her students a different opportunity to choose, as captured in Mrs. Padilla's interview. She stated that her students had always asked to use the computer. Based upon her awareness of the students' interest in technologies, Mrs. Padilla said that she provided as many opportunities as possible for them to be on the computer. She accommodated her students' interest in utilizing technology more in her instructional decision. Thus, she honored the students' choices of using technology.

Other opportunities were given when Mrs. Padilla's students could select which narratives to read from the website, as described in Telling Case 2 (Hurricane Katrina Narratives Reading Event). In addition, students had choice then they engaged in research about the Titanic; they were able to use published books and search engines to look for information related to the topic as well as in their search for images, as described in Telling Case 4 (Titanic Research Event)).

Using Spanish

In both classrooms, communicating in Spanish was part of classroom practice. At the onset of my data collection, Mrs. King's students used Spanish to collaborate with each other while they worked in groups. Telling Case 3 (Poetry Writing Event) presented two incidents of the use of Spanish by the students. When the students went outside to observe their surroundings for poetry writing, Mrs. King gave them the choice to use either Spanish or English to write these observations. From the analysis of the data, it was evident that the students in Mrs. King's classroom, including Juan and Raul, often mixed Spanish and English languages when speaking to each other. Although the students practiced code switching, Mrs. King only used English to communicate with the students during instructional and non-instructional interactions, except for translating for a newcomer student, who occasionally needed Spanish translations. During the later stages of my observation, I noted that the accommodating code switching in the classroom gradually changed as the students became more fluent in English. Mrs. King noted when the students started switching from English to Spanish, and she began directing them to use only English in the classroom, saying "Use English" to the students. Then she explained, "Mateo [newcomer] needs Spanish and that is okay for him to use it" due to his level of English proficiency. Then, she continued directing the students by saying, "Carlos and Pedro, use English."

A similar language practice occurred in Mrs. Padilla's classroom. She

communicated with her students in English, but she accommodated her students to speak in Spanish to each other. In addition, the students could ask for translation or use Spanish to explain in the classroom. Telling Case 2 (Hurricane Katrina Narratives Reading Event) showed an occasion when Alicia asked how to translate a certain word in English. Selena also needed to use Spanish to express what "evacuation" meant to Mrs. Padilla. As seen in Telling Case 2 (Hurricane Katrina Narrative Reading Event), Mrs. Padilla would provide translation to students who asked her. Mrs. Padilla used Spanish for various purposes but did not converse with the students in Spanish, while Mrs. King used Spanish only for a newcomer student. This might be because Mrs. King's students were higher in English proficiency compared to Mrs. Padilla's students. Both Alicia and Selena had been there less than six months while Juan was born in the United States and Raul had been in the United States for more than two years at the beginning of my data collection.

Owning Literacy Learning

The choices given to the students made literacy activities more personal, because the students could have influences in their learning. In Mrs. King's classroom, the students selected their computer and used the same computer every time they had the opportunities to do so, which gave them a sense of ownership. In addition, by allowing students to select the Indian tribes they wanted to research, she accommodated their interest in research topics. Their choices of partners also promoted ease in interactions

and collaborations with each other. The allowance to include clip art gave the students

enjoyment and freedom to explore the computer. The students could also choose which

word to write in an interrogative sentence. In addition, there were three ways to do

presentations: either a cartoon, PowerPoint, or creating a video. The more the students

were given opportunities to choose, the more they could exert their personal touch on

literacy activities. In the end, the literacy activities became more personal.

In contrast, Mrs. Padilla's students had choices of selecting the three personal

narrative stories they could read. In addition, they had the opportunity of exploring

Internet resources for their research and using social media, such as a blog, where they

could share their contribution with others. However, the occurrence of choices was not

as frequent in Mrs. Padilla's classroom as compared to Mrs. King's classroom.

Making Learning Interactive

Both teachers were able to create a learning community where the students and

the teachers interactively participated in literacy activities. When the students engaged in

poetry writing, myth summary writing, YouTube viewing, and defining multiple meaning

words, technologies mediated their literacy activities to be interactive. The community of

learners interactively engaged in learning through the technologies as well as through the

discussion or dialogue.

A similar phenomenon was seen in Mrs. Padilla's classroom. Writing blog posts,

reading websites, research about the Titanic, and watching videos about Hurricane

Katrina offered opportunities for the teachers and the students to interact with one another in literacy activities. Although Mrs. Padilla's classroom interaction during small-group/independent instruction was more with the students and the teachers, the students did interact with the teachers to engage in literacy learning.

Group vs. Individual Instruction

There was one clear contrast between Mrs. King and Mrs. Padilla's implementation of the culture of groups and social construction of meaning. Mrs. King used groups and encouraged the students to interact in groups. Either she allowed the students to select their own partners or she selected the students for each group. When Mrs. King selected the group members, she paired a higher-language level student with a medium-language level student. Mrs. King asserted in her interview that mixing different language levels allowed the students to accomplish more than they could independently.

In Mrs. King's classroom, when she formed groups, the students completed the tasks given to them during small-group/independent work instruction. The meaning-making process was a socially constructed process established as the students collaborated in their groups during the different literacy events. For example, when Mrs. King assigned the task to write a summary of the group's assigned myth described in Telling Case 5 (Vocabulary and Myth Summary Writing Event), she repeatedly encouraged the students to talk to each other, collaborate, and write a summary that all members of the group approved. When groups were formed, Mrs. King asked the

188

students to talk to each other and work together. She used phrases such as, "You all have to agree," and "The work will represent the whole group." With this support, the observed student groups in Mrs. King's classroom worked together. Members of Jaime's group and Raul's group took turns reading the myth aloud from the computer screen. If a student was unsure of a word while reading, other group members helped the struggling student by reading the word aloud. The group then discussed the myth. When it was time to write the summary, the students displayed shared writing collaboration. Students would review the myth on the computer screen when needed, while another student wrote the summary down on paper.

In comparison, Mrs. Padilla used individual instruction instead of small group instruction. This might have been due to the fact that she only had four students in her class and two of them were new comers and sisters. In addition, the third student had been there less than a year. When students in her classroom worked together and helped each other, it was more a spontaneous occurrence. For example, Selena often asked her sister, Alicia, questions in Spanish during independent work. This kind of collaboration using their native language, combined with the consistent support from Mrs. Padilla, functioned as collaborative work in Mrs. Padilla's classroom.

Technologies and Classrooms

As Mrs. King and Mrs. Padilla used technology, it became necessary for the students to know how to use the technologies as well. The following themes surfaced

related to technologies as I analyzed the data.

- Technology instruction

- Technologies blending and lending well to literacy instruction

Technology Instruction

Technology instruction occurred in both teachers' classrooms. Telling Cases 1 (Native American Indian Research), 3 (Poetry Writing Event) and 5 (Vocabulary/Myth Writing Summary Event) captured the moments when Mrs. King demonstrated how to use technologies during whole-group instruction and provided technical assistance during small-group instruction. When the students had opportunities to use the e-book, Mrs. King first demonstrated during whole-group instruction how to use the E-book. After the step-by-step instruction, some students required additional technological support from Mrs. King during small-group instruction, which she offered to the students. For example, when Juan's group used the e-textbook, they called to Mrs. King to help them out. Hearing their request, she went to their desk to show them how to find the pages from the e-textbook and how to scroll up and down. There was another occasion captured in Telling Case 3 (Poetry Writing Event) in which Juan did not know where to find the Microsoft Word program, how to insert clip art, and how to scroll up and down in the screen. Mrs. King also rendered technology instruction to him.

In contrast, Mrs. Padilla's technological support was slightly different. Mrs. Padilla demonstrated and explained literacy activities using technologies during whole-

190

group instruction; however, more technology instruction took place during small-group instruction. During this instructional time, she provided unsolicited technology assistance to the students to guide them on how to use them as she moved from one computer station to the next, guiding each student individually. Telling Case 2 (Hurricane Katrina Narratives Reading Event) described that Mrs. Padilla walked each student through how to get to the website. Telling Case 3 (Blog Event) also described Mrs. Padilla's one-on-one technology support for accessing the blog site during independent instruction. This might have occurred because Mrs. Padilla's class was smaller than Mrs. King's class, making it was easier to provide one-on-one technology instruction. At the onset of the data collection period, Mrs. Padilla's class consisted of three students but increased to four students when Selena joined the class. Even with her addition, the class size was small enough that Mrs. Padilla was able to move easily from one student to the next, offering one-on-one help. Mrs. King based her technology support on particular technical needs of the students during small-group instruction.

Technologies Blending and Lending Well to Literacy Activities

Mrs. King and Mrs. Padilla blended their use of technologies within their literacy lessons effectively, and technologies fit well into their classrooms. They described this occurrence as lending well to the literacy instruction they provided, as noted in their interviews. Mrs. King saw technologies as tools for the students to be creative in their own work. Clip art, Microsoft Word, PowerPoint, and the Flip camera facilitated the

191

creation of different products by each group of students. When they created products, they learned in different ways.

Mrs. King added that presenting the visual images of the students' work on the projection screen created authentic teaching materials, which lent well to literacy activities. She intended that each group would teach the other students in the class about the myth they summarized. Thus, they were only responsible for reading one myth and the other two myths would be taught by other groups. She elaborated in her interview that she made this decision because the three myths were very similar in format and story line. Presenting an assigned summary given to each group as a PowerPoint presentation became authentic teaching material. Furthermore, the students could make a text-to-text connection based upon their background knowledge of knowing what myths were from their experience of reading and writing summaries (see Figure 8 in Telling Case 5).

Mrs. Padilla thought a blog was a wonderful way to share the ideas the students had written down and to engage them in a discussion, because she was able to project all the students' responses visually at one time. She also saw the benefit of making abstract concepts into concrete ones.

Mrs. King asserted in her interview that it was important for English language learners to be able to see the meaning of the words visually, because images can provide the concrete meaning of words. Students would also better remember the images than the meanings, which would result in their comprehension of what they were reading.

192

Mrs. King saw that technologies were something the students enjoyed using and perceived that they did not realize how much they were learning when they were on the computer. The students saw this time as a kind of play, although they were really working. She summarized her observation by stating that the students were learning something, but they were so busy having fun that it did not feel like work to them. Thus, both teachers saw technologies blending and lending to their literacy instruction.

Looking Across the Students

In this section, I will present the results of cross-case analysis of the student participants. The similarities and differences shed light on how they responded to the teachers' literacy instruction as mediated by technologies.

Technology Use by Mrs. King's and Mrs. Padilla's Students

Analysis of data revealed that Mrs. King's students (Juan and Raul) and Mrs. Padilla's students (Alicia and Selena) had opportunities to use a variety of technologies during small-group/independent instruction. As for whole-group instruction, when Mrs. King used the technologies, the students did not operate the technologies personally since the teachers operated them. However, the students took part in read aloud, shared reading, shared writing, discussion, and other literacy activities mediated by the teachers' use of technologies. Therefore, the students' indirect participation in the technology tightly aligned with the teachers' direct use of technologies in whole-group instruction.

However, during small-group/independent instruction, the students had opportunities to operate technologies for their literacy activities.

Figures 16 and 17 display the students' personal use of technologies during small-group/independent instruction. The list of technologies Mrs. King's students, Juan and Raul, used included the projector, the document camera, Microsoft Word, Microsoft PowerPoint, search engines, websites, the e-book, the e-textbook, videos and the Flip camera (see figure 16). They used 10 different technologies during 29 observation days. As for Mrs. Padilla's students, Alicia and Selena used five technologies during eight observation days: Microsoft PowerPoint, search engines, websites, the e-textbook, and the blog (see figure 17). Among these technologies, Microsoft PowerPoint, search engines, websites, and the e-textbook were the technologies used by both groups of students.
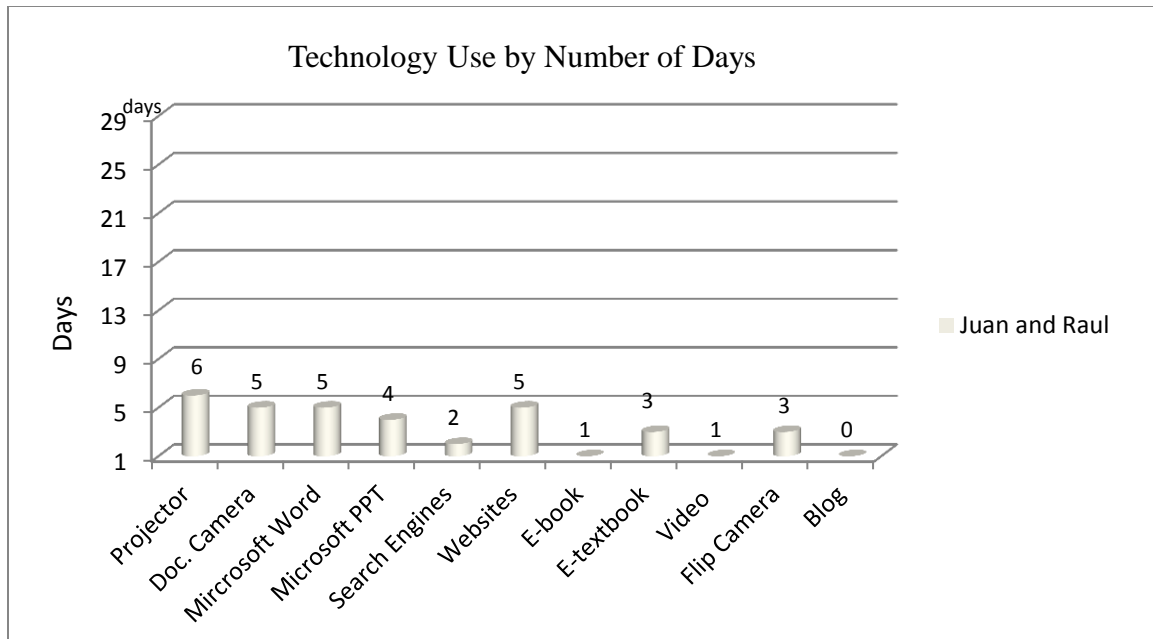
Figure 16. Technology use by number of days by Juan and Raul.
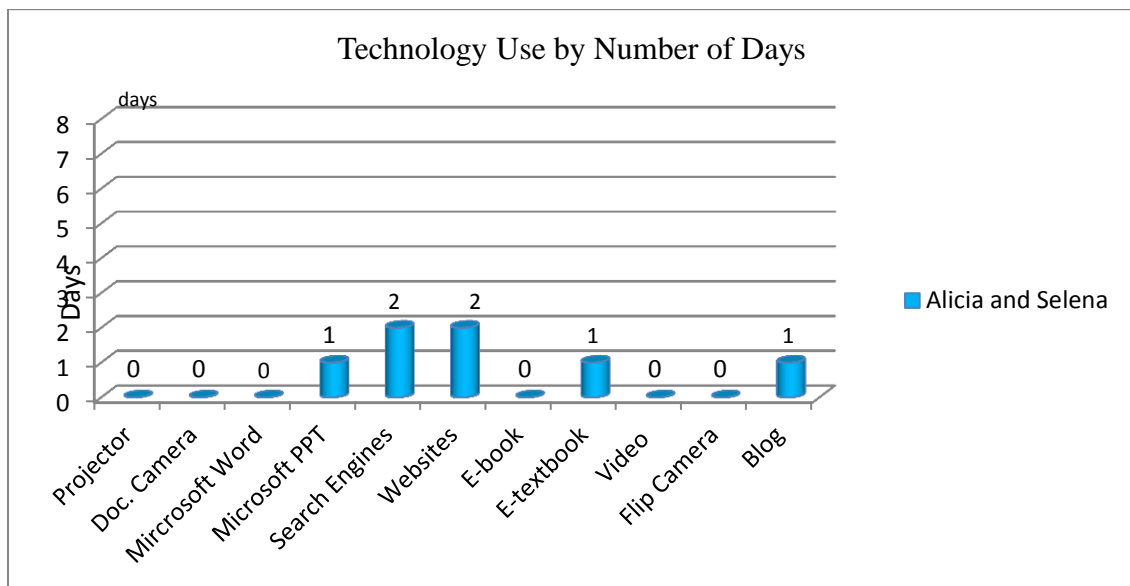

Figure 17. Technology use by number of days by Alicia and Selena.

As for the use of Microsoft Word and PowerPoint, Juan and Raul used them for writing a poem and summaries for the myths. Using these technologies also allowed them to use search engines to look for clip art. Since the students were interested in including clip art into their document, they spent time searching for the right kind of clip art. As a group, they negotiated with each other to decide what kind of clip art they wanted to insert in the documents. Overall, they use these technologies with similar frequency: Microsoft Word for five days and Microsoft PowerPoint for four days. Students used search engines on two days for researching clip art and other information. They used other Internet resources to access e-books for research and the e-textbook for reading. Juan and Raul used websites as much as Microsoft Word.

When Juan and Raul used the Flip camera, they used it to create their version of the video based upon their reading from *Bridge to Terabithia*. The students had three days to complete a video for their project. Only Juan and Raul used the Flip camera, as Alicia and Selena did not use it during independent instruction in their classroom.

In contrast to Juan and Raul, I observed Mrs. Padilla's students to use the blog for one day. This technology was used only by Mrs. Padilla's classroom. Students' actual use of the blog was only one day, but Mrs. Padilla projected the students' blogs to share with the others in the classroom after they completed their writing and then posted them on Mrs. Padilla's blog site.

I observed that Alicia and Selena used PowerPoint for one day to write a research

paper about the Titanic. However, they continued to use it for a few more days while I

was not in their classroom to observe them. During this writing activity, the students used

search engines to look for clip art, photos, and other information to paste in the

PowerPoint slides. The use of the e-textbook occurred when Alicia and Selena accessed

Collecting and Preserving the Stories of Katrina and Rita from its website to read

narrative accounts of people's experiences. One contrast of the two groups of students

was that Juan and Raul had opportunities to use the projector. Juan and Raul used it to

show their presentations.

Figure 18 below documents the percentage of use of each technology tool. Juan

and Raul's use of the projection screen was 21%, which translates to them using the

screen 6 out of 29 observation days. Juan and Raul's use of search engines was 7%

during my observation, which translates as 2 out of 29 total observation days.
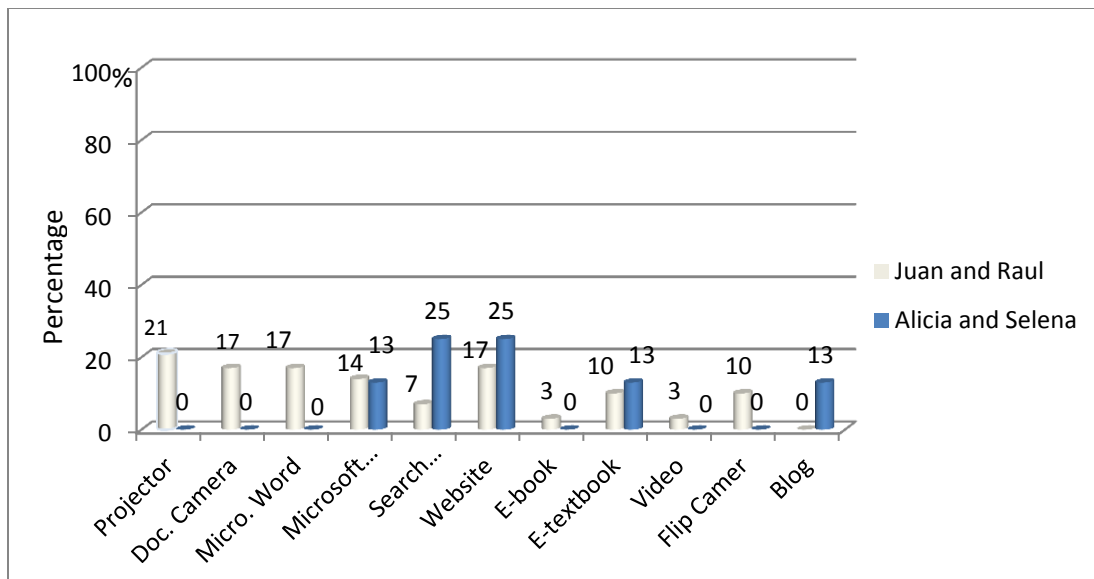
197

Figure 18. Technology use in percentage by Mrs. King's and Mrs. Padilla's Students.

Figure 18 indicates that there was a wide variation of technology usage based on the percentage of time search engines were used by the two groups of students. Juan and Raul's use of search engines was 7% of the observed time, while Alicia and Selena's use of search engines was 25% of the observed time. Both groups' usage of Microsoft PowerPoint, websites, and the e-textbook were similar concerning the frequency of usage.

Students' Responses to the Use of Technologies and Literacies

In this section, I present the results of cross-case data analysis related to usage and responses to technologies and literacies by Mrs. King's and Mrs. Padilla's students. First, I present the results of Mrs. King's students, Juan and Raul, followed by Mrs. Padilla's students, Alicia and Selena.

Juan and Raul: Engagement and Interest in Literacy Activities

I observed that when technologies were used to teach literacy, both students' were interested in literacy instruction during whole-group instruction. Juan and Raul looked up at the screen to see the images of semiotics in larger scale as Mrs. King projected them on the screen. When Mrs. King engaged the students in shared reading or read aloud through the projection screen, they followed Mrs. King's reading as she pointed at the words using a ruler or a pencil. Telling Cases 2 and 4 captured their participation in this literacy activity. Telling Case 2 included another illustration of their interest in engaging in a literacy activity.

Juan and Raul used the document camera and the projection screen to present their work. It was rather difficult for them to use at first, but they began to master the skills of using them after a few times. When they presented their work, sometimes they lined up in one line and one student from the group presented while the other group members stood quietly. Other times, each took turns reading what they had written down from the projection screen. During the presentations, the classroom was very quiet and the students paid attention to the presentation. When groups completed their presentation, the other students applauded the presenters.

When Mrs. King presented a literacy activity of making a movie based upon the book they read in the class, she gave the students an opportunity to use the Flip camera. Raul was very interested in using the Flip camera. He asked Mrs. King to let him practice

using it. Once he got the equipment, he aimed the camera at students sitting on the couch and made a recording. After doing it, he reviewed what he recorded and shared it with the students sitting on the couch.

Before taking a movie, the students used the four chapters they had read to write a summary for each chapter. Raul wrote four summaries all by himself. In addition to writing summaries, the students provided illustrations for each chapter. Raul drew one illustration. When the groups of students were ready to make a movie, they went to the hallway and start making it. When Raul's group started recording, Raul held the Flip camera, the second student read summaries, and the third student moved each illustration according to the chapter. They were eager to retake the movie. Juan's participation in this activity was similar to Raul.

When Mrs. King showed a video and demonstrated how to use the e-book and its videos, their eyes were on the screen as they watched the video. Their excitement over the e-book and the video was summed up by one student's expression during the showing. "It's cool!'

When it was time for them to use the e-book, which incorporated a narrator reading the book, Juan and Raul listened to the audio voice, their eyes following the green curser tracing each word the narrator read. They sat, listened, and read to the end of the book.

Both Juan and Raul said that they enjoyed using the e-book better than traditional

paper-based books. They added that they liked to hear the narrator reading the e-book texts to them, which helped their comprehension of the written texts. Both students expressed that they enjoyed using technologies in the literacy classroom. Juan even wished that Mrs. King would use the computer for every lesson.

Juan and Raul: Collaboration and Negotiation

When Juan and Raul used Microsoft Word and PowerPoint, the students used these tools as groups. When they used them, they were willing to take turns. When they used search engines to look for the right clip art, their eyes were fixed on the screen and negotiated with each other to decide which clip art they would use.

When Juan was concerned with his use of a particular word, he asked Mrs. King a few times how to spell the word. He did not only negotiate the text he wrote, he also negotiated with his group members to complete a group assignment. For example, Juan and his partner talked together, added more details to the sentence in their poem, and edited the sentences together. When Mrs. King suggested they include a certain piece of clip art, they were eager to take up her suggestion and found one that she suggested.   As for finding clip art, they first did not know how to insert it, but after learning from Mrs. King, they searched for clip art together and negotiated what to put in, where to put it, and the size of the clip art. During their use of these technologies, they also took turns to read aloud, engage in discussion, consult with each other, negotiate on how to carry out the assignment, what to write, who would read first, etc. There were negotiations and

201

collaboration that took place among the students in the groups to decide on the use of technologies and on how to complete the work.

When the students engaged using PowerPoint, Raul received peer teaching from another student in the group. When Raul and his group started working with a project in front of the computer, they first took turns reading. When Raul's turn came, he started reading but he encountered a word he could not read. Seeing Raul's struggle, one of the group members took the initiative to pronounce the word for him. Raul looked at him and listened to what he said and repeated the word as his partner had pronounced it. When Raul came to the same word the second time, he was able to pronounce the word correctly.

There were some variations between Juan's and Raul's responses to technologies. Juan needed more technology assistance from Mrs. King compared to Raul, since Juan did not know where to find PowerPoint, how to insert clip art, or how to scroll the computer screen.

Juan and Raul: Designers of Their Own Literacy Products

Their work also became the product of their own design, using various resources from Microsoft Word, PowerPoint, and Internet resources. When Juan and Raul wrote a poem as described in Telling Case 3 (Poetry Writing Event), they selected their own font style and the size of the font. Moreover, Juan added clip art after he searched for it using Microsoft Word and search engines. They were not only careful with wording but also

eager to add details to their poem. The end product was fully designed with written and visual semiotics by Juan and his partner. Raul carried out this assignment in the same manner. Raul and his partner wrote their own poem with a few visuals to embellish their product. The visual parts were important for both students.

Juan and Raul: Technology Learning

Although both students liked to use technologies, there were some variations between Juan's and Raul's responses to technologies. Juan needed more technology assistance from Mrs. King compared to Raul, since Juan did not know where to find PowerPoint, how to insert clip art, or how to scroll on the computer screen (see Telling Case 3: Poetry writing and Telling Case 4: Multiple Meaning Word Event). Juan needed technology support from Mrs. King.

Alicia and Selena: Engagement and Interest in Literacy Activities

Both students were interested in the literacy activities using technologies. For example, when the video about Hurricane Katrina was shown (see Telling Case 1 Hurricane Katrina Video Event), Alicia looked up at the screen to watch the video and looked down to take notes. She repeated this process until the video was completed. After the video, Mrs. Padilla engaged her students in discussion. This was part of her way to assess the students' comprehension of the video. Each student actively participated in this discussion, providing answers to the questions Mrs. Padilla posed. Mrs. Padilla also used this time to clarify some of their misunderstandings. Students watched another video

when Mrs. Padilla introduced the students to the topic of the Titanic. After showing the

video, Mrs. Padilla started the discussion about vocabulary. The students were willing to

ask questions, and Mrs. Padilla provided the answers to their questions. Through the

students' active engagement in the discussion, they were able to build their vocabulary

knowledge as Mrs. Padilla used the video to explain the meanings of the words.

When Mrs. Padilla gave the students an opportunity to write a blog post, as

described in Telling Case 3 (Blog Writing Event), both Alicia and Selena immediately

started writing their post once they opened up the blog site. Their engagement showed

that, after they wrote down something, they paused to read their writing, started revising,

and resumed writing again. This kind of writing engagement continued until they finished

their writing. Their blog posts were not long, but they paid close attention to their writing.

Mrs. Padilla stated they absolutely enjoyed using the computer. She added they were also

accustomed to social media and without any hesitation, they started writing their blog

posts.

The blog provided the students with a means to share their writing. For example,

after the students completed writing the posts, the next day Mrs. Padilla projected them

on the screen. Mrs. Padilla observed that the students showed their interest in sharing

their posts and reading the others' posts. Mrs. Padilla stated that she used this

opportunity to ask questions about their individual posts, to have them verbalize more

details, to clarify their writing, and to provide vocabulary assistance. blog activity

afforded Mrs. Padilla an opportunity to support the students' language. During this literacy activity, the students actively engaged in a discussion and even asked questions about the other students' writing.

As Mrs. Padilla incorporated reading in her writing class using a website, Alicia and Selena showed their interest in reading through this media. They actively engaged in this event, as captured in Telling Case 2 (Hurricane Katrina Narratives Reading Event). They searched through the website to select three stories they would like to read. To select the stories, they skimmed through the collection of stories from the website and chose three of them to read.

Alicia and Selena: Collaboration and Negotiation

In contrast to Juan's and Raul's literacy activity, Alicia and Selena presented a different form of collaboration and negotiation. When they needed collaboration or support, Mrs. Padilla provided the support they needed and became their collaborator, since the class was composed of four students and two were newcomers and sisters.

Alicia and Selena: The Designers of Their Own Literacy Products

Like Juan and Raul, they also became designers of their own writing. The Titanic project described in Telling Case 4 (Titanic Research Event) gave them that opportunity. After they researched the information related to the Titanic, Alicia wrote and searched for some images using search engines. After she found the images of the life jacket and the Titanic, she moved and modified the size of the images as well. She also wrote, cut,

moved, and pasted her writing during this event. The images were also edited a few times as well. After she completed her PowerPoint slides, she cut out her writings and the images from the printouts to make a poster presentation. This activity also required the students in Mrs. Padilla's class to design the poster board presentation. Although it took some time for Selena to complete her writing using an outline of the expository format, she also used PowerPoint to make a poster board. Then she printed the slides, she created to make a poster board presentation.

Alicia and Selena: Technology Learning

According to their interviews, both students use email and Facebook to communicate with their friends in Mexico. They are familiar with these tools and other software, such Microsoft Word and PowerPoint, which they learned in school in Mexico. They were also comfortable using a blog. However, they still needed assistance in using a website (see Telling Case 2: Hurricane Katrina Narrative Reading).

From the students' responses to their teachers' literacy instruction, they showed their interest in using technologies for literacy learning and active engagement with the literacy activities provided. They also designed their own literacy work to be unique and original.

<div align="center">

Summary

</div>

In this chapter, I presented the results of the cross-case analysis of the two teachers and their students. The cross-case analysis from the teachers' data revealed

compelling themes. In their classrooms, technologies offered and mediated many literacy activities in a variety of ways. Teachers provided scaffolding and alternated multimodality literacy instruction. The results from the cross-case analysis of the students' data also revealed three emergent themes: students' engagement and interest in literacy activities, students' collaboration and negotiation, and students' roles as designers of their own literacy products. In the next chapter, I discuss findings and present implications for future research and classroom practice.

CHAPTER VI

DISCUSSION AND CONCLUSIONS

Introduction

The goal of this qualitative study was to examine how two middle-school ESL teachers used technologies for literacy instruction in their classroom as well as their students' responses. A qualitative research case study design (Stake, 1995; Yin, 2009) guided the exploration of the two research questions:

1. How do middle school ESL teachers use technologies for literacy instruction in the classroom?

2. What are their ELL students' responses?

The sources of data were digital recordings of interviews, field notes of the classroom observations, digital/handwritten participant journals, teachers' lesson plans, students' work samples, and impromptu conversations. Results of the analysis of data were presented in the previous chapter. In this chapter, the findings are presented, followed by a discussion of the findings and implications for future research and practice.

Findings

Research Question 1: How do middle school ESL teachers use technologies for literacy instruction in the classroom?

Mrs. King and Mrs. Padilla used a variety of technologies in their ESL classrooms. The patterned ways that the teachers provided literacy instruction using technologies were unique to each teacher. Mrs. King provided the students' technology use in a small-group setting. In contrast, Mrs. Padilla provided the opportunity for the students to use technologies in an independent/individual instructional setting. This was due to a distinctive difference in instructional grouping. Mrs. King tended to organize her students into small groups during literacy instruction more often than having them work independently. In comparison, Mrs. Padilla tended to have her students work independently more often than organizing her students in small groups.

The technologies Mrs. King and Mrs. Padilla used provided many semiotic representations resulting in the teachers' literacy instruction becoming multimodal. When they showed written texts, images (e.g., photos, pictures, newspaper clips, and textbook illustrations) movies, and videos on the projection screen, they provided a variety of multimodal opportunities for their students use as they read, wrote, listened, and discussed the topics being presented. Both teachers used a document camera and projector linked to a computer to demonstrate reading, writing, listening, and speaking strategies. Auditory and aural components of literacy were demonstrated using videos and through the use of the e-book that contained videos and audio playback. When the teachers engaged their students in discussions, reading aloud, or shared reading of texts, the visual images remained on the projection screen during the entire lesson for the

209

students to go back and reference as needed. During small-group/independent instruction, the students had hands-on opportunities to use technologies as well, offering tactile ways for them to engage in learning literacy.

Through their use of technologies, the two teachers framed literacy events and activities to be springboards for their students' learning. In other words, the technologies provided scaffolding from which their students received enough support, and this support continued into each teacher's guided and independent conferencing with the students. In this dissertation, scaffolding is defined as the ways teachers make students' learning comprehensible, accessible, and successful through technologies and a variety of semiotics. Using these technological tools, the students were able to make meaning during literacy instruction with the support of the teachers who helped the students learn more than they would on their own (Bruner, 1983; Vygotsky, 1978; Walqui, 2006). Both teachers scaffolded the students with the use of technologies and multimodalities along with scaffolding literacy lessons to offer needed support, to activate and build schema, make students' work observable, to contextualize literacy instruction, incorporate discussions, integrate reading and writing, use real world teaching materials, and use project-based activities.

When Mrs. King and Mrs. Padilla used technologies, those technologies structured their instruction to create unique socio-cultural contexts in which the teachers gave choices, honored the students' use of native language, and helped provide

opportunities for their students to feel ownership in their own learning. The framework or formats used in both classrooms helped make literacy instruction interactive, and the use of small groups and individual instruction provided support at each student's level of need.

Figure 19 below indicates how Mrs. King and Mrs. Padilla organized literacy instruction when they used technologies. The table identifies the technologies in both teachers' ESL classrooms that shaped and provided multimodal and socio-cultural contexts that are characteristic of scaffolded literacy instruction.
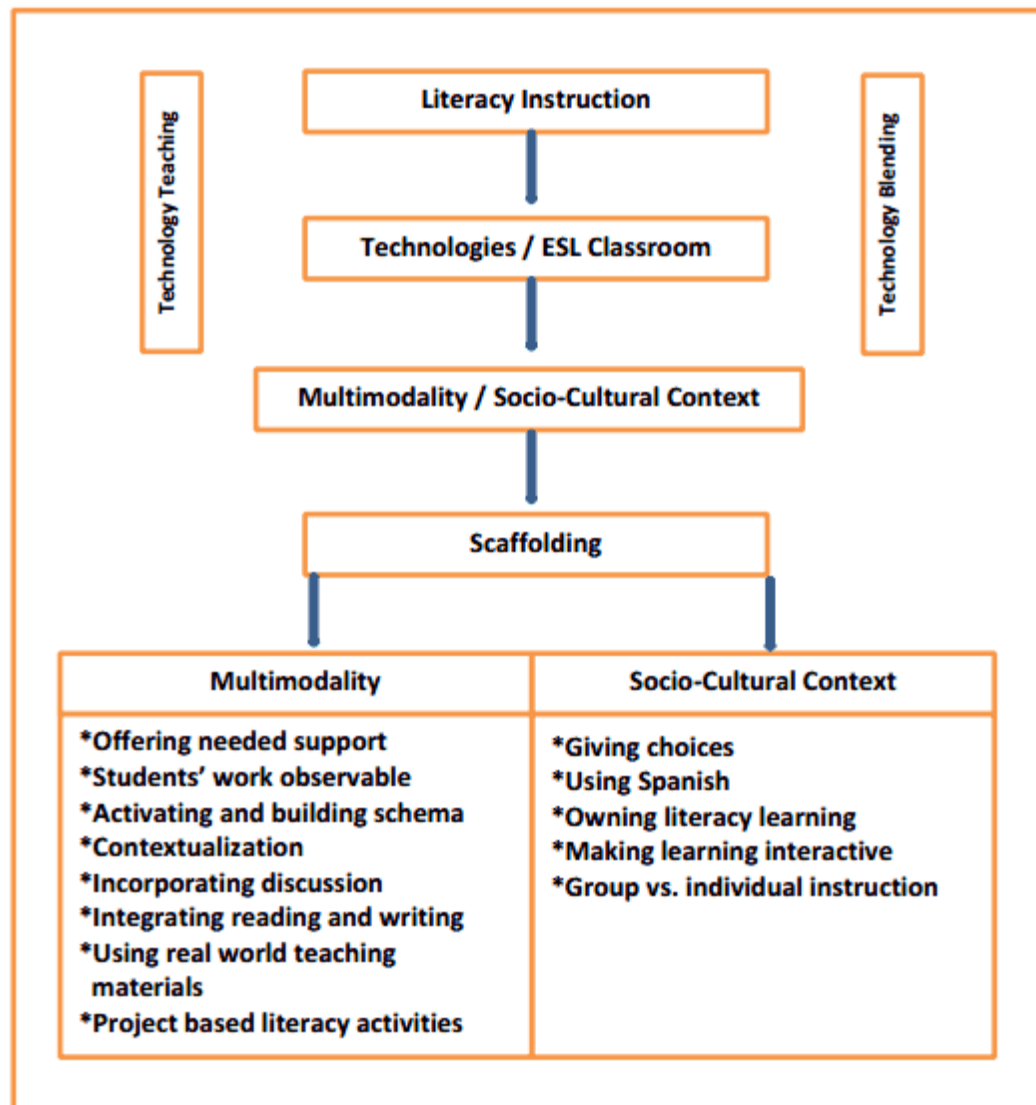
Figure 19. Literacy instruction using technology in ESL classrooms.

As shown in Figure 19, literacy instruction was offered to the students in the ESL

classrooms. When technologies were used, the literacy instruction mediated by

technologies became multimodal and created socio-cultural contexts. Under these

instructional contexts, both teachers were able to provide a variety of scaffolding for their students.

The second research question for this study was: What are their ELL students' responses? Both students in Mrs. King's classroom were observed to be actively collaborating and interacting with the other students, interacting with technologies, and using a variety of semiotics in literacy instruction. They used the e-textbook to read, write a poem using Microsoft Word, search information using the Internet resources, use PowerPoint to write, and a make a movie with a Flip camera. They interacted with group members in the completion of instructional work and supported each other in their groups by sharing ideas, negotiating with their ideas, engaging in shared writing, taking turns reading, and sharing the use of technologies. They were interested in literacy activities mediated by technologies, and their engagement with literacy learning was active, interactive, collaborative, and negotiated in Mrs. King's classroom

As for Mrs. Padilla's students, the students showed interest in engaging in literacy activities by exchanging ideas, sharing their knowledge, asking questions, providing their answers, reading from the website, using PowerPoint to write, searching for information using Internet resources, and adding different semiotics to their documents. However, in contrast to Mrs. King's students, Mrs. Padilla's students did not engage in collaboration and negotiation with one another due to the classroom structure. Another result of the technology-meditated literacy activities was the unique work both groups of students

213

produced. Mrs. King's and Mrs. Padilla's students were the designers of their end products that contained their choice of words, sentences, and visual images (clip art, photos, pictures), which were unique and original.

Discussion of the Findings

As research shares, adolescents are actively using technologies outside the classroom (Coiro et al., 2008; Lenhart et al., 2010) and developing digital, textual skills (MacArthur, 2006; Prensky, 2001; Prensky, 2005). Thus, it is important for teachers to incorporate technologies for literacy instruction so they can align their instruction to students' literacy practices (Ajayi, 2009; Grabill & Hicks, 2005.) Yet, there is little research about the digital literacy practices of ELLs in school. The gap widens when examining how ESL teachers use technologies for literacy instruction and how their ELLs respond.

The findings provide a detailed account of what types of technologies both teachers used, when they used each type, and how they used them for literacy instruction in their ESL classrooms. Using technologies created multimodal and socio-cultural ways of teaching literacy and technology instruction in both teachers' classrooms. This study also captured the teachers' use of technologies to provide a variety of multimodalities and scaffolding. Teachers teaching ELLs could use the findings from this research as a way to guide their digital literacy instruction

In addition, Walqui (2006) stated ELLs "benefit from the same good teaching as all learners do, but they need even more of it" (p. 169). Technology represents yet another effective scaffolding tool for teaching ELLs effectively. The findings from this study present that both teachers used technologies they were familiar with and provided support the students needed in their classroom. This finding adds to current research and fills in the gaps on the teachers' use of technologies for literacy instruction in an ESL classroom. In addition, the detailed account of findings related to their English language learners' responses help teachers to become motivated to use technologies as well as trying to figure out how to use the technologies for the students' benefit.

Implications for Future Research and Practice

More Studies on the Use of Technologies Within ESL Classrooms

New London Group (1996 and 2000) explains that people's meaning making today has another characteristic, that of social diversity, in addition to the characteristic of multimodality. They point out that meaning making has huge variability due to social background, linguistic differences, cultural setting, and more. Kalantzis and Cope (2012) emphasize that literacy teaching needs to be seen as a negotiation of these differences.

ESL classrooms are the place where social diversity creates a variety of meaning-making opportunities due to teachers' and students' social, cultural, and linguistic differences. In addition, teachers need to consider that they are to educate the youth who are considered *digital natives* and come through the door using technologies. This study

215

provides a glimpse at a real ESL classroom and the complexities surrounding literacy practices and the use of technologies. However, there is a critical need for more studies looking into the ESL classroom when technologies are mediated for socially, culturally, or linguistically diverse students' meaning making.

More Studies Focusing on Teacher Training and Use of New Technologies

The technologies Mrs. King and Mrs. Padilla used were available to every campus from their district. The district also provided the teachers with technology training. Both teachers confirmed in their interviews that they had many opportunities for technology training.

Although both teachers used technologies, many ESL teachers do not provide literacy instruction via technologies. Baylor and Ritchie (2002) point out that one of the hurdles for teachers in developing technology proficiency was the lack of technology training. Future research could focus on ways of supporting teacher's use of technologies in the classroom particularly surrounding language and literacy learning. As students' technology proficiency advances outside the classroom, it is essential to explore how districts can offer technology support to classroom teachers for language and literacy learning.

When Mrs. King and Mrs. Padilla were interviewed, they mentioned having a district technology specialist's support. For example, Mrs. King shared that, when she wanted to begin using the new document camera in her classroom, her campus

technology specialist came to the classroom and walked her through how to use it. Mrs. Padilla echoed these comments in her interview and shared that she also experienced the specialist's strong support when she decided to use a new technology of which she was not familiar. A technology specialist came to set up the technology and taught her how to use it as well. For them, the specialists' support was invaluable.

However, neither teacher mentioned that they had a buddy system or an individual mentor system on their campus for continuous technology learning for literacy instruction. In my study, both teachers worked alone and came to their own decision about what technologies to use and how to use them in their classrooms. If they had another teacher whose technology skills were more proficient and could provide support as a mentor, what kind of technology learning and teaching would take place for less knowledgeable teachers? Is a buddy system or mentor system another avenue for the teachers to continue exploring the possibilities of expanding technology knowledge so they can engage the students in literacy instruction? Another research area to be explored might deal with what this type of technology mentoring would look like along with how this kind of technology learning for the teachers and students might affect language and literacy instruction in the classroom. There is a critical need for research dealing with how to support literacy teachers' technology use in their classroom as students become more and more technology oriented in their own lives.

217

More Studies Focusing on ELL Students' Opportunities to Use Technologies in and out of School for Learning Language, Literacies, and Technologies

It was observed from the classrooms that when both teachers actively used technologies during whole-group instruction, they showed the students how to engage in meaning making utilizing technology. When the teachers turned their instruction to small-group/independent instruction or individual instruction, they took just enough time to instruct their students on how to use the technologies so the students could engage in the literacy activities they were assigned to complete. All these evidences add to the current research that teachers need to become proficient in their own use of technologies so they can be guides or mentors for the digital generation in their classrooms in order to prepare them for the 21st century literacy and digital workforce (Ito et al., 2008; National Writing Project et al., 2010; New London Group, 1996; Tarasiuk, 2010). Otherwise, the digital generation, particularly ELLs, will be left alone in the digital world to grow up without the benefit of adults' and teachers' guidance (Ito et al., 2010).

In order to support ELLs' competency in using technologies in the 21st century, there is an urgent need for teachers to use technologies in the classroom. Teachers need to show ELLs not only how to use them but how to use them skillfully and help them become competent in meaning making through technologies. Exploring how to motivate the teachers to use technologies in a literacy classroom, how to create technology-inclusive curriculum, and how to include the students' funds of knowledge through

218

literacy instruction are some of the topics for future research that would support ELLs' in becoming proficient in meaning making through technologies.

Conclusion

In today's world, technologies permeate almost every facet of our lives. Furthermore, the use and value of technologies in language and literacy classrooms has been recognized as necessary and integral educational tools. Now it is more important than ever for teachers to embrace the presence of technologies in the classroom when students are actively using them outside school. The purpose of this study was to explore how ESL teachers use technologies in their ESL classroom and their students' responses. The findings of this research offer some insights about the power and potential of technologies in the classrooms. However, technology does not "have any impact on its own- it all depends on how we use it" (Stokes, 2012, p.8). Thus, more research is needed to focus on how teachers use technologies in their ESL classrooms, how teachers can expand their knowledge of technology use in the literacy classroom, and how to provide more opportunities for students to use technologies in the ESL classroom. The results of research with these goals will guide ESL teachers and students to engage with technologies in their language and literacy classroom.

REFERENCES

Allison, B. N., & Rehm, M. L. (2007). Effective teaching strategies for middle school

    learners in multicultural, multilingual classrooms. *Middle School Journal*, *39*(2),

    12-18.

Ajayi, L. (2009). English as a second language learners' exploration of multimodal texts

    in a junior high school. *Journal of Adolescent & Adult Literacy, 52*(7), 585-595.

Baylor, A. L., & Ritchie, D. (2002). What factors facilitate teacher skills, teacher morale,

    and perceived student learning in technology-using classrooms? *Computers &*

    Education, 39 (4), 395-414.

Beaufort, A. (2009). Preparing adolescents for the literacy demands of the 21st-century

    workplace. In L. Christenbury, R. Bomer, & P. Smagorinsky (Eds.), *Handbook of*

    adolescent literacy research (pp. 239-255). New York: The Guilford Press.

Black, R.W. (2009). English-language learners, fan communities, and 21st-century skills.

    Journal of Adolescent & Adult literacy, 52(8), 688-697.

Black, R., & Steinkuehler, C. (2009). Literacy in virtual worlds. In L. Christenbury, R.

    Bomer, & P. Smagorinsky (Eds.), *Handbook of adolescent literacy research*

    (pp.271-286). New York: The Guilford Press.

Bradley, K.S., & Bradley, J.A. (2004). Scaffolding academic learning for second

   language learners. *The Internet TESL Journal, 10*(5). Retrieved June 25, 2011,

   from http://iteslj.org/

Bruce, B.C. (2004). Diversity and critical social engagement: How changing technologies

   enable new modes of literacy in changing circumstances In D. E. Alvermann

   (Ed.), *Adolescents and literacies in a digital world* (pp.1-18). New York: Peter

   Lang.

Bruner, J. (1983). *Child's talk*. New York: Norton.

Chen, B. (2011). *What it means to be "always on" a smartphone.* Retrieved May 5, 2011,

   http://www.npr.org/2011/07/14/137472487/what-it-means-to-be-always-on-a-

   smartphone

Coiro, J., Knobel, M., Lankshear, C., & Leu, D. J. (2008). Central issues in new literacies

   and new literacies research. In J. Coiro, M. Knobel, C. Lankshear, & D. J. Leu

   (Eds.), *Handbook of research on new literacies* (pp.1-21). New York: Lawrence

   Erlbaum Associates.

Cope, B., & Kalantzis, M. (2000). Multiliteracies: The beginning of an idea. In B. Cope,

   & M. Kalantzis (Eds.), *Multiliteracies: Literacy learning and the design of social

   futures* (pp.3-7). New York: Routledge.

Cope, B., & Kalantzis, M. (2009). 'Multiliteracies': New literacies, new learning.

   Pedagogies: An International Journal, 4(3), 164-195.

221

Creswell, J.W. (2007). *Qualitative inquiry and research design: Choosing among five approaches*. Thousand Oaks, CA: Sage Publications.

de Guerrero, M.C.M., & Villamil, O.S. (2000). Activating the ZPD: Mutual scaffolding in L2 peer revision. *The Modern Language Journal, 84(*1), 51-68.

Emerson, R. M., Fretz, R. I., & Shaw, L. L. (1995). *Writing ethnographic fieldnotes*. Chicago: The University of Chicago Press.

Freire, P. (1972). *Pedagogy of the oppressed*. Harmondsworth: Penguin.

Gee, J.P. (2003). *What video games have to teach us about learning and literacy.* New York: Palgrave Macmillan.

Gee, J.P. (2004). Millennials and Bobos, Blue's Clues and Sesame Street: A story for our times. In D.E. Alvermann (Ed.), *Adolescents and literacies in a digital world*. (pp. 51-57). New York: Peter Lang.

Gilster, P. (1997). *Digital literacy*. Hoboken, NJ: John Wiley, & Sons, Inc

Grabill, J. T., & Hicks, T. (2005). Multiliteracies meet methods: The case for digital writing in English education*. English Education, 37*(4). 301-311.

Heath, S.B. (1983). *Ways with words: Language, life, and work in communities and classrooms.* New York: Cambridge University Press.

Hull, G., & Schultz, K. (2001). Literacy and learning out of school: A review of theory and research. *Review of Educational Research, 71*(4), 589-611.

Ito, M., Horst, H., Bittani, M., Boyd, D., Herr-Stephenson, B., Lange, P. G., Pascoe, C. J., & Robinson, L. (2008). *Because digital writing matters: Improving student writing in online and multimedia environments*. San Francisco: Jossey-Bass.

Kalantzis, M., & Cope, B. (2012). *Literacies*. New York: Cambridge University Press.

King, J.R., & O'Brien, D.G. (2004). Adolescents' multiliteracies and their teachers' needs to know: Toward a digital détente. In D.E. Alvermann (Ed), *Adolescents and literacies in a digital world* (pp.40-50). New York: Peter Lang.

Knobel, M., & Lankshear, C. (2005). "New" literacies: Research and social practice. In B. Maloch, J.V. Hoffman, D. L. Schallert, C. M. Fairbanks, & J. Worthy (Eds), *54th yearbook of the National Reading Conference* (pp. 22-50). Oak Creek, WA: National Reading Conference, Inc.

Knobel, M., & Lankshear, C. (2007). Online memes, affinities and cultural production. In M. Knobel, & C. Lankshear (Eds.), *A new literacies sampler* (pp.199-227). New York: Peter Lang.

Krashen, S. (1982). *Principles and practice in second language acquisition*. Pergamon Press. Retrieved April 12, 2013, from http://www.sdkrashen.com

Kress, G. (2000). Multimodality: Challenges to thinking about language. *TESOL Quarterly, 34*(2), 337-340.

Kress, G. (2003). *Literacy in the new media age*. London: Routledge.

Kress, G. (2004). *Reading images: Multimodality, representation and new media*.

    Retrieved May 7, 2010, from Expert Forum for Knowledge Presentation

    http://www.knowledgepresentation.org/BuildingTheFuture/Kress2/Kress2.html

Kuiper, E., & Volman, M. (2008). The web as a source of information for students in K-

    12 education (pp. 241–266). In J. Coiro, M. Knobel, C. Lankshear, & D. Leu

    (Eds.), *Handbook of research on new literacies.* Mahwah, NJ: Erlbaum.

Ladson-Billing, G. (1995). Toward a theory of culturally relevant pedagogy. *American*

    Educational Research Journal, 32 (3), 425-491.

Lam, W. S. E. (2008). L2 literacy and the design of the self. In J. Coiro, M. Knobel, & C.

    Lankshear (2003). *New literacies: Changing knowledge and classroom learning.*

    Philadelphia: Open University Press.

Lankshear, C., & Knobel, M. (2006). *New literacies: Everyday practices & classroom*

    learning. New York: McGraw Hill.

Lankshear, C., & Knobel, M. (2007). Sampling "the new" in new literacies. In M. Knobel

    & C. Lankshear (Eds.), *New literacies samplers* (pp.1-24). New York: Peter Lang.

Lenhart, A., Kahne, J., Middaugh, E., Rankin Macgill, A., Evans, C., & Vitak, J. (2008).

    Teens, video games, and civics: Teens' gaming experiences are diverse and

    include significant social interaction and civic engagement. *Pew Internet &*

    American Life Project. Retrieved March 10, 2011, from

    http://www.pewinternet.org/~/media/Files/Reports/2008/PIP_Teens_Games_and_

    Civics_Report_FINAL.pdf.pdf

224

Lenhart, A., Ling. R., Campbell, S., & Purcell, K. (2010). Teens and mobile phones. *Pew Internet & American Life Project*. Retrieved March 11, 2011, from http://pewinternet.org/Reports/2010/Teens-and-Mobile-Phones.aspx

Leu, D. J., Kinzer, C. K., Coiro, J., & Cammack, D.W. (2004). Toward a theory of new literacies emerging from the internet and other information and communication technologies. In R. B. Ruddell, & N. J. Unrau (Eds.), *Theoretical models and processes of reading* (pp.1570-1613). Newark, DE: International Reading Association.

Levin, D., & Arafeh, S. (2002). The digital disconnect: The widening gap between internet-savvy students and their schools. *Pew Internet and American Life Project*. Retrieved April 4, 2011, from http://www.pewinternet.org/Reports/2002/The-Digital-Disconnect-The-widening-gap-between-Internetsavvy-students-and-their-schools/Part-IV.aspx?view=all

Lewis, C., Enciso, C., & Moje, E. B. (2007). *Reframing sociocultural research on literacy: Identity, agency, and power*. New York: Routledge.

Ludlow, B. (2012). Web 2.0 for teaching and learning. *Teaching exceptional children, 45*(2). Retrieved May 15, 2011, from http://www.questia.com/library/1P3-2803270621/web-2-0-for-teaching-and-learning

Luke, C. (2004). Re-crafting media and ICT literacies. In A.E. Alvermann (Ed), *Adolescents and literacies in a digital world* (pp.132-146). New York: Peter Lang.

225

MacArthur, C. A. (2006). The effects of new technologies on writing and writing

    processes. In C. A. MacArthur, S. Graham, & J. Fitzgerald (Eds.), *Handbook of*

    writing research (pp. 248- 262). New York: The Guilford Press.

Miller, S. M. (2007). English teachers learning for new times: Digital video composing as

    multimodal literacy practice. *English Education, 40*(1), 61-83.

Moll, L., Amanti, C., Neff, D., & Gonzalez, N. (1992). Funds of knowledge for teaching:

    Using a qualitative approach to connect homes and classrooms. *Theory Into*

    Practice, 31, 132-141.

National Council of Teachers of English (2008). The NCTE definition of 21st century

    literacies: Adopted by the NCTE Executive Committee. Retrieved on October, 25,

    2010, from http://www.ncte.org/positions/statements/21stcentdefinition

National Writing Project with DeVoss, D.N., Eidman-Aadahl, E., & Hicks, T. (2010).

    Because digital writing matters: Improving student writing in online and

    multimedia environments. San Francisco: Jossey Bass.

New London Group (1996). A pedagogy of multiliteracies: Designing social futures.

    Harvard Educational Review, 66(1), 60-92.

New London Group (2000). A pedagogy of multiliteracies: Designing social futures. In

    B. Cope & M. Kalantzis (Eds.), *Multiliteracies: Literacy learning and the design*

    of social futures (pp. 9-37). London: Routledge.

Palincsar, A., & Brown, A. (1984). Reciprocal teaching of comprehension-fostering and

    comprehension-monitoring activities. *Cognition and Instruction, 1*, 117-175.

Patterson, N. G. (2000). Hypertext and the changing roles of readers. *The English Journal*, *90* (2), 74-80.

Pew Internet and American Life Project (2010). Teen and technology. Retrieved September 15, 2012, from http//www.pewinternet.org

Pew Internet and American Life Project (2013). Teen and technology 2013. Retrieved April 13, 2013, from http//www.pewinternet.org.

Prensky, M. (2001). Digital natives, digital immigrants. *On the Horizon, 9*(5). Retrieved February 7, 2011, from http://www.marcprensky.com/writing/Prensky%20%20Digital%20Natives, al%20Immigrants%20-%20Part1.pdf

Prensky, M. (2005). "Engage me or enrage me": What today's learners demand. *Educause Review*, Retrieved February 7, 2011, from http://www.marcprensky.com/writing/Prensky-Engage_Me_or_Enrage_Me.pdf

Rhodes, J. A., & Robnolt, V. J. (2009). Digital literacies in the classroom. In L. Christenbury, R. Bomer, & P. Smagorinsky (Eds.), *Handbook of adolescent literacy research* (pp. 153 -169). New York: The Guilford Press.

Richards, L. (2009). *Handling qualitative data: A practical guide*. Los Angeles: Sage Publications.

Shenton, A. K. (2004). Strategies for ensuring trustworthiness in qualitative research projects. *Education for Information, 22*, 63-75.   Retrieved April 16, 2013, from http://www.angelfire.com/theforce/shu_cohort_viii/images/Trustworthypaper.pdf

Snowman, J., & Biehler, R. (2003). *Psychology applied to teaching* (10th ed.). Boston:

    Houghton Mifflin.

Spradley, J. P. (1979). *The ethnographic interview*. New York: Holt, Rinehart and

    Winston.

Stake, R. E. (1995). *The art of case study research*. Thousand Oaks, CA: Sage

    Publications.

Street, B. V. (1984). *Literacy in theory and practice*. Cambridge, England: Cambridge

    University Press.

Street, B. V. (1998). New literacies in theory and practices: What are the implications for

    language and in learning? *Linguistics and Education, 10*(1), 1-24.

Street, B. V. (2003). What's "new" in new literacy studies? Critical approaches to

    literacy in theory and practice. *Current Issues in Comparative Education, 5*(2),

    77-91.

Sugimoto, T. (2007). Non-existence of systematic education on computerized writing in

    Japanese schools. *Computers and Composition, 24*, 317-328.

Swain, M. (1993). The Output Hypothesis: Just speaking and writing aren't enough. *The

    Canadian Modern Language Review, 50(*1), 158-164.

Tarasiuk T. (2010). Combining traditional and contemporary texts: Moving my English

    class to the computer lab. *Journal of Adolescent Literacy, 53*(7), 543-552.

Texas Education Agency. (2011). Educators' Guide to TELPAS. Retrieved in September

    12, 2011 from http://www.tea.state.tx.us/student.assessment/ell/telpas/

United States Department of Commerce. (2011). Fact sheet: Digital literacy. Retrieved

    May 15, 2011, from http://www.commerce.gov/news/fact-sheets/2011/05/13/fact-

    sheet-digital-literacy

Unsworth, L. (2001). *Teaching multiliteracies across the curriculum: Changing contexts*

    of text and image in classroom practice. Retrieved March 20, 2011,

    http://ftp.mcgraw-hill.co.uk/openup/chapters/0335206042.pdf

Vygotsky, L. S. (1978). *Mind in Society*. Cambridge, MA: Harvard University Press. In

    L. S. Vygotsky's collected works (Vol. 1, pp.39-285). New York: Plenum.

    (Original works published in 1934, 1960).

Walqui, A. (2006). Scaffolding instruction for English language learners: A conceptual

    framework. *The International Journal of Bilingual Education and Bilingualism*,

    9(2), 159-180.

Walsh M. (2008). Worlds have collided and modes have merged: Classroom evidence of

    changed literacy practices. *Literacy, 42*(2), 101-108.

Ware, P. D. & Warschauer, M. (2005). Hybrid literacy texts and practices in technology-

    intensive environments. *International Journal of Educational Research*, *43*, 432-

    445.

Weigel, M. & Gardner, H. (2009, March). The best of both literacies. *Educational*

    Leadership. Retrieved May 14, 2011, from

    http://www.margaretweigel.com/comment/pubs/DM2EdL0903.pdf

Weiss, R. S. (1994). *Learning from strangers: The art and method of qualitative interview studies.* New York: The Free Press.

Yin, R. K. (2009). *Case study research: Design and methods* (*Applied social research methods)* (5th Ed.), Newbury Park, CA: SAGE Publications.

APPENDIX A

IRB Approval Letter and Modification Request

Institutional Review Board
Office of Research and Sponsored Programs
P.O. Box 425619, Denton, TX 76204-5619
940-898-3378   FAX 940-898-4416
e-mail: IRB@twu.edu

September 12, 2012

Ms. Chieko Hoki
3008 Bandolino Lane
Plano, TX 75075

Dear Ms. Hoki:

Re: *The Great Expectations of 21st Century Literacies (Protocol #: 16239)*

The request for an extension of your IRB approval for the above referenced study has been reviewed by the TWU Institutional Review Board (IRB) and appears to meet our requirements for the protection of individuals' rights.

If applicable, agency approval letters must be submitted to the IRB upon receipt PRIOR to any data collection at that agency. A copy of the approved consent form with the IRB approval stamp is enclosed. Please use the consent form with the most recent approval date stamp when obtaining consent from your participants. A copy of the signed consent forms must be submitted with the request to close the study file at the completion of the study.

This extension is valid one year from October 1, 2012. Any modifications to this study must be submitted for review to the IRB using the Modification Request Form. Additionally, the IRB must be notified immediately of any unanticipated incidents. If you have any questions, please contact the TWU IRB.

Sincerely,

Dr. Vicki Zeigler, Co-Chair
Institutional Review Board - Denton

cc.   Dr. Margaret Compton, Department of Reading
      Dr. Nora White, Department of Reading
      Graduate School

TWU INSTITUTIONAL REVIEW BOARD (IRB)

MODIFICATION REQUEST FORM

Complete this form when you would like to request a change on an approved study. This change could be a change in the research team, data collection sites, protocol (e.g., compensation, study procedures, etc.), and/or the informed consent. Submit this signed form along with copies of any new or modified materials you describe below to the IRB. NOTE: You may not implement any changes to an IRB-approved study until your Modification Request has been approved.

PRINCIPAL INVESTIGATOR: Chieko Hoki

DATE APPROVED BY IRB (most recent):   September 3, 2013

TITLE OF STUDY: The Great Expectation of 21st Century Literacies

Provide a detailed description of the modification(s) requested:

I need to change the title of my dissertation.

Provide a list of any new or modified documents materials and attach these items to this form:

MIDDLE SCHOOL ENGLISH SECOND LANGUAGE (ESL) TEACHERS' USE OF TECHNOLOGY FOR LITERACY INSTRUCTION AND THEIR ENGLISH LANGUAGE LEARNERS' (ELL) RESPONSES

Principal Investigator Assurance: I certify that the revised information provided for this project is correct and that no other procedures or forms will be used. I confirm that no changes will be implemented until I receive written approval for the changes from the TWU IRB.

Chieko Hoki

Signature of Principal Investigator

_9-24-13_

Date

APPROVED:

Vicki A. Zygler

Signature of IRB Chair/ Co Chair

_9/26/13_

Date

233