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KAREN G. MARTIN
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WRITING THROUGH THE USE OF A CLASS BLOG

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Dr. Jiening Ruan, Chair

Dr. Priscilla Griffith

Dr. Sara Ann Beach

Dr. Lawrence Baines

Dr. Beverly Edwards

DEDICATION

I dedicate this dissertation to my parents, husband, and children. All of you have helped in ways you never knew. Whether it be financially or physically, it was all worth it. Dad, you always told me whatever I do, do it to the best of my ability and do not quit. Mom, you were always checking in on me and helping motivate me to keep going. To my loving husband and children, you were always helping me out with anything I needed including daily chores around the house and keeping me company on those long drives to and from Norman. You were there in times when I was upset and wanted to throw in the towel encouraging me to continue. For these reasons, I thank each of you and offer my completed dissertation.

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ABSTRACT

In this sequential explanatory mixed methods study the researcher examined a) the quality of persuasive writing, and b) attitudes toward writing of two groups of fourth graders, one that blogged and another group that did not. The purpose of this study was to investigate how blogging could be used to assist in students' persuasive writing development.

In the study the researcher collected both quantitative and qualitative data. For quantitative data, the researcher administered pre and post writing assessments, which were scored using two different writing rubrics. Attitudes toward writing were assessed with a survey. Interviews were conducted with purposefully selected fourth grade students.

The blog writing group perceived that they improved in five of the seven areas on the Six-Point Writing Rubric (also known as the 6 + 1 Traits Writing Rubric) and in all areas except punctuation on the Opinion Writing Rubric as elucidated in the assessments. However, the results from the inferential statistical analyses of the quantitative data suggest that none of the differences reached the level of statistical significance. Yet, analyses of qualitative data suggest fourth graders in the blog writing group perceived that blogging enhanced the quality of their writing, increased the quantity of their writing, and improved their writing mechanical skills. In addition, fourth graders who blogged had more positive attitudes toward writing than fourth graders in the traditional writing group upon the completion of the study.

CHAPTER ONE: INTRODUCTION

Background and Statement of the Problem

Writing instruction has been a neglected area for quite some time as opposed to reading and math. Reading and writing are intertwined and therefore, students' writing development has generated much discussion recently with the implementation of the Common Core initiative. The Common Core State Standards (CCSS, 2012) Initiative has been adopted by many states within the U.S. The standards require students to be college and career ready when they graduate high school. In the writing standards section, the standards have become more rigorous and require students to develop more advanced writing skills.

Previous instruction in elementary writing encompassed persuasive writing. Lucy Calkin's curriculum (2013) selected for use in this study uses the two terms persuasive writing and opinion writing interchangeably. According to CCSS, opinion writing is one of the major genres first through fifth grade students are required to master and the term changes to argument in grades six through 12 (CCSS, 2012). An assessment recently conducted on high school students' writing revealed they could write clear argument responses 80% of the time, however; only 2% could support a claim with evidence (National Center for Education Statistics, 2012). Therefore, further development of persuasive writing could assist in building the foundation for argumentative writing required in later grades.

While students are expected to develop a solid foundation in writing in elementary grades, they should leave high school having the ability to write with greater competence (Berg, 2011). Writing through social media provides students with a means

to write, revise, edit, publish, share with wide audiences, collaborate, and provide feedback quickly with little effort. Engaging learners in a digital writing project may provide them the opportunity to apply their skills to real world challenges (Serim, 2012) and prepare them for real life writing. Common Core places an unprecedented focus on the use of technology beyond its traditional function as a word processing tool in the course of learning. The NETS-S (National Educational Technology Standards for Students) is used to evaluate students' skills and knowledge with digital media (ISTE, 2012).

Besides print materials, adolescents frequently engage in activities such as texting, instant messaging, blogs, chat rooms, wiki's, Facebook, My Space, eZines, and eBooks (Berg, 2011) outside of school. According to Turner and Katic (2009), teens have been raised in a world filled with technologies. Today's students are known as digital natives (Prensky, 2005), meaning they have been surrounded by technology since birth.

Several studies addressed blogging and its potential to support student learning. Some researchers (Blankenship, 2007; Churchill, 2009; Glicker, 2010) claim blogging can provide opportunities for more peer feedback, sharpen writing skills, build a sense of community, and develop a sense of audience. Other researchers (Armstrong & Retterer, 2008; Brescia & Miller, 2007; Felix, 2008) claim blogging gives students a sense of engagement.

In the area of students' persuasive writing and writing development through blogging, two studies were located. Palombo (2011) conducted an exploratory study to determine if there were any changes in sixth grade students' (N = 24) persuasive writing

when using blogging and the students' perceptions of using blogging over a six-week period. The researcher compared both online and offline writing through a pre and post-test writing sample. Data were collected through a survey and interviews to examine students' perceptions of using blogging to write. The study focused on the students' awareness of audience and idea development as well as draft development and revision. Results indicated that the students actively used the blog and that it influenced their writing process and product. Palombo also found using a blog supported the students' building of audience awareness and idea development when composing persuasive writing. The evidence indicated students' establishment of ownership using the blog allowed them to make a convincing argument.

A study conducted by Anderson (2010) examined the writing development in specific writing skills (traits—content, vocabulary, voice, sentence fluency, organization, and conventions) of freshmen English college students (N = 74). They were divided into two groups, blogging group vs. journaling group. The researcher used 6 + 1 Traits Writing Rubric (Education Northwest, 2010) to score pre and post-test writing samples. The groups of students were given writing prompts to write about over a six-week period, and a pre and post-test were administered. Results indicated that content and voice of the blogging group had a significant improvement; however, there were no significant differences in organization, vocabulary, sentence fluency, or conventions between the two groups.

Both of these studies had a short duration period of six weeks. Palombo's (2011) study also had a small sample size (N = 24). While Anderson's (2010) study had a control and treatment group, Palombo's (2011) study did not. Neither study

included a formal writing curriculum. The current study addresses these issues by using a more rigorous design.

The body of research on blogging and persuasive writing development with elementary students is limited. Research has not comprehensively addressed the integration of technology, particularly blogging in elementary students' development of persuasive writing. This study contributes to the current body of research on blogging and offers new insights on the extent to which blogging may improve persuasive writing among fourth grade students. This study also informs educators, policy makers and community leaders of a writing tool that could potentially motivate elementary students to actively engage in persuasive writing.

This study examines the effects of the traditional mode of writing (paper and pencil) versus blogging to determine if it assists fourth grade students to make stronger gains in their development of persuasive writing. In addition, this study also examines the effect of blogging on fourth grade students' attitude toward writing.

Theoretical Framework

Sociocultural Learning Theory (Vygotsky, 1978), Engagement Theory (Guthrie & Wigfield, 2000) and New Literacy Theory (Leu, 2000; 2002) frame this study. These theories are briefly reviewed in this chapter as they relate to the constructs of blogging and writing development. Each theory will be discussed in more depth in chapter 2.

From a sociocultural perspective, children construct their knowledge through interactions with others. Knowledge gained is based on the cultural influences of the participants involved. Blogging is a social act with a potentially large cultural audience where writing is actively constructed and debated among participants. Vygotsky is one

of the key theorists in the development of this theory and emphasized language, social interaction, and cultural influences in the development of cognition (Vygotsky, 1978). Bruner (1996) expanded upon Vygotsky's work and proposed that culture shapes the construction of knowledge. Gee (2000) further expanded on Vygotsky's work by addressing the social and cultural aspects of the online community. Most recently, Ito (Connected Learning, 2012) and a team of researchers developed a connected learning model that incorporates the social and cultural aspects of learning through digital media. With the social and cultural interaction that takes place through blogging, students build on their prior knowledge, particularly in the area of persuasive writing.

Currently, many young children have used or are using social networking as a way to stay connected with their friends outside of school. Social networking has become an integral part of many students' culture. Blogging is therefore familiar to many young children. Using various forms of technology to communicate with others is engaging to children of all ages (Martindale & Wiley, 2005).

Although what constitutes engagement varies, it is best defined by Guthrie, Wigfield and You (2012) as involvement, participation, and commitment to an activity. Stovall (2003) suggests that engagement is the combination of the student's willingness to participate in a task and time-on-task. Krause and Coates (2008) define engagement as the student's effort devoted to an activity that contributes directly to his or her learning. Additionally, Chen, Gonyea, and Kuh (2008) add to Krause and Coates (2008) definition by saying that engagement is linked to desired outcomes such as high grades, satisfaction, and perseverance. Another study defines engagement as including motivation and academic achievement (Bulgar, Mayer, Almeroth, & Blau, 2008).

Guthrie and Wigfield (2000) provide a more specific definition of reading and writing engagement as the decoding and comprehending of texts, value of reading, self-efficacy, and choice of reading materials as well as the need for an integration of motivation, cognition, and social interactions to be a successful reader. Guthrie, Wigfield, and Perencevich (2004) refer to engagement in reading and writing as a result of the interplay of motivation, conceptual knowledge, strategy use, and social interaction during literacy activities. Guthrie, Wigfield, and Klauda (2012) add “it is crucial to the development of life-long literacy learning” (p. 53-54).

While engagement and motivation are terms used synonymously by some people, they are different. Motivation is a more specific construct of engagement. According to Gambrell (2011), Sivan (1986), and Vygotsky (1978), motivation is linked to goal structures, choice, social interaction, self-efficacy, and relevance. Motivation is both intrinsic and extrinsic. Other sociocultural theorists believe that motivation is linked to cognitive development and is dependent upon a child’s intrinsic motivation to learn (Guthrie, Wigfield, & You, 2012). Because reading and writing are interconnected processes in the development of literacy, the engagement theory lends itself to students’ development of writing through blogging.

The definition of new literacies varies. Some see new literacies as new social practices (Street, 2003). Some see it as important new strategies essential for online reading comprehension and communication (Castek, 2008; Henry, 2006). According to Leu, Kinzer, Coiro, Castek, and Henry (2013), the term literacy has become deictic. This means that the term changes as quickly as the context changes. For example, what literacy means today could change by tomorrow with the rapidly changing face of

Internet technologies (Leu et al., 2013). “Literacy is not just new today; it is new every day” (Leu, Forzani, Rhoads, Maykel, Kennedy, and Timbrell, 2014, p. 37). According to Lankshear and Knobel (2007) new literacies is “a useful construct for recognizing and understanding the extent to which changes in the current conjuncture are extending social practices of using codes for making and exchanging meaning...” (p. 224). The construct of new literacies should be understood from a historical rather than a temporal perspective, and it refers to the new “technical stuff” that allows people to engage in various conventional and emerging literacy practices and new “ethos stuff” that involves different values, sensibilities, and perspectives (p. 225).

Leu and colleagues suggest a dual-level theory of lowercase and uppercase new literacies (2013). The lowercase theories explore a specific construct and/or new literacies technology (Leu et al., 2013), such as social practices in blogging. The uppercase theories explore common findings that emerge across multiple lowercase theories. This provides more focus on the shifting landscape of literacy and at the same time expands our understanding of the lowercase perspective of that construct. The uppercase theories are built on eight principles that are common across current research and current theoretical work and are discussed more in depth in chapter 2.

Reading and writing are still parallel constructs whether online or offline. Online reading includes reading blogs and other online texts. Also, in order to blog, a student must use some type of technological device such as a computer, iPad, or iPhone to conduct his/her communication. It is the combination of the production of writing (blog entries) as well as reading and responding to entries through technological devices that connects this study to new literacies.

Drawing on these theories, blogging is viewed as a sociocultural activity in which students develop their writing. In addition to students' writing development, blogging is viewed as a tool to engage learners and motivate them to improve the quality of their writing for a much broader audience base. These theories also inform and guide this study's research design, including the data collection methods as well as the analysis and interpretation of the results.

Statement of Purpose

The intent of this sequential explanatory mixed methods study is to investigate the effect of blogging on the development of persuasive writing in fourth graders. The researcher examined a) the quality of persuasive writing, and b) attitudes toward writing between two groups of fourth grade participants who practiced writing with and without the use of blogging. The purpose of this study is to understand the research problem by expanding our knowledge of how blogging was used to assist in students' persuasive writing development. In the study, the researcher collected both quantitative and qualitative data. For quantitative data, the researcher administered a pre and post writing assessment of the participants' persuasive writing using the same prompt. The writing assessments were then scored using the 6 + 1 Traits Writing Rubric developed by Education Northwest (2010) (Appendix B) and the Opinion Writing Rubric provided by the Lucy Calkins (2013) curriculum (Appendix B). Writing attitudes were assessed by using a writing attitude survey (Kear, Coffman, McKenna, & Ambrosio, 2000), also known as the Garfield Attitude Survey (Appendix C). Interviews were conducted with purposefully selected fourth grade students to further examine the changes or lack thereof in the quality of persuasive writing and their attitudes toward persuasive writing.

Research Questions

The following two questions were addressed in this study. These questions serve as a guide to the research investigation.

1. Is there a difference in the quality of persuasive writing between fourth grade students who practice writing through blogs versus students who practice writing through traditional method (paper and pencil)? Why or why not?
2. Is there a difference in attitudes toward writing between fourth grade students who practice writing through blogs versus students who practice writing through traditional method (paper and pencil)? Why or why not?

Importance of the Study

In the past, classroom teachers focused on developing elementary students' abilities to compose persuasive writing. Common Core State Standards (2012) refer to it as opinion writing in elementary grades and require teachers to help students develop their abilities to write effective opinions. This study may produce findings to assist in meeting the new Common Core objectives in opinion writing, but it also helps prepare fourth grade students to tackle the fifth grade writing test with more confidence and a greater competence in this genre of writing. It further helps prepare students in their writing development with the rigorous writing demands they will encounter in middle school and beyond.

Review of the literature indicated there is little research on students' writing development using blogging in elementary grades (Wood, Muller, Willoughby, Specht, & Deyoung, 2005). Even more limited is research in the area of persuasive writing of elementary students. Of the studies already conducted, most samples/participants

consisted of high school students and higher education students, and the sample sizes were too small from which to draw conclusions effectively (Haythornthwaite, 2001; Palombo, 2011; Williams & Jacobs, 2004). Therefore, there is a need to further explore fourth grade students' development of persuasive writing to determine if blogging could improve their abilities in that particular writing genre.

Definition of Terms

In order to provide a common reference, the definitions for key terms used for this study are provided in the following section.

Argument. Argument is where two or more sides engage in explaining or defending a statement made by themselves or others in order to justify and to solve problems or make decisions (Rottenberg, 1997). Ramage, Bean, and Johnson (2001) define argument as “having three defining features: justification of claims, is a product and process, and combines elements of truth seeking and persuasion” (p. 1).

Argumentative writing. Argumentative writing is writing that requires the investigation of a topic, collection and evaluation of evidence, and establishing a position on a topic (Baker, Brizee, & Angeli, 2013).

Blogging. A blog as a website where entries are made and displayed in a reverse chronological order. Anderson, Grant, and Speck (2008) add that blogs are meant to be interactive and ongoing; they can include various topics, visuals, links, videos/audios, and publishing is instantaneous. Richardson (2006) defines blogging as the act of writing or responding to a blog (short for weblog) post.

Class blog. A class blog used for instructional purposes is a blog set up by the teacher where all students read and contribute in one place rather than each student

having his/her own individual blog (Beach, Anson, Breuch, & Swiss, 2009). Rather than students writing just for the teacher, students are also writing for their peers, providing a much larger audience base (Beach et al., 2009).

Digital native. Digital natives are students or children who have grown up surrounded by digital tools and toys (Prensky, 2001; 2005). According to Prensky, these children are also native speakers of the digital language. Other terms that have been used to classify this group of children are the net generation and the digital generation (2001).

Motivation. According to Guthrie (2001), motivation is linked to goal structures, choice, social interaction, self-efficacy, relevance, and engagement. Motivation is both intrinsic and extrinsic and is domain specific. Gambrell (2011) defines motivation as engaging in or choosing to do something, such as read or write.

New literacy. Leu et al. (2013) suggests a dual-level theory of lowercase and uppercase New Literacy. Lowercase new literacy theory refers to specific practices of technology and/or new forms of technology (Leu et al., 2013), such as blogging or wiki. Uppercase New Literacy explores common findings that emerge across multiple lowercase theories.

Opinion writing. According to CCSS (2012), opinion writing is a basic form of argument and is a precursor to argument writing. In opinion writing, the writer makes a claim and supports the claim with reasons that include facts or details.

Persuasive writing. According to Storytown published in 2008 by Harcourt, a persuasive essay states an opinion and gives reasons supporting that opinion (Beck, 2008) and therefore persuasive writing and opinion writing are usually two

interchangeable terms. Palombo (2011) also notes persuasive writing is a form of argumentative writing.

Social media. Social media uses both mobile and web-based technologies to communicate, create, share, discuss, send personal messages and modify content with others through various interactive platforms such as blogs, wikis, My Space, Facebook, and so on (Kietzmann, Hermkens, McCarthy, & Silvestre, 2011). These researchers further add that social media allows for building online virtual communities with other users.

Social networking. According to Cohn (2011), social networking is the structure formed by a group of people who are joined together based on a common interest.

Web 2.0. Web 2.0 is a term used for communicative tools that allow the reader to not only consume content, but to construct, inquire, and converse with others their ideas (Warlick, 2007). According to Anderson (2010), web 2.0 is a term that refers to a collective group of applications that allow the user to access the Internet, read, produce, and reply to content. Anderson goes on to address that the Internet differentiates from web 2.0 in that it is the social interaction required by web 2.0, whereas, the Internet does not require social interaction.

Writing traits rubric. Writing traits are important qualities of writing. These traits usually refer to ideas, word choice, voice, sentence fluency, organization, and conventions that define strong writing (Education Northwest, 2010). Presentation is one additional trait.

Organization of the Dissertation

This dissertation includes five chapters. Chapter 1 provides an introduction to the current study and includes these sections: theoretical framework, statement of the purpose, research questions, importance of the study, and definitions of terms. Chapter 2 begins by providing an overview of the chapter. The theoretical framework that guides the study is examined in more depth. A review of current literature on blogging and writing is provided, particularly in the area of persuasive writing. Chapter 3, the methodology chapter, begins with a brief overview of the sequential explanatory mixed methods design, followed by the research questions. This chapter also provides details of the research design, including the selection of the research site, selection and description of participants, and a detailed description of each instrument used in the study. In addition, this chapter provides information on the plan for data analysis of both quantitative and qualitative data. In Chapter 4, the researcher presents the findings from both quantitative and qualitative data analysis. In Chapter 5, the researcher discusses the major findings of the study as well as provides answers to the research questions posed. Finally, implications for practice, limitations, and implications for future research are discussed.

CHAPTER TWO: REVIEW OF THE LITERATURE

Overview

Chapter 2, review of the literature, is organized in three sections. The first section begins by examining the three theories that guide this study, Sociocultural Learning theory (Vygotsky, 1978), Engagement theory (Guthrie & Wigfield, 2000), and New Literacy theory (Leu, 2000). The second section reviews the literature on social networking, writing development, and Common Core State Standards (CCSS). The final section reviews the research studies on blogging and students' writing development, particularly in persuasive writing.

Theoretical Framework

Sociocultural Learning Theory

Sociocultural Learning theory (Vygotsky, 1978) provides the main theoretical framework that guides this study. Vygotsky is one of the key theorists in the development of this theory. According to this theory, learning happens when learners engage with complex tasks in a supporting environment. The social and cultural experiences children have when blogging and the processes of their development that emerge are emphasized. Feedback offered by peers provides a supporting environment.

Vygotsky (1978) emphasized language, social interaction, and cultural influences in the development of cognition. He proposed that complex thinking and learning develops through social interactions that take place when people interact with one another in the context of a large environment. Children learn from a more knowledgeable other, such as a teacher, adult, or a more capable peer. The cultural surroundings in which they live and interact are what shape their way of thinking. In

this study, giving and receiving feedback during blogging provide opportunities for social interactions for students within a larger supportive environment for the learner to shape and develop their thinking.

Woolfolk (1998) suggested that social interaction leads to changes in children's thought and behavior and can vary from different cultures. He also recognized the need for cultural tools in the development of cognition and development in learning (Woolfolk, 2004). Examples of cultural tools are language, books, television, and computers/technological devices. Blogging is carried out via a computer, and it can be considered a cultural language tool in this study.

Bruner (1996) expanded on Vygotsky's (1978) work on social and cultural aspects of learning. He adopted the point of view that culture shapes the mind and therefore determines how we construct our knowledge. He stressed that scaffolding children's learning is what moves them forward, and in order to do this, the children must be engaged in learning and interacting with others (Bruner, 1996; Woo, Chu, Ho, & Li, 2011). Feedback from peers provides scaffolding. Bruner referred to this as being co-participants in the process of learning.

Gee (2000) stressed there are different ways of literacy learning within the sociocultural practices that are connected to social norms, beliefs, values, and languages of a particular culture. He builds on Vygotsky's (1978) work by adding the on-line community. He stressed that social and cultural views of other on-line users influence a person's identity. In turn, their learning is guided by the on-line group in which they participate.

Sociocultural Learning theory is also connected to the Connected Learning model through the social aspect. Ito, Gutierrez, and a team of researchers (Connected Learning, 2012) supported by the MacArthur Foundation developed the redesigned model. The model is based on three core values (equity, participation, and social connections), three learning principles (interest, peer support, and academics) as well as three design principles (shared purpose, open networks, and production centered). Connected learning was built on the foundation that learning is socially situated within the interests of the learner through digital media. In the Connected Learning model, students use their hands-on learning experiences from traditional teaching methods learned in school and fuse them with their out-of-school interests, friendships, and academics through a shared purpose and open networks, such as blogging (Connected Learning, 2012). Mostly, this is done away from the school setting, such as in the home or community. In other words, they share their knowledge through social and cultural practices and global connectedness. For example, according to Dowdell (2009), a person who responds to others on a social network are validating the other person's choice of identity they have constructed based on the comments. Since students can blog and provide feedback to each other from any computer by logging into the social network, they help shape their own identity as well as others.

The Third Space theory (Gutierrez, Baquedano-Lopez, Tejada, & Rivera, 1999) also emerged from the Sociocultural Learning theory. Third Space is known as the space where cultures meet (Marsh, 2007). It is the bridge that brings together the home (one space) and school (second space) in an educational setting, such as the classroom (third space), where diverse cultures interact. Moje, Ciechanowski, Kramer, Ellis,

Carrillo, and Collazo (2004) suggest the classroom is a place where academic discourse is challenged and re-shaped. Third Space, as it pertains to blogging, is bridging the cultural home environment with the school environment based in an educational setting, such as the computer lab, where students conduct their blogging (interaction). The feedback from peers offers challenges that assist in re-shaping the students' thinking and knowledge development.

In looking at the background of the participants in the study (Moje et al., 2004), many cultures were represented. During the study, participants provided and received feedback on their writing from others. Generally, when this is done in the classroom, feedback from others consists of usually two other students and the teacher. On the blog, feedback from others consisted of any number of responses from a few classmates to all classmates as well as the teacher. The back-and-forth feedback established on the blog were social and cultural experiences shared by one another. Based on Vygotsky's sociocultural theory (1978), the complex thinking that takes place during social interaction is when learning happens.

Engagement Theory

Engagement theory (Guthrie & Wigfield, 2000) is the second theoretical framework that guides this study. Researchers in the field vary in defining engagement and most are very broad definitions. According to Guthrie, Wigfield, and You (2012), engagement can best be defined as involvement, participation, and commitment to an activity. Stovall (2003) suggests that engagement is the combination of the student's willingness to participate in a task and time-on-task. Krause and Coates (2008) define engagement as students' effort they devote to an activity that contributes directly to

their learning. Additionally, Chen, Gonyea, and Kuh (2008) add to Krause and Coates definition by saying that engagement is linked to a desired outcome, such as high grades, satisfaction, and perseverance. Other studies define engagement as including motivation and academic achievement (Bulgar, Mayer, Almeroth, & Blau, 2008).

Guthrie and Wigfield (2000) provide a more specific definition of reading and writing engagement as the decoding and comprehending of texts, value of reading, self-efficacy, and choice of reading materials as well as the need for an integration of motivation, cognition, and social interactions to be a successful reader. Guthrie, Wigfield, and Perencevich (2004) refer to engagement in reading and writing as a result of the interplay of motivation, conceptual knowledge, strategy use, and social interaction during literacy activities, and Guthrie, Wigfield, and Klauda (2012) add “it is crucial to the development of life-long literacy learning” (p. 53-54). Guthrie (2001) and associates at the National Reading Research Center (NRRC) focused on what contributes to reading and writing engagement. Their focus is on the integration of motivation, cognitive, and social features of reading and instruction (Guthrie, 2001; Hawthorne, 2008). Guthrie and Wigfield (2000) expanded on the works of Dewey’s (1938) inquiry perspective where the learner is problem-centered and from that they proposed a reader engagement model (Figure 1). According to Kucer (2005), reading and writing are parallel processes. Therefore, Figure 1 presents Guthrie’s (2001) model in a modified format to include writing.



Figure 1 Modified Model of the Engagement Model of Reading and Writing Development by J.T. Guthrie, Contexts for engagement and motivation in reading. Copyright 2001 by Reading Online.

Guthrie (2004) discusses the differences of engaged readers and disengaged readers. Engaged readers enjoy what they are learning, believe in themselves as readers, and seek to understand what they are reading. An engaged reader is one who reads because they are intrinsically motivated and are activating their metacognitive strategies to build understanding. Engaged readers are often social with what they are reading and learning. According to Baker and Wigfield (1999), engaged readers are motivated for different purposes and utilize prior knowledge to form new understandings through meaningful social practices that involve reading.

On the other hand, disengaged readers are often thought of as struggling readers or readers with low self-efficacy and likely to be extrinsically motivated (Gottfried, 1985; Guthrie & Davis, 2003). They often procrastinate and avoid making an effort to read. Disengaged readers usually are considered to be middle school and above (Anderman, 1999), however, they are seen in upper elementary grades as well. To re-

engage these students, Guthrie and Davis (2003) suggest two paths: first, connect intrinsic motivation; and second, build stronger intrinsic motivation for reading and writing. While engagement and motivation are terms used synonymously by some, they are different. Motivation is a critical concept of engagement.

Motivation. Motivation is one of the critical concepts of Guthrie's (2001) engagement model for reading and writing development. According to Gambrell (2011), Sivan (1986), and Vygotsky (1978), motivation is linked to goal structures, choice, social interaction, self-efficacy, and relevance. Motivation is both intrinsic and extrinsic. Incorporating these practices initiates motivation. Other sociocultural theorists believe that motivation is linked to cognitive development and is dependent upon a child's intrinsic motivation to learn (Guthrie, Wigfield, & You, 2012). Turner and Paris (1995) found that providing open tasks influences students' motivation with what they call the six C's: choice, challenge, control, collaboration, comprehension, and consequences.

Goal structure. According to Bruning and Horn (2000), setting specific and challenging goals will lead to higher levels of performance. They also note that feedback is crucial in the facilitation of goal progression. On the other hand, Guthrie (2008) suggests setting goals and controlling what students read and write force students to be extrinsically motivated. For example, students will seek the reward or gold star, but will cheat and minimize their efforts in comprehension as well as to read and write deeply. Students who seek mastery want to completely understand the task and not merely read or write to get by. Students who seek to meet the goal or make the grade are considered to be performance-oriented and they do not care whether they have

a deep understanding of the task. They are simply performing to reach their goal.

Guthrie (2008) further suggests rewarding effort over performance, because it levels the playing field for all students to succeed in academic learning.

Choice and control. One of the most powerful motivators to learn is choice (Gambrell, 2011). According to Guthrie (2008), enabling students to have significant control over their reading and writing is motivating. Infusing self-direction into daily lessons is likely to develop motivation in students. Fillman and Guthrie (2008) suggest that students need to be choosing, deciding, owning, controlling, and taking charge of their reading and writing. Moss and Hendershot (2002) note students often do not hate reading and writing, they just do not enjoy reading the text the school assigns or writing about prompts they did not choose. Guthrie (2001) further adds that covering a required amount of textbook pages and answering specifically aligned questions to the reading offers little in student autonomy for learning. Assor, Kaplan, and Roth (2002) found in their study on motivation when students were given choices in their reading and writing tasks, the students felt in control of their work. Researchers Turner and Paris (1995) found when looking at choice and control in writing, the student was able to select their topic of interest, organize the writing in a way they saw fit, and monitored their own execution of the writing piece.

Self-efficacy. Self-efficacy refers to the belief or level of confidence in one's ability to learn (Baker, 2003) or perform at a designated level (Bandura, 1997). According to Pajaras (1996) self-efficacy is the foundation for motivation. Students with low self-efficacy or lack of confidence in themselves in a given task feel it is a punishment to them (Guthrie, 2008). For example, students who have a low self-

efficacy in writing feel they are being punished having to write and, therefore, will avoid the task and may not complete it. Students with low self-efficacy often feel overwhelmed and inadequate; their effort wanes, and they disengage from the task. In contrast, students with high self-efficacy often believe in themselves and their confidence builds around their successes. Yudowitch, Henry, and Guthrie (2008) suggest that setting attainable goals with optimal effort and skill will build self-efficacy. Having high self-efficacy supports motivation and the persistence to be successful (Bandura, 1986).

Challenging and relevant. Providing open tasks that are easy leads to boredom and providing open tasks that are too difficult leads to frustration (Gambrell, 2011; Turner & Paris, 1995). These researchers suggest providing open tasks that are moderately challenging. In doing so, they believe this will provide enough flexibility to tackle the problem (task) and solve it. They also note that providing less challenging closed tasks forces consequence on the learner by allowing the learner's meaning making, self-efficacy, and pride to suffer.

Making connections between new information and students' existing knowledge builds students' motivation to learn and use new information outside the confines of the lesson. In other words, make reading and writing relevant to the student. If students do not see relevance in the text, they are often not compelled to read the text or write about a topic unrelated to themselves (Gambrell, 2011). Positive forms of relevance foster engagement, however, negative forms or absence of relevance lead to feelings of anger and anxiety (Assor, Kaplan, Kanat-Maymon, & Roth, 2005; Assor, Kaplan & Roth, 2002). According to Guthrie and Wigfield (2000), teachers can promote engagement by

having interesting and relevant materials for literacy as well as provide choice and real-world connections to literacy.

Intrinsic versus extrinsic. According to Deci and Ryan (1985), intrinsic motivation refers to motivation to engage in an activity because that activity is enjoyable and satisfying to do. Students who have high self-confidence in reading are more intrinsically motivated to learn and have high goals for achievement (Guthrie, Coddington, & Wigfield, 2009). According to the 2005 National Association for Educational Progress (NAEP) report, 65% of fourth grade students reported reading was not their favorite subject, 73% reported they did not read frequently, and 59% reported they did not feel they learned from reading, which are all indicators of intrinsic motivation to read (Guthrie, 2008).

On the other hand, extrinsically motivated behaviors are those actions carried out to achieve some instrumental end, such as earning a reward or avoiding a punishment (Deci & Ryan, 1985). Extrinsically motivated students seek to meet a goal or make the grade and are more performance based. These students perform tasks that produce surface level knowledge rather than deep, well-constructed responses. A study conducted by investigators Vansteenkiste, Simons, Lens, Soenens, and Matos (2005) found that students in group A (intrinsically motivated) read more conceptually. In contrast, when the students were given a goal to meet, the students reported feeling manipulated by the researcher. In group B (extrinsically motivated), students read more superficially.

Social interactions. Another critical concept of Guthrie's (2001) engagement model for reading and writing development is social interaction. Goffman (1983)

narrowly defines social interaction as narrowly defined as that which transpires in social situations or in environments where two or more people are in another's response presence. According to Guthrie (2008) and Gambrell (2011), when teachers build social interaction around topics, students learn better. Allowing students to blog about their writing will likely increase their writing knowledge and intrinsically motivate them. Felix (2008), Richardson (2006), and Chen, Liu, Shih, Wu and Yuan (2011) also parallel Guthrie (2008) in that they see blogging as a vehicle for students to share their ideas, which is a contemporary way to gain additional knowledge or understanding that seems to resonate more with students in the digital age. On the other hand, Otis, Grouzet and Pelletier (2005) report motivation for reading and writing declines as social motivation rises. When students feel connected and the need for relatedness is met, students prosper; in contrast, when these needs are not met, students feel frustrated and isolated or disconnected (Guthrie, Schafer, Wang, & Afflerbach, 1995).

Kucer (2005) suggests literacy activities involving written discourse are used to build and maintain relationships. He further suggests that social groups cognitively impact literacy. Similarly, Turner and Paris (1995) suggest situations that encourage social interaction help build self-efficacy. Gambrell (2011) expands on this and notes that peer comments influence student curiosity, student observation of peers increases their own confidence, and working with others promotes engagement.

Conceptual knowledge. Conceptual knowledge is also a critical concept of Guthrie's (2001) engagement model of reading and writing development. Conceptual knowledge (knowledge of concepts) consists of understanding the interrelationships of the main concepts and structurally organizing the content within that knowledge domain

(Guthrie & Scaffiddi, 2004). According to Ben-Hur (2006), conceptual knowledge develops from thoughtful reflective activity rather than rote memorization. He further adds, it is also known as conceptual understanding (sometimes referred to as ‘big ideas’). To build conceptual knowledge, students take in new information, decide if it fits into their current understanding or if it changes their current understanding, and finally, organize the new information with their prior knowledge to form a new understanding of the content. Teachers need to allow students to actively engage in and explore new concepts as well as collaborate with others during their explorations. The process of building conceptual knowledge involves both active and social interactions. Both terms relate to motivation.

Active learning. Engaging and involving students in the learning process is termed Active Learning (Smink & Schargel, 2004). In the classroom, this allows students to be responsible for their own learning and teachers become facilitators to aid the students in the process. The term has also been referred to as ‘student-centered instruction’ and is connected to the constructivist era. Allowing students to engage in explorations and collaborate with others during their explorations is how students gain conceptual knowledge. It is the active involvement and the student ownership that motivate the learner.

According to the American Association for Higher Education Bulletin,

Learning is not a spectator sport. Students do not learn much by sitting in classes listening to teachers, memorizing pre-packaged assignments, and spitting out answers. They must talk about what they are learning,

write about it, relate it to past experiences and apply it to their daily lives (Chickering & Gamson, 1987).

Social learning. Social Learning theory (Bandura, 1977) draws from both the behavioral and cognitive theories of learning. Two of the major tenets of this theory are that one learns through observation and mental states, such as intrinsic and extrinsic reinforcement, and both are important to the learning process. This theory focuses on the learning that develops within a social context. According to Tracy and Morrow (2006), this theory was recently renamed as the Social Cognitive theory. It is through observations (or modeling) that one learns. For example, children mimic what they see and hear as they learn and grow as young children.

The social learning theory has been most effective in literacy instruction and classroom management. For example, D.E.A.R. (Drop everything and read) is grounded in the observational aspect of social learning (Tracy & Morrow, 2006). Positive reinforcement of a desired behavior is also grounded in the motivational aspect of social learning.

Strategy use. The last critical concept of Guthrie's (2001) engagement model of reading and writing development is strategy use. One way to assure strategy use is by offering interesting texts, allowing student choice (which supports student autonomy), and providing strategy instruction. All of these areas help motivate and engage the learner.

Providing interesting texts that your students want to read motivates them to read. The teacher can learn the students' interests by obtaining an interest inventory from each of their students. Other texts that should be included are culturally-based

texts based on the cultural make-up of the classroom. This makes the students feel included and feel like they belong. It is important to also integrate interesting text into the content areas.

Autonomy support includes providing students the ability to choose their reading material as well as their writing topics. This shows the students the teacher values their opinions and supports them in taking ownership of their work. Allowing them to be part of the decision-making process also provides autonomy support. Providing support in autonomy helps students build self-confidence and feel in control of their learning.

Strategy instruction includes modeling, scaffolding, guiding the students, giving feedback, and teaching the students strategies that will assist them in answering questions posed (Guthrie & Davis, 2003). Some examples of strategy instruction include problem-based learning activities, small group experiences, activating background knowledge, making connections, fix-up strategies in reading, and modeling (Tracy & Morrow, 2006). While these are just a few, there are many more. Strategy use is built on the premise that the reader/writer is actively engaging in the learning process.

In the current study, participants will offer their ideas in topic choice, which will allow them to feel ownership. Participants will also use the concept-mapping strategy for brainstorming. Blogging will provide an intrinsic motivation factor and make learning relevant to today's learners. It will not matter whether participants' blog or write with paper and pencil, they will still have opportunities to provide feedback to one another. Through peer feedback, participants will be able to socially interact with one

another, which will help them build their knowledge using active and social learning aspects.

New Literacy Theory

The term New Literacy according to Leu (2000; 2002) refers to skills, strategies, and insights that are needed to successfully explore the rapidly emerging and changing face of information and communication devices. Berg (2011) defines New Literacy as a term associated with electronic devices, software, and Internet resources that are emerging and expanding on what already constitutes literacy in the world around us. New literacies such as email, web-browsing, videoconferencing, multimedia composing, and media viewing are just a few examples, but not an exhaustive list. ICT (information communication technologies) allow the user to ask questions, locate information, critically evaluate information, synthesize information, and communicate responses to others during the online task (Leu, et al., 2014). Leu (2000) also defines new literacies as having several aspects, including regular change, dependent on ability to critically evaluate information, knowledge to effectively locate and use resources within complex ICT, build on traditional literacy elements (does not replace), highly social, and provide opportunities to develop cultural understandings.

Because technology continues to change rapidly it is difficult to define new literacies, therefore, Leu, Kinzer, Coiro, Castek, and Henry (2013) more recently suggest a dual-level theory of lowercase and uppercase new literacies. Lowercase new literacies theory explore specific constructs and/or new technology, such as social practices in blogging. The lowercase theories are more capable of keeping up with the

rapidly changing technologies and therefore provide a more stable definition of new literacies and reading online (Leu, et al., 2014).

Uppercase theories explore common findings that emerge across multiple lowercase theories. This provides more focus on the shifting landscape of literacy and at the same time expands our understanding of the lowercase perspective of that construct.

According to Leu et al (2013),

Uppercase New Literacies theory is built on eight principles that are common across current research and current theoretical work:

1. The Internet is this generation's defining technology for literacy and learning within our global community.
2. The Internet and related technologies require additional new literacies to fully access their potential.
3. New literacies are deictic.
4. New literacies are multiple, multimodal, and multifaceted.
5. Critical literacies are central to new literacies.
6. New forms of strategic knowledge are required with new literacies.
7. New social practices are a central element of new literacies.
8. Teachers become more important, though their role changes, within new literacy classrooms (p. 1158).

This study explores a particular application of lowercase new literacies. In this study participants used the Internet to compose and post their writing on a class blog. In order to accomplish this, they developed additional new literacies to become

multimodal, deploy strategic knowledge, and engage in social practices. The teacher played an important role in making sure the blogging went smoothly according to the lesson plans and guidelines for the blog.

It is important that new literacies be incorporated in elementary education for several reasons. First, new literacies provide access to greater amounts of information in the shortest amount of time. Most nations have realized in order to globally compete economically, ICT convergence in education is important (Leu, 2000; Leu & Kinzer, 2000). Second, the convergence of ICT requires new reading and writing skills to be taught and learned. The ability to read and write texts using new forms and with new media devices is important because they can be easily stored and organized to generate new information (Leu & Kinzer, 2000). There are various constructs of new literacies that are discussed next.

Multimodal literacy. Multimodal literacy involves multimodal text. According to Kress (2008), multimodal text is text that communicates a message through printed, visual, graphical, electronic, and digital modes. Whether these texts are in a textbook or graphics on a screen, the text communicates a message. The text can be analyzed by the reader and contributes to meaning-making (Coleman, 2010).

Critical literacy. Critical literacy is defined as the act of reflecting, thinking, and disputing information being received (analytical reading) (Bloch, 2007; Luke & Dooley, 2011; Molden, 2007). Luke and Dooley (2011) further add that critical literacy is using text to transform cultural, social, and political power. Readers must question the text, taking in all parts (behind, beyond, and underneath), and investigate its worth. Doing so leads the reader to be an active participant in his or her reading. With the vast

amount of information at the fingertips of the Internet user, it is even more important for Internet users to become critical evaluators of all information on the Internet.

Technology literacy. Changes in technology also require changes in the definition of technology literacy. In the beginning of the digital age, it was referred to as knowing the programming codes, then knowing how to work the tools within programs and, now, it refers to being able to communicate, access information, solve problems, and acquire knowledge and skills to compete in the growing industry of technology (Jones-Kavalier & Flannigan, 2006). Technology literacy is also referred to as digital literacy (Amicucci, 2013).

Multiliteracies. Multiliteracies is a term to describe moving from one single form of print literacy to multiple forms. The definition has been changed to reflect both social and cultural aspects, such as including multiple languages. However, multiliteracies can be defined as the use of multiple technological tools in which to construct knowledge and communicate with others. According to the New London Group (1996), multiliteracies is multiple forms of knowledge linked with multiple forms of literacy practices. According to Cope and Kalantzies (2003), multiliteracies is literacy that extends beyond traditional methods and moves to screen-based methods, such as computers, iPads, iPhones, iPods, laptops, cameras, and so on.

Media literacy. Media literacy is defined by the 1992 Aspen Media Literacy Leadership Institute as the ability to access, analyze, evaluate, and create media in a variety of forms (Aufderheide, 1993). This definition was later expanded to fit the 21st century learners by changing print to include digital mediums such as the Internet that

builds on the understanding and essential skills of inquiry and communication necessary in society (Westby, 2010).

Visual literacy. According to Westby (2010), visual literacy is being able to produce and understand visual messages. It is the interpretation of an image and images appear on most web pages and multimedia materials. Visual images are used to enhance communication. Examples include art, TV, photos, logos, symbols, maps, charts, and so on. Freedman and Hernandez (1998) suggest we are in a wave of communication that should include all visual culture, grounded in socio-cultural concerns, and what it means to live in a changing image-based technological environment. Labbo (2006) refers to visual literacy as the ability to recognize, interpret, evaluate, and utilize electronic graphic forms as a tool for thought and communication.

Cultural literacy. Cultural literacy applies to both print materials and electronic forms. The Internet is full of cultural literacy. For example, a blog provides opportunities for posts to be made by many, which could include people of various cultures adding their shared knowledge. Hirsch (1987) defines cultural literacy as world knowledge. He further adds that world knowledge is developed through core knowledge, which he refers to as our background knowledge we possess and build upon from the curriculum taught in schools. Therefore, the curriculum in schools must contain cultural aspects that are understood. Smith (2010) suggests understanding the text from various cultures requires cultural background knowledge.

Digital literacy. Digital literacy is also referred to as technological literacy, media literacy, e-literacy, information literacy, computer literacy, and network literacy (Amicucci, 2013; Bawden, 2008). Digital literacy is related to one's ability to use a

technological tool to research, organize, evaluate, interpret, and communicate (Amicucci, 2013; Gilster, 1997; Trilling & Fadel, 2009). Burnett (2009) suggests digital literacies are practices that surround the production of digital text. Blogging would be considered a form of digital literacy. Digital literacy is usually connected with social practices, but it also provides multiple opportunities for social interaction and social learning.

In the current study, the researcher wants to examine if students' writing improves more by using a blog rather than paper and pencil. This study is connected to uppercase New Literacies theory in that it adds the dimension of social interaction. It is connected to lowercase new literacies due to the use of blogging as a teaching tool. When the participants write and read feedback as well as read each other's blog posts, they are engaging in collaboration with others.

Social Networking

Social networking is defined as the interaction with and in an online community, such as blogs, wikis, chat rooms, instant messaging (Ducate & Lomicka, 2008), and so on. Web 2.0 and its technologies promote social networking and allow users to share private and personal content about themselves, such as Facebook or My Space (Losinski, 2007). Social networking media provides the opportunity for students to interact with one another through a blog by making posts and receiving feedback from peers. Baird and Fisher (2005) suggest when using a blog, students reflect, post, read, and receive feedback, which allows for knowledge transfer to take place. It is through this interaction that the students can learn how to improve their writing from each other. This, in turn, aids both the students and the teacher in the facilitation and consumption

of writing instruction. This process includes varied cultures interacting through social practices and, therefore, ties to the socio-cultural learning theory.

Blogs. The term weblog (we blog) was first coined in 1997 and was later broken apart in 1998 by Peter Merholz and referred to as blog (Armstrong & Retterer, 2008). A blog as defined by Godwin-Jones (2006), is a large, loosely interwoven network of information that is linked, reinforced, and debated. Blood (2002) adds that blog posts are typically listed in reverse chronological order. They provide rich sources of collaborative activity and create a virtual community. Blog users are referred to as the blogger and blogs with their multiple links to other bloggers are referred to as the blogosphere, also known as an online community (Farmer, Yue, & Brooks, 2007). A person who makes posts to a blog is blogging.

Although mostly used as a place to make personal posts, blogs can be used as an instructional tool. Blogs facilitate knowledge sharing and allow for reflection (Williams & Jacobs, 2004) as well as act as a vehicle for self-expression and self-empowerment (Blood, 2002). Blogs promote literacy through feedback of ideas and opinions, enhance critical thinking, and help observers become critical of the world around them (Blood, 2002; Goodwin-Jones, 2006). An instructional blog provides a place for students to model what they are learning in the classroom, reflect on that learning, and use social practices to communicate with others on their work (Merchant, 2005). As for writers, it offers a place to refine and further develop their writing and grammatical skills (McGrail & Davis, 2011). Students interact socially in blogs to co-construct their own learning and through these interactions develop a sense of belonging in a group or community of readers and writers (Murray & Hourigan, 2006). Witte (2007) suggests

teachers combine writing with technology to develop students' digital fluency while strengthening their traditional literacy skills.

Blogging. According to Williams and Jacobs (2004), blogging can be seen as a form of micropublishing. According to Ferdig and Trammel (2004), blogging is writing one's thoughts in a post to publish for a wide audience. Typically, a blog has one author and that author contributes however often and whatever content they choose. Others can reply to the author's posts.

Instructional blog. This study uses a blog for instructional purposes, which looks different from a typical blog. In this instructional blog there is one blog led by the teacher in which a group participates with the teacher controlling the published content. The teacher makes an entry or blog post (writing prompt) and the students contribute to the entry as well as provide feedback to others' entries. The entries are in a chronological sequence just like in typical personal blogs. The chronological sequence reveals growth and the type of writing students contribute.

While there are other forms of social networking, they are not pertinent to this study. The above information on blogging provides guidance for this study. Whether writing using a blog or paper and pencil, the idea is to look at students' growth and attitudes toward writing across the time period of the study.

Writing

Writing began as a pictographic form on tablets or clay walls and much later developed into what we know today as writing, where each letter of the English alphabet represents a sound. Ehri (1992) explains that letters connect to sounds to form words and then they get stored in our memory for decoding of words. Prior to the

1970s, writing focused on the product. Decades later, the focus turned to the writing process. During this time, researchers began to see that writing is constructed both cognitively and socially.

Writing is important because it is a vehicle which we use to communicate to others our thinking (Ducate & Lomicka, 2008). For the first time in history, the National Assessment for Educational Progress (NAEP, 2011) has used computers to assess students' writing in grades 8 and 12. This report is known as the Nation's Report Card. According to their 2011 test results, more than 75% scored above the basic achievement level and 25% scored above the proficient achievement level (National Center for Educational Statistics, 2012). This report also says that students who use computers to draft, revise, and edit scored higher on the writing assessment. According to researchers Bruning and Horn (2000) and Hill (2010), schools provide the only real opportunity for formal writing that children receive.

Writing development

As children see print and listen to oral language (being read to), they begin to see and understand the meaning of signs and symbols and that the signs and symbols serve a purpose. Young children begin to also associate signs and symbols of environmental print at the early stage as well. Writing development moves from the student using invented spelling to conventional spelling (Sulzby & Teale, 1985). Ferreiro and Teberosky (1982) conducted a study of children's writing development and found that children's writing goes through stages with the first stage being squiggles for every word. The next stage, children began to add a squiggle for each letter and reorder the squiggle marks. This led to the syllables stage and then to the alphabetic stage.

Lastly, children moved to the conventional stage of writing development. Tompkins (2003) also believes children go through stages of writing development and refers to them as emergent, beginning, and fluent.

Process writing and writing process

Process writing developed to counter the product approach. In this approach, writing is considered a creative act that requires time and feedback (Stanley, 2003).

Less focus is given to grammar and teacher-generated topics. This approach is more student-centered where the students take control of their topics and their writing.

Emphasis is put on studying the process the students use to carry out their writing from beginning to end. Donald Graves (1994) is thought to be the father of the process writing approach. This process is also sometimes referred to as Writing Workshop (Calkins, 2013). In the writing workshop, the teacher conducts mini-lessons and holds writing conferences to offer feedback. During the writing workshop, the students write using the writing process.

The writing process is a series of steps the writer goes through when writing a piece of text. These steps include planning, drafting, editing, revising, and writing the final draft (National Writing Project & Nagin, 2006; Tompkins, 2003). These steps are recursive and not linear. Most classrooms use the writing process as a guide for students moving from one stage to the next when conducting their writing using a pencil and paper method. This method is often followed in classrooms as a linear approach.

Many researchers have noted that writing is not a linear process, as once thought prior to the 1980s, but rather a recursive process (Berg, 2011; Turner & Katic, 2009). Turner and Katic (2009) conducted a case study to examine the ways high school

students were influenced by technology as they wrote and what aspects of technological literacies emerged as appropriate for the writing processes. They wanted to examine both processes and products of their writing. Participants for this study included five male and four female high school students taking a college preparatory English class. Data sources included argumentative writing, literary analysis, and recorded think-alouds. Two researchers coded each transcription. A third researcher coded the transcriptions and reconciled any conflicts that were noted. Five themes emerged from the coded data: student's concrete use of technological tools, references made to technological tools, use of technological terms, non-linear processes to develop argument, and non-linear organization of final product. Turner, being the teacher of the class, took the role of the engaged observer to guard against biases and maintain objectivity. The students also collected data in their own home setting to be more authentic and have less influence of their teacher/researcher. Turner did not participate in the coding of the data, but rather served as member checking. Findings indicated participants could use technology to complete writing tasks, they followed a recursive approach to writing, and they demonstrated non-linear thinking. Researchers noted the way in which writing is taught and assessed has implications that need to be further addressed.

According to Kucer (2005), it is most commonly assumed that reading and writing are opposite processes. However, Kucer further explains through literacy examinations that reading and writing more accurately share a parallel relationship. In both processes the reader/writer searches, generates, integrates, and revises meaning as well as actively uses their linguistic and cognitive resources. Reading and writing also

use/build background knowledge and are context dependent. Both processes are driven by a purpose or goal. Kucer also points out that encounters with learning from reading advance writing development, and encounters with learning from writing advance reading development, and, therefore, share cognitive parallels.

Although this method includes opportunities for peer feedback, it is often limited to one or two classmates and the teacher. In this study, blogging allows for a greater amount of engagement in peer feedback with many classmates as well as the teacher. The participants can also log into their blogs at home and share with their families.

6 + 1 Trait Writing Rubric

Traits are characteristics used to define strong writing (Education Northwest, 2013). These traits or characteristics make up the foundation for a writing assessment model rubric (Appendix B) developed by Education Northwest that includes ideas, voice, word choice, sentence fluency, organization, conventions, and presentation.

- Ideas—the main message;
- Organization—the internal structure of the piece;
- Voice—the personal tone and flavor of the author's message;
- Word Choice—the vocabulary a writer chooses to convey meaning;
- Sentence Fluency—the rhythm and flow of the language;
- Conventions—the mechanical correctness; and
- Presentation—how the writing actually looks on the page.

This writing assessment model provides common language for teaching how good writing looks and sounds as well as for assessing students' writing. By separating

out the traits, teachers can give more detailed feedback in particular areas rather than on a whole piece in general.

Traditional writing vs. online writing

Traditional writing is writing that is printed on paper and covers print material, such as magazine articles, books, newspaper articles, and more. Print writing is known as the older form of writing (Patel, 2013). Patel further adds that print writing is generally not interactive, has typically longer pieces, and is more formally written.

Online writing is writing that is published on the World Wide Web (WWW). Examples include but are not limited to blogs, your own website, or an article on a publishing website. When writing online, keywords play a huge role if your writing is to be found. People who read online are usually seeking information, not pleasure reading. Patel (2013) also points out online readers do not usually read the whole piece word-for-word; they skim headlines, skim articles, and look around for something interesting.

Best practices in writing

No matter the choice of writing style, the same standard rules for writing still apply. Writing still needs to be grammatically correct, be organized into paragraphs, and flow smoothly. Engaging with writing tasks relies on students' behavioral, emotional, and cognitive dimensions (Hawthorne, 2008) as well as social interactions. As the saying goes, reading more makes a better reader, therefore, writing more makes a better writer.

According to Bromley (2007), best practices in writing incorporate the writing process approach, direct instruction of writing skills, and knowledge of writing

conventions to develop good writers. Bromley also believes that a good writing program should include context for writing, intentional writing instruction, and writing assessment. A context for writing is the physical writing environment as well as the teacher's attitude toward writing and the social interactions the teacher allows. Intentional writing instruction includes direct instruction of grammar and conventions referred to as "fix-the-error" during writing time using the student's authentic writing pieces. Writing assessment should include portfolios, rubrics, and checklists as well as formal and informal writing pieces.

Cambourne (1988) suggests engagement, immersion, modeling, and relevance result in good writing. Vygotsky (1978) believes that writing is a social act and, because of student interactions, writing becomes stronger. Atwell (1998) and Graves (1994) believe that best practices in writing involve going through the writing process in a writer's workshop approach.

In looking at today's generation and the number of technologies available, Bromley (2007) notes that because of a wider audience base in online writing, some students are more metacognitively aware of their thinking, which could produce better writing when using a word processor. In addition, since it does correct some spelling and some grammar, it helps build students' self-confidence and ease frustrations associated with paper-and-pencil writing.

Text genres of writing

The term genre or text type refers to written text that has recognizable patterns, techniques, syntax, and conventions. CCSS require teachers to incorporate three distinct types of writing, which include narrative, informational/explanatory, and

argumentative. Each type serves different purposes and follows a different style or structure. In other words, each type has its own defining features. According to Calkins (2013), there are three major categories and each incorporates various genres. Narrative writing is telling stories and can consist of personal narrative, fiction, historical fiction, fantasy, narrative memoir, biography, and narrative nonfiction. Information/explanatory writing is text used to inform or explain something and can consist of how-to-books, directions, recipes, lab reports, fact sheets, news articles, feature articles, blogs, websites, reports, analytical memos, research reports, and nonfiction books. Argumentative text uses logical reasoning to analyze a claim through clear evidence and evaluating sources. Genres of this category can consist of persuasive letter, petition, persuasive speech, review, personal essay, persuasive essay, literary essay, historical essay, editorial, op-ed column, and research-based argumentative essay.

Typically, upper grade students are exposed to argumentative writing. Lower grades introduce this type of writing in the form of persuasive or opinion writing. For the purpose of this study, persuasive writing will be described more in-depth.

Persuasive writing

Due to the many controversies over the meaning of the term argument, Ramage, Bean and Johnson (2001) introduce various ways of thinking about argument rather than a definition. Many people believe that argument carries a negative connotation, meaning to fight or debate something. However, Ramage, Bean and Johnson share how argument can be pleasurable, because it provides a creative activity for engaging high levels of inquiry and critical thinking, often with people we know (2001).

According to Burton (2014), persuasive writing is writing where the writer expresses his opinion in such a way as to convince the reader that the writer's opinion is correct. It can consist of an argument in order to build on the writer's opinion. It includes facts to support the writer's stance. While persuasive writing involves only one view and evidence to support that view, argumentative writing usually involves both sides of the argument and then the writer weighs the facts and evidence to support a chosen view or position.

Challenges of teaching writing with technologies

Students must be able to write, think, and use proper grammar/spelling, all while composing a piece of text. The multitasking needed for good quality writing is a challenge for some students to master using paper and pencil (Anderson, 2010). While word processing software and various technological platforms allow for easier production of writing, they are too costly for schools to widely implement in a single year and are constantly being updated, which leaves current school-purchased technology to become outdated quickly. Teachers not familiar with the most current social media practices also find it a challenge to implement them into their lessons. For example, some teachers have never used blogs and are clueless as to how blogs would benefit their teaching. They also are concerned with issues such as students' identity being stolen or misused and student accounts being hacked into. Although many teachers are starting to incorporate these new ways (using social media) of communicating in writing, they find it difficult when schools lag so far behind in the purchasing and providing of training on technology. Today, many school districts are listening to the pleas of teachers to acquire more technology to engage today's learners.

Common Core State Standards Initiative and Writing

The No Child Left Behind Act (NCLB, 2002) did not address writing. The Common Core State Standards (CCSS, 2012) treat writing as an equal to reading and writing is seen to be the vehicle where reading work and reading assessment will occur (Calkins, Ehrenworth, & Lehman, 2012). The CCSS (2012) initiative is state-led and coordinated by the National Governors Association Center for Best Practices (NGA, 2010) and the Council of Chief State School Officers (CCSSO, 2010). A group of teachers, administrators, and others in the educational field collaborated to develop a clear and consistent framework that would prepare children to be college and career ready upon graduation. The standards are also meant to provide a consistency of learning no matter where you live. CCSS (2012) adopted by 45 states (originally 46 as one state only uses the ELA standards) has recently dropped to 43 as 2 of the states reversed their decision in 2014, Oklahoma being one of those states. According to the NGA and CCSSO 2010, these standards require teachers to integrate technology more now than ever before. Policy makers are moving forward from a multiple-choice paper-and-pencil state test to providing written responses on a computer in effort to stay globally competitive. In 2015, many students in Oklahoma took the required state assessments on a computer. This will require that students have both computer skills and more in-depth knowledge of constructing written responses on a computer, instead of filling in a bubble on paper.

The new Common Core State Standards (2012) have anchor standards that provide the skills and understanding all students must demonstrate in order to be college and career ready (CCR). Each anchor standard is then broken down into smaller

standards called grade specific standards. According to Common Core State Standards Initiative (NGA & CCSSO, 2010) anchor and grade specific standards for fourth grade writing being used for this study include

- Anchor Standard W.CCR.1 requires students to write arguments to support claims using topics or texts, using valid reasoning and relevant and sufficient evidence.
 - Grade Specific Standard W.4.1 requires students to write opinion pieces on topics or texts, supporting a point of view with valid reasons as well as facts and details.
 - Standard W.4.1 (a) requires students to introduce a topic or clearly state an opinion, and create an organizational structure in which related ideas are grouped to support the writer's purpose.
 - Standard W.4.1 (b) requires students to provide reasons that are supported by facts and details.
 - Standard W.4.1(c) requires students to use words and phrases to link opinion and reasons (e.g. for instance, in order to, in addition to)
 - Standard W.4.1 (d) requires students to provide a concluding statement.
- Anchor Standard W.CCR.4 requires students to produce clear, organized writing that is appropriate to the task, purpose, and audience.

- Anchor Standard W.CCR.5 requires students to develop and strengthen writing as needed through planning, revising, editing, and peer feedback with the guidance and support of peers and adults.
- Anchor Standard W.CCR.6 requires students to use technology, including the Internet, to not only produce one page of writing in a single sitting, but also publish their writing as well as interact and collaborate with others about their writing.
- Anchor Standard W.CCR.8 requires students to use multiple print and digital sources for information, assess credibility/accuracy, and integrate the information while avoiding plagiarism.
- Anchor Standard W.CCR.10 requires students to write routinely over extended time frames (e.g. reflection and revision) and shorter time frames (a single sitting) for a range of tasks, purposes, and audiences.

Fourth grade students will be expected to produce a minimum of one typed page in a given sitting. However, the standards place more emphasis on quality versus quantity. The quality of writing produced is expected to be at much higher levels than educators previously taught. While the standards are basically the same in each grade, they progress in more depth for each of the next grade levels. With this in mind, the foundational skills for writing must be taught and mastered at the elementary level.

The Common Core State Standards cross with the traits of writing. For example, according to Education Northeast (2012), for ideas in argumentative writing a writer should be able to develop, introduce, and establish a claim as well as support the claim with relevant evidence and point out the claim's strengths and weaknesses. For

voice in argumentative writing a writer should be able to use appropriate tone and style for that type of anticipated audience. For organization in argumentative writing a writer should be able to create logical sequence and reasons to back up a claim with thoughtful transitions between claims. For word choice in argumentative writing a writer should be able to use words and phrases appropriate to topic. Writers should also use appropriate sentence fluency, conventions, and presentation skills applicable for their grade.

Research Studies on Blogging and Persuasive Writing Development

Review methods

In order to identify relevant studies for the literature review, key terms/phrases were identified, such as writing, writing development, blogs, blogging, persuasive writing, writing instruction and blogging, blogging as an instructional tool, blogging as a social practice of writing instruction, and blogging as a motivational tool. Search engines included J-Stor, PsycInfo, Academic Search Premier, EBSCO Host, ERIC, Professional Development Collection, and Pro-Quest. Pro-Quest identified dissertations that were relevant to this study. In the dissertations, reference sections were combed to locate additional studies.

The searches did not produce many studies, suggesting the research in this area needs further exploration. Reading the abstracts helped to determine the study's relevance. Criteria for selecting or excluding studies were based on the following

- Studies were dissertations and/or peer reviewed.
- Studies were published within the last 10 years.
- Studies focused on blogging and writing.

- Studies represented adequate research methods.

Initially, 48 studies were identified; however, many were eliminated due to one or more of the following a) they were not focused on blogging and writing (some may have focused on one of the topics, but not both), or b) they were not actual studies. As a result, 13 studies were selected to include in this review. Only two studies were identified that are relevant with this study on blogging and persuasive writing development.

This review is divided into four areas related to blogging and persuasive writing development. Each area examines the purpose and methods used in the studies. All studies used for this review are situated around the theoretical framework for this study. Each study addresses at some level blogging and writing. The area with the largest number of studies was blogs used as an instructional tool for writing. This is consistent with Leu and Kinzer’s (2000) assertion that most nations have realized in order to globally compete economically, ICT convergence in education is important (Leu, 2000; Leu and Kinzer, 2000). Table 1 below provides a summary of the studies used in this review.

Table 1

Summary of Studies

Study	Purpose	Design	Sample	Result
Felix (2008)	To determine the ways in which teachers used blogs in the classroom.	Multiple Case study	168 surveys; selected 12 to interview	Communication, motivation, increased writing, awareness of self-identity, interactive and collaborative.
Armstrong & Retterer (2008)	Examined how writing instruction was affected by the	Action Research	16	Wrote more, took risks, and allowed for creativity.

Bloch (2007)	use of a blog. Examined how a blog was implemented as well as how it helped develop academic writing.	Action Research-Case Study	1	Helped with strategies but showed no improvement in writing development.
Churchill (2009)	Explored how blogging can supplement instruction and lead to improved learning.	Action Research	24	The participants felt the blog contributed to their learning.
Tekinarslan (2008)	Examined the use of blogs in the teaching and learning environment.	Action Research	55	Gained organizational skills, knowledge of paraphrasing and referencing skills, assumed greater responsibility, good practice for writing and referencing.
Chen et al. (2011)	Examined peer feedback to enhance writing through blogging.	Mixed method	33	Improved students writing.
Ellison & Wu (2008)	Explored students' attitude toward blogging in the classroom.	Exploratory	52	Helped with writing, viewed others perspectives, engaging and less formal.
West (2008)	Sought to determine if blogging changed participants' responses to literature.	Action Research-Case Study	3	Students' wrote much like they would for their teacher using traditional methods.
Ducate & Lomicka (2008)	Examined how students progressed as readers and writers of	Action Research	50	Developed intercultural competence, negotiated a third space, experimented with language, immersed

	blogs.			themselves into the culture of blogging, and added to their learning of reading, writing, vocabulary, and cultural knowledge.
Berg (2011)	Examined adolescents' online discussions.	Case Study	8	New literacies build on traditional literacies taught in the classroom.
Palombo (2011)	Explored changes in persuasive writing through the use of a blog.	Exploratory	24	Influenced writing, built audience awareness and idea development, and established ownership.
Anderson (2010)	Examined writing development in blogging.	Experimental	24	Improved content and voice.
Heath (2013)	Explored differences in writing in online and offline platforms.	Exploratory	141	Gender significantly influences the quality of writing. There were no significant differences in online and offline writing development, however, the blog group scored higher than the word group.

Studies on Blogs used as an Instructional Tool for Writing

Six studies focused on blogging as an instructional tool. Among the six, three also included academic writing.

Felix (2008) surveyed 168 respondents to determine the ways in which teachers use blogs in the classroom. He used a multiple case study approach and from the surveys selected 12 respondents to interview. Results from his surveys showed the number one reason teachers used blogs in the classroom was to communicate with their students and to use the blog as a writing tool. From the combined data, several benefits

were revealed: higher levels of student motivation, increased levels of writing, an increased awareness of students' identities based on their comments, and greater interaction and collaboration among students.

Action research conducted by Armstrong and Retterer (2008) examined how writing instruction was affected by the use of a blog in a Spanish course. The students (n = 16) were assigned to developing two blogs: one for community discussions and the other for personal use to post their formal writing assignments. Students met on campus four times a week for 50 minutes each time. Discussion and writing were done online, while other communicative activities were done in class. Data collection consisted of a pre-assessment survey and blog posts. Over the 8-9 week period, students posted to 36 different topics. Results indicated students averaged more words and took more risks when it was an ungraded assignment as well as had easy access to reference sources, and allowed them to be creative. Students expressed that 85% liked writing the blogs while 15% did not. They also indicated that 69% wrote more when writing for online purposes and that writing online seemed less of a hassle than traditional methods.

In an action research study, Bloch (2007) used an immigrant student's blog posts to examine how blogging was integrated into a composition course and how it can be used as a tool to help students develop their academic writing. Bloch used several of the immigrant students' blog posts to analyze. From the analyzed blog posts, Bloch concluded the blogs did help with rhetorical strategies (reasoning-logos, avoiding fallacies, ethical-ethos, and emotional-pathos), however, there was no evidence to support that blogs helped with writing development. Bloch noted, however, that while

no evidence supported the improvement in writing development, the student did spend more time reading and writing while using blogs.

Another action research study conducted by Churchill (2009) explored the use of blogs with graduate students (n = 24) over a semester to learn how blogging can supplement classroom instruction and lead to improved learning. Data collection consisted of observations, analysis of blog posts, teacher reflection, interviews, and a questionnaire. Multiple data sources helped to triangulate the data. To make sure students participated, the researcher/instructor assigned regular blog tasks, assessed blog posts, and provided instructor feedback to students. The researcher also assessed their blogs as part of their semester grade for the class, which could have skewed the results. Results indicated through the interviews that students felt the blog contributed to their learning.

Yet another action research study conducted by Tekinarslan (2008) reported on undergraduate students' (n = 55) use of blogs in their teaching-learning environment. Data collection consisted of participant observation, document analysis, and interviews. Again, multiple sources of data helped to triangulate the data to achieve reliability. The researcher used a category construction approach to code data. Results indicated five students gained organizational skills, nine students gained knowledge of paraphrasing, and 28 students gained knowledge on referencing sources. Students' interviews revealed submitting work electronically was a plus, it was more cost effective than using pencil, paper, folders/notebooks and copies, and they assumed a greater responsibility for preparing their assignments since everyone could see them. However, students acknowledged limited access off campus. Overall results indicated blogs could

be a useful tool for students who want to practice their writing as well as build their skills in search and retrieval of information.

Heath (2013) conducted an exploratory study on fifth grade students ($n = 84$) to determine if there was a difference in writing growth between females and males in online and offline writing. Data collection consisted of a 4-point PSSA (Pennsylvania System of School Assessment, 2014) writing rubric. The offline platform was Microsoft Word and the online platform was Kidblog. Groups were randomly selected. Students were given time to practice prior to the study. Once the study began, the students were read the directions and had 30 minutes to respond to a narrative prompt on their assigned platform. Thirty days later, the process was repeated, except they switched platforms. Writings were scored by three independent trained scorers. Results indicated there was no significant difference in writing scores, however, females scored higher than males and those that did the blog first scored higher.

Overall, the authors of this group of studies described their research designs simplistically and had adequate sample sizes for the design chosen. However, some of the studies failed to address the theoretical foundations that guided their research. Felix's (2008) study found there were higher levels of motivation; however, he failed to reveal how motivation was measured. Even though Armstrong and Retterer (2008) conducted a pilot study, they failed to include a comparison group in their research study from which to compare writing online with that of traditional practices. The problem with Bloch's (2007) and Churchill's (2009) studies are that the researchers left many gaps or holes to be filled in the methodology, such as how the blog posts were analyzed. Heath's (2013) study had a large sample size and a good measure; however,

there was no writing instruction involved or other measurements to back up the quantitative results.

Studies on Blogs as a Motivational Tool for Writing Development

Three studies focused on the use of blogs as a motivational tool in the development of writing. All three of these studies included blogging and writing. One focused on attitudes, another focused on peer feedback, and the third focused on responding to literature. All three had similar results with blogs being motivational and engaging when conducting writing assignments.

Chen et al. (2011) conducted a mixed method study on fifth graders using peer feedback to enhance writing through blogging. Participants included 33 fifth graders. Data collection included pre and post-test of constructing one article. Students met for two hours per week over a 15-week period. Data was analyzed using quantitative and qualitative techniques, including interrater reliability, content analysis, *t*-test, analysis of covariance, observations, and interviews. From this data, six students were randomly selected to participate in interviews. Results indicated a significant improvement in students' writing ($p < 0.05$; $t = 2.07$).

In another study, Ellison and Wu (2008) conducted an exploration of students' attitudes on blogging in the classroom. Participants included 52 undergraduate students. These students were assigned six writing assignments (three using traditional methods and three using blogging). Writing assignments were to synthesize the reading of that day and give their opinion. From the blog posts, students were required to make two peer feedback posts. After the writing assignments were completed, students participated in an online survey.

Survey questions consisted of behavioral, open-ended, and Likert-type questions. Results indicated reading other students' blogs helped them write their blog posts and exposed them to other perspectives, blogging was engaging where traditional writing was not, and blogging encouraged a less formal writing voice.

West (2008) conducted a similar study where three college preparatory students used blogs to determine if the blogs changed their responses to literature. Although the researcher/instructor gave literature questions in which to respond, she also gave them free rein to play with their entries, such as joking, sharing personal stories, and developing their own style. All three students constructed themselves as serious literature students and web-literate communicators. West discovered the students did communicate through informal posts; however, their literature responses used the strategies modeled by their teachers and were written much like they would if they handed in a written paper for grading (West, 2008). West concluded with encouraging teachers to harness the use of blogs for student enjoyment and to increase their engagement in writing.

Overall, this group of studies had sample sizes that matched their research designs. However, they failed to adequately describe their research designs as well as include a theoretical foundation that guided their studies. Chen et al. (2011) found writing improved significantly based on a *t*-test and improvement was credited to peer feedback. Ellison and Wu (2008) and West (2008) found writing improved somewhat based on the modeling provided by the instructor and other peers. They also found blog posts contained less formal voice.

Studies on Blogging as a Socio-Cultural Tool in the Practice of Writing

Three studies focused on blogging as a socio-cultural practice when writing. All three studies looked at how writing developed when using blogging as a social practice.

In a previously discussed study conducted by Chen et al. (2011), the participants already had a social networking site that had been in place and active for two years prior to the study. He simply used the content added to the site along with the participants' interview responses to develop themes across the data set. Themes he developed were issues around agency, circumscription of text production in social network sites, and issues around audience and authorship. Results revealed the participants had constructed a social identity and were driven by enjoyment as well as the use of digital tools, which provided the participants social positioning within the sociocultural group in which they participated. He further elaborated that digital tools provided a powerful social and cultural influence as well as motivated children to produce more text of this nature.

Ducate and Lomicka (2008) conducted an action research study of French and German higher education students over a period of two semesters to examine how students progressed as readers and writers of blogs in the first semester (n = 29) and the second semester (n = 21). During the first semester, the students had to get to know a blogger and research the blogger in depth with a final presentation to their peers on their blogger and findings. During the second semester, the students had to create their own blogs, post weekly to their blog, and respond to two of their peers' blogs. Postings were related to their class readings and they had to include a link that supported their argument. At the end of the study, a focus group interview was conducted. Data

collected consisted of a pre and post Likert-style questionnaire, worksheets completed on blogs, presentation on blogger, and written report on blogger, students' own blog posts and comments by classmates, and focus group interviews. Data was qualitatively analyzed. Results from the questionnaire revealed students were neutral on the use of blogs for academic purposes. In moving from a blog reader to a blog writer, students progressed through exploring blogs, selecting a blogger, getting to know the blogger, connecting with the blogger, articulating the identity of the blogger, exploring blogging in foreign language, establishing identity as a foreign language blogger, and forming a blog community. Through these steps, the student developed intercultural competence, negotiated a third space, experimented with language, immersed themselves into the culture of blogging, and added to their learning of reading, writing, vocabulary, and cultural knowledge.

Berg (2011) conducted a study on adolescents' discussions while using computers to provide teachers with a bridge between the old and new literacies. The study was composed of conversations that took place in a public library around a set of six grouped computers over an 18-month period. Having the computers grouped together created a space for adolescents to develop social practices on their reading and writing. From the analyzed discussions, the researcher selected eight adolescents from which to interview. Collected data consisted of field notes and transcripts. The researcher used open coding and triangulation to develop themes: reference, authority, experience, expression, and instrument. Results suggested teachers need to take an interest in student's out-of-school literacy practices and encourage them to continue their in-school literacy practices out-of-school as well. Results also indicated practices

with new literacies build on traditional practices that were already in place. The researcher concluded with a message to teachers that they should allow opportunities for students to collaborate online as well as allow small group writing and peer editing using a variety of modes to further students' writing and design skills.

Overall, this group of studies did a good job of describing their studies' designs. However, Ducate and Lomicka (2008) failed to tell how their data was analyzed to arrive at their findings and Chen et al. (2011) had no comparison group. While they were all looking for blogging to be a sociocultural tool for writing, they each found something different. Chen et al. (2011) found blogging did provide the bloggers with a social identity as well as a sociocultural influence in text production. Ducate and Lomicka (2008) found students added to their learning and cultural knowledge. Berg (2011) found new literacies build upon traditional literacies already in place in the classroom.

Studies on Blogs and Persuasive Writing Development

In the area of students' persuasive writing and writing skills development through blogging, two studies were located. Specifically, one study examined students' persuasive writing development and the other examined students' writing skills. These studies are the most relevant to this study.

Palombo (2011) conducted an exploratory study to determine if there was any change in sixth grade students' (n = 24) persuasive writing when using blogging and the students' perceptions of using blogging over a six-week period. The researcher compared both online and offline writing through a pre and post-test writing sample. Data was collected through a survey and interviews to examine students' perceptions of

using blogging to write. The study focused on the students' awareness of audience and idea development as well as draft development and revision. Results indicated the students actively used the blog, and it influenced their writing process and product. Palombo also found using a blog supported the students' building of audience awareness and idea development when composing persuasive writing. The evidence indicated students' establishment of ownership using the blog allowed them to make a convincing argument.

A study conducted by Anderson (2010) examined the writing development in particular specific writing skills (traits—content, vocabulary, voice, sentence fluency, organization, and conventions) of freshmen English college students ($n = 74$). They were divided into two groups, blogging group (treatment) vs. journaling group (control). The researcher used a trait-based writing rubric to score pre and post-test writing samples. The groups of students were given writing prompts over a six-week period between the pre and post-test. Results indicated neither group made a significant difference ($p = .125$); however, the mean score showed the journaling group had a higher score than the blogging group. As for the writing skills (traits) development, the results revealed content and voice of the treatment group had a significant improvement; however, there were no significant differences in organization, vocabulary, sentence fluency, or conventions between the two groups.

Overall, this group of studies addressed the research designs well. While Anderson's (2010) study had a large sample size and a comparison group, Palombo's (2011) study did not. Both studies were over a six-week period, which may have been too short to determine improvement. Palombo (2011) found that using blogging as a

medium for writing increased the students' awareness of audience as well as gave them the ability to establish ownership in their writing. Anderson (2010) found that some writing skills improved with the blogging group, but others did not.

Discussion

Writing is an integral part of students' lives today due to their use of texting and social networking sites, but most students do not recognize this type of communication as writing. In fact, they see it as separate from writing they do in school. They recognize writing is an important skill and wish that technology was included in more of their writing instruction (Lenhart, Arafeh, Smith & MacGill, 2008; Turner and Katic, 2009).

The research literature reviewed has provided evidence of the significance of how using a blog platform for writing is worthwhile. Three themes emerged from this review of the literature that significantly relate to supporting fourth grade students' writing development using a class blog: blogging improved student writing, blogging improved student motivation toward writing, and blogging developed positive identity as writers.

Theme 1: Blogging Improved Student Writing

Many of the studies reviewed related to blogging and writing in some capacity of learning. For example, Churchill (2009) claimed blogging helped students' improve their overall learning. Tekinarslan (2008) reported blogging and writing improved students' organization skills, and helped them refine skills in paraphrasing and referencing. Ducate and Lomicka (2008) also concluded blogging improved learning as well as allowed the students to take more risks in experimenting with their writing.

Berg (2011) conveyed editing, most often taught in the last stage of the writing process, occurred simultaneously when using computers. Berg (2011) also noted ideas and tone played a huge role in the word choices used by student's online posts. Anderson (2010) found that blogging produced gains in some of the trait-based writing skills, such as content and voice.

This review provides evidence that in most cases, more time spent online blogging improved writing. From the literature reviewed all but two were significantly related to more time spent blogging and improved writing. Several studies noted that writing through blogging benefited by increasing the students' level of writing (Chen et al., 2011; Ducate & Lomicka, 2008; Felix, 2008; & Palombo, 2011). Other studies reported that when writing online, students spent more time and, therefore, wrote more (Armstrong & Retterer, 2008; Bloch, 2007; & Chen et al., 2011).

Theme 2: Blogging Improved Student Motivation Toward Writing

Felix (2008) noticed higher levels of motivation in the participants. Both Chen et al. (2011) and Ellison and Wu (2008) concluded participants were more engaged when writing online. These studies are in line with the Sociocultural Learning Theory (Bandura, 1977), learning happens when learners engage with complex tasks in a supporting environment. Krause and Coates (2008) defined engagement as the students' effort they devote to an activity that contributes directly to their learning.

Otis, Grouzet and Pelletier (2005) reported motivation for reading and writing declined as social motivation increased. Felix (2008) and Chen et al. (2011) visualized blogging as a vehicle for students to share their ideas, which is a contemporary way to gain additional knowledge or understanding that seems to resonate more with students

in the digital age. Allowing students to blog may develop an increase in engagement and, in turn, improve students' writing as well as further their knowledge base through social interactions.

Keeping students motivated to learn in school is a tough job, however, when teachers connect it to their daily lifestyle of socializing through media they become much more interested and seem to not mind communicating this way at school and, in turn, improve their writing skills.

Theme 3: Blogging Builds Positive Identity as Writers

Several studies identified that blogging assisted in the students' awareness of identity as well as building their identity in third spaces (Chen et al., 2011; Ducate & Lomicka, 2008; Felix, 2008; Palombo, 2011; & West, 2008). According to Leu et al.'s (2013), eight principles of upper case New Literacies theory, social practices are central to New Literacies. Building identity is also in line with one of the eight principles of the lower case theory, collaborating about writing practices online appears to increase learning. Since students can blog and provide feedback from any computer by logging into the social network, they help shape their identity as well as others'. According to West (2008), identity was evident in the students' words, phrases, and conventions that are typical when using texting or message boards.

A blog is one type of social media used to communicate with a broader audience outside the walls of a classroom. Online blogs allow students to get feedback from more than one person, and this type of peer feedback may be more effective than traditional self-editing (Holder, 2006). Blogs are popular forums for many teens to express themselves, and there is growing evidence that teens that have their own blogs

tend to be prolific writers inside and outside of school (Lenhart et al., 2008). Vygotsky (1998) emphasizes students can learn writing in a social context. Peer editing and feedback can be accomplished in writing pairs or groups, however, this limits the audience. Using social media, such as blogging, provides a much broader audience and leads to more opportunities for peer feedback.

Blogging and identity building is also in line with the Connected Learning Theory (2012). The Connected Learning model is built on the foundation that learning is socially situated within the interests of the learner through digital media. Blogging is a form of digital media. Feedback to others is where the social interaction takes place. Feedback from others is what helps build or confirm the blogger's identity through confirmation of his or her written posts.

Summary

This chapter discussed important theories that guide this study. In particular, it discussed Vygotsky's Sociocultural Learning Theory (1978) and Guthrie and Wigfield's Engagement Theory (2000). It also discussed Leu's upper case New Literacy Theory (2000).

This chapter also reviewed literature on blogging and writing development. Literature on blogging to improve persuasive writing versus traditional methods of persuasive writing is less developed than those examining blogging and writing in general. Much of the literature has been conducted using action research and there is a need for more rigorous research to add to the body of research (Armstrong & Retterer, 2008; Churchill, 2009). Several of the studies are case studies and only used a sample of one to three participants (Bloch, 2008; West, 2008). While there is only a small

number of studies in this area, most of the them do not have a comparison group from which to support their claims, have small sample sizes, and are not conducted on fourth grade students. Therefore, there is a lack of studies conducted on fourth grade students using blogging to improve persuasive writing skills. Evidence from more studies in this area would support the inflow of technology devices and may lead to the funneling of more dollars into education for the purpose of increasing technology hardware and software in schools/classrooms. It would also help educators incorporate technology in more meaningful ways rather than just letting the students use computers for research writing or responding to reading. This study attempts to address the following research questions through both qualitative and quantitative methods.

1. Is there a difference in the quality of persuasive writing between fourth grade students who practice writing through blogs versus students who practice writing through traditional method (paper and pencil)? Why or why not?
2. Is there a difference in attitudes toward writing between fourth grade students who practice writing through blogs versus students who practice writing through traditional method (paper and pencil)? Why or why not?

Chapter 3 is the chapter on methodology. It includes information on the research design, participants, data collection, and data analysis.

CHAPTER THREE: METHOD

Overview

Even though studies have been conducted on blogging and writing, most of the current research has not addressed children's persuasive writing development. Therefore, the purpose of this study was to examine fourth grade students' development of persuasive writing through blogging.

This chapter outlines the research methodology used in the study, including the research design, participants, data collection, and data analysis. Discussion begins with the research design and the rationale for the research and ends with the researcher's plan for data analysis. The study was broken up into five phases. Phase I consisted of collecting, scoring, and analyzing a pre assessment writing sample and an attitude survey. Phase II consisted of implementing the curriculum. Phase III consisted of collecting, scoring, and analyzing a post assessment writing sample and an attitude survey. Phase IV consisted of selecting, interviewing, transcribing, and analyzing interviews. Phase V consisted of making interpretations of the entire analyses.

Purpose

The purpose of this research study was to examine if blogging produced more growth in persuasive writing for fourth grade students who practiced persuasive writing through blogging in a class blog when compared to those who wrote with the traditional method of paper and pencil.

Research Question

The research questions that guided this study are as follows:

1. Is there a difference in the quality of persuasive writing between fourth grade students who practice writing through blogs versus students who practice writing through traditional method (paper and pencil)? Why or why not?
2. Is there a difference in attitudes toward writing between fourth grade students who practice writing through blogs versus students who practice writing through traditional method (paper and pencil)? Why or why not?

Research Design

This study employed a sequential explanatory mixed methods design. According to Creswell (2003), a sequential explanatory design involves the collection and analysis of quantitative data, followed by the collection and analysis of qualitative data. Both data analyses are integrated into the interpretation phase. The quantitative data is given priority. The qualitative data assists in explaining and illuminates the quantitative findings.

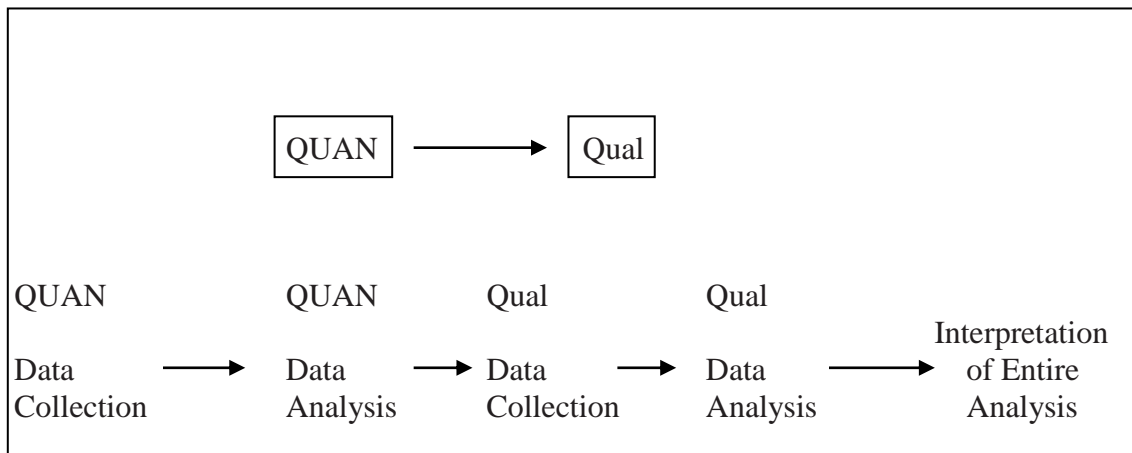


Figure 2 Research Design by J. Creswell, *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*, 2nd Ed. Copyright 2003 by Sage Publications Inc.

The study consisted of five distinctive phases. In Phase I, the researcher collected pre quantitative data from both the treatment and the comparison groups. Quantitative data included a pre writing assessment sample and a pre attitude survey. The researcher scored the pre attitude survey and sent the pre writing assessment sample to be scored.

After completion of Phase I data collection, Phase II consisted of the implementation of the curriculum. Phase III consisted of collection of post quantitative data from both the treatment and the comparison group. Quantitative data included a post writing assessment sample and a post writing attitude survey. The researcher scored the post attitude survey and sent the post writing assessment sample to be scored.

For Phase IV, gain scores from pre and post writing assessment samples provided data for the selection of students to interview. The researcher chose students to interview that made the most amount of gain (HG), medium amount of gain (MG), and limited amount of gain (LG) from both the treatment and comparison groups. Lastly, the researcher transcribed and coded the interview data. The researcher held one last meeting with each participant individually for the purpose of member checking to ensure the accuracy of the interview data and to clear up any misconceptions. The researcher coded the data to analyze for emerging patterns.

The last phase, Phase V, was the interpretation phase where findings from the analyses of Phase I, III, and IV data made it possible to draw conclusions and make interpretations. The quantitative data and their subsequent analysis provided a general understanding of the research questions. The qualitative data enabled the researcher to

further explore (Creswell, 2003) the research questions as well as the “Why or Why not” of each research question.

The interpretation phase consisted of merging the quantitative and qualitative findings together to help explain or elaborate on the research questions. Table 2 displays the five phases of the research procedures. Table 3 includes research questions, the corresponding data sources, and data analyses that were employed to provide answers for the research questions.

Table 2

Phases of Research Procedures

Timeline	Procedures
<p>Phase I</p> <ul style="list-style-type: none"> -Preparation and recruitment -Collection of pre assessment (baseline) data from treatment and comparison groups -Conduct data analysis 	<ul style="list-style-type: none"> -Pre assessment (writing to a prompt) -Pre assessment attitude survey
<p>Phase II</p> <ul style="list-style-type: none"> -Implement persuasive (opinion) writing curriculum with blogs (treatment) and traditional methods (comparison) groups 	<ul style="list-style-type: none"> -Implement persuasive writing instruction with both groups of participants (treatment and comparison groups) -Observation of both groups for fidelity
<p>Phase III</p> <ul style="list-style-type: none"> -Collection of post assessment data from treatment and comparison groups -Conduct data analysis 	<ul style="list-style-type: none"> -Post assessment (writing to a prompt) -Post assessment attitude survey
<p>Phase IV</p> <ul style="list-style-type: none"> -Select interview participants -Conduct interviews 	<ul style="list-style-type: none"> -Interview selected students (students with most amount of gains (HG), medium amount of gains (MG), and limited amount of gains (LG))

Phase V

-Interpretation of findings from both data sets

Table 3

Structure of data sources

Questions	Data Sources	Data Analysis
1. Is there a difference in the quality of persuasive writing between fourth grade students who practice writing through blogs versus students who practice writing through traditional method (paper and pencil)? Why or why not?	-Scores (Opinion Writing Rubric) -Scores (6 + 1 Trait Writing Rubric) -Student Interview data -Blog entries	-MANOVA and ANOVA -Constant Comparative Method and Thematic Analysis
2. Is there a difference in attitudes toward writing between fourth grade students who practice writing through blogs versus students who practice writing through traditional method (paper and pencil)? Why or why not?	-Scores (Garfield Attitude Writing Survey) -Student Interview data	- ANOVA -Constant Comparative Method and Thematic Analysis

Research Setting and Participants

This section focuses on information about the setting and a description of the participants. The setting section includes a description of the school, classrooms,

computer lab, and also describes the persuasive writing instruction each group received. The participants section includes a description of the participating students.

Setting

School. The participating school is a public K-5th grade elementary school located in a suburb of a Southwestern state. The city is an urbanized area with a population of approximately 103,500 or more. The area has many major business retailers, restaurants, hotel chains as well as industrial and agricultural areas. The area also has several businesses that offer tutoring to students in reading and math for a fee. The area includes two public libraries, which also offer tutoring to students from retired certified teachers for free. All elementary schools in the school district are located near or in residential areas. The school district continues to grow and develop at a rapid rate; therefore, they are currently seeking to build three more elementary schools, a new middle school, an activities complex, and an agricultural facility. They are also seeking to make many improvements to existing structures. One such area of improvement the district is seeking to increase is the area of technology. While they have made improvements in this area within the last few years, they seek to be on the cutting edge of technology. Teachers are encouraged to implement various forms of technology in as many areas as possible.

For this study, the chosen elementary school sits adjacent to a 6th-8th grade middle school. The elementary school was established in 1989. Currently, there is one administrator and approximately 30 certified teachers (23 classroom teachers and 7 specialized teachers). Twenty-six percent of the teaching staff has less than five years' of experience, while 74 percent have more than five years. Eighty-five percent hold a

bachelor's degree, while the other 15 percent hold a master's degree or higher. Fifteen support staff members account for the remaining employees. Elementary enrollment is approximately 580 students with only 20 percent on the free and reduced lunch program. Classroom sizes have an average ratio of 25:1. This means each teacher has approximately 25 students in his/her class.

The building is only one story with a large gymnasium at one end of the building. The office, library, and cafeteria are centrally located in the building. For campus safety, the school building stays in lockdown with the only open entrance being at the main door. Anyone who enters must go through a lobby guard system, obtain a visitor badge with his/her name, and picture before being allowed to enter the building. The school day begins at 8:55 a.m. and ends at 3:40 p.m.

Classroom. There are approximately 32 classrooms (two are for storage at this time). Each grade level consists of approximately three to five classrooms. All classrooms have a TV, SMART board, and an audio system. Each classroom has two or more student computers and one teacher computer. Classrooms also contain storage cabinets, book shelves, student desks, and the teacher's desk. Students have a built-in storage area to keep their materials.

The participating classroom used student desks that were arranged to face the SMART board and still allow for a flow of student movement. The room had a welcoming reading area for the students to engage in the enjoyment of reading. The classroom contained a small desk with writing supplies for student use. There was also a table for the teacher to meet with students in small groups or individually.

Computer lab. The school has wireless Internet and two computer labs with 24 computers in each lab. In order to maintain a safe environment in the computer lab, students are assigned a number, which corresponds to a computer number, and that is where the student with that number may sit. If their computer is down, the teacher assigns them to the next available computer. It is already assumed that students have their parents' permission to use the Internet at school, however, should a parent want to deny access to their child's use of the Internet, they must sign the School Internet Usage Policy (Appendix D). The teacher also instructs the students about net etiquette (Appendix E).

Computer lab time is generally scheduled three times a week for a period of 40 minutes; however, for the purpose of this research study, the computer lab time was increased up to one hour when needed. This allotted computer lab time was scheduled during the class writing time so that students in the blogging group could use the computers to write their blog posts.

Writing instruction. The school district currently uses a reading textbook that was adopted several years ago. While the textbook focuses on reading instruction, writing instruction is integrated. The adopted textbook is Storytown published in 2008 by Harcourt. The current reading textbook consists of 30 reading lessons and 6 writing lessons: (personal) narrative, essay responding to literature, explanatory, research report, story writing, and persuasive writing. Each writing lesson includes an explanation of the writing genre, a student model of the writing genre, and a diagram of how the student used the writing process to prepare the writing model. Other than what is in the reading textbook, no other writing curriculum is offered. Because the Common

Core State Standards call for opinion writing, the researcher chose to use Lucy Calkins Units of Study for Fourth Grade writing curriculum (Lucy Calkins, 2013) as a supplement to what the school textbook currently offers.

Lucy Calkins (2013) Units of Study for Fourth Grade consists of instruction on various writing genres: narrative (unit 1), opinion/persuasive (unit 2), information (unit 3) and literary essays (unit 4). In addition, the package includes writing pathways (performance assessments and learning progressions), If...Then ...Curriculum (assessment-based instruction), and a guide to the Common Core writing workshop. The package also includes a trade-book package to assist in teaching each unit of writing as well as a CD-ROM of resources for the teacher.

The opinion/persuasive writing unit takes the student through the writing process of a persuasive/opinion piece from brainstorming, introduction, making a claim, supporting the claim with evidence, to the conclusion. The writing pathways book provides instruction on the assessment system and includes a writing rubric, writing sample, and writing progression. It incorporates differentiating how students are assessed, including those on IEPs (Individualized Education Program). It also demonstrates how students can self-assess, set goals, make checklists, transfer their learning across the content areas, and set up a recordkeeping system. In the If...Then...Curriculum book, the teacher is provided with ways to help struggling students. For example, if a teacher has students struggling to elaborate on their reasons, then the teacher can demonstrate how to write a mini-story, using facts/statistics, definitions, or quotes to prove their point.

The chosen curriculum used a writing workshop approach. Therefore, prior to implementing the 10-week study, the students spent several weeks engaging in the writing workshop approach as a precursor to the chosen curriculum. During this time, they practiced writing using traditional methods to establish a writing workshop routine. For this study, the format for the writing workshop was as follows:

Mini-lesson---10 minutes each day

Engaging in Writing---25 minutes each day (except Friday)

Sharing---5 minutes each day (except Friday—30 minutes)

Below is what each day looked like:

Monday—mini-lesson, receive persuasive statement and brainstorm session, share

Tuesday---mini-lesson, draft essay, share

Wednesday---mini-lesson, peer revision, share

Thursday---mini-lesson, revise and edit draft, share

Friday---mini-lesson, share time

The writing workshop book guided the teacher on conducting writing in a workshop format as well as managing the students during the workshop time. Writing workshop began with calling students to sit on the floor near the teacher so the teacher could conduct writing mini-lessons, which lasted about 10 minutes. Having children sit on the floor near the teacher actively engaged them and drew them away from their desk area where they had plenty of distractions. Examples of mini-lessons included how to begin an introduction and how to conclude a written piece.

The next step is what Lucy Calkins (2013) referred to as the heart of the writing workshop, sending students off to write and practice what the teacher taught them in the mini-lessons. During this time, about 25 minutes, students went to their writing spots and begin writing. It was also during this time that the teacher worked with small groups of students who needed help in the same area or the teacher conducted one-on-one writing conferences with individual students. If the teacher noticed a particular mistake most students were making, she stopped everyone and quickly conducted a mid-workshop teaching point. As soon as the teacher finished the mini-lesson, the students returned to writing for another 15 to 20 minutes.

The last step in the writing workshop is sharing, lasting about five minutes. This can be done in many different ways. For example, the teacher may sum up the day's lessons, partners may share, tables may share, or maybe the teacher noticed someone who did a great job and asks that person to share his/her piece. On Fridays, the sharing time was increased to 30 minutes. The first 15 minutes were spent with groups of students sharing their week's writing. The last 15 minutes were spent with a small selection of students chosen by the teacher to share their writing with the whole class. The entire writing workshop lasted from 40 minutes to one hour.

Students also received guidance on how to give peer feedback. For example, the teacher emphasized constructive feedback that was both respectful and helpful to the writer using a 3, 2, 1 strategy. While there are several versions of this strategy, this study used three things the writer did well, two steps that the writer could take to improve his/her writing, and one question the reader still had.

The teacher gave the same amount of writing instruction and feedback on persuasive writing throughout the 10-week period for both the blogging and traditional group, but did not give feedback on the pre and post writing assessment samples that were collected for this study. The students in both the blogging and traditional groups were expected to compose one piece of persuasive writing on a given prompt each week.

Blog writing group. The blog used in this study did not look like a typical blog where individuals post whatever they feel like. It was an instructional blog used as a platform where the students carried out their blogging assignment each week. It was structured where the whole blogging class contributed to one class blog at the same allocated time during the school day. However, the students were able to sign-on and add to the blog any time outside of the given computer lab time.

The blog group received modified Lucy Calkins (2013) writing instruction (lesson one included in Appendix H) in the regular classroom. Then they went to the computer lab three times a week for 40-60 minute sessions to conduct their blogging with the instruction they received in the regular classroom. The initial session consisted of logging into the blog and becoming familiar with the blog site. The initial session also consisted of the participating teacher covering blogging rules (net etiquette) with the students.

The blogging/publishing platform selected for this study was Kidblog. According to Hardy and Flies (2010), Kidblog is safe, allows the teacher to control all activity before it is published, does not require an email address from students to use, does not have any pop-ups/ads, and is private. It also does not require any personal

information from students and, therefore, is fully COPPA (Children's Online Privacy Protection Act) compliant. It allows students to be creators, rather than consumers of information.

Students received instruction on the blogging program via a technology specialist (researcher) prior to beginning their blogging. The specialist also handled any technological issues that arose, such as forgotten passwords. Training consisted of how to log in/out, how to post a piece of written text, and how to access other students' blogs and provide peer feedback. Students practiced making a blog post before beginning their 10-week sessions. At the beginning of the 10-week sessions, the teacher encouraged students to provide feedback to each other and revise their writing as often as they wanted. The blogging group composed all their writing on the computer. They only received writing instruction in the regular classroom.

At the beginning of each week the researcher would post a writing prompt provided by the participants. Each writing group would then write using their assigned mode going through the writing process steps. The traditional writing group carried this out via paper and pencil while the blog writing group carried this out via a class blog in the computer lab. Figure 3 shows an example of a writing prompt on the class blog.

Figure 4 shows an example of a blog response with feedback from peers.

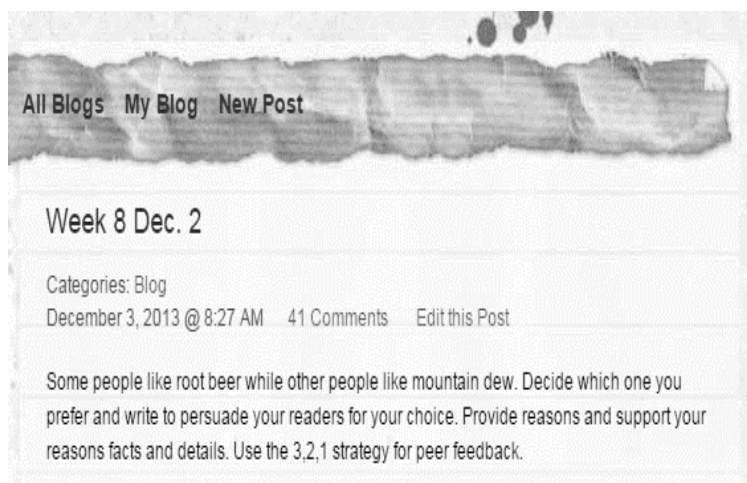



Figure 3 Example of participant blog post.

Carrie 
December 3, 2013 at 11:35 AM
What would you do if you have to pick Root Beer or Mountain Dew?? Well today your gonna have to choose!!!! I choose Root Beer 😊😊

I choose Root Beer because..... It has less caffiene so its healthier for you. Also your parents are not going to give you red bull, or monster so why would they give you Mountain Dew its just the same?


You can have old fassion Root Beer, Root Beer float, and plain. You can get Root Beer any where the movies, the store, the mall, And a lot of other places. And by alot I mean over 1,000 places..... Thats alot!

You can make home made Root Beer and it will taste all most the same but if you do Mountain Dew it will taste super duper differant and it will make you sad 😞😞 Its hard for kids to digest all of the caffiene and too much can make them sick!! 😞

And thats some super duper AWESOME!!!!!!!!!!!! reasons why Root Beer is way better them Mountain Dew hope you all enjoed every fact and all of my post this year!! LOVE Carrie 😊😊 !!!

Edit | Unapprove | Delete

Reply

Terry 
December 4, 2013 at 11:19 AM
I love root beer too! It is AWESOME! I like that you put smiley faces. You might want to put less smiley faces though. You might want less exclamation points too. What is another reason you hate mountain dew.

Edit | Unapprove | Delete


Patricia 
December 4, 2013 at 11:19 AM
I choose rootbeer too. I loved how you said you can make rootbeer floats and drink old fashioned rootbeer. and you can make homemade rootbeer.It is too hard to drink all that caffiene. I would not use all those smily faces and fix a few words. Why do you think mountain dew is yucky?

Figure 4 Example of participant's blog feedback.

Traditional writing group. The traditional group received the same modified Lucy Calkins (2013) writing instruction (lesson one included in Appendix H) in the

classroom. However, their writing was conducted using the traditional method (paper and pencil) in the classroom.

Participants

The participating teacher has two sections of students, a morning section, and an afternoon section. The school principal and counselor decide students' placement into each section (morning or afternoon), with teacher input the prior school year. Two sections of fourth grade classes participated in the study. Each section had 17 students. Students from the morning section (Comparison group) participated in traditional persuasive writing practices (paper and pencil) while the afternoon section (Treatment group) participated in persuasive writing practices through blogging. The same teacher taught both sections. Table 4 shows the group assignments and their class breakdown.

Table 4

Participants and groups assignments

	Class section	Number
Comparison Group	Morning Section	n = 17
Treatment Group	Afternoon Section	n = 17

Each section consisted of 160 instructional minutes. Social Studies consisted of 40 of the 160 minutes. The remaining 120 minutes consisted of reading, writing, grammar, and spelling (Language Arts). Both groups received the same amount of time for their persuasive writing practices during the Language Arts block.

Students. Participants in the chosen classroom came from various backgrounds. They were predominately Caucasian. A small percentage of other backgrounds include African American, and Native American. Table 5 shows the breakdown of ethnicity for both the comparison and the treatment groups. Most came from middle class families. Low income families made up only a small percentage. The students' ages ranged from 9-11 years old.

Table 5

Ethnicity breakdown

	Size	Caucasian	African American	Native American
Comparison Group	N = 17	(n = 11) 65%	(n = 3) 17%	(n = 3) 18%
Treatment Group	N = 17	(n = 13) 76%	(n = 2) 12%	(n = 2) 12%

Typically, the reading performance class profile would consist of a mix of some high, some low, and a majority being on level. While both groups did consist of students who were at high, middle, and low performance levels, for this study, any pull-out students (students receiving Individualized Education Program instruction) did not participate. Since they spent much of the classroom time in a small group setting with a pull-out teacher, they did not get the writing instruction from the regular classroom (participating) teacher and would likely have skewed the data.

Role of the Researcher

The researcher first sought approval from the school principal and consent of the participating teacher, who is not the researcher. Then the researcher obtained approval from the school district. Once that was given, the researcher obtained IRB approval

from the university. Next, the researcher sought consent from the participants and their guardians. While waiting on approvals/consents, the researcher prepared to work with the participating teacher on the understanding of the writing curriculum that supported the persuasive writing unit for this study. Once school began, the researcher collected all approvals and then began to collect pre data.

At that time, the researcher also requested the Oklahoma Writing Project (OWP) teachers to assist in scoring the writing assessments to assure accuracy of scores and was able to get an OWP teacher to be a scorer. The other scorer was a teacher educator in literacy education at a state university. She also had a strong background in teaching writing. Both scorers worked together to calibrate their scoring and achieve high inter-rater reliability before scoring took place.

Oklahoma Writing Project teachers are consultants who have spent many hours developing their expertise in the area of writing as well as studying research on writing. They stay involved in the Oklahoma Writing Project programs. Many are National Board Certified. They demonstrate leadership through assisting other teachers, act as writing coaches, and conduct professional development for schools and districts.

After the implementation of the 10-week instruction, the researcher collected post data and again had it scored by the two scorers. The researcher scored the pre and post Garfield Motivation Surveys. Finally, the researcher conducted the interviews, transcribed them, and coded the data for interpretations.

Data Sources

This study employed a sequential explanatory mixed method design. Instruments for data collection and scoring included a pre and post writing prompt

(Appendix I), writing rubrics (Appendix B) for scoring writing samples, a pre and post writing attitude survey (Appendix C), and an interview protocol (Appendix F and G).

Quantitative Research Instruments

Pre and post writing prompt. The same prompt was used for both the pre and post writing assessment. The prompt reads: Some schools have computer labs where an entire class can use the computers at the same time, while other schools have one or two computers in each classroom. Which method do you think is the better way to utilize technology? Write to express your opinion for one of the methods and support your claim using evidence.

The researcher created the prompt, and it was then submitted to an OWP consultant for feedback and to make sure it was appropriate for fourth grade students. Students generated writing prompts used for weekly practices during the study. Having choices in what students write about is an important key in motivating and engaging students in writing. Therefore, the researcher allowed the students to submit their own writing prompts. The researcher then revised the prompts. Ten prompts were developed. Prior to students generating weekly prompts, the participating teacher modeled how to write a prompt and shared examples of other effective persuasive writing prompts.

Writing rubrics. There were two rubrics used in this study. Both the 6 + 1 Trait writing rubric (Education Northwest, 2010) and the Lucy Calkins Opinion writing rubric (Lucy Calkins, 2013) were used to score the pre and post-test writing prompts.

6 + 1 Trait Writing Rubric. Education Northwest (2010), formerly, Northwest Regional Educational Laboratory acquired a version of the original 6 + 1 Trait scoring

rubric and reevaluated its effectiveness through an experimental study conducted by Kozlow and Bellamy (2004). The field tested and research based rubric is teacher friendly. The developers continue to test and revise the rubric so that it remains current with the most up-to-date scoring criteria. Although both a five-point and a six-point writing rubric exist, the 6 + 1 Trait/Six-Point Writing Rubric (Appendix B) is the one that was used for this study.

The 6 + 1 Trait Writing Rubric was used to score both the pre and post writing samples. The rubric looks at each of the traits separately: ideas, voice, word choice, sentence fluency, organization, conventions, and presentation.

Students' writing samples received a numerical score for each trait and a composite score for all traits combined. The rubric contains descriptive statements or key qualities that define strong writing under each sub category in which the scorers could determine where the writer would fall based on the participant's writing assessment.

Opinion Writing Rubric. The Opinion Writing Rubric (Appendix B) was developed by Lucy Calkins and Colleagues (2013) to accompany the Units of Study for fourth grade opinion writing. This unit consisted of 21 lessons delivered in a workshop format. Writing completed during the unit was also assessed by the participating teacher using the same opinion writing rubric. The rubric contains descriptive statements or key qualities that define strong writing under each sub category in which the scorers could determine where the writers would fall based on the participants' writing. The rubric covered grades two through five in case some students' scores were lower than fourth grade level and some were higher than fourth grade level. Each level

was assigned a point value in the following areas: overall, lead, transitions, ending, organization, elaboration, craft, spelling, and punctuation. In the elaboration and craft areas, the point value was doubled. Craft refers to the word choices, tone, evidence, facts and details that support opinion writing. Once the writing was scored, all area scores were totaled for an overall point value. Then they were compared to a point scaled score to assign a grade. For example, if the points total was between 28 and 33, the student would receive a scaled score of 3.

Survey. The survey selected for this study was the Writing Attitude Survey (WAS), also known as the Garfield assessment. It was developed in 1990 by McKenna and Kear (McKenna, Kear, Coffman, & Ambrosio, 2000). The 28-item survey was field tested and revised. It can be administered individually or to an entire class. For this study, it was administered to the entire class at the same time. Each question contained photographs of Garfield in a Likert-scale format. It is suggested that the test takes approximately 20 minutes to complete.

Test directions indicate grades one to two should have the test read to them. Grades three and above can complete it without having the test read to them unless the teacher chooses to read it to students who struggle in reading. The teacher explains to students the purpose of the survey is to find out how they feel about writing. Each Garfield photo is then explained by the teacher so the students understand the photo they circle is the closest to how they feel about writing.

Each photograph of Garfield is assigned a point value with four being the highest number (very happy) and one being the lowest number (very upset). The total raw score can then be converted to a percentile rank using a table provided with the

survey. For the purpose of this study, the full scale raw score was used to examine growth in attitude over the length of the study.

Qualitative Research Instruments

Interview protocols. The protocols are semi-structured and include open-ended questions. All interviews were recorded and transcribed by the researcher for review and data analysis. The interviews consisted of a student interview protocol (Appendix F and G). Appendix F is the protocol for the Comparison group and Appendix G is the protocol for the Treatment group. Transcribed data is stored as password protected documents on the researcher's computer. Pseudonyms were used in place of the participants' real names for protection of confidentiality.

Procedures

The study employed five distinct phases. Phase I consisted of pre quantitative data collection, while phase II consisted of implementation of the writing instruction. Phase III consisted of post quantitative data collection and Phase IV consisted of qualitative data collection. Phase V was the interpretation phase. Activities that took place in each phase are discussed next.

Phase I

Quantitative Data Collection. Quantitative data collection consisted of the collection of a pre writing sample and a writing attitude survey.

Pre writing assessment. A writing sample was collected from all participants at the beginning of the study in the fall of 2013 by the participating teacher. The writing sample was based on the persuasive writing prompt provided by the researcher. The researcher then collected the writing samples and had them scored by the scorers. Any

inconsistencies in the scoring were resolved through a discussion between the scorers. After 10 weeks of curriculum implementation and instruction, the students produced a post writing sample based on the same prompt.

Pre writing attitude survey. The participating teacher gave a writing attitude survey to all participants at the beginning of the 10-week study. After students completed the writing attitude survey the researcher collected them from the participating teacher. They were then scored according to the directions provided on the survey by the researcher. This provided a baseline score for each participant. The focus of the writing attitude survey was to determine how the students felt about writing before receiving instruction in persuasive writing and their writing practices.

Phase II

The participating teacher administered the modified Lucy Calkins writing curriculum (2013) selected for this study during a 10-week period for both groups. During this time, the researcher carried out periodic observations to make sure both groups were receiving the same instruction designed for this study. During this instructional time, the participating teacher conducted Lucy Calkins writing workshop three days a week and students used the other two days to brainstorm and share what they were learning. It was during the three writing workshop days that one group wrote using the blog and the other group wrote using the traditional (paper and pencil) method.

Observations for fidelity of implementation. The researcher observed in the computer lab and classroom a few times each week to make sure the participating teacher was giving both groups the same instruction and that the research procedures

were being followed. There was no protocol for this as it was simply to verify and to ensure fidelity.

Phase III

Quantitative data collection. Quantitative data collection consisted of the collection of a post writing sample and a post writing attitude survey.

Post writing assessment. A writing sample was collected from all participants at the end of the 10-week study in the fall of 2013 by the participating teacher. The writing samples were based on a persuasive writing prompt provided by the researcher. The researcher then collected the writing samples from the participating teacher and had them scored by the two scorers who also scored the pre writing samples. Any inconsistencies in the scoring were resolved through a discussion between the scorers. The collection of pre and post writing samples allowed the researcher to make comparisons of growth in persuasive writing.

Post writing attitude survey. The participating teacher gave the same writing attitude survey used in the pre assessment to all participants at the end of the 10-week study. After students completed the writing attitude survey, the researcher collected them from the participating teacher. Then they were scored according to the directions provided on the survey by the researcher. The focus of the writing attitude survey was to determine how the students felt about writing after receiving instruction in persuasive writing and writing practices.

Phase IV

Qualitative data collection. Qualitative data collection consisted of interviews. Following the completion of the 10-week period and when all data was scored, the researcher selected participants to interview.

Based on the scored data from the analysis of Phase I and III data, the researcher purposively selected a student who made the most amount of gain (HG), median amount of gain (MG), and limited amount of gain (LG) from both the treatment and comparison groups to conduct semi-structured interviews. To determine the high, medium, and limited amount of growth participants to interview, the researcher ran descriptive statistics, frequencies, and quartiles in SPSS, which also allowed the researcher to see any outliers. Quartiles produced a writing score that fell at the 25, 50, and 75 percentiles and three students were chosen from each group based on percentile scores.

The semi-structured interviews lasted approximately 20-30 minutes. The tape-recorded the interviews. The researcher coded the transcribed interview data using open-coding. To insure validity, the researcher met with each of the interviewed participants to conduct member checking, to verify or clarify information they provided in their interviews. Coded data was then analyzed for emerging patterns or themes.

Phase V

Phase V was the interpretation phase. In this phase, the researcher combined findings from both quantitative and qualitative analysis. The focus for phase V was to look for answers to the two research questions.

Data Analysis

Analysis of quantitative data

Writing scores. Descriptive statistics were calculated for each of the dependent variables. One set of variables came from each area on the 6 + 1 Trait Writing Rubric (i.e. ideas, word choice, voice, sentence fluency, organization, and conventions) and a composite score. The second set of variables came from each area of the Lucy Calkins Opinion Writing Rubric (i.e. overall, lead, transitions, editing, organization, elaboration, craft, spelling, punctuation) specifically designed for persuasive/opinion writing and a composite score. The third set of variables came from the Garfield Writing Attitude survey. The independent variable was the mode of writing practice (blogging or paper and pencil).

The researcher used Repeated Measures Multivariate Analysis of Variance (MANOVA) to determine if there is any statistically significant difference between the two groups in relation to all dependent variables related to traits of writing as per the 6 + 1 Trait Writing Rubric and areas of persuasive writing as per the opinion-writing rubric. When a statistically significant difference was found, ANOVA was conducted to further examine the group difference on each dependent variable. ANOVA was conducted to examine group differences on student attitude toward writing. Data were entered into SPSS for analysis. The entries were combed to make sure there were no entry errors (O'Leary, 2010).

Analysis of Qualitative Data

Student interviews. To prepare the data for analysis, the interviews were transcribed using Microsoft Word (Creswell, 2003). The researcher listened to the tape-

recorded interviews and typed each word verbatim. Once this was done, the researcher met a final time to share the interview transcripts with each participant separately to validate the interview data. When participants approved the interview transcript data, it was then subjected to analysis.

For analysis of the interview data, the researcher went line-by-line and developed initial codes. For example, the words fun and exciting were initial codes. The codes that were related, such as fun and exciting were then grouped under the concept such as enjoyment. Finally, the researcher made sure there was no overlapping of codes or categories. Then the researcher used the constant comparative method (Glass & Straus, 1967) to test the incoming data against the existing codes until no new codes could be found. The researcher then selected categories that were related to identify themes. Themes related to the research questions were utilized to illuminate the quantitative findings. While there were many categories, only categories that pertained to all interview participants in each group were used as the themes to provide answers to the research questions.

Once the quantitative and qualitative analyses were completed, the researcher compared and contrasted the results from both analyses in relation to the two research questions and the theoretical framework for the study. The researcher then identified any similarities and/or differences between the two analyses to see if they converged (Creswell & Plano Clark, 2007).

Validity

According to Creswell and Plano Clark (2007), all good research addresses validity of the data and results sections. It serves the purpose of checking on the quality

of the data and results. Validity threats to this study have been addressed through member checking (used to validate the interview data). Using an OWP teacher and a higher education professor of literacy allowed the researcher to avoid bias on scoring writing samples. Other validity issues were addressed by maintaining a researcher role to avoid influencing the participants' opinions or data. For member checking, the researcher transcribed the interview data and then met with each participant separately to get his/her approval of the transcripts before analyzing them.

Ethical Considerations

This study was conducted in compliance with the University of Oklahoma's Institutional Review Board (IRB) requirements. Participants were invited to participate in the study through a presentation and letter given by the researcher. Agreement to participate was determined based on the parent and child's returned and filled out informed consent forms prior to participating in the study. Students failing to produce a signed permission form from their parent and him or herself still participated in the related writing instructional and learning activities, but no data was taken from those students. Participants' anonymity was protected by using pseudonyms. All data was kept in a locked file cabinet in the researcher's office and will be destroyed after the required time period set forth by IRB. Data on the researcher's computer were password protected documents.

Summary

Chapter three discusses the methodology for the study. This study employed a sequential explanatory mixed methods design. The chapter also describes the selection of participants, data sources, and methods of data analysis. Chapter four presents the

findings of the study. It begins by restating the purpose of the study as well as the research questions. Findings from both quantitative and qualitative measures are presented next.

CHAPTER FOUR: RESULTS

The purpose of this study is to contribute to the existing body of research and inform others of the effect of blogging on fourth grade students' persuasive writing development. More specifically, this study was conducted to inform others how the use of blogging as a tool could potentially motivate fourth grade students to engage in persuasive writing as well as assist them in making gains in their development of persuasive writing.

This study used a mixed methods approach. The collection and analysis of qualitative data followed quantitative data analysis to shed light on the quantitative results as well as answer the “why or why not” part of this study. In the sequential explanatory mixed methods design, the qualitative data helps illuminate the quantitative findings (Creswell & Plano-Clark, 2007).

This chapter begins by presenting the results of a test of equality between the two groups to make sure they were comparable to each other prior to the writing instruction implemented in this study. Each research question is answered by results from both quantitative and qualitative analyses. The chapter concludes with a chapter summary.

The research questions that guided this study were:

1. Is there a difference in the quality of persuasive writing between fourth grade students who practice writing through blogs versus students who practice writing through traditional method (paper and pencil)? Why or why not?

2. Is there a difference in attitudes toward writing between fourth grade students who practice writing through blogs versus students who practice writing through traditional method (paper and pencil)? Why or why not?

Findings Related to Research Question One

The first research question is, “Is there a difference in the quality of persuasive writing between fourth grade students who practice writing through blogs versus students who practice writing through traditional method (paper and pencil)? Why or why not?”

Results from the Test for Equality on Pre-test Writing Scores Between the Two Groups

Prior to comparing the improvement of the quality of persuasive writing and attitude toward the paper and pencil group and blog group, it was necessary to test the equality between the two groups on their quality and attitude toward writing. In order to test the assumption, an independent-samples *t*-test was conducted to investigate if the two groups’ were statistically similar prior to writing instruction. There were two composite scores representing the writing quality of persuasive writing, which were sums of scores in nine areas of the Lucy Calkins Opinion Writing Rubric (OWR) (Calkins, 2013) and scores in seven areas (six traits plus presentation) on the 6 + 1 Trait Writing Rubric (Education Northwest, 2010), respectively.

Table 6 presents the means and standard deviations on the pre and post composite scores of the variables from both writing rubrics.

Table 6

Means and Standard Deviations of Composite Writing Scores

		Pre-Test		Post-Test	
Rubrics	Groups	N	M (SD)	N	M (SD)
Opinion Writing Rubric	Blog	17	16.41 (3.70)	17	24.21 (4.82)
	Traditional	17	17.79 (6.45)	17	23.79 (7.14)
6 + 1 Trait Writing Rubric	Blog	17	18.82 (4.25)	17	28.00 (5.50)
	Traditional	17	18.12 (6.60)	17	26.00 (6.12)

The *t*-test result revealed that for the OWR there was no statistically significant difference between the traditional writing group's quality of writing ($M = 17.79$, $SD = 6.45$) and that of the blog writing group's ($M = 16.41$, $SD = 3.70$) prior to the writing instruction, $t(32) = .767$, $p > .05$. For the 6 + 1 Trait Writing Rubric (2010), there was also no statistically significant difference between the traditional writing group's quality of writing ($M = 18.12$, $SD = 6.60$) and that of the blog writing group's ($M = 18.82$, $SD = 4.25$) prior to the writing instruction, $t(32) = -.371$, $p > .05$. Therefore, the two groups' quality of persuasive writing was comparable before the writing instruction started.

Quantitative Analysis Results

Difference in growth in individual aspects of persuasive writing between the two groups. Table 7 presents the descriptive statistics of each trait scored from the OWR. Table 8 presents a table of group gain scores for the OWR.

Table 7

Descriptive Statistics for the Opinion Writing Rubric

Writing Area	Blog Writing Group				Traditional Writing Group			
	Pretest		Posttest		Pretest		Posttest	
	M	SD	M	SD	M	SD	M	SD
Overall	1.82	.58	2.59	.59	2.03	.82	2.41	.67
Lead	1.59	.44	2.12	.33	1.74	.69	2.12	.70
Transitions	1.50	.43	2.03	.51	1.65	.70	1.94	.63
Editing	1.15	.42	1.79	.61	1.44	.73	1.71	.59
Organization	1.50	.47	2.59	.73	1.50	.64	2.41	.75
Elaboration	2.76	.66	4.09	1.06	2.94	1.20	4.24	1.71
Craft	2.94	.83	4.09	1.11	3.41	1.21	4.06	1.60
Spelling	1.56	.50	2.59	.51	1.65	.68	2.47	.65
Punctuation	1.59	.40	2.32	.53	1.62	.70	2.44	.58

Table 8

Comparison of Group Gain Scores for the OWR

Writing Area	Blog Group Gain Score	Traditional Group Gain Score
	M	M
Overall	.77	.38
Lead	.53	.38
Transitions	.53	.29

Editing	.64	.27
Organization	1.09	.91
Elaboration	1.33	1.30
Craft	1.15	.65
Spelling	1.03	.82
Punctuation	.73	.82

Descriptive data suggested, except on punctuation, the blog writing group made more growth in lead, transitions, editing, organization, elaboration, craft, and spelling. Descriptive data also suggested mean gain scores from both writing groups showed growth, however, the blog writing group made more growth than the traditional writing group. It is important to note in this rubric, the area of craft is where persuasive/opinion writing was scored.

Repeated-measure MANOVA results revealed there was no statistically significant interactive effect of student group and time point for the OWR, $V = .352$, $F(9, 24) = 1.446$, $p = .224$, which means that according to the OWR, there was no statistically significant difference in growth of persuasive writing between the traditional writing group and the blog writing group. Results indicated that overall growth made between the two groups was not statistically significant.

Differences in growth in individual traits of writing between the two groups. Table 9 presents the descriptive statistics of each trait scored from the 6 + 1 Trait Writing Rubric. Table 10 presents a table of group gain scores for 6 + 1 Trait Writing Rubric.

Table 9

Descriptive Statistics for the 6 + 1 Trait Writing Rubric

Writing Area	Blog Writing Group				Traditional Writing Group			
	Pretest		Posttest		Pretest		Posttest	
	M	SD	M	SD	M	SD	M	SD
Ideas	2.65	.86	4.24	1.03	2.71	1.05	3.76	1.03
Organization	2.65	.61	3.82	.95	2.29	.99	3.76	.97
Voice	2.71	.92	4.35	1.06	2.59	1.06	3.88	.93
Word Choice	2.76	.83	4.00	.87	2.71	1.05	3.76	1.03
Sentence Fluency	2.35	.86	3.88	.93	2.59	1.21	3.59	.87
Conventions	3.06	.66	3.65	.70	2.76	1.25	3.71	.92
Presentation	2.65	.86	4.06	.90	2.47	.80	3.53	.87

Table 10

Comparison of Group Gain Scores for the 6 + 1 Trait Writing Rubric

Writing Area	Blog Group Gain Scores	Traditional Group Gain Scores
	M	M
Ideas	1.99	1.05
Organization	1.17	1.47
Voice	1.64	1.29
Word Choice	1.24	1.05
Sentence Fluency	1.53	1.00
Conventions	.59	.95
Presentation	1.41	1.06

Descriptive data suggested the blogging group made higher growth on five of the seven traits (i.e. ideas, voice, sentence fluency, word choice, and presentation), while the traditional writing group made higher gains on organization and conventions.

MANOVA results suggested from the 6 + 1 Trait Writing Rubric (2010) interactive effect was significant, $V = .479$, $F(7, 26) = 3.421$, $p = .01$, $\eta^2 = .479$. The power of the multivariate test was .903, which is considered preferable (Cohen, 1992). The significant interaction suggested the two groups changed differently on their quality of writing in general based on traits graded by the 6 + 1 Trait Writing Rubric (2010). The univariate ANOVA follow-up tests showed the interactive effect on individual writing traits failed to reach the significant p-value (i. e., $p > .05$), which indicated that for each trait there was no statistically significant difference in the change of the quality of writing based on writing traits between the two groups.

Qualitative Analysis Results

After a thorough review of the transcribed interview data, through the process of constant comparative analysis method, three themes emerged from the blog writing group and two themes emerged from the traditional writing group. Themes that emerged apply to all three of the participants interviewed from their respective (traditional or blog) groups. Tables 11 and 12 show how each theme was identified. Each theme and data supporting each theme are presented.

Table 11

Identified Themes for Blog Writing Group

Research Question	Examples of Concepts Identified in Transcripts	Themes Identified
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Is there a difference in the quality of persuasive writing between fourth grade students who practice writing through blogs versus students who practice writing through traditional method (paper and pencil)? Why or why not?	Wrote better	Students perceived that blogging enhanced the quality of their writing.
	Added more details	
	Made writing more interesting	
	Helped writing stay organized	
	Spent more time on writing	Students perceived that blogging increased the quantity of their writing.
	Wrote more	
	Typed faster	
	Improved typing skills	Students perceived that blogging improved their writing mechanical skills.
	Improved spelling	

Table 12

Identified Themes for Traditional Writing Group

Research Question	Examples of Concepts Identified in Transcripts	Themes Identified
Is there a difference in the quality of persuasive writing between fourth grade students who practice writing through blogs versus students who practice writing through traditional method (paper and pencil)? Why or why not?	<u>On Writing Instruction</u>	Students perceived the writing unit improved the quality of their writing.
	Added more details	
	Helped with organization	
	Helped to brainstorm	
	Learned to write multiple paragraphs	
	Made writing longer	
	<u>On Blog Writing</u>	Students' perceived that blogging could have had advantages over writing with paper and pencil.
	Help with spelling	
	Eliminate concerns about handwriting	
	Offer the advantage of typing	
	Increase audience awareness	

Participants chosen for the interviews were selected based on the level of growth they made over the course of the project. Participants were selected based on their quartile score and labeled as High Gain (75%), Medium Gain (50%), and Low Gain

(25%). In the blog writing group, Donnie (High Gain), Patricia (Medium Gain), and Dan (Low Gain) were chosen. In the traditional group, Nancy (High Gain), Jade (Medium Gain), and Betty (Low Gain) were chosen.

Themes Related to Blog Writing Group

Students perceived that blogging enhanced the quality of their writing.

Analysis of the interviews with the blog writing group suggested blogging affected the quality of students' writing. For example, Dan said, "It made it better, and it helped me stay organized." Patricia replied, "I wrote more details so that when people read my writing they will like it more and it made it more interesting." Patricia realized that making a paper more interesting is what makes others want to read it and blogging helped her add more details to her writing and, as a result, made her writing more interesting. Donnie responded, "The blog made me write better." When probed, he said, "It made it (writing) more interesting." Participants' interview comments all suggest that blog writing has enhanced the quality of their writing.

The researcher noted, during an observation of the blogging group, for fidelity purposes, she heard a conversation where one participant said to another, "no one has provided me feedback." This would simply suggest the participant was looking for feedback from peers to see ways he could improve his writing.

Students perceived that blogging increased the quantity of their writing.

Analysis of the interviews with the blog writing group suggested blogging affected the quantity of students' writing. Although there was no question asked about the quantity of writing, there was a question that asked if the blog affected their writing. Participants interviewed said on several occasions that the blog made them write more.

For example, Dan said, “The blog helped me write more because I could type faster.” Patricia replied, “I put more details to it to tell what I’m writing about so that there is more description to it.” She also said, the blog helped her “make paragraphs and write more.” Donnie also responded, “It made me write more.” While it is important to note that quantity is not as important as quality in writing, the researcher felt it was important to the participants since they all mentioned it in the interviews.

Students perceived that blogging improved their writing mechanical skills.

Analysis of the interviews with the blog writing group suggested blogging helped improve participants’ mechanics in writing. During the interviews, they all mentioned how blog writing helped with their writing, particularly in the areas of typing and also spelling. For example, Dan said, “Typing made my writing look neater. I like keyboarding and more practice makes it better.” Patricia replied, “Blogging fixed my mistakes.” When the researcher asked, “How?” She answered, “Well, I read what people said and noticed what they were talking about and fixed what they said to fix, like misspelled words.” Donnie responded, “I learned how to spell better.” Their responses also suggested that due to a wider audience, they were more aware of their spelling errors as well as how the print made their writing look neater than their handwritten work.

Themes Related to Traditional Writing Group

Students perceived the writing unit improved the quality of their writing.

Analysis of the interviews with the traditional writing group suggested the writing unit affected the quality of students’ writing. For example, Betty said, “I learned how to make multiple paragraphs like we do for reports by learning how to organize my

writing.” She also said, “I added more detail, like taking it one paragraph at a time and adding on each time.” Here Betty was making a comparison of opinion writing to that of writing reports. Jade replied, “It helped me make it better, because I had more opinion in it.” She also added, “Brainstorming helped me organize my writing and helped me know what I was going to write about.” It appeared Jade realized that persuasive writing allows her to present her own opinion on the topic. Nancy responded, “Had we not gotten instruction on how to write it, I would have had a completely different story.” Nancy’s responses suggested she also realized the writing instruction on opinion writing benefited her understanding of the task at hand. Otherwise, she would have written something completely different than what was expected. The interview data indicated the opinion writing instruction contributed to their knowledge and skills of opinion writing.

Students perceived that blogging could have had advantages over writing with paper and pencil. According to analysis of the interviews with the traditional writing group, responses suggested that students perceived that given the opportunity to be in the blogging group, blogging could have had advantages over paper and pencil. For example, Betty said, “Being able to correct your spelling errors faster.” Betty was referring to the advantage that typing on a computer could have provided help in correcting her spelling errors faster and easier by using spell check rather than erasing and looking up how to spell words from a dictionary. Jade replied, “Memorizing the keyboard.” Jade meant by memorizing the keyboard, she could type faster than she could write. Nancy responded, “Typing!” Nancy felt the only advantage to blogging was typing and nothing else. These comments suggested the participants would rather

use a computer to conduct their writing whether it be a blog or not, and that typing and mechanical issues are a central concern for them in regards to writing.

Analysis of the interviews also suggested audience awareness would have had an impact on the quality of writing had they been in the blogging group. One of the interview questions asked had they been in the blogging group, how would they feel about having a larger audience on a blog. Betty said, “It would make me very nervous and I probably would have written more to make it look better.” Nancy said, “Kinda nervous because I would not want to mess up.” This implies that Nancy and Betty felt the peer pressure would encourage them to produce good writing in front of their peers.

Summary of Results for Question One

For question one, analysis of quantitative data did not reveal statistically significant differences in the growth in the quality of persuasive writing between the two groups. This may indicate that conducting writing in a blog or using paper and pencil are both viable methods of allowing students to improve their persuasive writing skills, however, neither condition produced better results than the other.

Yet, analysis of interview data revealed participants in the blog writing group felt that blogging produced positive outcomes. It enhanced the quality of writing (i.e. wrote better, added more details, helped writing stay organized, and made writing more interesting), increased the quantity (i.e. spent more time on writing, wrote more, and typed faster), and improved writing mechanical skills (i.e. improved typing skills, and improved spelling).

The interview data also suggested participants in the traditional writing group felt the instruction they received on persuasive writing helped improve the quality of

their writing (i.e. added more details, helped with organization, helped to brainstorm, learned to write multiple paragraphs, and made writing longer). They also thought blogging could have had certain advantages over traditional paper and pencil writing. More specifically, audience awareness could have been a major advantage because participants acknowledged that blogging helped with spelling as they did not want to make mistakes when other people were reading their writing. Blogging also eliminated concerns about handwriting and offered typing as an advantage. However, these advantages are mostly related to writing mechanics.

Findings for Research Question Two

The second research question asks, “Is there a difference in growth in attitude toward writing between fourth grade students who practice writing through blogs versus students who practice writing through traditional method (paper and pencil)? Why or why not?”

Results from the test for equality on pre-test attitude scores between the two groups.

Prior to comparing the attitude toward persuasive writing between the traditional writing group and blog writing group, it is necessary to test the equality between the two groups on the attitude toward writing. In order to test the assumption, an independent-samples *t*-test was conducted to investigate if the two groups’ attitudes were statistically similar prior to writing instruction. This was done using the Writing Attitude Survey. It consisted of 28-likert style questions. The researcher then followed the scoring directions and scored the surveys. Scaled scores were used. Table 13 presents the means and standard deviations of the two groups.

Table 13

Means and Standard Deviations of Writing Attitude Scores

Group	Blog Writing Group			Traditional Writing Group		
	Pre-test		Post-test	Pre-test		Post-test
	N	M(<i>SD</i>)	M(<i>SD</i>)	N	M(<i>SD</i>)	M(<i>SD</i>)
Attitude Toward Writing Survey	17	2.63 (.39)	2.78 (.59)	17	2.74 (.29)	2.47 (.51)

For the pre-test writing attitude scores there was no significant difference between the traditional writing group ($M = 2.74$, $SD = .29$) and blog writing group ($M = 2.63$, $SD = .39$), $t(32) = .93$, $p > .05$. Therefore, the two groups' writing attitudes were comparable before the writing instruction and writing practices.

Quantitative Analysis Results

Participants were given a pre writing attitude survey to determine how they felt about writing prior to the writing instruction. They were then given the same survey after the writing instruction to determine if there was any growth made in their writing attitude.

Descriptive statistics suggested that attitude for the blog writing group improved; conversely, attitude for the traditional writing group declined over the course of the study.

The plot profile (see Figure 5) also revealed the blog writing group's attitude improved, but the traditional writing groups' reduced.

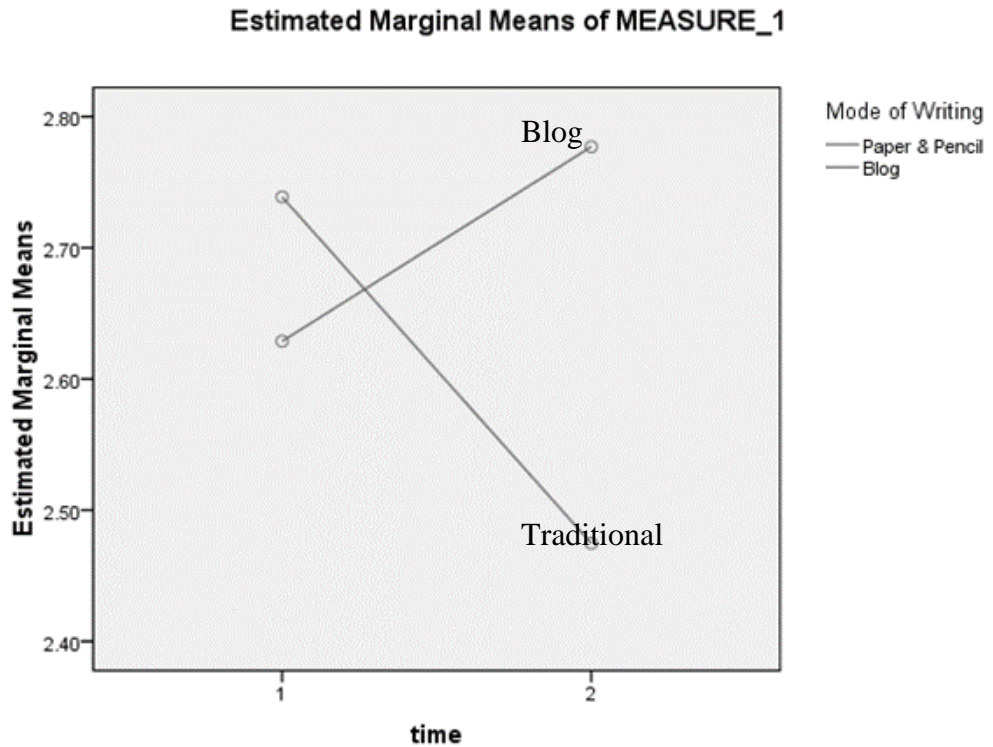


Figure 5 Writing Attitude Change of the Traditional and Blog Writing Group

Repeated-measure ANOVA for the writing attitude score. The repeated-measure ANOVA result showed there was significant interaction effect between student group and time point for students' attitude toward writing, $V = .248$, $F(1, 32) = 10.540$, $p = .003$, $\eta^2 = .248$, and the power of the test was .915, which is considered preferable (Cohen, 1992). This result suggested the two groups changed differently on their attitude toward writing. The blogging group made more positive dispositions in their attitude toward writing than their comparison group did.

Qualitative Analysis Results

After a thorough review of the transcribed interview data, through the process of constant comparative analysis method, one theme emerged from the blog writing group

and one from the traditional writing group. Themes that emerged apply to all three of the participants interviewed in their respective (traditional versus blog) groups. Tables 14 and 15 shows how each theme was identified. Each theme and data supporting each theme are then presented.

Table 144

Identified Themes from Blog Writing Group

Research Question	Examples of Concepts Identified in Transcripts	Themes Identified
Is there a difference in attitude toward writing between fourth grade students who practice writing through blogs versus students who practice writing through traditional method (paper and pencil)? Why or why not?	Really liked it Fun Enjoyed it Exciting Made writing more interesting Liked keyboarding	Students enjoyed writing blogs.

Table 155

Identified Themes from Traditional Writing Group

Research Question	Examples of Concepts Identified in Transcripts	Themes Identified
Is there a difference in attitudes toward writing between fourth grade students who practice writing through blogs versus students who practice writing through traditional method (paper and pencil)? Why or why not?	Sorta Fun (if provided with the opportunity to blog) Had interest in blogging Didn't like this type of writing (traditional writing method) Made hand hurt (traditional writing method) Hope to get in the blogging group	Students perceived they would prefer writing in blogs over writing with paper and pencil.

Themes Related to Blog Writing Group

Students enjoyed writing blogs. Analysis of the interviews with the blog writing group suggested students enjoyed using the blogging platform to produce their writing. For example, Dan said, “I felt really good, I enjoyed it.” Patricia replied, “I feel good because it was fun.” Donnie responded, “I like it actually, I really like it.” These comments suggested students responded positively to blog writing on the computer.

The researcher noted that when walking around the computer lab throughout the writing process and making observations, students seemed actively engaged and enjoying what they were doing. The researcher also made note that the blogging group participants in particular seemed to be laughing and conversing with peers across the room in response to blog posts from peers while conducting their blogging. This is an example of a community of writers in action. Also, with increased audience awareness, the writers realized they are writing not just for peers, but for authentic purposes and real people (parents and others).

Themes Related to Traditional Writing Group

Students perceived they would prefer writing in blogs over writing with paper and pencil. Analysis of the interviews with the traditional writing group suggested they would have preferred to be in the blogging group. Jade said, “Hope you get in the blogging group.” Nancy said, “In the blogging group, they can type faster, you will get used to it.” Betty said, “Hope you get in the blogging group because you can type faster and use spell check.”

Although these students were not in the blogging group, they seem to have a positive view of blog writing and expressed interest in this mode of writing. The researcher noted when walking through the classroom throughout the writing process for observation purposes, students seemed actively engaged in what they were doing. However, the traditional writing group seemed to just be going through the motions of the writing process that the teacher required of them and included some laughter. There was a lot of conversation over peer writing when doing peer revising and editing and less social interaction during other writing times. It appeared to the researcher the traditional group was more focused on their writing tasks individually rather than a community of writers.

Summary of Results for Question Two

For question two, the blogging group made more gains in their attitude toward writing when compared to the traditional writing group and the difference in the gain between the two groups is statistically significant. Had they been given the opportunity, the traditional writing group stated they would have preferred to be in the blog writing group (i.e., sorta fun-[blogging], had interest in blogging, did not like this type of writing-[traditional], made hand hurt, and hoped to get in the blogging group). On the other hand, the participants in the blog writing group expressed they enjoyed writing blogs (i.e., really liked it, fun, enjoyed it, exciting, made writing more interesting, and liked keyboarding), and the enjoyment seems to have transferred to the writing attitude survey as they scored higher in motivation for writing in blogs than the traditional writing group.

Summary of Results

The information presented in this chapter focused on the quantitative findings and the themes that emerged from the qualitative data analysis.

The first question examined the growth in the quality of persuasive writing between a blog writing group and a traditional writing group. Both groups started at a similar level in their persuasive writing before the study started. Over the duration of the study, descriptive data suggest that while the blog writing group made more growth, none of the OWR traits reached statistical significance. This could be due to this study's small sample size.

Qualitative findings suggested for the students in the blogging group, blogging enhanced the quality of their writing, increased the quantity of their writing, and improved their writing mechanical skills. For the students in the traditional group, students felt that the writing unit improved the quality of their writing. They also felt blogging could have had advantages over writing with paper and pencil.

The second question examined students' attitudes toward persuasive writing in a blog versus writing using traditional methods. Quantitative results on students' attitudes toward persuasive writing revealed the blog writing group had greater gains in their attitudes toward writing than the traditional writing group did. The blog writing group's attitudes improved and the traditional writing group's attitudes declined over the course of the project.

In addition, qualitative findings also suggested for the blog writing group, students enjoyed writing in blogs. For the traditional writing group, students preferred writing in blogs over paper and pencil.

Chapter 5 includes discussion and interpretation of findings as well as interesting points that came from the results and implications of findings. Chapter 5 concludes with limitations of the study and recommendations for further research.

CHAPTER FIVE: DISCUSSION

This chapter has three sections. The first section presents a summary of findings, while the second section focuses on the discussion of the findings. The last section includes implications for practice, limitations of this study, and recommendations for future research as well as a final conclusion.

According to the National Center for Education Statistics (NCES, 2012) only 2% of high school students could support an argument with reasons and evidence. According to business owners and college faculty (College Board, 2004), it costs \$3.1 billion a year for colleges and universities to provide remedial writing classes and training programs for their students as many of today's students have limited written communication skills.

On the other hand, adopting computer-based writing assessments is a trend around the nation. The National Assessment Governing Board (2011), cited in a report by the National Assessment of Educational Progress, suggests that students in grades 4, 8, and 12 will soon be taking computer-based writing assessments. More than 50% of states have already implemented computer-based writing assessments (United States Department of Education, 2012).

In much of the literature, technology is promoted as being a motivator for student learning (Ducate & Lomicka, 2008; Ellison & Wu, 2008; Felix, 2008; Yang, 2009). A growing number of schools are implementing and pushing for the integration of technology in reading and writing curriculum to improve student motivation to write.

Much needs to be done to improve the teaching and learning of writing. Learning to write through blogging and other technologies could be helpful because

they provide opportunities for students to practice computer skills and develop technology literacy so they can be successful in the future pursuit of higher education and career choices. It can provide the home/school connection that helps students transition from a traditional learning style to more of a digital learning style (Baird and Fisher, 2005).

The purpose of this study was to contribute to the existing body of research and inform others on using blogging as a tool to support fourth grade students' persuasive writing development. More specifically, this study was conducted to inform others if the use of blogging as a tool could potentially make a difference in the growth of persuasive writing as measured by Opinion Writing Rubric (Calkins, 2013) and 6 + 1 Trait Writing Rubric (Education Northwest, 2010) between the blog writing group and the traditional writing group. In addition, the researcher sought to determine if the use of blogging to conduct writing could make a difference in the growth of attitude toward writing between the two groups.

The research questions are:

1. Is there a difference in the quality of persuasive writing between fourth grade students who practice writing through blogs versus students who practice writing through traditional method (paper and pencil)? Why or why not?
2. Is there a difference in attitudes toward writing between fourth grade students who practice writing through blogs versus students who practice writing through traditional method (paper and pencil)? Why or why not?

This study used a sequential explanatory mixed methods approach. The collection and analysis of qualitative data followed quantitative data analysis to shed

light on the quantitative results as well as address the “why” or “why not” part of the questions for this study. The qualitative data helped explain the quantitative findings (Creswell & Plano-Clark, 2007). By using mixed methods, it also helped provide a more comprehensive understanding of the results for each research question.

Summary of Major Findings

The first question examined the growth in the quality of persuasive writing between a blog writing group and a traditional writing group. The quality of students’ persuasive writing was measured using two rubrics: the Opinion Writing Rubric (OWR) by Lucy Calkins (2013) and the 6 + 1 Trait Writer’s Rubric by Education Northwest (2010).

In regards to the OWR, descriptive data indicated the blog writing group made more growth in all areas of writing (overall, lead, transitions, ending, organization, elaboration, craft, spelling, and punctuation) as measured by the rubric. However, the results from the statistical analyses of the quantitative data suggested that none of the differences reached the level of statistical significance.

In regards to the 6 + 1 Trait Writer’s Rubric, even though the quantitative data did not yield statistically significant results in growth in the variables related to the quality of writing between the two groups, descriptive data also suggested the blog writing group made more growth in five of the seven traits (ideas, voice, word choice, sentence fluency, and presentation) when measured with the rubric.

Yet, analyses of qualitative data yielded positive findings, suggesting for the students in the blog writing group, blogging enhanced the quality of their writing, increased the quantity of their writing, and improved their writing mechanical skills.

For the students in the traditional writing group, students felt the writing unit improved the quality of their writing. They also felt blogging could have had advantages over writing with paper and pencil, especially in the areas of spelling, handwriting, typing, and audience awareness.

The second question examined students' attitude toward writing using a blog versus writing using the traditional method. Quantitative results on students' attitude toward persuasive writing revealed the blog writing group had greater gains on attitude toward writing than the traditional writing group. The blog writing group's attitude improved and the traditional writing group's attitude declined over the course of the project.

In addition, findings from the analysis of qualitative data also suggested for the blog writing group, students enjoyed writing in blogs. For the traditional writing group, students would have preferred writing in blogs over using paper and pencil.

Discussion of Major Findings

Blogging as a Tool to Support Student Writing

Blogging and persuasive writing. Palombo (2011) suggests students' use of a blog influenced their writing process and product as well as supported their awareness of audience and idea development when composing persuasive writing. This study offers evidence to support her study.

Even though the difference in gain scores was not statistically significant, according to descriptive data, the blog writing group made greater gains in all areas measured by the Opinion Writing Rubric and the majority of writing traits as measured by the 6 + 1 Trait Writing Rubric. Furthermore, from the qualitative data, this study

found blogging enhanced the quality of student writing, increased the quantity of student writing, and improved writing mechanical skills. The traditional writing group also considered that blogging could have had advantages over writing with paper and pencil. The qualitative results of this study are consistent with the results from Palombo (2011).

Blogging and traits. Anderson (2010) examined the traits of writing and found blogging caused a significant improvement in writing for the treatment group (blogging) in the areas of content and voice. Other traits had no statistically significant difference.

According to the descriptive data in this study, the blog writing group made more growth in all traits, except organization and presentation. When examining these results in comparison to those in Anderson's (2010) study, this study confirms the effect of blogging on improvement in content and voice. In addition, according to the descriptive data, the blogging group also made better progress in ideas, sentence fluency, word choice, and presentation, indicating that blogging could have caused improvements in areas beyond content and voice.

Blogging and attitude. A person's attitude has to do with his/her feelings toward a task. A motivated student is more likely to enjoy the task and do well in the task. On the other hand, an unmotivated student often gives little effort to the task. Ellison and Wu (2008) concluded participants were more engaged when writing on line. Felix (2008) noticed higher levels of motivation in participants who blogged.

In the current study, results indicated the blog writing group made more growth in their attitude toward writing than the traditional writing group. The plot profile also

illustrated the blog writing group improved, while the traditional writing group declined in attitude toward writing. Qualitative data suggested the blog writing group enjoyed writing in blogs and the traditional writing group wished they could have written in blogs.

Results also revealed blogging provided more enjoyment and engagement. In this study, students enjoyed social interactions with peers, which supports the results in the studies by Felix (2008) and Ellison and Wu (2008). The use of digital tools provided a powerful social and cultural influence that motivated them to produce more text (Chen, Liu, Shih, Wu, & Yuan, 2011). The results of this study offer evidence to support the claim that blogging produced higher gains in attitude. More specifically, the blog enhanced students' intrinsic motivation because blogging can be a vehicle for sharing ideas, gaining additional knowledge or a better understanding, and developing social practices.

Blogging as a Valuable New Literacy Practice

The results of this study showed blogging improved the quantity and quality of students' writing. Blogging created positive learning outcomes for the students in the blog writing group.

Blogging is a form of new literacy. Blogging as a new literacy practice offers several advantages. Blogging supports students' development of digital literacy. Burnett (2009) suggests digital literacies are practices that surround the production of digital text. Because blogging offers the students opportunities to produce digital text, it contributes to the development of digital literacy practices that students in the 21st century must acquire.

Some researchers suggest blogging is a vehicle for social interactions that resonate more with students in the digital age (Chen et al., 2011; Felix, 2008; & Richardson, 2006). A blog is social in nature and therefore is also a form of social media. The two (social and digital media) converge to offer potential for improving student writing. In a blog, Baird and Fisher (2005) argue students reflect, post, read, and receive feedback, which allows for the transfer of knowledge. Through these interactions, students learn to take peer feedback into consideration and based on peer feedback, improve their writing. Common Core anchor standard W.CCR.5 also incorporates using peer feedback to strengthen writing (CCSS, 2010).

This result supports findings in studies by Churchill (2009) and Felix, (2008), suggesting blogging increases and improves student writing partly because peer feedback on the blog allowed students to use social media practices. The literature review indicates that blogging is a new literacy practice that affords opportunities for students to produce text in a digital format (Amicucci, 2013; Baird & Fisher, 2005; Berg, 2011; Burnett, 2009; Leu, 2000; 2002; Leu et al., 2013) and this study produces further evidence to support this view.

Impact of Social Interaction on Student Writing

The results of this study support the Sociocultural Learning theory proposed by Vygotsky (1978) that learning happens when learners engage in complex tasks in a supportive environment through social interactions. Gee (2000) further expands on this theory by addressing learning in the online environment. He proposes social and cultural views of online users influence on other online users, and therefore, guides the learning of the online group or community.

Evidence from this study suggests the blog provided more opportunities for social interactions and peer feedback because it involved a wider audience and stimulated greater audience awareness. When the students offered peer feedback and suggestions to each other in an effort to help each other improve writing, they became members of an active learning community where learning was supported through social interaction. The value of blogging is that it provides a community in which writers can share and work together in an affinity space.

Blogging allowed students more opportunities to engage more deeply with their own and their peers' texts and thus help each other grow in their knowledge and skills of writing. For example, a post from one blogger had eight peer feedback posts (responses), while a paper from a traditional writing group member only had feedback (responses) from two peers for their paper.

Peer feedback can also influence motivation toward writing. The blog writing group had many opportunities for social interaction, and they seemed to enjoy the writing task more than the traditional writing group did due to the fact that they knew someone was reading their writing and will offer feedback for improving their writing. The results illustrated social interaction in student learning (Gee, 2000; Vygotsky, 1978). The results also supported findings in the existing literature suggesting blogging increases and improves the level of students' writing (Churchill, 2009; Felix, 2008).

Connection Between In School and Out of School Literacy

The Third Space theory (Gutierrez et al., 1999) emerged out of the Sociocultural Learning theory (Vygotsky, 1978). Third Space is known as the space where the cultures meet (Marsh, 2007). Blogging was intended to provide a connection

between students' outside of school interests (home-one space) and academic writing in school (second space) for a shared purpose in the computer lab (third space). Ducate and Lomicka (2008) found that when communicating through blogs, students were able to develop intercultural competence, negotiate a third space, experiment with language, and add to their learning. Gee (2011) refers to passionate affinity-based learning space as the new out-of-school learning system that competes with today's school systems. In this case the school computer lab is the real and virtual space where some students share their passion of blogging and writing. This social practice leads to learning of a shared interest.

An interesting finding of this study suggests that is a disconnect between what students think of the function of technology and its use for learning. Students were encouraged to work on their blogs outside of class time, such as from home, but none did. During the interviews, when students were asked about how they communicate with their friends, they mentioned email, texting, and so on. But when asked if they considered those activities as writing, they did not think so. They did not perceive blogging as an act of learning. Many of today's students are so caught up in texting, FaceTime, Skyping, IM'ing, and gaming, that they only think of those activities as part of their regular daily acts of living. They fail to see how technology can be used as a tool for academic learning. There is a need to help students bridge the gap in their perceptions of after school activities and academic learning and harness their digital literacy to support their school literacy.

Implications for Practice

This study offers some important implications for teaching writing. First, writing teachers could consider using blogging in their writing instruction. This study also suggests that blogging addresses some important aspects of the Common Core State Standards, such as writing an opinion piece that supports a point of view with valid reasons, awareness of audience, peer feedback, and use of the Internet to produce and publish writing.

New literacy practices emerge constantly and teachers need to update their own new literacy skills in order to know which technology could potentially enhance teaching and learning. Blogging at this time is still a rather new technology, however, it could quickly become obsolete as newer ICTs becomes available for use in education. Therefore, teachers and other stakeholders should constantly be looking out for newer ways to use new literacy tools to support teaching and student learning.

Second, in today's society, technology is used in almost everything we do. Many of today's students now have more technology in their lives outside of school than ever before. Therefore, it is important that we help students see how their daily practices outside of school can be connected to in-school literacy practices.

While a growing number of schools and classrooms are beginning to incorporate technology in teaching and learning, the researcher does not feel it is being implemented at the pace our children are becoming acclimated to various types of technology. It is not enough to have one computer lab with 25 computers for 300 students. Today's students need more exposure to technology and learning with and through technology in school.

Limitations of the Study

The current study had several limitations. First, the research was conducted in the same grade level the researcher had taught; therefore, only two classes were able to be used for the current study. This caused the sample size to be too small, which made it difficult to achieve statistically significant results and draw conclusions.

Second, the researcher's role as a teacher in the same grade level at the same school in which the study was conducted required her to have a high level of self-awareness in order to guard against bias and maintain trustworthiness. Even though the researcher tried very hard to maintain objectivity, it is important to note that there still could be a potential for subjectivity.

Third, since many of the participants seemed rather shy to contribute much to the interview questions during individual interviews, the researcher felt it could have been helpful to hold a focus group interview to allow participants to clarify some of their comments and thinking. A focus group interview would have allowed those less articulate interviewees to provide well thought-out responses and feel more open to do so when they hear others responding in that manner.

Another limitation was found after the conclusion of the study. During the interviews, it was discovered that the blog had a formatting issue. For example, it did not allow students to use indentation as a feature when starting a new paragraph. This was mentioned by the participants during several of the interviews. The participants mentioned that they needed to learn paragraphing, however, when questioned about that and looking at one of the blogs, the researcher understood what they meant. Future research using the same blog platform or another blog platform would need to include

an orientation for students on how basic formatting is different when writing in a blog. More training on how to use blogging successfully and effectively is needed.

In addition, choice of topics was a limitation. While students did contribute choices of topics, the topics chosen did not pertain to everyone's preference and therefore, may have limited the quality and quantity of some students' writing. If replicated, participants should each get to choose their own topics each time they write, which is a critical concept of motivation and could play a role in their attitude toward writing.

Finally, the research results could possibly be a result of the Hawthorne Effect or Novelty Effect. The study's results suggest the blog writing group made more progress. This could be contributed to the participants' awareness of being observed or the unique treatment they received (blogging). Should this study be replicated in the future, the researcher should consider using a counter-balanced design (where each group receives both treatments) to avoid influencing the results.

Recommendations for Future Research

The researcher would like to offer the following recommendations for future research. First, more studies should look at using additional technology tools to support writing. While this study did not find results that are statistically significant in terms of growth of writing using a blog, descriptive data showed the blog writing group made more progress in their writing and motivation. Other new technology tools may produce a higher growth in writing and therefore, is worthy of being investigated.

Second, the small sample size made it difficult to discover statistical significance even if such results exist. Because of the logistics, the number of

participants was limited in this study. Future research should consider obtaining a much larger sample size. The small sample size made it convenient for the researcher to maintain full time work and conduct the research at the same time. It also made the data more manageable. However, a larger sample size could produce different results.

Third, should this study be replicated in the future, the teacher would need to incorporate more explicit instruction on blogging and the blogging platform. For example, participants mentioned the blog did not let them change the font, color of font, or indent. They seemed disappointed in this and therefore, future studies need to include more explicit writing instruction in relation to a blogging platform that is adopted or consider another platform that affords both security and better functionality.

Fourth, future studies could consider adding a focus group interview in addition to individual interviews. Focus group interviews could have produced richer data. Since many of the participants seemed rather shy to contribute much to the interview questions, the researcher recommends that in addition to individual interviews, a focus group interview should be considered. A focus group interview would have allowed the participants to contribute more responses to interview questions.

Finally, the researcher did not have an observation protocol because observations were only used for validity purposes by conducting walk-throughs and making sure the instruction was the same for both groups. However, comments noted from the participants as the researcher walked through the writing classrooms added additional insights to the research questions for this study. For example, had the researcher not seen the way the students were engaged and heard the excitement over what they read in their blogs, she may not have realized how much blogging motivated

the students. More qualitative observation data could help illuminate and provide a better picture of the effects of blogging and technology in general. Future studies need to add an observation protocol to their methodology.

Conclusion

In conclusion, the research questions the researcher set out to explore were answered. The evidence from this study shows the potential of how blogging supports students' writing and improves students' attitude toward writing. Writing teachers can consider integrating blogging into their writing instruction. Teachers should also discuss with students about their use of technology outside of school and brainstorm ways for students to use those technologies to support student learning and students writing.

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APPENDICES

Appendix A: Institutional Review Board Approval



Institutional Review Board for the Protection of Human Subjects **Approval of Initial Submission – Expedited Review – AP01**

Date: July 17, 2013

IRB#: 3363

Principal Investigator: Karen Gail Martin

Approval Date: 07/17/2013

Expiration Date: 06/30/2014

Study Title: SUPPORTING 4TH GRADE STUDENTS DEVELOPMENT IN PERSUASIVE WRITING THROUGH THE USE OF A CLASS BLOG

Expedited Category: 6 & 7

Collection/Use of PHI: No

On behalf of the Institutional Review Board (IRB), I have reviewed and granted expedited approval of the above-referenced research study. To view the documents approved for this submission, open this study from the *My Studies* option, go to *Submission History*, go to *Completed Submissions* tab and then click the *Details* icon.

As principal investigator of this research study, you are responsible to:

- Conduct the research study in a manner consistent with the requirements of the IRB and federal regulations 45 CFR 46.
- Obtain informed consent and research privacy authorization using the currently approved, stamped forms and retain all original, signed forms, if applicable.
- Request approval from the IRB prior to implementing any/all modifications.
- Promptly report to the IRB any harm experienced by a participant that is both unanticipated and related per IRB policy.
- Maintain accurate and complete study records for evaluation by the HRPP Quality Improvement Program and, if applicable, inspection by regulatory agencies and/or the study sponsor.
- Promptly submit continuing review documents to the IRB upon notification approximately 60 days prior to the expiration date indicated above.
- Submit a final closure report at the completion of the project.

Appendix A: Continued

If you have questions about this notification or using iRIS, contact the IRB @ 405-325-8110 or irb@ou.edu.

Cordially,

A handwritten signature in blue ink, appearing to read "Fred Beard", is written over a horizontal line.

Fred Beard, Ph.D.

Vice Chair, Institutional Review Board

Appendix A: Continued



Institutional Review Board for the Protection of Human Subjects **Approval of Continuing Review – Expedited Review – AP0**

Date: June 25, 2014 **IRB#:** 3363

Principal Investigator: Karen Gail Martin **Approval Date:** 06/25/2014
Expiration Date: 05/31/2015

Expedited Category: 6 & 7

Study Title: SUPPORTING 4TH GRADE STUDENTS DEVELOPMENT IN
PERSUASIVE WRITING THROUGH THE USE OF A CLASS BLOG

Based on the information submitted, your study is currently: Active, closed to enrollment. On behalf the Institutional Review Board (IRB), I have reviewed and approved your continuing review application. To view the documents approved for this submission, open this study from the *My Studies* option, go to *Submission History*, go to *Completed Submissions* tab and then click the *Details* icon.

As principal investigator of this research study, you are responsible to:

- Conduct the research study in a manner consistent with the requirements of the IRB and federal regulations 45 CFR 46.
- Obtain informed consent and research privacy authorization using the currently approved, stamped forms and retain all original, signed forms, if applicable.
- Request approval from the IRB prior to implementing any/all modifications.
- Promptly report to the IRB any harm experienced by a participant that is both unanticipated and related per IRB policy.
- Maintain accurate and complete study records for evaluation by the HRPP Quality Improvement Program and, if applicable, inspection by regulatory agencies and/or the study sponsor.
- Promptly submit continuing review documents to the IRB upon notification approximately 60 days prior to the expiration date indicated above.
- Submit a final closure report at the completion of the project.

You will receive notification approximately 60 days prior to the expiration date noted above. You are responsible for submitting continuing review documents in a timely fashion in order to maintain continued IRB approval.

Appendix A: Continued

If you have questions about this notification or using iRIS, contact the IRB @ 405-325-8110 or irb@ou.edu.

Cordially,

A handwritten signature in black ink that reads "Aimee Franklin". The signature is written in a cursive style with a prominent flourish at the end.

Aimee Franklin, Ph.D.

Chair, Institutional Review Board

Appendix A: Continued



Institutional Review Board for the Protection of Human Subjects **Approval of Continuing Review – Expedited Review – AP0**

Date: June 04, 2015

IRB#: 3363

Principal

Approval Date: 06/04/2015

Investigator: Karen Gail Martin

Expiration Date: 05/31/2016

Expedited Category: 6 & 7

Study Title: SUPPORTING 4TH GRADE STUDENTS DEVELOPMENT IN
PERSUASIVE WRITING THROUGH THE USE OF A CLASS BLOG

Based on the information submitted, your study is currently: Active, closed to enrollment. On behalf the Institutional Review Board (IRB), I have reviewed and approved your continuing review application. To view the documents approved for this submission, open this study from the *My Studies* option, go to *Submission History*, go to *Completed Submissions* tab and then click the *Details* icon.

As principal investigator of this research study, you are responsible to:

- Conduct the research study in a manner consistent with the requirements of the IRB and federal regulations 45 CFR 46.
- Obtain informed consent and research privacy authorization using the currently approved, stamped forms and retain all original, signed forms, if applicable.
- Request approval from the IRB prior to implementing any/all modifications.
- Promptly report to the IRB any harm experienced by a participant that is both unanticipated and related per IRB policy.
- Maintain accurate and complete study records for evaluation by the HRPP Quality Improvement Program and, if applicable, inspection by regulatory agencies and/or the study sponsor.
- Promptly submit continuing review documents to the IRB upon notification approximately 60 days prior to the expiration date indicated above.
- Submit a final closure report at the completion of the project.

You will receive notification approximately 60 days prior to the expiration date noted above. You are responsible for submitting continuing review documents in a timely fashion in order to maintain continued IRB approval.

Appendix A: Continued

If you have questions about this notification or using iRIS, contact the IRB @ 405-325-8110 or irb@ou.edu.

Cordially,

A handwritten signature in blue ink that reads "Fred Beard". The signature is written in a cursive style and is positioned above a thin horizontal line.

Fred Beard, Ph.D.

Vice Chair, Institutional Review Board

Appendix A: Continued

701-A-3

University of Oklahoma Institutional Review Board Assent to Participate in a Research Study (For children 7-12 years old)

Project Title: Supporting 4th Grade Student's Development of Persuasive Writing Through the use of a Class Blog
Principal Investigator: Karen Martin
Department: Instructional Leadership & Academic Curriculum

Why are we meeting with you?

We are conducting a study to learn about the effects of using a class blog on 4th grader students' development of persuasive writing. Since you are a 4th grader, we are asking you to help because we want to learn from kids like you.

What will happen to you if you are in this study?

If you agree to be in this study, your writing samples will be collected and become a part of the data in this study. You will answer some survey questions. You may also be invited to participate in an interview with the researcher and answer some interview questions. These questions will ask about how you see yourself as a writer and about your writing experience during the study. If you are invited to participate in an interview, the interview will be audio taped.

How long will you be in the study?

You will be in the study for about 10 weeks in the school classroom and/or computer lab. No matter if you are in the study or not, you will receive writing instruction from your teacher and expected to complete all the work required to your teacher.

What bad things might happen to you if you are in the study?

No bad things will happen to you if you decide to participate.

What good things might happen to you if you are in the study?

If you are in the study, you will help the researcher learn about the effects of using a class blog to help 4th graders become better writers of persuasive writing. The results will help us determine if using a blog.

Do you have to be in this study?

No, you don't. No one will be mad at you if you don't want to do this. If you don't want to be in this study, just tell us. Or if you do want to be in the study, tell us as well. And, remember, you can say yes now and change your mind later. You can also decide to quit in the middle of the study. It's up to you. No penalty will be involved.

Appendix A: Continued

Your Mom or Dad will also have to give permission for you to be in this study.

Do you have any questions?

You can ask questions any time. You can ask now. You can ask later. You can talk to me or you can talk to someone else.

If you sign this paper, it means that you have read this form and want to be in the study. If you don't want to be in the study, don't sign this paper. Being in the study is up to you, and no one will be upset if you don't sign this paper or if you change your mind later.

The person who talks to you will give you a copy of this form to keep.

Signature of Child

Date

SIGNATURE OF PERSON CONDUCTING ASSENT DISCUSSION

I have explained the study to _____ (*print name of child here*) in language he/she can understand, and the child has agreed to be in the study.

Signature of Person Conducting Assent Discussion

Date

Name of Person Conducting Assent Discussion (*print*)

Appendix A: Continued

701-A-1

University of Oklahoma Institutional Review Board Informed Consent to Participate in a Research Study

Project Title: Supporting 4th Grade Student's Development of Persuasive Writing Through the use of a Class Blog
Principal Investigator: Karen Martin
Department: Instructional Leadership & Academic Curriculum

Your child is asked to volunteer for this research study. This study is being conducted at Wolf Creek Elementary. Your child is selected as a possible participant because he/she is a child in 4th grade at the selected school.

Please read this form and ask any questions that you may have before agreeing to allow your child to take part in this study.

Purpose of the Research Study

The purpose of this study is to thoroughly examine 4th grade students' development of persuasive writing through the use of a closely monitored, school approved class blog. The results of the study can help the researcher gain an understanding of how blogging affects your child's writing growth and attitude toward writing. The results will also help teachers improve writing instruction.

Number of Participants

About 48 students in 4th grade will take part in this study. There are two groups in this research study: a group that blogs and a group that uses the traditional method of writing (i.e. paper and pencil). Your child could be in either group. The writing instruction is the same except that one group will blog about the writing assignment and the other group will write using paper and pencil method.

Procedures

If you agree for your child to be in this study, your child's writing samples will be collected and become a part of the data in this study. Your child will answer some survey questions. Your child may also be invited to participate in an interview with the researcher and answer some interview questions. These

Appendix A: Continued

questions will ask about how you see yourself as a writer and about your writing experience during the study.

Alternate Procedures

Should you choose to not let your child participate in the study, he/she will receive the same writing instruction as that provided to the other students so as to not make him/her feel excluded or have unnecessary attention drawn to them, except no data (writing samples, survey, or interview) will be collected from your child.

Length of Participation

This study (learning unit on persuasive writing) takes about 10 weeks.

Risks of being in the study are

There are no foreseeable risks involved in this study. If you decide to not let your child participate, he/she will not be penalized. He/she will still be given the same writing instruction as the other students in the class.

Benefits of being in the study are

No direct benefits will be provided for participating in this study. However, the results from this study can help 4th grade teachers improve the way persuasive writing is taught at the school.

Compensation

You and your child will not be reimbursed for your time and participation in this study.

Confidentiality

In published reports, there will be no information included that will make it possible to identify you or your child without your permission. Research records will be stored securely and only the approved researcher will have access to the records.

There are organizations that may inspect and/or copy your research records for quality assurance and data analysis. These organizations include the OU Institutional Review Board.

Appendix A: Continued

Voluntary Nature of the Study

Participation in this study is voluntary. If you withdraw or decline participation for your child, you and your child will not be penalized. If you decide to participate, your child may decline to answer any question and may choose to withdraw at any time.

Audio Recording of Study Activities

Your child may be invited to participate in an interview that asks questions about his/her attitude toward writing and his/her experiences during the study. To assist with accurate recording of your child's responses should your child be selected, interviews may be recorded on an audio recording device. You have the right to refuse to allow such recording without penalty. Please select one of the following options:

I consent to audio recording. ___ Yes ___ No

Contacts and Questions

If you have concerns or complaints about the research, the researcher conducting this study can be contacted at 918-259-4510 or kgmartin@baschools.org. The faculty sponsor, Dr. Jiening Ruan can be contacted at 405-325-4204 or jruan@ou.edu.

Contact the researcher(s) if you have questions, or if you have experienced a research-related injury.

If you have any questions about your rights as a research participant, concerns, or complaints about the research and wish to talk to someone other than individuals on the research team or if you cannot reach the research team, you may contact the University of Oklahoma – Norman Campus Institutional Review Board (OU-NC IRB) at 405-325-8110 or irb@ou.edu.

You will be given a copy of this information to keep for your records. If you are not given a copy of this consent form, please request one.

Statement of Consent

I have read the above information. I have asked questions and have received satisfactory answers. I consent to participate in the study.

Appendix A: Continued

Participant Signature	Print Name	Date
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Signature of Person Obtaining Consent

Date

Print Name of Person Obtaining Consent

Signature of Witness (if applicable)	Date
--------------------------------------	------

Appendix B: Writing Rubrics

6-Point 3-12 Writer's Rubric

6-POINT WRITER'S RUBRIC

		IDEAS					
		Not proficient			Proficient		
		1 Beginning	2 Emerging	3 Developing	4 Capable	5 Experienced	6 Exceptional
		No main idea, purpose, or central theme exists; reader must infer this based on sketchy or missing details	Main idea is still missing, though possible topic/theme is emerging	Main idea is present; may be broad or simplistic	Topic or theme is identified as main idea; development remains basic or general	Main idea is well-marked by detail but could benefit from additional information	Main idea is clear, supported, and enriched by relevant anecdotes and details
A	No topic emerges	Several topics emerge; any might become central theme or main idea	Topic becomes clear, though still too broad, lacking focus; reader must infer message	Topic is fairly broad, yet author's direction is clear	Topic is focused yet still needs additional narrowing	Topic is narrow, manageable, and focused	Topic is narrow, manageable, and focused
B	Support for topic is not evident	Support for topic is limited, unclear; length is not adequate for development	Support for topic is incidental or confusing, not focused	Support for topic is starting to work; still does not quite flesh out key issues	Support for topic is clear and relevant except for a moment or two	Support is strong and credible, and uses resources that are relevant and accurate	Support is strong and credible, and uses resources that are relevant and accurate
C	There are no details	Few details are present; piece simply restates topic and main idea or merely answers a question	Additional details are present but lack specificity; main idea or topic emerges but remains weak	Some details begin to define main idea or topic, yet are limited in number or clarity	Accurate, precise details support one main idea	Details are relevant, telling; quality details go beyond obvious and are not predictable	Details are relevant, telling; quality details go beyond obvious and are not predictable
D	Author is not writing from own knowledge/experience; ideas are not author's	Author generalizes about topic without personal knowledge/experience	Author "falls" based on others' experiences rather than "showing" by own experience	Author uses few examples to "show" own experience, yet still relies on generic experiences of others	Author presents new ways of thinking about topic based on personal knowledge/experience	Author writes from own knowledge/experience; ideas are fresh, original, and uniquely the author's	Author writes from own knowledge/experience; ideas are fresh, original, and uniquely the author's
E	No reader's questions have been answered	Reader has many questions due to lack of specifics; it is hard to "fill in the blanks"	Reader begins to recognize focus with specifics; though questions remain	Reader generally understands content and has only a few questions	Reader's questions are usually anticipated and answered by author	Reader's questions are all answered	Reader's questions are all answered
F	Author doesn't help reader make any connections	Author does not yet connect topic with reader in any way although attempts are made	Author provides glimmers into topic; casual connections are made by reader	Author stays on topic and begins to connect reader through self, text, world, or other resources	Author connects reader to top with a few anecdotes, text, or other resources	Author helps reader make many connections by sharing significant insights into life	Author helps reader make many connections by sharing significant insights into life
		Key question: Does the writer stay focused and share original and fresh information or perspective on the topic?					

Appendix B: Continued

6-Point 3-12 Writer's Rubric

		WORD CHOICE					
		Not proficient			Proficient		
		1 Beginning	2 Emerging	3 Developing	4 Capable	5 Experienced	6 Exceptional
		Vocabulary is limited; author searches for words to convey meaning; no mental imagery exists	Vocabulary is flawed, resulting in impaired meaning; wrong words are used; and reader can't picture message or content	Vocabulary is understandable yet lacks energy; some interpretation is needed to understand parts of piece	Vocabulary is functional yet still lacks energy; author's meaning is easy to understand in general	Vocabulary is more precise and appropriate; mental imagery emerges	Vocabulary is powerful and engaging, creating mental imagery; words convey intended message in precise, interesting, and natural way
A	Words are overly broad and/or so generic no message is evident	Words are so vague and mundane that message is limited and unclear	Words are adequate and correct in a general sense; message starts to emerge	Words work and begin to shape unique, individual piece; message is easy to identify	In most cases words are "just right" and clearly communicate message	Words are precise and accurate; author's message is easy to understand	
B	Vocabulary confuses reader and is contradictory; words create no mental imagery; no lingering memory	Vocabulary has no variety or spice, even simple words are used incorrectly; no mental images exist	Vocabulary is very basic; simple words take variety starts to "show" rather than "let"; mental images are still missing	Vocabulary includes familiar words and phrases that communicate, yet rarely capture reader's imagination; perhaps a moment or two of sparkle or imagery emerges	Vocabulary is strong; it's easy to "see" what author says because of figurative language—similes, metaphors, and poetic devices; mental imagery lingers	Vocabulary is striking, powerful, and engaging; it catches reader's eye and lingers in mind; recast of handful of phrases or mental images is easy and automatic	
C	Words are incorrectly used, making message secondary to word mistakes	Words are either so plain as to put reader to sleep or so over the top they make no sense	Original, natural word choices start to emerge so piece sounds authentic	Attempts at colorful word choice show willingness to stretch and grow; yet sometimes go too far	New words and phrases are usually correct	Word choice is natural yet original and never overdone; both words and phrases are unique and effective	
D	Misuse of parts of speech filters piece, confusing reader; no message emerges	Redundant parts of speech and/or jargon or clichés distract from message	Parts of speech reflect a lack of craftsmanship; passive verbs, overuse of nouns, and lack of modifiers and variety create fuzzy message	Accurate and occasionally refined parts of speech are functional and start to shape message	Correct and varied parts of speech are chosen carefully to communicate message; and clarity and enrich writing	Parts of speech are crafted to best convey message; lively verbs emerge, precise nouns/modifiers add depth, color, and specificity	
		Key question: Do the words and phrases create vivid pictures and linger in your mind?					

Appendix B: Continued

6-Point 3-12 Writer's Rubric

		SENTENCE FLUENCY					
		Not proficient			Proficient		
		1 Beginning	2 Emerging	3 Developing	4 Capable	5 Experienced	6 Exceptional
		Sentences are incorrectly structured; reader has to practice to give paper a fair interpretive reading; it's nearly impossible to read aloud	Sentences vary little; even easy sentence structures cause reader to stop and decide what is being said and how; it's challenging to read aloud	Sentences are technically correct but not varied, creating sing-song pattern or lulling reader to sleep; it sounds mechanical when read aloud	Sentences are varied and hum along, tending to be pleasant or businesslike though may still be more mechanical than musical or fluid; it's easy to read aloud	Some sentences are rhythmic and flowing; a variety of sentence types are structured comely; it flows well when read aloud	Sentences have flow, rhythm, and cadence; are well built with strong, varied structure that invites expressive oral reading
A		Sentence structure is choppy, incomplete, run-on, rambling, or awkward	Sentence structure works but has phrasing that sounds unnatural	Sentence structure is usually correct, yet sentences do not flow	Sentence structure is correct and begins to flow but is not artfully crafted or musical	Sentence structure flows well and moves reader fluidly through piece	Sentence structure is strong, underscoring and enhancing meaning while engaging and moving reader from beginning to end in fluid fashion
B		No sentence sense—type, beginning, connective, rhythm—is evident; determining where sentences begin and end is nearly impossible	There is little evidence of sentence sense; to make sentences flow correctly, most have to be totally reconstructed	Sentence sense starts to emerge; reader can read through problems and see where sentences begin and end; sentences vary little	Sentence sense is moderate; sentences are constructed correctly with some variety hung together, and are sound	Sentence sense is strong; correct construction and variety is used; few examples of dialogue or fragments are used	Sentence sense is strong and contributes to meaning; dialogue, if present, sounds natural; fragments, if used, add style; sentences are nicely balanced in type, beginnings, connectives, and rhythm
C		Incomplete sentences make it hard to judge quality of beginnings or identify type of sentence	Many sentences begin in same way and are simple (subject-verb-object) and monotonous	Simple and compound sentence types and varied beginnings help strengthen piece	Sentence beginnings vary yet include simple, compound, and perhaps even complex	Sentence beginnings are varied (simple, compound, complex, and compound-complex) create balance and variety	Varied sentence beginnings add interest and energy; four sentence types are balanced
D		Weak or no connectives create massive jumble of language; disconnected sentences leave piece chaotic	"Blah" connectives (and, so, but, then, and because) lead reader nowhere	Few simple connectives lead reader from sentence to sentence though piece remains weak	Connectives are original and hold piece together but are not always refined	Thoughtful and varied connectives move reader easily through piece	Creative and appropriate connectives show how each sentence relates to previous one and puts piece together
E		Rhythm is chaotic, not fluid; piece cannot be read aloud without author's help, even with practice	Rhythm is random and may still be chaotic; writing does not invite expressive oral reading	Rhythm emerges; reader can read aloud after a few tries	Rhythm is inconsistent; some sentences invite oral reading, others remain stiff, awkward, or choppy	Rhythm works; reader can read aloud quite easily	Rhythm flows; writing has cadence; first reading aloud is expressive, pleasurable, and fun
		Key question: Can you feel the words and phrases flow together as you read it aloud?					

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Appendix B: Continued

6-Point 3-12 Writer's Rubric

		CONVENTIONS					
		Not proficient			Proficient		
		1 Beginning	2 Emerging	3 Developing	4 Capable	5 Experienced	6 Exceptional
		Errors in conventions are the norm and repeatedly distract reader, making text unreadable	Many errors of various types of conventions are scattered throughout text	Author continues to stumble in conventions even on simple tasks and almost always on anything trickier	Author has reasonable control over standard conventions for grade level; conventions are sometimes handled well; at other times, errors distract and impair readability	Author stretches, trying more complex tasks in conventions; several mistakes still exist; for secondary students, all basic conventions have been mastered	Author uses standard writing conventions effectively to enhance readability; errors are few and only minor editing is needed to publish
A		Spelling errors are frequent, even on common words	Spelling is phonetic with many errors	Spelling on simple words is incorrect, although reader can understand	Spelling is usually correct or reasonably phonetic on common grade-level words, but not on more difficult words	Spelling on common grade-level words is correct but sometimes incorrect on more difficult words	Spelling is usually correct, even on more difficult words
B		Punctuation is often missing or incorrect	Simple end (., ? !) punctuation is correct; internal (, ; : ...) punctuation is usually wrong or missing	Punctuation is inconsistent	End punctuation is usually correct; internal punctuation is sometimes correct; for secondary students, all punctuation is usually correct	Punctuation is correct and enhances readability in all but few places	Punctuation is correct, creative, and guides reader through entire piece
C		Capitalization is random, inconsistent, and sometimes nonexistent	Only the easiest capitalization rules are correctly applied	Capitalization is applied inconsistently except for proper nouns and sentence beginnings	Capitalization is mostly correct	Capitalization is correct; more sophisticated capitalization is used	Capitalization is thoroughly understood and consistently correct
D		Errors in grammar/usage are frequent and noticeable, making writing incomprehensible	Serious grammar/usage problems of every kind make comprehension difficult	Inappropriate grammar/usage results from heavy reliance on conversational oral language; meaning is confusing	Proper grammar/usage remains inconsistent and inaccurate though problems are not serious enough to distort meaning	Grammar/usage is usually correct; there are few grammar mistakes yet meaning is clear	Grammar/usage is correct and contributes to clarity and style; meaning is more than clear; piece is engaging and inviting to read
E		Extensive editing (on virtually every line) is required to polish text for publication; reader must read once to decode, then again for meaning	There's still a lot of editing required for publication; meaning is uncertain	Too much editing is still needed to publish although piece begins to communicate meaning	Moderate editing (a little of this, a little of that) is required to publish; meaning is clear	Several things still need editing before publishing; conventions are more correct than not; meaning is easily communicated	Hardly any editing is needed to publish; author may successfully manipulate conventions for stylistic effect; meaning is crystal clear
		<p>Key question: How much editing would have to be done to be ready to share with an outside source? (Note: For the rubric of conventions, grade level matters. Expectations should be based on grade level and include only skills that have been taught. Expectations for secondary students are obviously much higher than those of the elementary grade levels.)</p>					

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Appendix B: Continued

6-Point 3-12 Writer's Rubric

		ORGANIZATION					
		Not proficient			Proficient		
		1 Beginning	2 Emerging	3 Developing	4 Capable	5 Experienced	6 Exceptional
		Organization can't be identified; writing lacks sense of direction; content is strung together in loose, random fashion	Organization is mostly ineffective; only moments here and there direct reader	Organization is still problematic though structure begins to emerge; ability to follow text is slowed	Organization moves reader through text without too much confusion	Organization is smooth; only a few small bumps here and there exist	Organization enhances and showcases central idea; order of information is compelling, moving reader through text
A		There is no lead to set up what follows; no conclusion to wrap things up	The lead and/or conclusion are ineffective or do not work	Either lead or conclusion or both may be present but are cliché or leave reader wanting more	A recognizable lead and conclusion are present; lead may not create a strong sense of anticipation; conclusion may not tie up all loose ends	While lead and/or conclusion go beyond obvious, either could go even further	An inviting lead draws reader in; satisfying conclusion leaves reader with sense of closure and resolution
B		Transitions between paragraphs are confusing or nonexistent	Weak transitions emerge yet offer little help to get from one paragraph to next and not often enough to eliminate confusion	Some transitions are used but they repeat or mislead resulting in weak chunking of paragraphs with topic sentence and support	Transitions are logical, though may lack originality; ideas are chunked in proper paragraphs and topic sentences are properly used	Transitions are logical, though may lack originality; ideas are chunked in proper paragraphs and topic sentences are properly used	Thoughtful transitions clearly show how ideas (paragraphs) connect throughout entire piece, helping to showcase content of each paragraph
C		Sequencing doesn't work	Little useful sequencing is present; it's hard to see how piece fits together as a whole	Sequencing has taken over so completely, it dominates ideas; is painfully obvious and formulaic	Sequencing shows some logic, but is not controlled enough to consistently showcase ideas	Sequencing makes sense and moves a bit beyond obvious, helping move reader through piece	Sequencing is logical and effective; moves reader through piece with ease from start to finish
D		Pacing is not evident	Pacing is awkward; it slows to a crawl when reader wants to get on with it, and vice versa	Pacing is dominated by one part of piece and is not controlled in remainder	Pacing is fairly well controlled; sometimes lurches ahead too quickly or hangs up on details that do not matter	Pacing is controlled; there are still places author needs to highlight or move through more effectively	Pacing is well controlled; author knows when to slow down to elaborate, and when to move on
E		Title (if required) is absent	Title (if required) doesn't match content	Title (if required) hints at weak connection to content; is unclear	Uninspired title (if required) only restates prompt or topic	Title (if required) settles for minor idea about content rather than capturing deeper theme	Title (if required) is original, reflecting content and capturing central theme
F		Lack of structure makes it almost impossible for reader to understand purpose	Structure fails to fit purpose of writing, leaving reader struggling to discover purpose	Structure begins to clarify purpose	Structure sometimes supports purpose, at other times reader wants to rearrange pieces	Structure generally works well for purpose and for reader	Structure flows so smoothly reader hardly thinks about it; choice of structure matches and highlights purpose

Key question: Does the organizational structure enhance the ideas and make the piece easier to understand?

Appendix B: Continued

6-Point 3-12 Writer's Rubric

		VOICE				
		Not proficient		Proficient		
		2 Emerging	3 Developing	4 Capable	5 Experienced	6 Exceptional
	Author seems indifferent, uninvolved, or distanced from topic, purpose, and/or audience	Author relies on reader's good faith to hear or feel any voice in phrases such as "I like it" or "it was fun"	Author's voice is hard to recognize, even if reader is trying desperately to "hear" it	Author seems sincere, yet not fully engaged or involved; result is pleasant or even personable, though topic and purpose are still not compelling	Author attempts to address topic, purpose, and audience in sincere and engaging way; piece still skips a beat here and there	Author speaks directly to reader in individual, compelling, and engaging way that delivers purpose and topic; although passionate, author is respectful of audience and purpose
A	Author does not interact with reader in any fashion; writing is flat resulting in a disengaged reader	Author uses only clichés, resulting in continued lack of interaction with reader	Author seems aware of reader yet discards personal insights in favor of safe generalities	Author attempts to reach audience and has some moments of successful interaction	Author communicates with reader in earnest, pleasing, authentic manner	Author interacts with and engages reader in ways that are personally revealing
B	Author takes no risks, reveals nothing, lets reader to sleep	Author reveals little yet doesn't risk enough to engage reader	Author surprises reader with random "aha" and minimal risk-taking	Author surprises, delights, or moves reader in more than one or two places	Author's moments of insight and risk-taking enlighten piece	Author risks revealing self and shows individual thinking
C	Tone is not evident	Tone does not support writing	Tone is flat; author does not commit to own writing	Tone begins to support and enrich writing	Tone leans in right direction most of the time	Tone gives flavor and texture to message and is appropriate
D	Commitment to topic is missing; writing is lifeless or mechanical; it may be overly technical, formulaic, or jargonistic	Commitment to topic "might" be present; author does not help reader feel anything	Commitment to topic begins to emerge; reader wonders if author cares about topic	Commitment to topic is present; author's own point of view may emerge in a place or two but is obscured behind vague generalities	Commitment to topic is clear and focused; author's enthusiasm starts to catch on	Commitment to topic is strong; author's passion about topic is clear, compelling, and energizing; reader wants to know more
E	Voice is inappropriate for purpose/mode	Voice does not support purpose/mode; narrative is only an outline; expository or persuasive writing lacks conviction or authority to set it apart from mere list of facts	Voice is starting to support purpose/mode though remains weak in many places	Voice lacks spark for purpose/mode; narrative is sincere, if not passionate; expository or persuasive lacks consistent engagement with topic to build credibility	Voice supports author's purpose/mode; narrative entertains, engages reader; expository or persuasive reveals why author chose ideas	Voice is appropriate for purpose/mode; voice is engaging, passionate, and enthusiastic
Key question: Would you keep reading this piece if it was longer?						

Appendix B: Continued

Name: _____ Date: _____

Rubric for Opinion Writing—Fourth Grade					
	Grade 2 (1 POINT)	Grade 3 (2 POINTS)	Grade 4 (3 POINTS)	Grade 5 (4 POINTS)	SCORE
	1.5 PTS	2.5 PTS	3.5 PTS	3.5 PTS	
	STRUCTURE				
Overall	The writer wrote her opinion or her likes and dislikes and gave reasons for her opinion.	The writer told readers his opinion and ideas on a text or a topic and helped them understand his reasons.	The writer made a claim about a topic or a text and tried to support her reasons.	The writer made a claim or thesis on a topic or text, supported it with reasons, and provided a variety of evidence for each reason.	
Lead	The writer wrote a beginning in which he not only gave his opinion, but also set readers up to expect that his writing would try to convince them of it.	The writer wrote a beginning in which she not only set readers up to expect that this would be a piece of opinion writing, but also tried to hook them into caring about her opinion.	The writer wrote a few sentences to hook his readers, perhaps by asking a question, explaining why the topic mattered, telling a surprising fact, or giving background information. The writer stated his claim.	Mid-level The writer wrote an introduction that led to a claim or thesis and got her readers to care about her opinion. She got readers to care by not only including a cool fact or jazzy question, but also figuring out what was significant in or around the topic and giving readers information about what was significant about the topic. The writer worked to find the precise words to state her claim; she let readers know the reasons she would develop later.	

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Appendix B: Continued

	Grade 2 (1 POINT)	1.5 PTS	Grade 3 (2 POINTS)	2.5 PTS	Grade 4 (3 POINTS)	3.5 PTS	Grade 5 (4 POINTS)	SCORE
STRUCTURE (cont.)								
Transitions	The writer connected parts of her piece using words such as <i>also</i> , <i>another</i> , and <i>because</i> .	Mid-level	The writer connected his ideas and reasons with his examples using words such as <i>for example</i> and <i>because</i> . He connected one reason or example using words such as <i>also</i> and <i>another</i> .	Mid-level	The writer used words and phrases to glue parts of her piece together. She used phrases such as <i>for example</i> , <i>another example</i> , <i>one time</i> , and <i>for instance</i> to show when she wanted to shift from saying reasons to giving evidence and <i>in addition to</i> , <i>also</i> , and <i>another to show</i> when she wanted to make a new point.	Mid-level	The writer used transition words and phrases to connect evidence back to his reasons using phrases such as <i>this shows that</i> The writer helped readers follow his thinking with phrases such as <i>another reason</i> and <i>the most important reason</i> . To show what happened he used phrases such as <i>consequently</i> and <i>because of</i> . The writer used words such as <i>specifically</i> and <i>in particular</i> to be more precise.	
Ending	The writer wrote an ending in which he reminded readers of his opinion.	Mid-level	The writer worked on an ending, perhaps a thought or comment related to her opinion.	Mid-level	The writer wrote an ending for his piece in which he restated and reflected on his claim, perhaps suggesting an action or response based on what he had written.	Mid-level	The writer worked on a conclusion in which he connected back to and highlighted what the text was mainly about, not just the preceding paragraph.	
Organization	The writer's piece had different parts; she wrote a lot of lines for each part.	Mid-level	The writer wrote several reasons or examples why readers should agree with his opinion and wrote at least several sentences about each reason. The writer organized his information so that each part of his writing was mostly about one thing. .	Mid-level	The writer separated sections of information using paragraphs.	Mid-level	The writer grouped information and related ideas into paragraphs. He put the parts of his writing in the order that most suited his purpose and helped him prove his reasons and claim.	TOTAL

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Appendix B: Continued

	Grade 2 (1 POINT)	1.5 PTS	Grade 3 (2 POINTS)	2.5 PTS	Grade 4 (3 POINTS)	3-5 PTS	Grade 5 (4 POINTS)	SCORE
DEVELOPMENT								
Elaboration*	The writer wrote at least two reasons and wrote at least a few sentences about each one.	Mid-level	The writer not only named her reasons to support her opinion, but also wrote more about each one.	Mid-level	The writer gave reasons to support his opinion. He chose the reasons to convince his readers. The writer included examples and information to support his reasons, perhaps from a text, his knowledge, or his life.	Mid-level	The writer gave reasons to support her opinion that were parallel and did not overlap. She put them in an order that she thought would be most convincing. The writer included evidence such as facts, examples, quotations, micro-stories, and information to support her claim. The writer discussed and unpacked the way that the evidence went with the claim.	(X2)
Craft*	The writer chose words that would make readers agree with her opinion.	Mid-level	The writer not only told readers to believe him, but also wrote in ways that got them thinking or feeling in certain ways.	Mid-level	The writer made deliberate word choices to convince her readers, perhaps by emphasizing or repeating words that made readers feel emotions. If it felt right to do so, the writer chose precise details and facts to help make her points and used figurative language to draw readers into her line of thought. The writer made choices about which evidence was best to include or not include to support her points. The writer used a convincing tone.	Mid-level	The writer made deliberate word choices to have an effect on his readers. The writer reached for the precise phrase, metaphor, or image that would convey his ideas. The writer made choices about how to angle his evidence to support his points. When it seemed right to do so, the writer tried to use a scholarly voice and varied his sentences to create the pace and tone of the different sections of his piece.	(X2)
								TOTAL

* Elaboration and Craft are double-weighted categories. Whatever score a student would get in these categories is worth double the amount of points. For example, if a student exceeds expectations in Elaboration, then that student would receive 8 points instead of 4 points. If a student meets standards in Elaboration, then that student would receive 6 points instead of 3 points.

Appendix B: Continued

	Grade 2 (1 POINT)	1.5 PTS	Grade 3 (2 POINTS)	2.5 PTS	Grade 4 (3 POINTS)	3.5 PTS	Grade 5 (4 POINTS)	SCORE
LANGUAGE CONVENTIONS								
Spelling	To spell a word, the writer used what he knew about spelling patterns (<i>tion, er, ly, etc.</i>). The writer spelled all of the word well words correctly and used the word wall to help him figure out how to spell other words.	Mid-level	The writer used what she knew about word families and spelling rules to help her spell and edit. The writer got help from others to check her spelling and punctuation before she wrote her final draft.	Mid-level	The writer used what he knew about word families and spelling rules to help him spell and edit. He used the word wall and dictionaries to help him when needed.	Mid-level	The writer used what she knew about word patterns to spell correctly and she used references to help her spell words when needed. She made sure to correctly spell words that were important to her topic.	
Punctuation	The writer used quotation marks to show what characters said. When the writer used words such as <i>can't</i> and <i>don't</i> , she put in the apostrophe.	Mid-level	The writer punctuated dialogue correctly with commas and quotation marks. While writing, the writer put punctuation at the end of every sentence. The writer wrote in ways that helped readers read with expression, reading some parts quickly, some slowly, some parts in one sort of voice and others in another.	Mid-level	When writing long, complex sentences, the writer used commas to make them clear and correct. The writer used periods to fix her run-on sentences.	Mid-level	The writer used commas to set off introductory parts of sentences, for example, <i>At this time in history</i> , and it was common to The writer used a variety of punctuation to fix any run-on sentences. The writer used punctuation to cite his sources.	TOTAL

If you want to translate this score into a grade, you can use the provided table to score each student on a scale of 0–4.

Number of Points	Scaled Score
1–11	1
11.5–16.5	1.5
17–22	2
22.5–27.5	2.5
28–33	3
33.5–38.5	3.5
39–44	4

Teachers, we created these rubrics so you will have your own place to pull together scores of student work. You can use these assessments immediately after giving the on-demand and also for self-assessment and setting goals.

















Scoring Guide

In each row, circle the descriptor in the column that matches the student work. Scores in the categories of Elaboration and Craft are worth double the point value (2, 3, 4, 5, 6, 7 or 8 instead of 1, 1.5, 2, 2.5, 3, 3.5, or 4).
Total the number of points and then track students' progress by seeing when the total points increase.
Total score: _____





















Appendix C: Writing Attitude Survey

Writing Attitude Survey





















Name _____ School _____ Grade _____

GARFIELD © PAVIS. All rights reserved.	1. How would you feel writing a letter to the author of a book you read?				
	2. How would you feel if you wrote about something you have heard or seen?				
	3. How would you feel writing a letter to a store asking about something you might buy there?				
	4. How would you feel telling in writing why something happened?				





















Appendix C: Continued

<small>GARFIELD © PAWS. All rights reserved.</small>	5. How would you feel writing to someone to change their opinion?				
	6. How would you feel keeping a diary?				
	7. How would you feel writing poetry for fun?				
	8. How would you feel writing a letter stating your opinion about a topic?				
	9. How would you feel if you were an author who writes books?				





















Appendix C: Continued

<small>GARFIELD © PAWS. All rights reserved.</small>	10. How would you feel if you had a job as a writer for a newspaper or magazine?				
	11. How would you feel about becoming an even better writer than you already are?				
	12. How would you feel about writing a story instead of doing homework?				
	13. How would you feel about writing a story instead of watching TV?				
	14. How would you feel writing about something you did in science?				

















Appendix C: Continued

<small>GARFIELD © PAWS. All rights reserved.</small>	15. How would you feel writing about something you did in social studies?				
	16. How would you feel if you could write more in school?				
	17. How would you feel about writing down the important things your teacher says about a new topic?				
	18. How would you feel writing a long story or report at school?				
	19. How would you feel writing answers to questions in science or social studies?				

Appendix C: Continued

<small>GARFIELD © PAWS. All rights reserved.</small>	20. How would you feel if your teacher asked you to go back and change some of your writing?				
	21. How would you feel if your classmates talked to you about making your writing better ?				
	22. How would you feel writing an advertisement for something people can buy?				
	23. How would you feel keeping a journal for class?				
	24. How would you feel writing about things that have happened in your life?				

Appendix C: Continued

<small>GARFIELD: © PAWS. All rights reserved.</small>	25. How would you feel writing about something from another person's point of view?				
	26. How would you feel about checking your writing to make sure the words you have written are spelled correctly?				
	27. How would you feel if your classmates read something you wrote?				
	28. How would you feel if you didn't write as much in school?				

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Appendix D: School Internet Usage Policy

School Internet/Computer Use Policy:

Students are provided with access to computers at school. The computers and internet access are to be used for legitimate school activities. Inappropriate or unauthorized usage of school computers and/or the internet will result in disciplinary consequences. We are pleased to offer students access to the district computer network for the internet. However, BAPS respects the right of a parent/guardian to deny the use of the internet for his/her child. Therefore, a parent/guardian may deny his/her child's access to the internet at school by notifying the school in writing. A form to deny your child's access to the internet is provided below. Notification in writing to deny your child access to the internet must be made annually for each new school year. Access to the Internet will enable students to explore thousands of libraries, databases, and bulletin boards. Families should be warned that some material accessible via the Internet may contain items that are illegal, defamatory, inaccurate or potentially offensive to some people. While our intent is to make Internet access available to further educational goals and objectives, students may find ways to access other materials as well. We believe that the benefits to students from access to the Internet, in the form of information resources and opportunities for collaboration, exceed any disadvantages. To help students achieve a positive and safe internet experience, schools will instruct students in appropriate online behavior. Ultimately, parents and guardians are responsible for setting and conveying the standards that their children should follow when using media and information sources. To that end, the Broken Arrow Public Schools support and respect each family's right to decide whether or not to apply for access. Access to network services is given to students who agree to act in a considerate and responsible manner. Access is a privilege-not a right. Access entails responsibility. Each user of the district computer networks is responsible for his/her behavior and communications over those networks. It is presumed that users will comply with district standards and will honor the district's policies, rules, and regulations.

Regarding school internet and computer usage, the following are not permitted. This list of prohibitions is not meant to be exhaustive.

- Displaying or sharing offensive messages, pictures, or site addresses
- Damaging computers, computer systems, computer networks or computer services
- Violating copyright laws
- Downloading, uploading, or distributing software
- Using obscene language
- Harassing, attacking, or insulting others
- Cyber bullying

Appendix D: Continued

Parent/Guardian Form to Deny Child's

Access to Internet at School

I, _____, am aware that my parents have not given me permission to use the Internet and it is my responsibility to abide by that decision.

Student I.D. #: _____ Student Signature: _____

I, _____, do not give permission for my son/daughter to use the Internet.

Parent/Guardian Signature: _____ Date: _____

Broken Arrow Public Schools is an equal opportunity educational institution

Netiquette

Netiquette is a term used to describe proper etiquette on the Internet. For the most part it refers to accepted practices for composing and sending e-mail, newsgroup messages, and listserv messages—and participating in chat rooms. Following are guidelines that are considered important by experienced Internet users. Share these guidelines with your students, as appropriate.

Netiquette
The generally accepted code of behavior on the Internet.

Use a Subject Line

Always include a subject line in your message. The recipient will know, at a glance, what's coming and will be able to recognize the message in the future.



Appendix E: Continued

Use Proper Capitalization

Don't type your message in all uppercase or all lowercase letters; it makes your message difficult to read. In e-mail and chat-room messages, all capital letters indicate that someone is "shouting."

Emoticons

Symbols made out of keyboard characters, used to convey emotions.

Spelling and Grammar Matter

Poorly worded, misspelled messages are hard to read, can be confusing, and make an unfavorable impression. Use correct grammar and spelling.

Use the Quote Feature in Your Replies

When replying to an e-mail message, include enough of the original message to provide the reader with context—but it is not necessary to resend the entire original message.

Limit Use of Shortcuts

To save time and typing, people tend to use shortcuts to convey emotions and commonly used phrases when communicating over the Internet. When making jokes or trying to convey emotions, some people use **emoticons**, symbols made out of keyboard characters. Some examples are

:-) smile

:-(frown

;-) wink

Common acronyms include BTW (by the way) and IMHO (in my humble opinion). While these shortcuts are harmless up to a point, encourage students to convey their feelings through their writing.



Appendix E: Continued

Don't Send Private Information

Never assume that your e-mail message is private, even if you send it to only one person. Others may be able to read what you write. Never send anything that you wouldn't mind reading in your local newspaper or seeing on a TV news program—with your name as the author! Likewise, don't forward a personal message that you received to others without first getting the author's consent.

Don't Be Rude or Offensive

When you communicate via computer, remember that there is a person (or many persons) who will receive your writing. Some Internet users feel a freedom to write whatever they want without regard to others' feelings. Instead, imagine the face of the person you are writing to, and don't write things you wouldn't say to that person's face. Remember: your words go out into cyberspace and can be forwarded many times—and they may come back to haunt you!

Give Credit Where It's Due

This is especially important when doing research. Most work that someone has placed on the Internet is free for you to use—but if you do use it, give the writer or creator credit.

Don't Break the Law

There are many software products available on the Internet. Many of these products are offered free of charge. Be sure the software product you are downloading is not a commercial product that has been distributed illegally. Most commercial software products have a title screen with a copyright statement.

Things to Know

Shareware is software that is not free but is available for a free trial period. You can download it and use it at no cost, with the understanding that you will pay for it if you like it and want to keep using it—or remove it from your system if you don't intend to use it. Most shareware agreements ask you to make up your mind within 30 days.

Appendix F: Student Interview Protocol (Treatment Group)

Tell me about yourself and what kinds of writing you have done both in and out of school.

Tell me if you do online communicating at home or school and if so, how much and what kind?

Describe your class blog.

Tell me about your experiences with the class blog.

Tell me how you feel about writing on a class blog, and why?

How does the class blog affect your writing?

How does the class blog influence the writing process?

How does the class blog affect the quality of your writing?

How does the class blog affect your understanding of persuasive writing?

How does the class blog affect how you feel about writing?

What are the advantages and disadvantages of using a class blog for writing?

What did you learn from participating in a class blog?

What was challenging for you?

How does having a larger audience affect how you wrote?

What suggestions do you have for future writing projects such as this one?

Is there anything else you would like to say about the project?

Appendix G: Student Interview Protocol (Comparison Group)

Tell me about yourself and what kinds of writing you have done both in and out of school.

Tell me if you communicate with your friends through writing at home or school and if so, how much and what kind?

Describe your persuasive writing unit that you just completed.

Tell me about your experiences with the unit.

Tell me how you feel about doing persuasive writing, and why?

How does the unit affect your writing?

How does the unit influence the writing process?

How does the unit affect the quality of your writing?

How does the unit affect your understanding of persuasive writing?

How does the unit affect how you feel about writing?

Even though you were not in the blogging group, what are the advantages and disadvantages of using a class blog for writing?

If you were in the blogging group, what would you learn from participating in a class blog?

What would be challenging for you if you were to write in a class blog?

How would having a larger audience affect how you write?

What suggestions do you have for future writing projects such as this one?

Is there anything else you would like to say about the project?

Appendix H: Modified Lucy Calkins Lesson Plan

Lucy Calkins (2013) Unit 2 Lesson 6

Teacher: (Minilesson)--- Think about the cake metaphor, beautiful on the outside and poor content on the inside. You will need to think about the outside as well as the inside. Also, think about a construction site where a building is being built. They begin with the frame of the building. Our writing is much like building a building. So today, we will begin to build the frame or layout our writing. In other words, we will make a plan for our writing.

A plan begins with a *thesis* statement. A thesis statement is the first sentence or is in the first paragraph telling your reader what they will read about or what you have written about. In a persuasive thesis statement, you make a claim and back it up with your evidence/reasons. Your evidence/reasons should persuade the reader that your claim is true. For example:

Claim: “My mother is the most important teacher.”

Evidence/Reasons:

- because she taught me to cook.
- because she taught me to love school.
- because she taught me to work hard to achieve success.

Now, let us combine these to develop our thesis statement.

Thesis: “My mother is the most important teacher---- because she taught me to cook (evidence/reason 1), to love school (evidence/reason 2), and to work hard to achieve success (evidence/reason 3).”

Engage—Brainstorm—students develop their own thesis statement.

Share—2 people share

Appendix I: Pre/Post Writing Prompt for Both Groups

Some schools have computer labs where an entire class can use the computers at the same time, while other schools have one or two computers in each classroom. Which method do you think is the better way to utilize technology? Write to express your opinion for one of the methods and support your claim using evidence.