ABSTRACT

BARTLETT, MELISSA ELLIS. High School Students Reading Informational Texts: A Comparison of Written and Video Response Modalities. (Under the direction of Hiller A. Spires.)

This two-phase mixed methods study explored how generating a video response might impact high school students' comprehension of informational texts. Research indicates that using external visualization while reading can improve text comprehension and recall. One emerging technology that supports external visualization is digital video. Research on student-generated video points to positive impacts on engagement, but the use of digital video as a possible support for increased student comprehension remains unexamined. This study compared high school students' reading comprehension of informational texts under two treatment conditions: an experimental condition requiring student-generated video responses to text and a comparison condition requiring written responses to text. Measures of students' baseline reading levels and prior content knowledge were collected prior to the instructional treatments. Both instructional groups read the same three informational texts within the same given amount of time. Students then created written or video summaries of what they perceived to be important textual information in the readings. Reading comprehension measures were then administered after each instructional treatment response. Follow up focus group interviews explored student perceptions of reading and responding to the informational texts under the two conditions. The qualitative data indicated that while students enjoyed responding to informational texts by creating student-generated video, some students believed that the mode would not help and it might actually lower their reading comprehension scores on multiple choice and constructed response texts. The quantitative data produced no significant treatment effect, positive or negative; however, additional

investigation identified class placement as an uncontrolled variable with significant influence on student reading comprehension of informational texts. Additional research is needed to further investigate the potential influence out-of-school student digital literacies, such as student-generated video, might have on measurable in-school reading comprehension of informational text.

High School Students Reading Informational Texts: A Comparison of Written and
Video Response Modalities

by
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A dissertation submitted to the Graduate Faculty of
North Carolina State University
in partial fulfillment of the
requirements for the Degree of
Doctor of Philosophy

Curriculum and Instruction

Raleigh, North Carolina

2014

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UMI Number: 3690206

UMI

Dissertation Publishing

ProQuest

DEDICATION

To my husband, Walter C. Bartlett. But for you, I would not have undertaken this effort.

ACKNOWLEDGEMENTS

Piglet noticed that even though he had a Very Small Heart, it could hold a rather large amount of Gratitude. – A.A. Milne in Winnie-the-Pooh

First, I want to thank my doctoral committee members. The writing in this dissertation would be significantly worse if not for the input of Dr. Kristin Conradi, editor *par excellence*. I must also thank Dr. John Neitfeld for asking the probing questions that kept me focused on my quantitative path. In addition, Dr. Jessica DeCuir-Gunby reminded me that a researcher can not be separate from her research, that I must not only acknowledge but actually embrace being situated within the work. These three professors were ever generous without hope of much return, and I will always be grateful for their input.

I offer my deepest thanks to my committee chair, Dr. Hiller A. Spires. Guiding an older, nontraditional student through the arduous work required to earn a doctorate could not have been the easiest task. When it seemed that my mind simply could not grasp the message she was trying to get through to me, I imagine Dr. Spires may have thought, "Never again." Thankfully, she never gave up on me. Perhaps she was thinking of what one of her favorite writers, Anne Lamott, advised in *Bird by Bird*. "Try looking at your mind (your doctoral student) as a wayward puppy that you are trying to paper train. You don't drop-kick a puppy into the neighbor's yard every time it piddles on the floor. You just keep bringing it back to the newspaper." Well, I'm not sure my mind is exactly housebroken, but the focus of my thinking and writing has improved dramatically under Dr. Spire's patient direction.

BIOGRAPHY

Melissa was born in Hampton, Virginia, and she currently resides in Roxboro, North Carolina with her husband, Walter Bartlett. She received a Bachelor's degree in English from Old Dominion University in Norfolk, Virginia and a Master's degree in teaching English as a foreign language (EFL) from the American University in Cairo, Egypt. She holds North Carolina teaching certifications in K-12 ESL, 6-8 Language Arts, 9-12 English, and has earned National Board Certification in Early Adolescent Language Arts. Melissa has taught Title I reading in the U.S. Virgin Islands, English "O" Levels in Kenya, and EFL at the English Language Institute at the American University in Cairo. Since coming to North Carolina in 1992, Bartlett has served in educational program administration in K-12 school systems as well as at the community college level, and she also served as the director of the Center for 21st Century Skills located within the NC Business Committee for Education in the NC Governor's Office. In addition, Bartlett has enjoyed diverse K-12 teaching experiences in North Carolina. Melissa has taught at an innovative 'Learn and Earn' high school and at a traditional high school, she has taught language arts in several traditional middle schools, and she is currently teaching at a 6-12 public charter school. Melissa was chosen as North Carolina's 2002-03 Teacher of the Year and became a finalist for the 2003 National Teacher of the Year. In 2013 Bartlett completed serving an eight-year term as an at-large member of the North Carolina State Board of Education.

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CHAPTER ONE: INTRODUCTION

Background

The importance of reading comprehension cannot be overstated. This is as true today as it was three decades ago when public concern over literacy rates in the United States grew in response to the landmark publication of *A Nation at Risk* (National Commission on Excellence in Education, 1983). The report made predictions of economic demise due to the nation's lack of literacy, claiming that four out of ten American teenagers were unable to construct simple inferences from written material. Fortunately, since that time the National Assessment of Educational Progress (NAEP) scores provide evidence that reading skills in the United States have improved (National Center for Education Statistics, 2013). Yet, while these trends are positive, particularly for 9- and 13-year-old students, growth in reading achievement for older learners is still underwhelming.

The nation's literacy levels coupled with the *flattening* of the international economic markets via the Internet have created what many consider a perfect storm forecasted for the United States economy (Friedman, 2006). At a time when competition has never been fiercer and as concern for the economic health of the nation grows, the majority of American students are not as literate as they need to be to compete on an international level. Policy makers are keenly interested in requiring instruction that improves students' reading comprehension in order for the United States to stay competitive within the digitized global marketplace, and this interest has driven state boards of education to adopt more rigorous

standards (National Governors' Association Center for Best Practices [NGACBP] & Council of Chief State School Officers [CCSSO], 2010).

One large-scale policy response to this concern has been the advent of national standards that ratchet up literacy expectations in English language arts (ELA) and in math (NGACBP & CCSSO, 2010). The *Common Core State Standards* (CCSS) are designed to produce high school graduates who are equally ready to enter a vocation or to continue their preparation at institutes of higher education. To achieve this, the CCSS set expectations for students to comprehend increasingly complex texts and to have much more experience in reading informational texts, both in print and in non-print media. In a widely circulated contrastive analysis, CCSS was rated vastly superior in both math and ELA standards compared to similar standards in 33 states (Carmichael, Martino, Porter-Magee, & Wilson, 2010). The need for more rigorous standards has been widely accepted by a majority of states, and regardless if states go forward with their adoption of CCSS or if they craft their own standards, the recognition of the need for more rigorous K-12 educational standards is occurring nationwide.

The call for more rigorous standards has created a heightened instructional focus on text complexity, arguing that schools have failed to keep up with the ever-increasing demands in industry and in higher education. While the reading demands in college and workforce-training programs have steadily increased over the last half-century, K–12 texts used in schools have declined in complexity (Chall, Conard, & Harris, 1977; Hayes, Wolfer, & Wolfe, 1996).

In addition to the steady decline in text complexity over time and across grades there is also a lack of informational texts used in primary classroom instruction (Moss & Newton, 2002; Yopp & Yopp, 2006). The need for more exposure to reading informational texts is reflected in the NAEP recommendations to require reading in both literature and informational texts (National Assessment Governing Board [NAGB], 2009). According to the CCSS, informational reading should make up 70% of all reading by grade 12; this marks a substantial change from current instructional practice. In addition, the CCSS calls for 21st century college and career ready high school graduates to be proficient in reading complex information text in a variety of subjects and to be able to "use technology strategically and capably" (NGACBP & CCSSO, 2011, p.7). In other words, students must become fluent consumers of informational texts both in print and in digital media.

Students are already documented consumers of digital media. Students today have developed a different set of literacies where 95% of all teenagers aged 12-17 use the Internet daily, and 37% of teenage Internet users participate in video chats *daily* (Lenhart, 2012). Yet, students' digital out-of-school literacies need not be in opposition to what is typically measured as in-school literacy by tests such as the NAEP and state standardized reading tests. There are theoretical arguments, such as Dual Coding Theory, that suggest digital literacies can actually be leveraged to support students' improvement in understanding the increasingly complex informational texts they are expected to encounter as they progress toward post-secondary education and career opportunities. This study was situated within this challenging literacy intersection of informational text reading and digital media.

The Dual Coding Theory (DCT) was initially developed as a theory of cognition, but it later developed into a theoretical framework to describe reading comprehension as a form of cognition. With its focus on nonverbal imagery, the DCT of reading comprehension may offer some insight into the appeal multimodal digital media have in the literacy practices typical of today's youth (e.g., Clark & Paivio, 1991; Paivio, 1991; Sadoski, Goetz, & Fritz, 1993; Sadoski & Paivio, 2004).

In DCT all mental representations, including those in text, are either linguistic/verbal or nonlinguistic/nonverbal and form two individual mental systems or codes (Sadoski & Paivio, 2004). The verbal code is specialized for processing language and the nonverbal code for processing nonlinguistic objects and events. All cognition involves the two independent but interconnected codes (Paivio, 2010) and research supports the hypothesis that utilizing both the verbal and nonverbal codes will improve reading comprehension (Sadoski & Paivio, 1994; Sadoski et al., 1993). DCT hypothesizes that utilizing both the verbal and the nonverbal codes while reading will benefit comprehension and memory; this premise underpins a body of applied DCT-related research investigating the instructional technique of visualization where teachers guide students in using both codes to aid in reading comprehension (e.g., Borduin, Borduin, & Manley, 1994; De Koning & van der Schoot, 2013; Gambrell & Bales, 1986; McCallum & Moore, 1999).

Visualization research indicates that evoking mental imagery during reading can improve text comprehension and recall and that instructional practices that guide students in visualizing important information from written text benefit comprehension and memory in a

variety of ways. For example, several studies have indicated that visualization can help students better identify main ideas or themes in the narrative texts (Gambrell & Bales, 1986; Montague & Carter, 1973; Sadoski, 1983) as well as make logical inferences from the texts (Borduin et al., 1994). Research also indicates that visualization aids comprehension of expository texts with young learners (Glenberg, Willford, Gibson, Goldberg, & Zhu, 2011; McCallum & Moore, 1999), with middle school students (Gunston-Parks, 1985; Peters & Levin, 1986; Van Meter, 2001), and with high school students (Leutner, Leopold, & Sumfleth, 2009). Early studies found visualization particularly supports comprehension in readers characterized as struggling comprehenders (Chan, Cole, & Morris, 1990; Gambrell & Bales, 1986; Oakhill & Patel, 1991). In addition, studies have compared the use of visualization strategies for older and younger learners (e.g., Gambrell & Bales, 1986), finding that older students are more successful in using these strategies. These studies indicate that the use of external visualization strategies, particularly when accompanied by clear instructions, can have a greater positive impact on comprehension than internal visualization alone.

This applied DCT research suggests that the use of external visualization in a variety of forms has a positive impact on reading comprehension. The research on DCT and visualization, coupled with research on in-school and out-of-school literacies demonstrating that adolescents are engaging in digitized forms of new literacies such as video (Lenhart, 2012) point to student-generated video as a form of external visualization that could be used in classroom settings. Student-generated video could serve as a digitized version of the

drawings and the dramatic recreations that visualization research indicates have positive effects on reading comprehension. Although there is an emerging body of research on student-generated video, this research has not focused empirically on the possible impact student-generated video as a form of external visualization might have on measures of reading comprehension. The majority of the research on student-generated video uses a qualitative case study design, including research investigating the impact student-generated video has on learner attitudes toward writing (Ranker, 2008), student engagement in project-based learning (Kearney & Schuck, 2006), and empowerment of students who are considered at-risk of academic failure (Lee, McLoughlin, & Chan, 2008).

Theories which consider literacy to be more than a linguistic phenomenon and as a socially situated conduit to personal empowerment (Cazden et al. [New London Group], 1996; Gee, 2000a) have driven this largely qualitative body of research. However, the use of student-generated digital video as a possible influence on comprehension remains under-examined. This study addressed this gap in the research. The study investigated the instructional use of student-generated video as an external visualization strategy and explored the influence this mode of text response had on high school students' comprehension and perceptions of their experiences in reading informational texts.

Statement of the Problem

Despite being considered an emerging and popular out-of-school literacy high school students could use to respond to the increasing amounts of informational text they encounter, the influence that student-generated video as a form of external visualization might have on

student reading comprehension is seriously understudied. This study addressed this gap in the research by employing a mixed methods design to investigate student-generated video not only as an external visualization strategy that might affect students' reading comprehension, but also as a nonlinguistic semiotic practice that may influence students' perceptions of their experiences as individuals interacting with informational texts by using their out-of-school media skills.

Study Overview

This two-phase mixed methods study explored the effects student-generated video as a form of external multimodal visualization might have on high school students' comprehension of and experiences in reading and responding to informational texts. DCT research has indicated that the instructional use of visualization can train students how to generate nonverbal representations of nonfiction text content and serve to increase reading comprehension in a variety of contexts (e.g., Glenberg et al., 2011; Gunston-Parks, 1985; Van Meter, Aleksic, Schwartz, & Garner, 2006). However, these studies have not examined the use of an emerging technology such as student-generated video as a form of multimodal external visualization that may positively impact student comprehension of informational texts.

Theories related to new literacies claim that the instructional integration of these new literacies privileges what students already know and ultimately empowers students to become successful communicators within the global economy (Gee, 2000a; Jewitt, 2008). The related research, however, has not tied the instructional potential of emerging technologies and the

new literacies they entail to measurable student achievement. This study compared high school students' reading comprehension of and experiences with three informational texts under two instructional treatment conditions: an experimental condition that used student-generated videos as a response to text, (VG) and a comparison condition (CG) that required written responses to text (see Appendix A for research design overview).

Purpose of study. The purpose of this study was to empirically investigate the potential impact student-generated video as a form of multimodal external visualization might have on reading comprehension and to explore student perceptions of their experiences in reading informational texts in their respective experimental mode of text response. A two-phase explanatory sequential mixed methods design (QUAN → qual) (Creswell & Plano Clark, 2011) was used to address the research questions. In the first phase of the study, quantitative measures were collected prior to the instructional treatments, and quantitative post-treatment measures were also administered. The second phase of the study qualitatively probed the students' experiences in reading and responding to informational texts in both treatment conditions.

Research questions. This explanatory sequential mixed methods study (Creswell & Plano Clark, 2011) was designed with a twofold purpose: (a) to investigate the impact student-generated video as a form of multimodal external visualization may have on reading comprehension, and (b) to explore participants' perceptions of using student-generated video to respond to reading as compared to written responses to informational reading. The following research questions guided the study's examination of student-generated video as a

form of multimodal external visualization that might enhance student comprehension of informational texts in a classroom setting:

1. What are the differences in reading comprehension between groups of high school students who either (a) produce a written verbal response to reading informational texts or (b) produce a video as an externally visualized nonverbal response to reading informational texts?

   a. Is there an interaction between reading results of treatment condition and students' baseline reading ability (ELA8 EOG)?

   b. Is there an interaction between treatment assignment and comprehension question category (i.e., retrieval inferential and generation inferential)?

2. How do high school students personally perceive their literacy experiences as they respond to informational texts in both written and video modalities?

CHAPTER TWO: REVIEW OF THE LITERATURE

This study was situated within the pedagogical intersection of K-12 literacy instruction and students' out-of school digital literacy practices, specifically student-generated video. The review of literature addresses four areas to provide the theoretical base for the study. The first section of this review briefly examines the literacy expectations set forth in the recent move toward new literacy standards that specifically focus on informational texts. Then this review situates student-generated video as a form of text response within research on multimodalities and emerging new forms of literacy, often referred to as "new literacies" (Leu, Kinzer, Coiro, & Cammack, 2004). Next, theory and research related to reading comprehension are examined, specifically highlighting the role played by external visualization in enhancing reading comprehension. The final section of the literature review narrows the focus onto the current body of studies that specifically explore the use of student-generated video in literacy instruction in order to identify the gaps in this research addressed by this study.

Reading Standards and Informational Text

Background. The momentum for more rigorous reading standards reached an apex in 2010 when, buoyed by generous additional federal support, nearly every state signed on to adopt the CCSS created through a collaboration between the National Governors' Association (NGA) and the CCSSO (NGACBP & CCSSO, 2011). According to the NGA (2009), this initiative was undertaken because,

In the twenty-six years since the release of *A Nation at Risk,* states have made great strides in increasing the academic rigor of education standards. Yet, America's children still remain behind other nations in terms of academic achievement and preparedness to succeed. (n.p.)

The NGA/CCSSO partnership collaborated with groups such as Achieve, ACT, and the College Board that have long supported the belief that the literacy preparation students need is identical for entry to work or for college and that the rigor of this preparation needs to be increased to ensure that American students can compete globally. Although state support for the CCSS has eroded since the inception of the federally supported standards, there is still a general consensus that literacy preparation needs to be more rigorous to ensure that American students can compete globally in their post-secondary careers (Carmichael et al., 2010).

The premise underlying of the ELA CCSS objectives is that the mastery of a specific standard must be essential for postsecondary readiness in the "21st century globally competitive society" (NGACBP & CCSSO, 2010, p. 4). What has traditionally been considered content standards under the purview of the English teacher is now more broadly defined as skills needed in *all* content areas. The implied interdisciplinary approach addresses the goal that students should be proficient in reading complex informational text in multiple disciplines in order to be ready for college or to enter a career (NGACBP & CCSSO, 2011).

The CCSS also include a separate standard specifically focused on text complexity based on evidence that schools have not instructionally kept up with the demand for rigorous reading required in industry and in higher education. This explanation is based partially on findings produced by a testing company positing that students who understand more complex texts as measured by correct test item responses are significantly more successful in college (ACT, 2006). However, the idea of increased rigor is supported by the NAEP recommendation that state standards should strive to balance the required reading in literature and informational texts, with the latter making up 70% of all reading by grade 12 (NAGB, 2009). This includes texts within the broad CCSS definition for informational texts, "texts in history/social studies, science, and technical subjects and literary nonfiction, a specific category of informational text" (NGACBP & CCSSO, 2010, p. 5). The texts used in this study were examples of history and science informational texts specifically recommended under CCSS Reading Standard 9 for high school ELA students.

Informational text. Research indicates that the independent reading comprehension levels required in order for high school graduates to be college and career ready have held steady or increased over the past half century (Hayes et al., 1996). However, K-12 students are not generally required to be independent readers within school instructional contexts (Heller & Greenleaf, 2007). An additional troubling trend is that the complexity of K–12 texts has been decreasing over time (Chall et al., 1977; Hayes et al., 1996).

These trends are not surprising since research indicates that students in primary literacy instruction are generally exposed to narrative text with less than a quarter of

instructional reading based on informational texts (Moss & Newton, 2002). A similar lack of early exposure to informational texts was found for kindergarten learners (Yopp & Yopp, 2006). Reading informational text is also characterized as more difficult for students than is reading narrative text (Heller & Greenleaf, 2007; Saenz & Fuchs, 2002; Shanahan & Shanahan, 2008). In addition to this lack of early exposure to informational texts, structural elements unique to informational texts such as headings and subheadings and organizational cues can thwart comprehension (Saenz & Fuchs, 2002). Even when informational text is included, instruction in strategic reading of the genre is not regularly provided by primary grade level teachers (Williams et al., 2005).

In sum, the majority of younger literacy learners have insufficient opportunities to engage in meaningful informational literacy practices. Yet, in order to independently comprehend the text that they will inevitably encounter in college and career contexts, strategic instructional support and sustained exposure is required for students to develop the necessary reading strategies to successfully comprehend these texts (McNamara, Graesser, & Louwerse, 2012; Perfetti, Landi, & Oakhill, 2005; van den Broek, Lorch, Linderholm, & Gustafson, 2001). Although perhaps lacking in early exposure and instructional support for reading informational texts, high school students are still expected to be able to independently read informational texts. Research has been undertaken to address the lack of engagement in informational texts at the secondary level (Spires & Donley, 1998), and instructional strategies to help secondary students comprehend informational text are being developed (e.g., Caverly, Mandeville, & Nicholson, 1995; Elish-Piper, Wold, &

Schwingendorf, 2014). Investigating comprehension strategies that can support informational text instruction that also embrace students' out-of-school digital literacy practices would target this issue. This study addressed the need for more classroom support for and exposure to informational texts in that it explored the impact of an instructional practice on the comprehension of informational text that also utilized a modality typical of students' daily out-of-school literacy practices.

New Literacies

There are many terms that have been used interchangeably to discuss new literacies research, including "21st century literacies, Internet literacies, digital literacies, new media literacies, multiliteracies, information literacy, Information Communication Technology (ICT) literacies, computer literacy, and so forth" (Coiro, Knobel, Lankshear, & Leu, 2008, p. 10). The following sections synthesize new literacies into two theoretical areas. First, the literature formally labeled the New Literacy Studies (NLS) encompasses theorists and researchers who take a predominantly sociocultural view of literacy (Gee, 2000a). Second, in-school/out-of-school literacies situate new literacies within and without the school context and explore implications for instructional practice.

New literacies studies. Emerging as a sociocultural reaction to both behaviorism and cognitivism, NLS posits that "reading and writing can only make sense when studied in the context of social and cultural (and we can add historical, political, and economic practices) of which they are but a part" (Gee, 2000a, p. 180). NLS situates reading within the realm of cultural and social interaction (Rowsell, Kress, Pahl, & Street, 2013) and focuses on the

purpose of socially constructed literacy as communication in terms of relationships rather than in terms of media.

The NLS rejects traditional literacy pedagogy as a type of linguistic sorting mechanism, as a "carefully restricted project - restricted to formalized, monolingual, monocultural, and rule-governed forms of language" (New London Group, 1996, p. 1). In NLS, literacy was defined as much more than merely decoding a text or a group of spoken words. Being able to successfully navigate within different social environments where meaning is made places the strategic use of literacy within the political realm of power embracing literacy as a lever of social justice. To successfully navigate a different cultural context, learners do need to develop fluency in a variety of socially situated literacies, which Gee and others have called Discourses (Gee, 2011).

The ability to move between different Discourses becomes even more important as the Internet creates a global workforce able to communicate and collaborate 24 hours a day, seven days a week (Gee, 2000b). The New London Group recognized this shift and called upon teachers and school leaders to prepare students to use these new literacies so they would not be left behind in the new global economy (New London Group, 1996).

The NLS defines literacy as a continuously changing set of multiple literacies or discourses that are dependent on multiple social and cultural contexts (Mills, 2010) and serve as "ways of recognizing and getting recognized as certain sorts of whos doing certain sorts of whats" (Gee, 2011, p. 153). Using literacies in these sociocultural contexts is always about more than language; it is about gaining recognition as a member of the group and thereby

gaining status and power. Members of the community gain power from their participation in the language sociogenesis and this constitutes a powerful out-of-school literacy for students.

In-school/out-of-school literacies. The dramatic increase in modalities afforded by the Internet has caused a semiotic shift that privileges the individual as a decision-maker in what to read and when to read and what it means to be literate. The new literacies view "stresses adaptation to constant change through thinking and speaking for oneself, critique and empowerment, innovation and creativity, technical and systems thinking, and learning how to learn" (New London Group, 1996, p. 7). The traditional in-school overemphasis on the verbal code represented in print literacy has ignored or at best downplayed the importance of nonverbal representations (Archer, 2006) that according to DCT are so critical to readers' creating rich models of text meaning (Sadoski & Paivio, 2004). The prevailing institutional school view of what constitutes literacy no longer matches the multimodal (nonverbal multisensory) literacy practices emerging in out-of-school contexts where complex nonlinguistic multimodal forms of representation are shared within global communities (Jewitt, 2008).

Students today have clearly developed a different set of literacies where 95% of all teenagers ages 12-17 use the Internet daily, and 37% of teenage Internet users participate in video chats *daily* (Lenhart, 2012). This set of digital out-of-school literacies students are embracing need not be in opposition to what is typically measured as in-school literacy by tests such as the NAEP and state end of course reading tests. Popular out-of-school literacies can actually be leveraged to aid in supporting students' improvement in being able to read

and understand the increasingly complex texts they are expected to encounter as they progress toward either post-secondary education or career opportunities.

Perhaps it is inevitable that the social nature of communication and the subsequent power gained through the creation of shared meanings will transmogrify into completely new forms of literacy practices fueled by Internet-based emerging technologies. Although this has not yet been fully realized or even acknowledged in a majority of instructional contexts, research on new literacies could explore possible models of instructional practice to help integrate multiple literacies into meaningful pedagogy. This integration could close the gap, or, as one commentator described it, could form a "sieve" that allows a type of communicative literacy exchange between non-traditional out-of-school literacy communities and the traditional in-school practices in reading comprehension (Alvermann & Moore, 2011).

Reading Comprehension

Although the construct of reading comprehension has generated many competing theories, Afflerbach (2013) asserts that most theories share four common aspects that contribute to comprehension: a) a combination of information from the text and from the reader's prior knowledge, b) the complexity of the texts and the activity or task to be completed with the text, c) the use of strategies and of skills, and d) the reader's cognitive and affective variables. These aspects are reflected in developmental approaches to reading comprehension that aver comprehension develops over time as an outcome of multiple interacting factors including the text, the reader, and the context (Duke & Carlisle, 2011).

Although past research indicated that many teachers do not embrace explicit reading instruction (Durkin, 1978/1979), the purpose of literacy instruction is to explicitly employ multiple practices that address all the factors that contribute to comprehension. To address this goal much research has focused on identifying successful strategies to accelerate comprehension development (National Reading Panel, 2000).

Construction-integration theory. Cognitive theories related to memory storage and retrieval have led to reading comprehension theories defined by the relationships between elements in a text. Text difficulty and readability are defined in terms of coherence rather than as simply the sum or averages of individual surface features such as word frequency and sentence length (Benjamin, 2012). Many of these cognitive based theories of reading comprehension by design are well suited for computer modeling and analysis to help quantify the underlying comprehension processes.

One of the prevailing cognitive theories is the Construction-Integration (CI) model of reading comprehension, which holds that a *text base*, made up of the words, sentences, and paragraphs, does not adequately represent meaning, but rather that a *situation model* must be created in order for a deeper understanding to occur (Kintsch, 2004). According to CI, readers create a meaningful situation model by relating the text base to their prior understandings and experiences in order to create and comprehend new meanings as they read. CI theory differentiates levels of textual meaning with the distinction of micro- and macrostructures and that deeper comprehension happens through the integration of background information and a reader's prior knowledge into a situation model of

comprehension.

However, Kintsch (2013) acknowledges that situation models are not always strictly verbal since people often express meaning with multisensory images rather than words, and he claims that, "at present there really is no language . . . to represent the salient features of complex mental images" and he further asserts that this "deficiency" is why much of the research "neglects the role of mental imagery" (Kintsch, 2013, p. 809). One long-established theory of cognition, the Dual Coding Theory (DCT), has developed into what its proponents consider a robust and unifying theory of reading comprehension that does have language to represent the salient features of mental images (Sadoski & Paivio, 2007).

According to some DCT uses an integrative approach similar to CI when it is applied to reading comprehension (De Koning & van der Schoot, 2013). However, DCT proponents claim that DCT improves on CI in that it can theoretically account for decoding as well as for elements coming from outside of the situation model such as the role of mental imagery in reader response or reader affect (Sadoski & Paivio, 2007). The DCT approach to reading comprehension that considers mental imagery as a construct available for instructional manipulation particularly supports this study in its investigation of student-generated video as a type of external visualization strategy that may have influence reading comprehension.

Dual coding theory. Dual Coding Theory (DCT) is a theory of cognition that has been directly applied to literacy as a cognitive behavior and now is considered by some as a unified theory of reading comprehension (e.g., Clark & Paivio, 1991; 2000; Paivio, 1991; Sadoski et al., 1993; Sadoski & Paivio, 2007). DCT posits that all mental representations can

be either linguistic/verbal or nonlinguistic/nonverbal and that they form two individual but interrelated mental systems or codes. The verbal and nonverbal codes or systems represent knowledge of language and knowledge of the world respectively, and together the two systems can have positive additive effects on memory and comprehension (Paivio, 1991; Sadoski & Paivio, 2004).

   Verbal and nonverbal systems. The verbal system or code is specialized for processing language and the nonverbal code for processing nonlinguistic objects and events. The basic unit of verbal representation is a logogen and the basic unit of nonverbal representation is an imagen (Paivio, 1991). The verbal code logogen is anything learned as language and includes visual representations for letters and written words, auditory for phonemes, and other modality-specific representations (see Table 1). In sum, all verbal logogens are arbitrary word-like symbols that represent objects, events, and abstract ideas (Clark & Paivio, 1991, Sadoski & Paivio, 2004). Nonverbal representations or imagens are modality-specific, are often perceived in sets and can include images for shapes, sounds, actions, emotions, and other nonlinguistic objects and events (See Table 1). Nonverbal representations are not arbitrary; they have inherent meaning in that they are analogous to what they represent. Another difference between logogens and imagens is their organization. The verbal code is sequentially constrained whereas the nonverbal code can encode in parallel or simultaneously (Clark & Paivio, 1991).

Table 1

Orthogonal model of DCT representational units

Sensorimotor	Verbal Code	Nonverbal Code
Visual	Visual words	Visual objects
Auditory	Auditory words	Environmental sounds
Haptic	Writing patterns	"Feel" of objects
Taste		Taste memories
Smell		Olfactory memories
Emotion		Affective reactions

Note. Adapted from "Dual Coding Theory and the Mental Lexicon," by A. Paivio, 2010, *The Mental Lexicon*, *5*(2), p. 208.

DCT processes. As a theory of cognition, DCT includes three processes that allow for accessing the mental representations, and the verbal and nonverbal codes can operate independently or in tandem through these processes. In representational processing logogens or imagens activate for very basic initial recognition. This means that during reading, representational processing would activate logogens' phonological associations but not necessarily any semantic connections. Activation that spreads then within the verbal or within nonverbal code is associative processing, and this level of processing represents meaningful comprehension (Sadoski & Pavio, 2004). For example, verbal code associative connections occur when words become connected to other related words, and nonverbal code associative processing connects images to other images (Clark & Paivio, 1991). The third DCT process involves referential connections that occur between logogens and imagens (Sadoski & Paivio, 2004). It is through the referential connections that images are connected

to words and vice versa (Clark & Paivio, 1991). Although these three processes are described separately in DCT, they are elaborately interconnected. For example, at the initial sight of a word, the first representational process would also involve the associative process within the verbal code of visual and auditory logogens, and at the same time this would trigger a nonverbal representation process where word imagens would activate (Sadoski & Paivio, 2004). The more elaborate and interconnected the two code systems are through referential processing, the more meaningful will be the comprehension.

Additive hypothesis. DCT hypothesizes that verbal and nonverbal codes representing the same object (e.g., pictures and their names) form a referential connection that can have an additive effect on recall. In early DCT research, the imagens were considered only supplements to the base verbal code, but when they were combined, recall improved significantly, and this finding led researchers to hypothesize that together logogens and imagens have an additive effect for memory (Paivio, 1991). The initial research on the additive effect in DCT relied on a conceptual peg hypothesis related to the use of mnemonic techniques in word list memorization acting as memory pegs or placeholders (Paivio, 1991). In this research the words initially generated images during list learning, and then the images were evoked with verbal cues and decoded back into the original words. The verbal and nonverbal units taken together improved recall and that the most important feature of the memory peg words was their concreteness. This added value of imagens is referred to as the concreteness effect (Paivio, 1991).

The DCT additive hypothesis can explain the strength concrete words have over abstract words in free recall experiments, almost with a 2:1 ratio of strengthened recall (Paivio, 1991). This phenomenon is the result of the concrete words producing increased multisensory image arousal (Paivio, 2010). The values of imagery and concreteness were also correlated with ease in defining words at a correlation of .70 and .64, respectively (Clark & Paivio, 1991). This effect is not limited to just word lists. Research has also indicated that imagery processing affects the meaning of the larger verbal units of sentences and paragraphs (Anderson, 1974). In a later study, concreteness alone predicted recall of the gist of sentences (Anderson, Goetz, Pichert, & Halff, 1977). The additive effect of student-reported use of images (the nonverbal code) on recall has also been correlated with enhanced comprehension and recall of theme, plot, and events in narrative text (Sadoski, 1983). Images such as hierarchical trees or concept maps that represent related verbal elements visually and spatially combine the two code systems to aid memory, and using outlining and summarizing as a spatial representation of verbal associative processing have proved beneficial as a study aid (Kulhavy & Kardash, 1988).

Although presented separately in DCT, the verbal and nonverbal codes are intertwined so as to have collective and interactive effects that promote increased reading comprehension by producing a "strengthened memory trace" (Sadoski et al., 1993, p. 291). Sadoski et al. (1993) investigated basic recall and comprehension of paired abstract/concrete passages about historical characters and found that concreteness was the best predictor, accounting for 80% of the variance in passage comprehensibility, and concrete sentences and

paragraphs were consistently better recalled than were the abstract counterparts in immediate and delayed recall tests. The data also revealed concreteness ratings highly correlated with interest ratings (Sadoski et al., 1993).

Concreteness and interest are both part of the nonverbal code in DCT, so the notion that they may be related constructs is not surprising from the perspective of DCT. Furthermore, Sadoski et al. (1993) did not find that the information rated as concrete and interesting had diverted student attention from abstract information, a possibility that had been suggested earlier by other researchers (Garner, Gillingham, & White, 1989). Sadoski et al. found that in no case was abstract information recalled well. They responded to their findings by concluding that rather than considering concrete text a potential distraction as had Garner et al. (1989), that actually the abstract, generalized text could be seen as the "seductive abstractions" (Sadoski et al., 1993, p. 304). Sadoski et al. suggested abstract text may be important to the researchers but if such verbal forms of information are lost on students, this points to the need to add concreteness within instructional literacy texts.

Visualization. Utilizing both the verbal and the nonverbal codes during reading benefits comprehension and memory by creating rich multi-sensory verbal and nonverbal representations of the meaning in the text (Sadoski & Paivio, 2004; Sadoski et al., 1993). According to DCT the levels and amounts of associative and referential processing vary in a complex manner that depends not only on individual differences in past experience and in unprompted use of imagery, but also on elements of context (Clark & Paivio, 1991).

The following review focuses on elements within the classroom context that can help induce mental imagery and prime students for simultaneous dual coding. According to DeKoning & van der Schoot (2013), visualization is defined as the practice of intentionally inducing nonverbal representations of objects or events that are described in text. The visualization can be internal in that the mental image occurs entirely within the mind or can be external such as a drawing or other physical representation. Although both types of visualization are interconnected, the following review organizes the research into studies of the impact of internal visualization and studies that examine the effects of external visualization.

Internal visualization. According to DCT, creating multisensory nonverbal representations of the text helps the reader connect the new text with previous personal experiences and knowledge already stored in long-term memory, which in turn deepens understanding (De Koning & van der Schoot, 2013; Sadoski & Paivio, 2004). There have been numerous studies that support the DCT hypothesis that teaching readers to internally visualize or generate mental images in their minds as they read improves recall and enhances the ability to draw inferences and make predictions from narrative text for young skilled readers (Gambrell, 1982; Pressley, 1976; Sadoski, 1983) and for young skill-challenged readers (Gambrell & Bales, 1986; Oakhill & Patel, 1991). Similar results have been found with expository text for young readers (e.g., Glenberg et al., 2011; McCallum & Moore, 1999; Van Meter, 2001; Van Meter, et al., 2006) and for older readers (Gunston-Parks, 1985; Leutner et al., 2009).

One issue found within this body of research particularly salient for the design of this study is the mixed findings regarding the importance of visualization instructions provided in the experimental treatment. For example, two studies that focused on elementary aged students gave very little visualization strategy instruction prior to their reading narrative texts, but they found significant positive results from the brief training (Gambrell, 1982; Gambrell & Bales, 1986). Gambrell (1982) used very simplistic instructions in an earlier study for students to make mental images and found that the grade 3 students made more accurate predictions and wrote longer completions than did the control group, concluding that with minimum instruction visualization can facilitate comprehension. In a later study, Gambrell and Bales (1986) investigated the impact visualization would have on comprehension monitoring of grade 4 and grade 5 students characterized as poor readers who were successfully reading at least one year below grade level. The researchers instructed the experimental group, "One good way to understand and remember what you read is to make pictures in your mind. I want you to make pictures in your mind to help you understand and remember what you read" (Gambrell & Bales, 1986, p. 458). Students in the control group were instructed to simply do whatever they could to understand and remember what they read. Despite the brevity of their visualization strategy training, the experimental group identified both explicit and implicit inconsistencies in text 70% of the time compared to 1% of the time in the control group. Teaching students to use visualization as a successful reading comprehension strategy has been characterized as "really easy" (Gambrell & Bales, 1986, p. 150).

Other studies have attempted to address the issue of instructions in visualization, with some instructional protocols lasting just a few minutes (Rose, Cundick, & Higbee, 1983) to multiple 30-minute sessions (Borduin et al., 1994). Despite the difference in instructional protocols, both of these studies found positive correlations between the visualization training and reading comprehension. The study with the short instructional protocol (Rose et al., 1983) found significant increases in reading comprehension for learning-disabled students who had been instructed in the use of mental images. The Borduin et al. study (1994) found increased inferencing reasoning skills with grade 2 students who had received the much longer visualization training.

Not all of the research involving internal visualization as a reading strategy concurs with Gambrell and Bales' (1986) earlier conclusion regarding the small amount of instruction needed to elicit positive results from teaching students to visualize while reading text. For example, Anderson and Kulhavy (1972) found that the simple instructions given to high school students to make mental images while they are reading expository text did not correlate with their subsequent reading comprehension level. Instead, the amount of text the students from both the experimental and the control groups reported they had made mental images for was positively correlated with their reading comprehension. This finding supports the value of imagery, as would be predicted by DCT, but it indicates that, at least for older students, more than simple visualization instructions are needed to intentionally prompt the use of imagery.

Other studies confirm that simplistic visualization instructions do not have a positive impact on reading (Cramer, 1980; Gunston-Parks, 1985; Moore & Kirby, 1988). Like the findings from the Anderson and Kulhavy (1972) research, Gunston-Parks (1985) found that the amount of mental images generated positively correlated to reading comprehension but that the visualization training instructions were not correlated to reading comprehension. DCT holds that successful readers naturally evoke mental imagery as they read to help them connect with the text content (Sadoski & Paivio, 2004). One study that examined naturally occurring (uninstructed) visualization indicated that when given no priming or direction before reading the text, students often produced images that were actually not related to the text and these "unconstrained" images were correlated with comprehension failure; whereas, images grounded in or "constrained" to the text were correlated with successful comprehension (McCallum & Moore, 1999, p. 21). Together these findings suggest that generating mental images does have a positive impact on reading comprehension; however, further study is clearly needed to determine what instructions would be most successful in training students in how to employ visualization as a strategy to improve comprehension of text content.

According to DCT successful readers intentionally activate nonverbal representations to add to the text and to their related prior knowledge in order to construct a meaningful situation model, and De Koning and van der Schoot (2013) suggest that providing process-oriented instructions would be more aligned to the method readers use to construct mental representations from text. Such a processing approach was adopted in a later article providing

pedagogical advice (Gambrell, Kapinus, & Wilson, 1987) in which the researchers did

modify the brief protocol used in the earlier studies (Gambrell, 1982; Gambrell & Bales,

1986) to include explanations and modeling, so that the visualization training would take

about 20 minutes. One significant criticism related to the instructions used in many of the

studies cited above is that while they all tried to control the visualization instructional

protocol, they did not offer a comparable set of strategy instructions for the control groups

(De Koning & van der Schoot, 2013).

Visualization as an active reading process followed by summarizing as a text

reorganizing strategy has been suggested as a useful design to help readers gain

independence (Gambrell et al., 1987). Summarizing is a text reorganizing strategy that

requires students to identify main ideas and omit supporting details. This helps readers

remember what they read and "especially to personalize the new information" as they work

toward reading comprehension (Gambrell et al., 1987, p. 639). To address the weakness in

the previous studies involving summarizing and visualization, this study provided a

comparable set of summary strategy instructions modeled on the Gambrell et al. (1987)

protocol for both the treatment and the comparison groups (see Appendix C).

External visualization. External visualization is defined as reader-constructed visual

or multimodal (multiple senses such as sound, movement, etc.) physical representations of

text content (De Koning & van der Schoot, 2013). Although the majority of research on

visualization as a reading strategy involves internally inducing the nonverbal representations

within the minds of the readers, there are studies that investigate the influence external

visualization can have on reading comprehension (e.g., Leutner et al., 2009; Snowman & Cunningham, 1975; Van Meter, 2001; Van Meter et al., 2006).

The instructional practice of having students draw pictures that represent the text are a form of external visualization, and research shows that the training used to teach students how to externally visualize text through drawing has a significant impact on their comprehension of expository text (Van Meter, 2001; Van Meter et al., 2006). In her 2001 study Van Meter instructed students in grades 5 and 6 to create drawings based on an expository text reading within one of three conditions (in addition to the control group that did not draw). One group drew with no supporting prompts, one received a sample picture, and the third group was given guiding questions and the sample picture. The group that received the questions and the sample picture significantly outperformed the other groups on the recall posttest and in the accuracy of the drawings (Van Meter, 2001). A later study of grade 4 and grade 6 students drawing from expository text resulted in similar findings, where the greater the support provided, the more accurate the problem solving, the recall, and the drawings (Van Meter et al., 2006). Having students in grade 10 produce unsupported drawings from reading expository text, on the other hand, resulted in decreased levels of comprehension (Leutner et al., 2009). It should also be noted that like the internal visualization studies reviewed previously, all of these drawing studies used control groups that did not receive comparable strategy instruction or prereading prompting.

Whereas drawing to text constitutes a single mode of external visualization, physical manipulation of objects to depict text content is a multimodal form of external visualization.

Research indicates that children in grades 1 and 2 who manipulate toy objects to depict narrative text content manifest significantly more accurate recall and inferencing skills compared to control groups who collaboratively reread the texts (Glenberg, Gutierrez, Levin, Japuntich, & Kaschak, 2004). This positive result of external visualization was replicated with triads of children between the ages of 6 and 8 who collaboratively manipulated the toy objects to depict narrative text content compared to triad control groups who collaboratively reread texts (Glenberg, Brown, & Levin, 2007). The benefits of multimodal external visualization in the form of object manipulation has also been found with improved performance on solving math word problems by grade 3 and grade 4 students who manipulated the toy objects on a computer screen (Glenberg et al., 2011).

These findings taken together indicate that reading comprehension of both narrative and expository texts can be improved through intentionally focused training in the use of internal and external visualization strategies provided to students as individuals and in small groups Although the instructional goal is for students to be able to independently internally visualize text content as successful life-long readers, external visualization techniques can be used to introduce students to the construction of multisensory nonverbal representations of texts that can ultimately lead them to internally visualizing text through mental imagery alone (De Koning & van der Schoot, 2013).

No research could be found that was grounded in DCT and/or utilizing visualization as an instructional practice in the form of student-generated videos, yet this technique resembles the external visualization strategies featured in some of the reviewed research that

were found to be positively correlated with increased reading comprehension in both narrative and expository text. Specifically, student-generated video could feature students either manipulating objects (such as stick figures or action figures) or physically acting out important parts of the texts (using themselves as objects to manipulate) in processes similar to children in grades 1 and 2 manipulating toys to depict narrative texts (Glenberg et al., 2004), children in grades 3 and 4 manipulating computer images to illustrate their understanding of math word problems (Glenberg et al., 2011), or children in grade 4 dramatically acting out narrative text without videorecording (Rose, Parks, Androes, & McMahon, 2000).

This study extended the body of research related to DCT and visualization strategies in that it examined student-generated video of digital images representing textual main ideas as a form of multimodal external visualization. This multimodal external visualization, according to DCT, would add concreteness to abstract informational text and, therefore, would, at least theoretically, have a positive impact on reading comprehension (Sadoski & Paivio, 2004). There is an emerging body of research on student-generated video as an instructional practice that integrates out-of-school new literacies with in-school literacy. However, as an emerging field the research has in large part focused on descriptive research rather than empirically investigating the possible influence student-generated video as a visualization strategy might have on reading comprehension. The following section of this review highlights research focusing on student-generated video as part of literacy instruction.

Student-Generated Video Literacy Research

The majority of the research on student-generated video uses a qualitative case study design, including research investigating the impact student-generated video has on learner attitudes toward writing (Ranker, 2008), student engagement in project-based learning (Kearney & Schuck, 2006), and empowerment of students at-risk of academic failure (Lee et al., 2008). Although these studies are not framed within DCT, student-generated video could be used as a form of external visualization, and as such may enhance students' reading comprehension.

Many researchers are now investigating the instructional benefits of new literacies, and this research can inform schools as they work to redefine what it means to become educated in the 21st century. Because the move from print to digital media has happened remarkably fast in less than one generation, much of the emerging research involves exploratory qualitative case studies that attempt to reveal student and teacher perceptions to the new modes of response. Although there are myriad emerging new technologies fueling this body of research, the following review includes studies that investigate the instructional value of student-generated digital videos.

One case study examined the interplay between video editing tools and other media resources within students' composing practices (Ranker, 2008). Middle school subjects characterized as resistant to participating in traditional writing activities approached the task of creating an informational video on a topic of choice in a nonlinear interactive fashion so that "a *composing synergy* emerged in the dialogic space that was fostered through the use of

multiple *media*" (Ranker, 2008, p. 225). This interaction resulted in highly engaged and productive students, students who exceeded their own traditional linear literacy capacities as they recursively revisited and added to their production. The researcher observed the additive effect the multimodal literacy practices had for students who had been resistant to participating in literacy activities.

A similar result was indicated in a multiple case study conducted across five schools where collaborative student-generated video production was part of regular instructional practice (Kearney & Schuck, 2006). Both students and teachers served as resident experts who supported learners as they collaboratively designed their video productions in social learning groups. This type of classroom experience could be characterized as sociocultural in that it situates learning within the context of the shared knowledge building activity (Perry, Turner, & Meyer, 2006). The students had control over task choice and over most aspects of product development, and they had meaningful roles in the group structures that approximated real world work interaction, with the students eventually evolving expertise and becoming resources for others (Kearney & Schuck, 2006).

A mixed method study investigated the cognitive and social development of urban at-risk, low-income high school students through their participation in an afterschool program that featured digital video production (Charmaraman, 2006). A focused content analysis revealed that students were using both linguistic and non-linguistic tools to negotiate communication and create new meaning in digital media already familiar to them. This resulted in observable multiple levels of understanding occurring simultaneously through the

process of student-generated video production. This study of student-generated video most closely mirrors the DCT interaction of verbal and nonverbal systems to create a rich situation model to represent the meaning of the text content. Although no quantitative achievement or engagement measures were used in this study, the results suggested that leveraging students' existing out-of-school digital media fluency and informal home learning and knowledge could yield powerful results in accelerating literacy acquisition in academic educational settings.

The positive outcomes of using digital technologies, and student-generated video in particular, as a part of literacy instruction that validates students' informal literacies and culture appear again and again in articles that exemplify the theme of empowering students to collaborate in social learning (Lee et al., 2008). Despite repeated observations that student-led digital video projects appeared to have affected student performance because instructionally integrating new literacies helps "create a space where the students' culture, experiences, and values could be utilized and validated" (Chun, 2005, p. 34), the push for standardized testing often undercuts the adoption of these student-empowering new literacies best practices (Leu et al., 2004). Brass (2008) suggests that remediation efforts based on drills toward developing proficiency as measured by standardized tests further "displace young people's local knowledge . . . their local knowledge can facilitate sophisticated textual work, as well as problematize what counts as literacy achievement in secondary schools" (p. 464). The lack of student validation in the traditional classroom practices is exacerbated, ironically so, by schools' very efforts to close the achievement gaps (Brass, 2008).

One recommendation found across all of the related new literacies research included in this review was the need for classroom practitioners to create meaningful methods and techniques to empower students to employ their existing out-of-school new literacies skills to better serve their in-school academic needs. Over seven years ago one researcher created a research design primer related to the instructional use of digital video that suggested this area of research should always "provide evidence of deep learning . . . and can be successfully used to support assessment for learning" (Barrett, 2005, p. 1). Yet, this field of research still lacks studies that integrate the qualitative exploration of student empowerment afforded through the instructional integration of new literacies with quantitative investigation into the possible relationship between student achievement and new literacies instructional practices.

Summary of Literature Review

This study was designed to investigate many of the related research issues featured in the review of literature. First, this research investigated instructional strategies that may have a positive impact on reading comprehension of informational texts. This study addressed the need to investigate an expanded instructional use of rigorous informational texts, as evidenced in the literature. The second area of the literature review addressed within this study is the body of theoretical and applied research related to Dual Coding Theory and the use of visualization as an instructional strategy to enhance reading comprehension. Early studies in this area focused on supporting younger learners' reading of narrative texts, whereas the later studies began to examine the use of visualization strategies to assist in comprehending informational texts, albeit mostly within elementary instructional settings.

This study adds not only to the research on visualization strategies and comprehension of informational texts but also to the emerging body of research situated within high school contexts. Furthermore, the literature review uncovered scant visualization research situated within multimodal computer based texts, and this study's focus on student-generated video as a form of external visualization supplements this part of the existing research base. This third area of the literature review situated student-generated video as a form of text response within research on multimodalities and emerging new forms of literacy. The related applied research on the use of student-generated video qualitatively explored the potential influence this instructional practice may have on students' literacy experiences but did not measure the potential impact such new literacies practices may have on reading comprehension.

CHAPTER THREE: METHODS

Research Design

This study employed a mixed methods approach that involved both quantitative and qualitative methodologies within a two-phase design (see Appendix A) to address the two research questions. The mixed methods design addressed the study's twofold purpose: (a) to compare the influence student-generated video as a form of multimodal external visualization may have on reading comprehension, and (b) to explore student perceptions of using student-generated video compared to producing written responses to informational reading. The sequential explanatory mixed methods design first employed a quantitative phase followed by a qualitative phase of data collection and analysis, QUAN → qual (Creswell & Plano Clark, 2011). Positioning the qualitative data collection and analysis second provided the researcher a broadened understanding of the research problem and an opportunity to explore in depth the participants' perceptions and experiences relative to the quantitative results gathered earlier in the research procedure. A defining characteristic of the sequential explanatory mixed methods design is that the quantitative results are used to refine and define qualitative data collection protocols (Creswell & Plano Clark, 2011). In this study the results of the quantitative prior knowledge and posttest reading comprehension measures helped inform the semi-structured interview protocols used in the focus group interviews in the second phase of the study. In addition the qualitative results produced from the focus group interviews also prompted an additional set of quantitative analyses.

Participants

Students in regular (non-honors, non-AP, non-inclusion) and in honors 10th grade English classes in a public charter high school in the rural southeastern United States were randomly assigned to one of two instructional treatment conditions in this study. The students participating in this study were drawn from a charter school whose mission defines the school as college preparatory, indicating that the students who choose to attend this school are motivated to go to a two- or a four-year institution for post secondary education. The demographics for the 2012-2013 grade 9 school population (N=84) who formed the grade 10 participant pool for the study included (in percentage followed by raw number): American Indian 2.3% (2), Asian 0% (0), Hispanic 0% (0), Black 10.5% (9), White 84.9% (73), Multi 2.3% (2), and Pacific Islander 0% (0) (NCReportCards, 2013).

Grade 10 was chosen for reasons related to curriculum content and the timing of the data collection. First, the data collection was scheduled for the latter part of the second semester of the 2013-2014 school year. This data collection coincided with the EOC review period for this charter school's yearlong English course of study, which was amenable to the school leadership since the reading passages and questions used for the data collection were authentic grade 10 EOC items drawn from the state field tests and would serve as an EOC review for the students participating in the study. Second, the targeted student population was finishing their grade 10 English course of study, making the use of released grade 10 English II End of Course (EOC) test items developmentally appropriate for students at this grade level. Intentional selection of a particular population of participants, as conducted in this

study, constitutes a purposive, nonprobabilistic sample (Creswell & Plano Clark, 2011).

Although a purposive sample, the selected English students were enrolled in two classes each

of regular and honors English 10 classes and so could be randomly assigned to experimental

and comparison treatment groups to reduce the possibility of selection bias. The targeted

school served approximately 84 English grade 10 students divided into four 10th grade

English classes that were scheduled in consecutive pairs facilitating possible random

assignment.

Data Sources

Data sources included quantitative measures administered in Phase One and

qualitative focus group data collected in Phase Two of the study. In Phase One, the

quantitative data sources were: (a) the most current available state standardized English

Language Arts End of Grade (EOG) test scores, (b) measures of content prior knowledge

(PK), and (c) brief reading comprehension posttests for three short informational readings.

English language arts EOG8 test scores. The most current state standardized

English language arts EOG score available for study participants at the time of this study was

the 2011-2012 administration of the ELA8 EOG based on the North Carolina ELA Standard

Course of Study (NCSCOS). The ELA8 EOG consisted of 10 reading passages with a total of

68 questions to be completed in a 100-minute testing session (NC DPI, 2013). Four passages

were literary selections, four were content-based passages from other school disciplines such

as science or history, and two were consumer/human interest passages. The ELA8 EOG

reading assessment was designed to measure student achievement on goals 1-3 of the

NCSCOS: the use of strategies and processes that enhance control of communication skills development (NCSCOS Goal 1); the use of language for the acquisition, interpretation, and application of information (NCSCOS Goal 2); and the use of language for critical analysis and evaluation (NCSCOS Goal 3). The ELA8 EOG field tests produced an average reliability coefficient alpha of .92 at the passage level and .93 at the item level (N=80,833) (NC DPI, 2014). Signed written consent forms allowed these EOG scores to be obtained from the public charter school office. These scores were included as a covariate in the multivariate data analysis to control for variance in participant baseline reading abilities to investigate possible interactions between instructional treatments and the two dependent variable levels of reading comprehension.

Content prior knowledge measure (PK). Prior knowledge of the informational texts was assessed immediately before each text reading occurred. One study used a brainstorming strategy to assess prior knowledge of expository texts that were to be used in the instructional conditions (Hoffmann, 2010). In this study, grade 5 students were given three minutes to write down as much as they could about the named topic. Two independent raters coded the prior-knowledge sheets, assigning one point for each unique, accurate proposition. The number of accurate and original propositions was recorded, and inter-rater reliability was established to be 88%. Any disagreements were resolved through discussion. This technique to assess content prior knowledge (PK) was also used in this study. Experienced teachers not participating in the study were trained by recursively checking inter-rater agreement in rounds of every ten PK measures, working through the 74 PK measures obtained for each of

the three informational passages. Inter-rater reliability was established using Cohen's kappa-statistic measure. Inter-rater reliability averaged across the three readings was 89%, and disagreements were resolved through discussion. These teachers were financially remunerated for their time.

Reading comprehension posttests. This study used three informational readings to produce reading comprehension measures to address the first research question. Since each of the three comprehension measures have less than ten questions each, the scores for the three readings were combined into a single reading comprehension total score. The combined reading comprehension questions were also analyzed as two subsets of reading comprehension scores based on dichotomous ratings of levels of comprehension.

The readings used in this study were drawn from released field tests not used in the first administration of the English II End of Course (EOC) assessment in 2012-2013. The 2012-13 EOC II administration included three pencil and paper forms (A, B, C) and three online forms (M, N, O) which rendered the following reliability coefficients: Form A: 0.89, Form B: 0.89, Form C: 0.89, Form M: 0.89, Form N: 0.90, and Form O: 0.89. Two of the three readings are informational history passages, "Excerpt from *Meet the Moai of Easter Island*" and "Excerpt from *To the Person Leaving*." The other selection is an informational science passage, *Geology Fieldnotes: Big Bend National Park, Texas.*

These three readings are the only informational passages that have been released from the latest generation of standardized tests aligned to the ELA CCSS; all other released passages are fiction or poetry. The readings are of lengths and text complexity typical of the

grade 10 required standard course of study (see Table 2). For a full description of the passages see Appendix D. The first reading was the "Excerpt from *Meet the Moai of Easter Island,*" the second was "Excerpt from *To the Person Leaving*," and the third was *Geology Fieldnotes: Big Bend National Park, Texas.* See Appendix D for passages and related comprehension questions.

Table 2

Lexile Analyzer Results for Experimental Informational Reading Passage

	Reading 1	Reading 2	Reading 3
Lexile Measure	1200	1320	1360
Mean Sentence Length (in words)	18.7	23.4	21.1
Mean Log Word Frequency	3.36	3.47	3.18
Word Count	542	678	972
Informational Subgenre	History	History	Science

The use of a series of brief passages followed by reading comprehension measures has been employed in several studies investigating the effects external visualization may have on students' reading comprehension (e.g., Glenberg et al., 2011; Van Meter et al., 2006). This research helped inform the design used in this study. A comprehension measure consisting of multiple choice and constructed response items was administered as a reading posttest after students completed each of three brief informational passages. Experienced teachers not otherwise participating in the study were trained to use the prescribed scoring

rubric for the three constructed response items and inter-rater agreement was established using Cohen's kappa measure. Inter-rater reliability averaged across the three items was 93%. These teachers were financially remunerated for their time.

The passages and the questions on the reading comprehension measures used in this study were previously administered statewide as part of the field testing program conducted by the North Carolina Department of Public Instruction, with the exception of the constructed response item in the third passage. This item was added to the third passage to balance the item distribution since the other two passages already contained constructed response items that were included in the field tests. None of the students in this study participated in any of the field tests of any of the study's passages. Six different field test forms were administered under what are called un-motivated, or no-stakes, conditions prior to creating the final forms of the new English II EOC exam (Dr. N. McBride, personal communication, November 7, 2013). Although the field test forms included items that were ultimately deemed of insufficient psychometric quality to move forward on either a released or operational form, the readings included in this study were considered appropriate for released and operational forms of the test.

Reliability of field test items. Reliability coefficient alpha calculations were produced reflecting each form's 59 question items, which included those items that were eventually deemed of insufficient psychometric quality. These reliability values also reflect the inclusion of some but not all items on the released form passages since the sample of items field tested was split across two forms. The reading passage "Excerpt from *To the Person*

Leaving" was included on field test Form 252 and on Form 255, and the released form passage includes seven multiple choice items and one constructed response item. Form 252 produced a reliability coefficient of 0.83 and Form 255 produced a reliability coefficient of 0.81. Two of the readings appeared together on field test Form 357 and Form 358. There passages were "Excerpt from *Meet the Moai of Easter Island*" that includes seven multiple choice and one constructed response item, and *Geology Fieldnotes: Big Bend National Park, Texas* that contains eight multiple choice items. Form 357 produced a reliability coefficient of 0.85 and Form 358 produced a reliability of 0.81. Although the comprehension measures at the individual passage level are too brief to render meaningful reliability coefficients, they were all part of larger measures that achieve reliability coefficients of .80 or above, which is considered acceptable for many group and individually administered achievement tests (Reynolds, Livingston, and Wilson, 2009).

Validity of field test items. Each question in the released informational reading passages used in this study underwent what the NCDPI accountability department characterizes as a rigorous process to produce the highest content validity possible for the resulting test forms (NCDPI, 2013). Test items are designed, developed, and classified to align the cognitive rigor of the test to the cognitive complexity reflected in the ELA CCSS. Input is solicited from experienced teachers, testing coordinators, and psychometricians in ascertaining test content alignment. In general, test items should require students to not only recall information, but also apply concepts and skills, make decisions, and explain or justify their thinking. The 26 items included in these released passages were produced through this

development process and field tested throughout the state. Taken together they cover CCSS

Reading Informational Text Standards 1 – 6 (RI.1-6) and Language Standards 4a and 5a

(L.4a-5a). Table 3 captures the distribution of the items across the CCSS. The items available

only in online test forms were omitted from this study.

Table 3

CCSS Distributions for Informational Reading Passages

# Items Included		Standards Covered
Multiple Choice	Constructed Response	
0	1*	L.4a. Use context (e.g., the overall meaning of a sentence, paragraph, or text; a word's position or function in a sentence) as a clue to the meaning of a word or phrase. Note – this item is available online only.
4	0	L.5a. Interpret figures of speech (e.g., euphemism, oxymoron) in context and analyze their role in the text.
3	0	RI.1. Cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.
2	0	RI.2. Determine a central idea of a text and analyze its development over the course of the text, including how it emerges and is shaped and refined by specific details; provide an objective summary of the text.
6	0	RI.3. Analyze how the author unfolds an analysis or series of ideas or events, including the order in which the points are made, how they are introduced and developed, and the connections that are drawn between them.
4	1*	RI.4. Determine the meaning of words and phrases as they are used in a text, including figurative, connotative, and technical meanings; analyze the cumulative impact of specific word choices on meaning and tone (e.g., how the language of a court opinion differs from that of a newspaper). Note. The constructed response item is available online only.
1	0	RI.5. Analyze in detail how an author's ideas or claims are developed and refined by particular sentences, paragraphs, or larger portions of a text (e.g., a section or chapter).

Table 3 Continued

| 2 | 2 | RI.6. Determine an author's point of view or purpose in a text and analyze how an author uses rhetoric to advance that point of view or purpose. |

Note. Items marked with an asterisk are available online only and so are omitted from this study.

Levels of comprehension. In Bloom's Revised Taxonomy, students' acquisition of knowledge and their application of cognitive skills produce successful learning in general (Anderson & Krathwohl, 2001), and this assumption was applied to reading comprehension within the ELA CCSS measured in the EOC II field test items used in this study (NCDPI, 2013). The Construction-Integration (CI) model of reading comprehension also supports this multipart concept of reading comprehension. CI holds that the text alone represents the surface level or text based meaning of a text, and that in order for a deeper understanding to occur a situation model must be created that would include verbal as well as nonverbal representations that together constitute deeper comprehension (De Koning & van der Schoot, 2013; Kintsch, 2004). This situation model of reading comprehension is created when students are able to draw upon their prior knowledge as well as the surface level text based meaning to make inferences in order to comprehend the gist of the text as well as deeper levels of understanding that the surface text based comprehension level alone can produce. The reading comprehension posttest questions included across this study's three passages are gauged to measure text-based levels of comprehension required within the CCSS L.4a and 4b and well as the more complex levels of comprehension required for students to make

inferences in order to create a situation model of text comprehension included in CCSS RI.
1-6.

The CCSS language standards classify the reading comprehension questions used in
this study into broad categories, such as students' vocabulary acquisition and use, students'
understanding of key ideas and details in the passage, and students' awareness of the craft
and structure of the given passage. To facilitate a more granular analysis of the reading
comprehension questions, two independent researchers analyzed the 25 reading
comprehension questions included in this study and categorized the multiple choice questions
(worth one point each) as requiring the reader to make a retrieval or a generation inference
and the three constructed response questions (worth two points each) could require one or
both types of inferencing. Retrieval inferences are defined as bridging inferences readers
make to connect different parts of a text or to connect their prior knowledge with the text,
and generation inferences are made when readers use parts of the text to logically deduce
new information that does not explicitly appear in the text (Kintsch, 2013). These two
categories of questions served as dependent variables in the multivariate analyses included in
this study.

Two independent researchers analyzed the 25 reading comprehension questions and
categorized the multiple choice questions (worth one point each) as requiring the reader to
make a retrieval or a generation inference, and the three constructed response questions
(worth two points each) could require one or both types of inferencing (worth 2 points total).
Using this rating procedure split the combined reading comprehension question points into

16 retrieval inference points and 12 generation inference points. Inter-rater reliability for the retrieval/generation inferencing rating using Cohen's kappa-statistic measure was 84%, and a third reader was brought in to help adjudicate any differences in ratings. The analysis protocol the raters used appears in Appendix E.

As a result of some of the data obtained in the focus group interviews, an additional set of comprehension levels was produced and investigated quantitatively in this study. The VG focus group interview contained repeated comments on how the concrete imagery in the passages facilitated comprehension, a finding that is supported by DCT research. The same two independent researchers analyzed the 25 reading comprehension questions and categorized the multiple choice questions (worth one point each) as referencing either concrete or abstract text and the three constructed response questions (worth two points each) could reference both. Concrete questions were those that contained sensory images or required the reader to refer to sections of the passage that contained sensory images. The abstract question category was defined as any question with a noted absence of sensory information or one that required the reader to refer to text that lacked sensory information and relied heavily on verbal code. The raters used the same analysis protocol to analyze the two different sets of comprehension levels and the protocol appears in Appendix E. These two levels of comprehension served as an additional pair of dependent variables within the multivariate analysis. Inter-rater reliability for the concrete/abstract rating was established as 74% using Cohen's kappa-statistic measure, and a third reader was brought in to help resolve any differences in ratings. Samples of these ratings appear in Table 16 in Chapter 4.

Focus group interview data. In Phase Two, focus group interviews were conducted. Focus group interviews are useful for topic exploration and to explore phenomena (Krueger & Casey, 2000). This form of data collection helped probe student opinions and perceptions of the instructional use of multimodal representation and visualization. After completing the posttest sessions, volunteer students participated in a focus group interview corresponding to their respective treatment conditions. The focus group sessions were audio-recorded, transcribed, and analyzed to compare student perceptions of reading informational texts under the two conditions.

A semi-structured interview protocol comprised of open-ended questions was used within the focus group format. This format was chosen with the expectation that the interaction among and the sense of familiarity and security provided by the grouped student interviewees would produce the most useful information and the most robust level of self-disclosure among participants (Creswell, 2007; Krueger & Casey, 2000). The open-ended questions focused on eliciting the participants' perceptions of their experience as they read and responded to the informational texts and also explored perceptions of their respective modes of text response to address the second research question (see Appendix F).

Procedures

This study compared high school students' reading comprehension of informational texts under two instructional treatment conditions: an experimental instructional condition that used student-generated videos as a form of external visualization (VG), and a comparison condition of (CG) that required written responses to text (see Appendix A for

research design). Phase One of this study included training the cooperating teacher in the two

instructional protocols, acquiring participant written consent forms, and randomly assigning

participants to the two conditions using a computerized randomizer (Urbaniak & Plous,

2013). Phase One also included accessing participants' most current ELA8 EOG scores and

collecting quantitative measures of pre-reading prior knowledge and post-reading

comprehension measures after each reading passage response activity was completed. The

second phase of the study qualitatively probed the students' experiences in reading and

responding to informational texts under both treatment conditions. Table 4 provides an

overview of the time frame for the study's activities.

Table 4

Study Time Frame and Condition Activities

Day	Minutes	Activity
1	5	Introduce Study
	15	Model Reading Task & Graphic Organizer
	40	Introduction and Practice of either (VG) Animoto or (CG) Summarization
2	5	Complete PK #1
	10	Read passage #1
	35	Create (VG) Animoto or (CG) summary #1
	10	Complete reading comprehension posttest #1
3	2	Complete PK #2
	15	Read passage #2
	30	Create (VG) Animoto or (CG) summary #2
	10	Students complete reading comprehension posttest #2
	3	Sign up for focus group participant pool.

Table 4 Continued

4	2	Complete PK #3
	15	Read passage #3
	30	Create (VG) Animoto or (CG) summary #3
	10	Complete reading comprehension posttest #3
	3	Sign up for focus group participant pool.
5	60	After School Focus Group Interviews

Phase one quantitative research. This study included 84 English grade 10 students from four classes scheduled in two repeated sections taught by the same teacher. Because the same teacher conducted the two classes for two consecutive periods of instruction, a randomized block design was used to randomly assign students to the two treatment conditions without having to also randomly assign teachers to the treatment conditions. In a randomized block design, the random assignment to treatment conditions is conducted within "blocks" that are defined by a nuisance variable that needs to be controlled within the experimental design (Kirk, 1995, p 252). The school schedule allowed the nuisance variable of teacher effect to define the *block* within which students were randomly assigned to either the VG or CG experimental conditions within their regular or honors English courses. This design isolated and thereby removed the teacher variable effect through the random assignment. All students who attend English 10 classes with Teacher A were pooled by either regular or honors English and randomly assigned to one of two treatment conditions within Teacher A's classroom (see Figure 1). The same assignment process was used for all of

Teacher A's students; however, eight students from A1 dropped out of the study resulting in

uneven attrition between the two treatment conditions (CG n=34, CG n=42).

	CG	VG
Teacher A 1st and 2nd Period Students N=49	A/1 n=25	
		A/2 n=24
Teacher A 4th and 5th Period Students N=35	A/4 n=17	
		A/5 n=18
	Total VG N=42	Total CG N=42
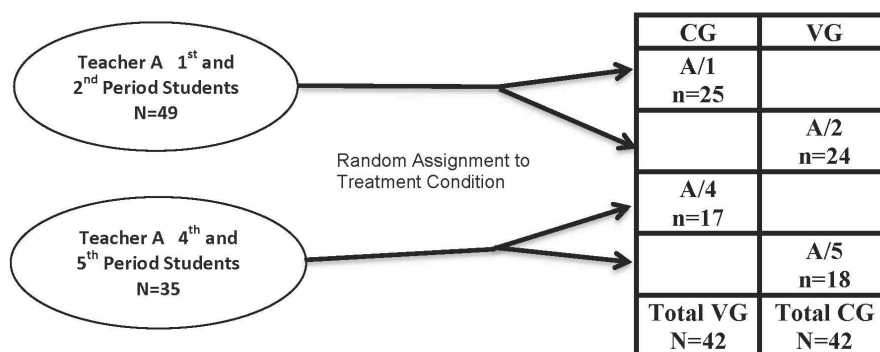
Figure 1. Randomized block design with two treatment conditions.

The classroom teacher participating in the study was trained after school prior to the

start of the treatment protocols. Scripted protocols were used for both instructional groups of

students. The intent of using scripted protocols was to apply control to the treatments to keep

every aspect of the treatments as similar as possible except for the mode of the culminating

response activity, the focus of the research problem (Creswell, 2007). Both treatment

protocols were conducted over the same total amount of time, and the VG and CG

instructional groups were allotted identical periods of time to read the same informational

nonfiction texts and both groups used the identical graphic organizer to take notes as they

read (see Appendix C).

The participating teacher received training to assist her participation in both the CG

and the VG instructional protocols. All training occurred after school and prior to delivering

the instructional conditions. The teacher received training in using Animoto, a simplistic free web-based program used for producing short videos. There are four steps in creating an Animoto video: (a) dragging and dropping copyright-free images, (b) arranging desired images and text, (c) selecting a pre-recorded sound file, and (d) clicking the "Finalize" button. Although Animoto does not have the flexibility other programs such as MovieMaker and IMovie have to customize video production, Animoto is appealing in a classroom setting in that it can be easily used to quickly create sophisticated videos with little expertise (Tagsold, 2013). The teacher did not need to be a technology expert to use Animoto; however, the researcher was available to help troubleshoot any difficulties that arose during the delivery of the video response protocols.

The participating teacher also received training in written summarizing instruction, which was expected to be an instructional strategy more familiar to the teacher (see Appendix C for the CG protocol description). The teacher was also trained in administering the prior knowledge measure that was used in both treatment conditions for each informational reading. Students had five minutes in the practice session, and five minutes on day two, and the PK time was reduced to two minutes on days three and four of the experiment as students were accustomed to the PK instrument. Two independent raters not participating in the study were trained and contracted to code the prior-knowledge sheets, assigning one point for each unique, accurate proposition.

In addition to participating in the protocol training, the teacher acquired the signed participant informed consent forms before the start of the instructional treatments so that the

researcher could conduct the random assignment prior to the start of the two experimental

protocols. This timeline also allowed the researcher to establish Flickr (2014) and Animoto

accounts for all study participants prior to the start of the experimental treatments. Once the

teacher training, the written consent forms, and the random assignments were completed, the

two instructional treatments were delivered over four 60-minute instructional periods (see

Table 4). Students who did not have permission to participate in the experiment or for other

reasons such as class absences had to drop out of the study completed the informational

readings, written summary activities (from the CG treatment) and the reading comprehension

measures in the separate setting of the media center, but their data were not included for

analysis.

Video group (VG). The teacher protocol training, the collection of the student written

consent forms, and the participant random assignments were completed prior to the

beginning of the VG protocol. The VG instructional treatment was delivered over four 60-

minute instructional periods. The first day oriented the students to the video task and to the

Animoto tool. Each of the next three days was dedicated to taking the timed prior knowledge

measure for the given passage, followed by the students' silent passage reading and note

taking with the graphic organizer, the creation of a short Animoto of images that reflected the

main ideas of the passage, and then the completion of a comprehension measure related to

the passage. All of the students assigned to the VG condition were directed to select all

images for use in their Animotos from the Creative Commons Flickr website (Flickr, 2014).

Day 1. During the first day of the VG protocol, the classroom teacher introduced the

researcher who explained the research as a study to investigate what is the best way to teach

informational texts in high schools. First the teacher modeled the use of Flickr Commons and

Animoto as tools to present images she had noted on a graphic organizer as reflecting the

main ideas of a brief passage reading. Then the students were guided through the completion

of the open-ended PK measure. Next, the students were instructed to independently read a

brief informational passage, using a simple graphic organizer as they read to note lines of the

text that were main ideas and possible related images. Then the teacher guided the students to

log in to pre-established Flickr Commons accounts on their laptops to find copyright-friendly

images related to the passage to insert into an Animoto. Once the students had found and

copied onto their desktop five digital images of those previously noted on their graphic

organizers, the teacher helped students log in to their individual Animoto accounts. The

students then went through the four steps to create a brief Animoto using the images they

located in the Flickr Commons website. The researcher was available to help troubleshoot

this process as needed. See Appendix C for more detail on the practice session for the VG

Protocol.

Day 2. Before the first informational readings, the classroom teacher allowed five

minutes for the prior content knowledge measure to assess what the students already knew

about Easter Island. Then the students read the first informational passage entitled "Meet the

Moai of Easter Island." They were given 10 minutes to read this passage and fill in the

graphic organizer and when time was called, the students were given 35 minutes to create

their Animoto video using a minimum of five images related to the main ideas of the

passage. After the Animoto was completed, the comprehension measure related to the

passage was administered in the final 10 minutes of the session.

Day 3. Before the second informational reading, the classroom teacher allowed two-

minutes for the prior content knowledge measure to assess what the students already knew

about immigration and how immigration affects the lives of the immigrants. Then the

students were given 15 minutes to read the second informational passage entitled "Excerpt

from *To the Person Leaving*" and to fill in the main ideas graphic organizer. When time was

called, the students were given 30 minutes to create their Animoto video using a minimum of

five images related to the main ideas of passage. After the Animoto was completed, a

comprehension measure related to the passage was administered in the final 10 minutes of

the session. There was also a three-minute allowance for students to sign up to participate in

the Phase Two focus group interviews.

Day 4. Before the third informational reading, the classroom teacher administered the

two-minute prior content knowledge measure to assess what the students already know about

geology and the Big Bend National Park. Then the students were given 15 minutes to read

the third informational passage entitled *Geology Fieldnotes: Big Bend National Park, Texas*

and fill in the graphic organizer. When time was called, the students were given 30 minutes

to create their Animoto video using a minimum of five images related to the main ideas of

passage. After the Animoto was completed, a comprehension measure related to the passage

was administered. There was also a three-minute allowance for students to sign up to participate in the Phase Two focus group interviews.

   Comparison group (CG). The teacher protocol training, the collection of the student release forms, and the participant random assignments were completed prior to the beginning of the CG protocol. The CG instructional treatment was delivered over four 60-minute instructional periods, and each day of the CG treatment protocol is described in detail below. The first day the teacher oriented the students to the summary task, demonstrated using a simple summary graphic organizer and modeled summarizing a brief reading passage. The students then practiced reading and summarizing independently. Each of the next three days was dedicated to taking the prior knowledge measure for the given passage, followed by the students' silent passage reading and completion of the graphic organizer, the creation of a short summary of the passage content, and then the completion of a comprehension measure related to the passage.

   Day 1. During the first day of the CG protocol, the classroom teacher introduced the researcher who explained the research as a study to investigate what is the best way to teach informational texts in high schools. The classroom teacher then oriented the students to the use of summary as a tool to share information about reading. After introducing summarizing and modeling the summarizing process on a brief passage, the teacher helped students create a summary. First, students were guided through the PK process on a short passage. A brief informational passage was read independently while the main idea graphic organizer was filled in, and then the teacher guided the CG students to organize and create on their laptops a

short summary of the important information related to the sample passage (see Appendix C for details of the CG summarizing protocol).

Day 2. Before the first informational readings, the classroom teacher allowed five minutes for the administration of the prior content knowledge measure to assess what the students already knew about Easter Island. Then the students read the first informational passage entitled "Meet the *Moai* of Easter Island." They were given 10 minutes to read this passage and fill in the graphic organizer. When time was called, the students were given 35 minutes to organize and write their summaries related to the passage. Once the summary creation period was completed, a comprehension measure related to the passage was administered in the last 10 minutes of the session.

Day 3. Before the second informational reading, the classroom teacher administered the two-minute prior content knowledge measure to assess what the students already knew about immigration and how immigration affects the lives of the immigrants. Then the students read the second informational passage entitled "Excerpt from *To the Person Leaving*." They were given 15 minutes to read this passage and fill in the graphic organizer. When time was called, the students were given 30 minutes to organize and write their summaries related to the passage. Once the summary creation period was completed, a comprehension measure related to the passage was administered during the final 10 minutes of the session. There was also a three-minute allowance after the assessment for students to sign up to participate in the Phase Two focus group interviews.

Day 4. Before the third informational reading, the classroom teacher administer the two-minute prior content knowledge measure to assess what the students already knew about geology and Big Bend National Park. Then the students read the third informational passage entitled *Geology Fieldnotes: Big Bend National Park, Texas*. They were given 15 minutes to read this passage and fill in the graphic organizer. When time was called, the students were given 30 minutes to organize and write their summaries related to the passage. Once the summary creation period was completed, a comprehension measure related to the passage was administered during the final ten minutes of the session. There is also a three-minute allowance for students to sign up to participate in the Phase Two focus group interviews.

Phase two qualitative research. In the second portion of this two-phase explanatory sequential mixed methods study, posttest comprehension data and student responses to the open ended constructed response questions were used to partially inform the qualitative questions to be included on the focus group interview protocol. This was one of the connections between the quantitative and the qualitative portions of the study. The interview questions included in the interview protocol related to the research questions and were used as a semi-structured protocol to conduct the focus group interviews (see Appendix F).

Interviews were conducted during separate sessions after school on day four and after school on day five after the treatment protocols and the content were completed. Participants representing the two treatment groups were recruited using an incentive of $10 iTunes cards to encourage the students to take part in focus group interviews. The original intent was to purposively select representative volunteers from the pool of participants in an effort to

ensure the level of diversity within the smaller volunteer participant groups reflected that of

the intact treatment group participants and to obtain a representative sample of both highly

skilled readers and of struggling readers according to their EOG8 scores. Due to a lack of

student response, this intention was unfulfilled and every participant who showed up was

included in the focus group interviews.

Focus group categories. This study employed a focus group interview design with

the two instructional treatments, VG and CG, forming the two focus group categories. Since

focus group participants should be homogenous (Krueger & Casey, 2000), the VG and CG

students formed separate focus groups rather than mixing VG and CG students within the

same group interview setting. In order to approach saturation of responses from these two

categories of participants, the goal was to interview four participants from each instructional

condition group. To support this goal, grant-funded iTunes card incentives were purchased to

produce a focus group participant pool large enough to create groups of four participants in

each focus group.

This balanced level of participation did not materialize; only two students participated

in the CG interview, whereas eight students showed up for the VG focus group interviews

and were subsequently split into two concurrent sessions. The researcher conducted one VG

focus group and the participating teacher conducted the other concurrent VG focus group

session. These interviews were conducted and audio-recorded within the treatment groups

using the semi-structured interview protocol. The focus group data were analyzed

independently by two researchers to compare themes that emerged from the interview

transcripts that reflected the student perceptions of their experiences reading informational texts in their respective modes of response.

Focus group interview schedule. In order to reduce potential time related differences, the length allowed as well as the time of day for all interview sessions remained the same (Underhill & Olmstead, 2003). The focus groups were conducted after school in order to reduce the amount of regularly scheduled instructional time during exam review week the participants had to miss. The goal was for each interview to last approximately one hour, and this amount of time was scheduled for the after school interviews. The interview participants and the lengths of the discussions are described in Chapter 4.

Focus group data collection. The open-ended interview questions focused on eliciting the participants' perceptions of their experience as they worked through the informational texts. The focus group protocols also explored students' perceptions of their respective modes of text response and probed student thoughts on reading comprehension relative to student-generated video in particular. The interviews were audiotaped and transcribed (see Appendix G).

Data Analysis

The majority of the quantitative data were collected first, followed by the qualitative data collection and subsequent data analysis in this sequential mixed methods study (Creswell & Plano Clark, 2011).

Phase one quantitative analyses. Phase One of this study searched for differences in reading comprehension between two groups of high school students who either (a)

produced a written verbal response to reading informational texts or (b) produced a video as

an externally visualized nonverbal response to reading informational text. First, a multiple

regression analysis was employed to investigate if there were any interactions between

reading results in the two treatment conditions and the participants' baseline reading ability

(i.e., EOG8) or their prior knowledge of the passage topics. Second, after meeting the

requisite assumptions including homogeneity of variances, a one-way multivariate analysis

of covariance (MANCOVA) was used to investigate if there was an interaction between

treatment assignment as the independent variable and two comprehension question inference

category scores as the two dependent variables (i.e., retrieval inferential question score and

generation inferential question score). MANCOVA was chosen since students were

randomly assigned to treatment groups and because it offered a more powerful analysis of the

group effect (for technical discussion, see Maxwell & Delaney, 1990; and Weinfurt, 2000).

The MANCOVA was followed up with ANCOVAS for each dependent variable.

Phase two qualitative analysis. In order to examine the participants' perceptions of

their reading experiences the interview transcriptions were analyzed using content analysis as

an unobtrusive method that many researchers characterize as an "inherently mixed method"

(Hesse-Biber & Leavy, 2011, p. 235). Open coding was used to qualitatively analyze the

data for recurring themes. Two independent researchers initially coded the transcriptions to

identify any emerging themes. Then the researchers discussed the independent analyses and

recoded in a spiraled approach with the researchers continuously reanalyzing and adjusting

the codes (Hesse-Biber & Leavy, 2011). This process added trustworthiness to the four

themes that eventually emerged from the students' perceptions of their reading experiences within the two instructional treatment groups.

Mixed Methods Integration

In mixed methods research, ascertaining reliability and validity is required for both the quantitative and qualitative components prior to data analysis. This means that validity somehow needs to be addressed in both qualitative terms and in quantitative terms. This has posed a dilemma for mixed methods researchers and various definitions for mixed methods validity have surfaced. The most straightforward approach involves determining validity for each type of data separately. Statistical measures of validity and reliability are used typically for the quantitative data (Wright, 2003). For qualitative data, there are "several ways to address trustworthiness, including reflexivity, triangulation, and member checks" (DeCuir-Gunby, 2008, p. 132).

Many mixed methods researchers point to the importance of retaining the reflexivity inherent in qualitative research: "Rather than focusing on eliminating the subjectivity of the researcher in a fruitless effort to attain objective knowledge, qualitative researchers pursue how best to work with the fruitful positionings that each researcher brings to a project" (Freeman, deMarrais, Preissle, Roulston, & Pierre, 2007, p. 30). However, not everyone agrees with keeping separate the individual validity and reliability of the two types of data, and some researchers are calling for a new measure of validity that can help resolve the problem of integration in mixed methods research. One such term coined for mixed methods validity is *legitimation*. This term refers to the difficulty in obtaining findings and/or making

inferences that are credible, trustworthy, dependable, transferable, and/or confirmable (Onwuegbuzie & Johnson, 2006, p. 51).   The issue of integration is considered particularly complex in mixed methods research that combines the complementary strengths and non-overlapping weaknesses of quantitative and qualitative research, and some recommend using legitimation as an entirely different view of validity in mixed research (Onwuegbuzie & Johnson, 2006). Considering legitimation a part of the research process rather than a fixed measure, the following is a brief description of two aspects of the legitimation process based on the model developed by Onwuegbuzie and Johnson (2006) that were utilized in this study.

Sample integration legitimation. In mixed methods studies, sample integration can be problematic in that the participants in the quantitative portion of the study are not the same individuals or groups that participate in the qualitative portion of the research. In that case integrating inferences from the quantitative and the qualitative findings would lack credibility or legitimation. In this study the participants for the qualitative focus group interviews were drawn from students who volunteered from the population that participated in the quantitative instructional treatments. However, the focus group participants were an incentivized (iTunes cards) volunteer pool, which presented a potential threat to the sample integration. The researcher was prepared to take extra care to purposively draw participants from the resulting volunteer pool to form focus groups for both treatment groups that each represented the demographics of the larger quantitative population from which they originated as well as groups that reflected at least two different reading levels represented in the total participant population.

Weakness minimization legitimation. Maximizing the strengths of the two research designs combined in a mixed methods study while minimizing the weaknesses of each is supposed to be a given in mixed methods research designs. However, the extent of overlap between the quantitative and the qualitative portions of the study need to be intentionally addressed in an explicit way. In this study, two different aspects of student-generated video were of interest. One was the question of how multimodal literacy practices might offer positive nonlinguistic multisensory influences on the comprehension of text. This part of the research was supported by the quantitative results and by the results produced in the qualitative data collection relative to concrete texts. In addition differences between students from different class placements bubbled up from the focus group interviews, leading to some resolution of discrepant results obtained in the quantitative data collection. The intentional goal was to obtain robust data collections in both phases of the study to compensate for inherent methodological weaknesses, and this goal was met in this study.

Subjectivity Statement

It is important to make every effort to limit any potential researcher bias to avoid undue influence on the data collection or on the analysis and interpretation of the data collected. The data collection for this study was conducted at the public charter school in which I was employed as a classroom instructor, and this relationship had the potential to introduce considerable bias into the research process and findings. In order to control as much potential bias as possible, grade 10 students were selected as participants in the study since they were not taught by and were unknown to me. During the course of my regular

daily duties as a classroom instructor, I had never had prior contact with the grade 10 students for any reason. In addition, a teacher not affiliated with the research design delivered all of the instructional treatments; the students were randomly assigned to the instructional treatment groups through the use of a randomized block design in order to control for that aspect of potential teacher bias.

Another potential source of bias relates to the researcher's affinity for multimodal forms of communication. I am a language teacher by profession and an avid consumer of all technologies and multimodal communication. I also come from an underprivileged background, and I am the only college graduate in my family (and only one of two who graduated from high school). I am a reluctant reader who nevertheless has been a successful learner. Based on my personal educational experiences that span multiple cultures and continents, I believe my literacy successes are attributable to the multiple modes of expression I have been empowered to utilize in a variety of multicultural multilingual learning environments.

I want students to learn academic content from a position of authority empowered by the multimodal representations afforded by new literacies that are often not shared evenly across diverse student populations (New London Group, 1996). As I have progressed through my research, I have found some evidence that standards measuring only discrete bits of knowledge rather than mastery of creative processes have usually produced higher test scores for the matched traditional form of learning via the transmission model. I have to gird myself to accept negative or insignificant findings in this research despite the DCT

hypothesis that reading comprehension and recall are enhanced through the use of external visualization strategies such as student-generated video, particularly when students read text that contains concrete images.

Potential Significance

This study addressed the gap in the research literature related to the possible impact new literacies instructional practices may have on student achievement and on student perceptions of their roles as literate members of the classroom language community. The majority of new literacies research focuses on possible effects on student attitudes (Ranker, 2008), engagement (Kearney & Schuck, 2006), or empowerment (Lee et al., 2008). This study explored multimodal instructional pedagogy relative to student achievement, particularly in examining student-generated video production as it might relate to reading comprehension in general and to reading informational texts in particular. This study also added qualitative student data to the research literature to help educators better understand student perceptions of the use of out-of-school literacies in instructional practices that integrate new literacies into the daily life of classroom experience and on the potential influence such practices may have on the task of consuming increasing amounts of informational texts required by new standards.

Leu et al. (2009) assert "that the Internet is this generation's defining technology for literacy and learning" (p. 3). Yet classroom instruction has not embraced fully this shift in technology nor the educational opportunities it affords. This study was situated in classroom settings and provides one example of the integration of new literacies into classroom

practice. Investigating the potential benefits of students creating digital videos as a response to reading informational literature will add to the body of research, which may eventually help to convince teachers to situate their instructional pedagogy more firmly in the students' world of the 21st century.

CHAPTER FOUR: RESULTS

This study employed a sequential explanatory mixed methods design divided into two phases producing quantitative and qualitative data in response to the two main research questions. The results from these data collections are reported below. The findings are organized sequentially, with Phase One findings preceding Phase Two findings.

Phase One Findings

Phase One of this study queried for differences in reading comprehension between two groups of high school students who either (a) produced a written verbal response to reading informational texts or (b) produced a video as an externally visualized nonverbal response to reading informational text. First, a multiple regression analysis was employed to investigate if there were any interactions between reading results in the two treatment conditions and the participants' baseline reading ability (i.e., EOG8) or their prior knowledge of the passage topics. Second, a one-way multivariate analysis of covariance (MANCOVA) was used to investigate if there was an interaction between treatment assignment as the independent variable and two comprehension question inference category scores as the two dependent variables (i.e., retrieval inferential question score and generation inferential question score).

Baseline reading ability and treatment condition. A multiple regression analysis was employed to investigate if there were any interactions between reading results of the two treatment conditions and students' baseline reading ability (i.e., EOG8) or with the

participants' prior knowledge of the passage topics. Stata12 statistical software was used to

conduct this analysis (StataCorp, 2011), and this program drops subjects who have missing

data for any variable included in a particular analytical model producing the variations in

participant numbers included in the models in Table 6. The mean EOG scores of both

treatment groups (i.e., CG, $M = 364.9$, $SD = 6.3$; and VG, $M = 369.6$, $SD = 25.1$) were above

the state average EOG score ($M = 360.4$, $SD = 8.1$). Although the VG group EOG mean was

higher than the CG group, the difference was not significant between the two groups. The

prior knowledge score used in the study is a total of the open-ended PK measures for the

three passages. Experienced teachers not participating in the study scored the prior

knowledge measures achieving Cohen's kappa inter-rater reliability of 89% averaged across

the three measures of prior knowledge. Despite random assignment, there was a marginally

significant difference (p = .060) in the mean PK scores (i.e., CG, $M = 3.64$, $SD = 2.09$; and

VG, $M = 2.78$, $SD = 1.89$) between the two groups. Examples of scored student responses for

prior knowledge appear in Table 5.

Table 5

Sample Student Responses and Scores on Prior Knowledge Measure

PK Question	Student Response	Score
Write down everything you know about Easter Island.	"Mysterious statues of giant heads/According to 'Rise of the Guardians' it is home to the Easter Bunny/No one Knows what happened to it's inhabitants/No one knows Why and how the giant statues of face are around the Island"	3

Table 5 Continued

"Easterisland Contains easter island heads and they were moved and made by hand."	2
"Easter Island is a mysterious that contains weird sculpture of a giant face"	1
"Easter Bunny Island was named after the famous Holiday Event 'Easter' It is shaped like an easter egg	0

The regression analysis revealed that both variables impacted the reading comprehension total score as the dependent variable. The EOG8 and PK scores had a significant predictive effect on the experimental reading comprehension scores for the combined participant population (EOG8, p = .034, and PK, p = .0001). The analysis indicated that participant score on prior knowledge of the reading passage topic was the stronger predictor for the consequent reading comprehension scores; however, more variance was accounted for in a model that combined prior knowledge and EOG8 scores as predictors of reading comprehension score (see Table 6, Model 3, R^2 = .26).

Table 6

Effects of EOG8 and PK Scores on Reading Comprehension Scores

	Model 1	Model 2	Model 3
EOG8	.07*	--	.05**
	(.02)	--	(.02)
Prior Knowledge	--	1.01*	.90*

Table 6 Continued

	--	(.23)	(.22)
Intercept	-8.27	13.39	-3.69
N	68	69	66
Adj. R^2	.09	.21	.26

Note. Standard Errors are in parentheses; *$p<0.01$, **$p<.05$

Retrieval and generation inferential comprehension. A MANCOVA was used to control for EOG8 and PK and to investigate interactions between treatment assignment as the independent variable and two comprehension question inference categories as the two dependent variables (i.e., retrieval inferential and generation inferential). Retrieval inferences connect separate textual information and/or prior knowledge, whereas generation inferences use textual information and prior knowledge to logically deduce new information not appearing in passage (Kintsch, 2013). Two independent researchers analyzed the 25 reading comprehension questions and categorized the multiple choice questions (worth one point each) as requiring the reader to make a retrieval or a generation inference, and the three constructed response questions (worth two points each) could require one or both types of inferencing (worth 2 points total). Inter-rater reliability using Cohen's kappa measure for the retrieval/generation inferencing rating was 84%. Example questions and some of the raters' scoring rationales appear in Table 7.

Table 7

Example Comprehension Questions Rated as Retrieval and Generation Inferences

Question	Answer	Inference Category	Rationale
1. What is the purpose of beginning the selection with dialogue and then moving to geographical and statistical information?	D. By starting with dialogue and the author's experience at the airport, the reader's interest is captured, and he or she wants to keep reading.	G	Requires reader to deduce answer not found in the text.
2. Which statement describes the connection between the selection and the oxymoron "both at the same time"?	B. Many of those who stayed, as well as those who left, lost their homes and were exiles.	R	The answer refers to another section of the text, "We are no longer a people divided between those who, on the one hand, have a home and, on the other, a suitcase; . . . In a land where there's no need to abandon one's home in order to lose the roof over one's head, everyone is on the road."

Table 7 Continued

| 3. In the excerpt from *Geology Fieldnotes,* how does the use of subheadings and bulleted lists help the author achieve his purpose? Use examples to support your answer. | (Sample Student Response) "The use of subheadings and bulleted lists help the author achieve his purpose by organizing the information and making it easier to understand. The Subheading 'A Land of Constant Change' lets the reader know what the main idea of text is: that Big Bend had been changing for millions of years." | R and G | Retrieval inferencing is required for the quoted examples whereas commenting on the author's purpose requires generating new information deduced from the text and the reader's prior knowledge. |

Note. R = retrieval inference; G = generation inference

A significant main effect for treatment group was indicated in the multivariate test of probability used in the MANCOVA (e.g. Wilks's lambda $F (2, 61) = 3.16, p = .0495$) with retrieval and generation inference comprehension scores as the dependent variables and EOG8 and prior knowledge scores controlled for as covariates (see Table 8 and Table 9).

Table 8

Means and Standard Deviations Retrieval/Generation Inference Scores

Treatment	RI			GI		
	M	*SD*	*AM*	*M*	*SD*	*AM*
CG (*n*=34)	56.9	14.2	55.4	62.5	12.3	61.5
VG (*n*=42)	60.6	17.9	61.8	57.2	18.8	52.5

Note. RI=retrieval inference score %, GI=generation inference score %

Table 9

Treatment Effect on Retrieval/Generation Inference Reading Comprehension Scores

Source	*W*	*df*	*F* (*df*1,	*df*2)	*F*	Prob > *F*
Model	0.63	3	6.0	122.0	5.38	0.0001
Treatment	0.91	1	2.0	61.0	3.16	0.0495
PK	0.76	1	2.0	61.0	9.76	0.0002
EOG8	0.93	1	2.0	61.0	2.23	0.1165

Note. $N = 65$, W = Wilks's lambda

One-way analyses of covariance (ANCOVA) were conducted to further investigate treatment effects for each of the two dependent variables, retrieval inference and generation inference reading scores, with EOG8 and PK scores controlled for as covariates. The VG adjusted mean on retrieval inference questions ($M = 61.8$) exceeded the CG performance on the same questions ($M = 55.4$). The reverse was found for the generation inference questions with the CG adjusted mean of 61.5 exceeding the VG group adjusted mean of 58.0 (Table 8). While neither of the ANCOVAs proved statistically significant at the alpha $< .05$ level, the treatment effect on the retrieval inference comprehension score approached significance with $p = .07$ with an adjusted R^2 of 0.287 as an indication of explained variance. These ANCOVA results appear in Table 10.

Table 10

Treatment Effect on Inference Reading Comprehension Scores by Category

Question Category	Sum of Squares	df	Mean Squares	F	Prob
Retrieval	.06	1	.06	3.24	0.07
Residual	1.19	62			
Adj. R^2	.29				
Generation	.02	1	.02	0.83	0.37
Residual	1.43	62			
Adj.R^2	.13				

Note. N=66

The discrepancy between the significant main effect revealed by the MANCOVA and the lack of significance in the follow up ANCOVAs prompted additional quantitative investigation to uncover possible alternative sources of variance causing interference that might produce these discrepant results. One area of interest was uncovered. It was somewhat surprising that there was only a small correlation of .31 (p = .01) between mean EOG8 scores and the students' placement into either honors or regular (non-honors) English 10 classes (see Table 11). This discrepancy in the correlation between class placement and EOG8 spurred an additional investigation into class placement as a variable that might have influenced the results as a potential source of unidentified variance.

Table 11

Correlation of Reading Comprehension, EOG8, PK, and Class Placement

	Class Placement	EOG8	Prior Knowledge	Reading Score
Class Placement *N*	1.0000 76			
EOG8 *N*	0.3078 71	1.0000 71		
Prior Knowledge *N*	0.5774 69	0.1737 66	1.0000 69	
Reading Score *N*	0.5674 72	0.3155 68	0.4680 69	1.0000 72

Class placement, EOG8, and PK. The potential differences in reading levels of the two participant pools was part of the rationale behind the early identification of the EOG8 reading scores as a covariate. However, this assumption was not supported in the quantitative results. The null hypothesis that there was no difference between class placement and EOG8 was rejected $F = (1, 65)$, $p = .0001$. A multiple regression of EOG8 as a predictor of class placement concurred with the test of correlation that although significant at the $p = .009$ level, EOG8 accounted for only a small portion of variance (i.e., adjusted $R^2 = 0.08$) in grade 10 English class placement in the participating school.

Three multiple regressions models were conducted with total reading comprehension score as the dependent variable and three different combinations of class placement, EOG8, and PK, as predictors. These multiple regression models revealed that class placement

dominated as the significant predictor of participant reading comprehension compared to the influence of both prior knowledge and EOG8 standardized reading scores (see Table 12).

Table 12

Effects of Class Placement, EOG8 and PK on Reading Comprehension Scores

	Model 1	Model 2	Model 3
Class Placement	4.52*	3.52*	3.28*
	(.83)	(.98)	(.98)
EOG8	.03	--	.03
	(.02)	--	(.02)
Prior Knowledge	--	.46	.43
	--	(.26)	(.25)
Intercept	-1.95	9.91	-.92
N	68	69	66
Adj. R^2	.04	.33	.36

Note. Standard errors are in parentheses; *$p<0.01$, **$p<.05$

A second discrepant result was that the MANCOVA results indicated that there may be a main VG/CG treatment effect on retrieval/generation inferential reading comprehension of the selected informational passages, but the lack of significance in the subsequent ANCOVAs did not indicate the treatment effect was due to an interaction between the treatment and the types of reading comprehension questions identified in this research. However, including class placement as an additional covariate in the MANCOVA with retrieval and generation inference reading comprehension scores as the dependent variables

produced very different results than those of the initial MANCOVA conducted in the study

(see Table 13).

Table 13

Treatment Effect on Retrieval/Generation Inference Scores with Class Placement as a Covariate

Source	W	df	F (df1,	df2)	F	Prob > F
Model	0.50	4	8.0	120.0	6.25	0.0000
Treatment	0.93	1	2.0	60.0	2.11	0.130
Class	0.80	1	2.0	60.0	7.66	0.001
PK	0.95	1	2.0	60.0	1.52	0.228
EOG8	0.97	1	2.0	60.0	1.10	0.339

Note. $N = 65$, W = Wilks's lambda

Subsequent ANCOVAs confirmed there was no statistically significant effect of the VG/CG treatment on the retrieval inference comprehension scores when the covariate class placement was added to the model. Likewise, no statistically significant interactions of VG/CG treatment on the generation inference comprehension score were found. These ANCOVA results appear in Table 14.

Table 14

Treatment Effect on Inference Reading Comprehension Scores by Category

Question Category	Sum of Squares	df	Mean Squares	F	Prob
Retrieval	.02	1	.02	1.26	0.27
Residual	.94	62			
Adj. R^2	.42				
Generation	.03	1	.03	1.49	0.23
Residual	1.73	62			
Adj.R^2	.15				

Note. N=66

Phase Two Findings

Phase Two of the study focused on the research question investigating the high school students' perceptions of their literacy experiences as they responded to the informational texts in their respective treatment groups (i.e., CG as comparison group producing a written summary, and VG as video group producing a video summary). Since this study was conducted during the school's exam review period at the end of the academic year, only after-school focus group interviews were permitted. This resulted in an uneven focus group representation for the two treatment groups, with only two students participating in the CG focus group interview while eight showed up and had to be divided into two groups for the VG focus group interviews. First the participants in the CG and VG focus group interviews

will be described. Then the themes that emerged from the focus group interviews will be described.

CG focus group interview participants. Although many CG participants expressed interest in participating in focus group interviews, only four signed up to participate and of those four only two attended the scheduled focus group interview session. One male and one female student from the same grade 10 regular English class participated in the CG focus group interview session, and the names used here are pseudonyms. George and Jane appeared to be quite close friends, sharing hand lotion and sitting within each other's personal space throughout the interview, forearms close enough to touch. George's EOG8 score of 364 was slightly above the state average of 360 and Jane's EOG8 at 359 barely below state average. The conversation with these two participants lasted 35 minutes.

VG focus group interview participants. Although few VG participants expressed any initial interest in participating in focus group interviews and only four signed up to participate, eight showed up for the scheduled focus group interview session. Since the participating teacher had observed and taken notes in the prior CG focus group session, this oversubscribed VG session was split into two focus groups of four students each with the participating teacher leading one focus group interview (VG1) and the primary researcher interviewing the other group (VG2).

VG1 participants. Two females and two males participated in the VG1 interview, and all names used for reference are pseudonyms. John was in a regular English 10 class and had an EOG8 score of 344, which was below the average of his peers ($M = 367.5$) as well as

below the state mean of 360.4. Paul was the only honors English 10 student in this focus

group and his EOG8 score was 366. Both Sally and Mary were from regular English 10

classes and their EOG8 scores were 363 and 366 respectively. The interview with these four

participants lasted 16 minutes.

VG2 participants. Two females and two males participated in the VG2 interview, and

all names used for reference are pseudonyms. Peter and James were both in regular English

10 classes, and their EOG8 scores were 365 and 368 respectively. Maria and Karen were

both in honors English 10 classes and their EOG8 scores were well above the average scores

for the state and for their peers. Although a non-native English speaker, Maria's EOG8 score

was a 375 (nearly two standard deviations above the state mean), and Karen's score of 477

placed her in the 98 percentile at the state level in reading ability. The interview with these

four participants lasted nearly 43 minutes.

Emergent themes. Two independent researchers analyzed the three interview

transcripts, resulting in an initial list of ten potential student perceptions recurring in the

interview transcripts (see Appendix G for transcripts). The researchers then discussed the

various themes and the list was winnowed down to four main themes recurring in both

treatment groups: text complexity, audience awareness, the value of textual repetition, and

the utility of active reading practices. These four themes are described in detail below and

selected student comments categorized by theme appear in Table 15.

Passage complexity. Students in both VG and CG focus group interviews expressed

an awareness of how variance in text complexity affects reading comprehension. The CG

participants noted that longer texts in timed situations particularly interfere with their reading comprehension. John cited the third passage as an example of how passage length can impact comprehension. This same student commented that longer stories and "different and bigger descriptions of stuff . . . had a lot . . . more of upscale, I don't know if that's the right word, but upscale words than the other passages . . ." Jane characterized the last passage being more difficult to comprehend because " it was, like, differently worded [than] the other ones."

The first two passages are labeled as history passages in the field test documentation, whereas the third passage is considered a science passage (NC DPI, 2014). When asked later in the interview what class they would have most likely found the third passage, both students immediately identified the passage as something they might encounter in science class. These students described how they had to "think more" to get through the passage since it had so many words they didn't know, and Jane commented that the bullets made it easier for her to identify the main ideas of the passage to write in the graphic organizer.

The VG focus group participants did not define differences in passage text complexity in terms of length and vocabulary usage, as did the CG students. Instead, both focus groups of VG students defined text complexity by describing how passages with concrete imagery were more comprehensible. Sally, who participated in the first VG focus group session (VG1), noted that finding pictures to reflect the main ideas of the Easter Island passage "was the easiest 'cause it was, like, talking about, like, houses and waves and stuff. It gave you a lot to work with." Karen from the second VG focus group (VG2) discussed in

detail how picking out images for her video summaries differed between passages saying,

> for the Big Bend and the Easter Island, there was a lot of landscape mentioned, so,
>
> that's what those images were, and for the, for the immigration one, it was more
>
> symbols like . . . for the hero that stayed, I had a medal.

Peter agreed that the passage "Excerpt from *To the Person Leaving*" was the most difficult

one in that, "the immigration one didn't have anything to base it, like, any, like, physical

things that you pick out and go, 'Oh, I can put that in there' (as a main idea image)."

  Audience. Students in both VG and CG focus group interviews expressed a keen

awareness of the importance of audience when summarizing the gist of a given reading

passage. As found with the theme of text complexity, participants in both treatment groups

touched on the subject of audience, but the perceptions differed greatly about the role of

audience relative to the summary responses created by the participants. CG focus group

participants perceived informing an audience as the guiding purpose of creating their written

summary, but the VG participants seemed to believe that video summaries were so

personalized that they could not really be used to inform anyone but the creator of the video

summary.

  The CG students described how they kept their audience in mind as they were

crafting their summaries. George described his approach to reading and summarizing as a

strategic effort to communicate with his summary's audience, "and I was thinking, I'll put

some details to somebody, to the   untrained eye that doesn't know the story, would kind of

get a feel for it, like, okay she, she's there." Jane concurred with George's summary note

taking strategy when she described how she picked out main ideas. "And then, um, if I saw something that stood out to me that I thought, oh, that's good information for someone to know, I'd write it down."

Whereas both of the CG focus group participants seemed keenly aware of their potential audience, none of the VG1 focus group participants overtly mentioned an audience for their video summaries; however, they were very reluctant to share their video summaries with the group. One student, Paul, even blurted out loudly, "Don't watch mine!" Then after watching a video summary made by an unnamed participant from another group, Paul sarcastically praised how "great" the video was, making the other focus group participants snicker. This was such a different response than what the CG participants expressed toward the written passage summaries. It should be noted that the VG1 session was the first focus group the participating teacher had conducted alone.

As mentioned above, the VG2 focus group participants eagerly shared their videos within their group, and participants from this group actively acknowledged potential audiences for their video summaries. Maria expressed concern that any video summary a student might create would be incomprehensible to another person because, "they might look at it differently than you do . . . it's good for self-learning, but not, like, for other people." Maria also thought creating a visual summary was advantageous; however, she thought it was intensely personal and would only benefit the reader creating the visual summary and not a potential audience for the summary information. In a similar vein, Karen explained that to address concern Maria had voiced, "I added captions because I was thinking if I showed

this to someone else, would they understand the images I picked out." Peter thought that only visual learners would understand someone else's video. Maria even suggested that a column should be added to the graphic organizer for students to explain their image selection rationale and later continued that this sort of summarizing could never be accomplished in a large group setting because what students think is important to put in the summary doesn't agree with what the teacher (as audience) thinks is important.

Repetition. Students in both VG and CG focus group interviews expressed the value of text repetition in the identification of the gist of a given reading passage, whether they were searching for main ideas in words or in images.

The CG identified main ideas as information that was repeated within the text and that the more the student repeats the main ideas, the better the gist of the passage is comprehended. George "totally agreed with Jane's standpoint" on using repetition to identify main ideas (see her comment in Table 15). He illustrated his agreement by sharing a Sunday school example of how the narrator in 1 Peter was trying to express how he suffered for the Lord by "I mean, it was like, 23 times that he said it . . .that maybe he's trying to get a point across . . . and I need to pick up on that a little bit more." George also later identified repetition as the advantage of the active reading practices used in the CG treatment group that enhanced comprehension.

Participants in both VG1 and VG2 focus group sessions identified repetition as a cue to identifying important main ideas in the passages they read. Sally characterized main ideas as the important ones that were mentioned more than once, and Paul said he wrote down a

word if it appeared more than twice so that he could then find a matching image to include in

his video summary. James from the VG2 group explained that any idea that he encountered

in the text that related or repeated the concept in the passage title was his clue to put that in

the summary video and Karen agreed that recursive ideas are important to include.

Active reading practices. Students in both VG and CG focus group interviews

expressed a variety of views regarding the utility of summarizing and of creating written or

video summaries to express the gist of the given informational reading passages.

Both CG students believed that the active reading strategy of using a graphic

organizer as preparation for writing a summary would help them better comprehend the

reading. George described how recursive active reading reinforces his reading

comprehension by requiring him to "read it and you kind of go back over it, some things start

clicking and you kind of get, like, the gears start turning almost when . . . you rewrite it." He

also pointed out that having to fill in the graphic organizer forced the reader to make

decisions as he went along. The CG treatment of reading, filling in a graphic organizer and

writing a summary of the main ideas was designed as the more typical instruction

traditionally found in classroom settings, but according to the CG focus group participants

the graphic organizer was not a tool they typically were offered during reading instruction;

rather this type of instruction only occurred in science and history classes. Yet, the CG

students described how valuable the graphic organizer was as an active reading strategy that

helped them keep track of the information they identified as main ideas while they read and

then helping them recall information when they were completing the quiz questions after

completing the reading.

Unlike the CG focus group participants, the VG1 focus group participants were not in agreement regarding their instructional protocol. Although the data for the first VG focus group did not indicate whether they completed the graphic organizer during or after reading, their differing attitudes toward the treatment protocol were very apparent. John really did not enjoy the active reading practice of jotting down images on the graphic organizer to represent the main ideas in the text and then making them into a video summary. He called the activity a "misery" that he planned to repeat "never in my life." Despite his attitude toward the reading activity, he thought it probably aided his recall on the quiz questions for the passages. The other three participants held the opposite opinion; they enjoyed the active reading but thought it would have no effect on their quiz performance. This split in perception with John on one side and the three other participants on the other mirrored the split in their EOG8 scores with John as the low outlier (i.e., EOG8 = 344) and the other participant scores averaging five points above the state average and 21 points above John's reading score. The only noted perception the VG1 shared with the CG focus group participants was that they had rarely experienced this type of reading activity and when they did, it was not in their English classes.

There was more agreement in the second VG focus group than there was in VG1. All four VG2 participants expressed enjoyment in picking out the images as an active reading strategy, but said that it was a novelty that they had only experienced in science or history classes. The VG2 participants also agreed that using images to express the main ideas in the

passages was quicker than using words, and Karen and Peter both acknowledged that this strategy would be a particular advantage for the visual learner. Maria also thought creating a visual summary was advantageous; however, she thought it would only benefit the reader creating the visual summary and not a potential audience for the summary information. All four participants found the graphic organizer useful in noting images to represent the repeating information they identified as main ideas; however, only Peter and James filled in the organizer as part of actively reading the passage. Karen and Maria, the more proficient readers, both filled it in *after* reading the passage. Also unlike Karen and Maria, Peter and James believed the activity, particularly using the images, would aid them in remembering what they read. It should be noted that Peter and James also differed from Maria and Karen in their baseline reading scores and in their class placements. Peter and James are regular English class students whereas Maria and Karen are in honors English. In addition Peter and James had EOG8 reading scores within three points of each other (i.e., 365 and 368 respectively) but twenty points below Maria's score of 375 and 120 points below Karen's EOG8 score of 477.

While Maria said the "personalization" of the video summary strategy was good, she thought the images were just pictures that "come to mind when you read" and would not match what "the teacher might put" as the main points to be graded on a test. Karen expressed similar concerns sharing that although she is a visual learner, using this strategy would make her so reliant on it that she would be at a disadvantage in situations where everything is abstract, such as "in the middle of a college exam." Karen continued this line of

thought by echoing Maria's concern that the images she might pick as important would not necessarily be what the test makers think is important.

The focus group interviews produced a rich body of data that revealed four themes running through the students' perceptions of the experiences they had in their respective instructional treatment groups. However, the qualitative data collection revealed two unanticipated observations of interest regarding students' perceptions of reading informational texts under different instructional treatment conditions. First, regardless of treatment protocol, all of the focus group participants were aware of differences in text complexity between passages, but they reported having very few strategic tools at their disposal to address these differences in text complexity. A second unanticipated finding drawn from the qualitative data is that, at least for these focus group participants, active reading strategies like graphic organizers are used rarely and only in content classes, such as science and history.

Table 15

Student Quotes Illustrating Focus Group Interview Themes

Theme	Sample Student Quotes
Passage Complexity	James/VG2, "The, uh, immigration one was probably one of the hard ones because I had to, like, reread it a couple of times . . . The Easter Island one was easy 'cause. . . the descriptions, like, the descriptive places it gave . . ."
Audience	Jane/CG ". . . if someone asked, 'Hey, what was this story about?' you could just give them a brief summary." Maria/VG2, ". . . so it's (Animoto) good for yourself, but you couldn't really show it to anybody else."

Table 15 Continued

Repetition	Jane/CG, ". . . if there was something that they talked about and then it got repeated in the same paragraph, I was like, okay, that's a big point because they repeated about it." Karen/VG2, "If the problem kept reoccurring or, you know, something that just kept coming back up again" is how she identified main ideas of the passages.
Active Reading Practices	George/CG, "With the graphic organizer and the summary, when you're reading the quiz, um, . . .when you look at on the quiz, it almost, it's almost like a light bulb goes on . . .and . . . you kind of get the gist . . ." James/VG2, "I think the images affected mine. . . . I know I forget a lot of stuff and I have to go back, but if I have to . . make pictures, I remember the question about the picture I and then, like answer it."

Note. All names are pseudonyms.

The discussion that emerged in the two VG focus group interviews regarding how concrete and abstract text affects text complexity prompted the researcher to conduct additional quantitative tests, and those results are described in Table 17.

Concrete/abstract question reading comprehension. The VG focus group interview elicited repeated comments about how the concrete imagery in the passages facilitated comprehension, a finding that is supported by DCT research. However, five of the eight VG students interviewed, who were also the participants with the strongest EOG8 reading scores, thought that using imagery would not help their quiz scores. Furthermore, the participant with the highest EOG8 score of the entire participant pool (Karen) thought that the VG treatment condition could perhaps even interfere with comprehension measures such as the ones used in the study and on state standardized tests. These focus group findings prompted a further quantitative examination of the passages' reading comprehension

questions to investigate if using images in summarizing (i.e., the VG treatment) had any

effect on the students' performance on the comprehension questions that referenced more

concrete imagery. The results of this investigation appear below.

A MANCOVA was used to investigate interactions between treatment assignment as

the independent variable and two comprehension question categories as the two dependent

variables (i.e., concrete and abstract). Two independent researchers analyzed the 25 reading

comprehension questions and categorized the multiple choice questions (worth one point

each) as referencing either concrete or abstract text; the three constructed response questions

(worth two points each) could reference both. The analysis protocol the raters used appears in

Appendix E. Inter-rater reliability for the concrete/abstract rating using Cohen's kappa-

statistic measure was 76%. A third reader was brought in to help settle any differences in

ratings. Example questions for concrete and abstract categories and some of the raters'

scoring rationales appear in Table 16.

Table 16

Example Reading Comprehension Questions Rated as Concrete or Abstract

Question	Answer	Category	Rationale
1. What is the purpose of beginning the selection with dialogue and then moving to geographical and statistical information?	D. By starting with dialogue and the author's experience at the airport, the reader's interest is captured, and he or she wants to keep reading.	C	The beginning section contains dialogue and refers to the sounds of the airport at midnight so full of people socializing and greeting one another.

Table 16 Continued

2. What can be inferred from the author's focus on Argentina's troubled past and present situation?	C. The Argentinian people as a whole have lost any sense of security.	A	Security is an abstract concept for which neither the question nor the passage contain concrete text.
3. In the excerpt from *Geology Fieldnotes,* how does the use of subheadings and bulleted lists help the author achieve his purpose? Use examples to support answer.	(Sample Student Response) "The use of subheadings and bulleted lists help the author achieve his purpose by organizing the information and making it easier to understand. The subheading 'A Land of Constant Change' lets the reader know what the main idea of the text is: that Big Bend had been changing for millions of years."	C & A	Concrete text is referenced in the quoted examples whereas the author's purpose is an abstract concept the reader your constructs based on information from the text and the reader's prior knowledge.

Descriptive statistics for concrete and abstract comprehension scores appear in Table 17 and the MANCOVA results appear in Table 18. The VG adjusted mean on concrete questions ($M = 69.5$) exceeded the CG performance on the same questions ($M = 66.3$). The difference between the two treatment groups was much smaller for the abstract comprehension questions with the CG adjusted mean of 52.8 barely exceeding that of the VG group, 52.5.

Table 17

Means and Standard Deviations for Concrete/Abstract Reading Comprehension Scores						
Treatment	C			A		
	M	*SD*	*AM*	*M*	*SD*	*AM*
CG (*n*=34)	67.5	9.87	66.3	53.9	14.6	52.8
VG (*n*=42)	68.5	18.5	69.5	51.6	18.9	52.5

Note. C = concrete score %, A = abstract score

The multivariate test of probability used in the MANCOVA (e.g. Wilks's lambda F (2, 61) = .51, p = .61) indicated no significant main effect for treatment group on concrete and abstract comprehension scores as dependent variables with EOG8 and prior knowledge scores controlled for as covariates.

Table 18

Treatment Effect on Concrete/Abstract Reading Comprehension Scores

Source	*W*	*df*	F (*df*1,	*df*2)	=	*F*	Prob > F
Model	0.6861	3	6.0	122.0		4.21	0.0007
Treatment	0.9837	1	2.0	61.0		0.51	0.6051
Prior Knowledge	0.7800	1	2.0	61.0		8.60	0.0005
EOG8	0.9271	1	2.0	61.0		2.40	0.0994

Note: *n*=65, *W* = Wilks' lambda

Although a treatment main effect on concrete and abstract comprehension scores was not found to be significant in the MANCOVA, ANCOVA tests were conducted to further investigate treatment effects independently for each of the two dependent variables with EOG8 and PK scores as covariates.

Table 19

Treatment Effect on Inference Reading Comprehension Scores by Category

Question Category	Sum of Squares	df	Mean Squares	F	Prob
Concrete	.02	1	.02	.84	0.36
Residual	1.10	62			
Adj. R^2	.23				
Abstract	.00	1	.00	0.00	0.95
Residual	1.50	62			
Adj.R^2	.16				

Note. N=66

While neither of the ANCOVAs proved statistically significant at the alpha < .05 level, the treatment appeared to have a greater effect on the concrete comprehension score than on the abstract comprehension score. These ANCOVA results appear in Table 19.

CHAPTER FIVE: DISCUSSION

The purpose of this study was to empirically investigate the potential impact student-generated video as a form of multimodal external visualization might have on reading comprehension and to explore student perceptions of their experiences in reading informational texts and employing written and video modes of text response. This chapter begins with a summary of the quantitative and qualitative results followed by a discussion of how these results compare to related previous research. The final sections of this chapter delve into implications for educational practice, the limitations of this study, and potential areas for future research in the area of multimodal student response to informational texts.

Summary of the Results

Quantitative Results

A multiple regression analysis was employed to investigate if students' baseline reading ability (i.e., EOG8) or their prior knowledge (PK) of the passage topics had any significant effect on the reading comprehension results of the two treatment conditions.

First, multiple regression analysis was used to investigate the effect of PK and EOG8 on reading comprehension of the total group. Participants' EOG8 scores and PK had significant predictive effects, accounting for 9% and 21% of the variance respectively on the combined passage reading comprehension scores. These two variables in combination explained 26% of the variance in the informational passage reading comprehension.

Next, MANCOVA multivariate tests of probability were used to investigate if the nonverbal demands of the video summary (i.e., VG) and the verbal demands of the written summary (i.e., CG) treatments may have interacted with reading comprehension questions that measured retrieval or generation inferencing or with reading comprehension questions that referenced concrete or abstract text. Controlling for EOG8 and PK, the MANCOVA indicated a significant main treatment effect only for retrieval/generation inference comprehension scores, but the follow up ANCOVA tests did not support the findings for either of the pairs of question category.

In sum, the quantitative results confirmed the predictive influence of students' prior knowledge and reading skills on their measurable reading comprehension, but no significant treatment effects were found for retrieval/generation inference or concrete/abstract reading comprehension question types.

Qualitative Results

The analysis of focus group interviews revealed four themes that recurred across both the CG and the VG treatment groups. This section summarizes the results of the interviews organized by the four main themes researchers identified in the analysis of the interview transcripts.

The students in both VG and CG focus groups discussed text complexity, but defined it very differently. CG students defined text complexity in terms of passage length and the presence of unfamiliar vocabulary, whereas the VG focus group participants characterized text complexity of the passages in terms of concreteness or the use of sensory imagery.

Students in both VG and CG participants also differed greatly in their perceptions of the role of audience relative to the text responses they created. CG focus group participants intentionally created their written summaries with the audience in mind, whereas the VG participants did not believe their video summaries would be comprehensible to potential audiences of other students or teachers.

Students in both the VG and CG focus group interviews recognized the value of text repetition in the identification of the gist of the reading passages and differed very little in their discussion of how they picked out main ideas from the text to include in their summarization products.

VG and CG students had different views of the value of the active reading strategies used in their treatment protocols. The two students who participated in the CG focus group characterized using the graphic organizer in conjunction with the written summary as very advantageous to their reading comprehension. However, five of the eight VG participants believed the use of the graphic organizer and video summary would not increase their comprehension. Furthermore, the most competent reader in the VG group thought the student-generated video might actually be disadvantageous to comprehension. In contrast, the three participants with the lowest EOG8 scores in the VG group thought their reading comprehension scores would improve as a result of the treatment. Seven of the eight VG group participants reported enjoying making the video summary, and the sole VG group participant who did not enjoy the video process also had the lowest EOG8 reading score, not only of the VG group, but of the entire pool of study participants.

Connecting Findings to Previous Research

The results of this study are connected to previous research in two areas: reading comprehension research and new literacies research. First, this study's findings are considered relative to research in reading comprehension and to student-generated video as a form of external visualization. The relationship between this study's findings and student-generated video as a form of new literacy is considered second.

Reading Comprehension Research Alignment

The reading comprehension questions used in this study were categorized into two paired typologies: retrieval/generation inferencing informed by CI theory, and concrete/abstract informed by DCT and visualization research.

The interaction of timed reading with inferencing to form situation models noted in CI theory seemed to be relevant to some students interviewed in this study. The CG participants noted that having to read longer texts ("like the third passage") in timed situations was particularly challenging for reading comprehension. This negative temporal effect has been recognized as especially influential on inferencing, which requires more processing time for readers to create situation models that constitute successful reading comprehension (Kintsch, 2013). However, this study found no significant difference in the retrieval/generation inference category reading comprehension scores across the three passages, and there were too few questions to analyze the third passage for comprehension differences relative to passage length. This study also found no treatment effect, positive or

negative, for retrieval or generation inferencing question categories, although CI would predict generation inferencing as much more challenging to comprehension (Kintsch, 2013).

The categorization of the passage questions into retrieval and generation inferencing does align with one aspect found in the CI literature. Kintsch (2013) writes that retrieval inferencing processes are bridging behaviors that "merely access information available in long-term memory either automatically or by a resource-demanding search" and that only generation inferences are true inferences (p. 830). He asserts that most readers do not go much further than retrieval inferencing as they attempt to comprehend text nor are they required to use the more challenging generation inference skills on measures of reading comprehension. One goal in creating the new grade 10 EOC assessments, from which this study's passages were drawn, was to include more challenging questions that require a deeper comprehension than previously required (NC DPI, 2013). The rating procedure used in this study resulted in splitting the combined reading comprehension question points into 16 retrieval inference points and 12 generation inference points. This indicates that challenging inferences are required for 43% of the question points in the three combined informational passages, with retrieval inferencing still being dominant.

Some of the comments elicited from the VG focus group participants initially seemed aligned to the impact predicted by the verbal and nonverbal codes defined in DCT research. The VG focus group participants identified the less complex, more easily comprehended text as the passages with more concrete imagery. This perception aligns with studies that have found texts intentionally manipulated to have more concrete images result in higher reading

comprehension scores than abstract versions of the same content (Montague & Carter, 1973; Sadoski, Goetz, & Fritz, 1993). However, neither the MANCOVA nor the follow up ANCOVAS found any significant treatment effects relative to questions that referenced concrete and abstract portions of the text. In addition, the CG focus group participants did not notice any difference in the use of imagery or make any references to the concreteness of the text passages. This lack of triangulation points to the VG participants' perception of text complexity being an artifact of the VG video summary task that required them to select images rather than an attribute of the DCT additive effect found in studies of verbal and nonverbal codes. This VG perception regarding the relationship between text comprehensibility and concreteness seems more aligned to the finding that overtly teaching students to use imagery does not have a positive effect on reading comprehension and simply encourages them to report that they used imagery (Moore & Kirby, 1988).

The most competent reader and the least competent reader in the VG focus group interviews each voiced a comment that initially seemed possibly aligned to some previous visualization research. The strong reader thought student-generated video might actually be disadvantageous to comprehension, and the least competent reader reported that he "hated" working with images to create the video summary. There is some research that indicates visualizing images can actually interfere with comprehension. This negative effect might be just noted by strong readers, while it could be utterly debilitating for weaker readers. Results from a recent study indicated that producing unsupported drawings while reading informational texts decreased grade 10 students' reading comprehension levels as distractions

to the reader (Leutner et al., 2009). Another study found that unconstrained, random image production also interfered with students' comprehension while the use of constrained images increased comprehension (McCallum & Moore, 1999). Despite the aforementioned focus group comments, my study found no similar measurable negative or positive treatment effects. Unlike the participants in the Leutner et al. study (2009), the students in this study manipulated the images to create their videos *after* completing the readings rather than during the readings, which would control for the potential increase in cognitive load that image creation might have *during* the reading process that would interfere with comprehension. Also, the graphic organizer used in this study served to constrain student use of imagery; therefore, this study also did not align with McCallum and Moore's findings that the use of constrained images facilitates comprehension (1999).

The lack of significant VG treatment effects for concrete and abstract question categories also does not support previous research that shows students who use either internal visualization (e.g., Gambrell & Bales, 1986; Snowman & Cunningham, 1975) or external visualization strategies (Glenberg, et al., 2011; Van Meter et al., 2006) while they read perform better significantly on reading comprehension measures. This study lacked alignment not only to previous research related to reading comprehension and visualization, but the findings from this study also do not align well with previous research related to student-generated video as a form of new literacies.

New Literacies Research

The findings from the VG condition, which was defined by the use of student-generated video as a multimodal form of communication, do not align well to the previous related research and theory related to emerging new literacies.

The VG participants did not openly recognize a potential audience contrary to what new literacies theory might predict for a socially mediated multimodal form of communication such as Animoto (Gee, 2000a). Furthermore, several of the VG participants seemed to believe that video summaries were too personalized to be understood by others. This perception does fit with survey research that characterizes students' general out-of-school digital literacies as intensely private forms of communication (Schultz, 2002). However, this study's VG finding regarding audience is in stark contrast to the critical role audience played in the students' perception of their video production tasks found in a multiple case study conducted across grades and schools using collaborative student-generated video (Kearney & Schuck, 2006). Perhaps having the students create videos collaboratively, as in the Kearney and Schuck study, influences their awareness of audience. The findings of this study also are not in accord with the positive perception of audience found in a collaborative podcast production that motivated at-risk learners to produce content-rich infomericals for their peers (Lee, et al., 2008). Lee et al.'s conclusion does not seem to be supported by the additional suggestion made by several VG participants in this study that a video could not be created through the collaboration of a large group since it still would not match what the teacher had in mind. Recent survey results indicated that middle

school students wanted their digital literacy to be allowed into their school literacy practices (Spires, Lee, Turner, & Johnson, 2008). However, the participants in this study's VG condition seemed to not appreciate any in-school value of student-generated video, despite reports that this is a common digital literacy in which students participate daily outside of school (Lenhart, 2012).

This study experimentally measured the influence student-generated video might have on reading comprehension of informational texts. No significant negative or positive impacts on comprehension were found quantitatively; however, the qualitative results draw into question student perceptions of the utility of student-generated video as a possible in-school instructional literacy practice.

Study Implications

Reading comprehension is a complex cognitive process that is difficult to define. Numerous theories have attempted to capture the variables that contribute to successful reading comprehension, yet a unified theory of reading comprehension is still lacking (Sadoski & Paivio, 2007). Despite the gaps that remain in our understanding of reading comprehension, ongoing research add to the current body of knowledge, help inform instructional practices, and point to areas in need of future research. This is particularly salient in the area of reading comprehension of informational texts, a genre that is most needed for post-secondary readiness for entry into college or a career.

Implications for Educational Practice

One implication for educational practice indicated by this study is that it is unwise to assume that embracing students' out-of-school digital literacies, such as student-generated video, will enhance reading comprehension. Likewise, the study results indicate that these new literacy instructional practices will not harm student literacy. Perhaps schools and their teachers need to explore how to best fit the instructional tool, digital or non-digital, to the learning need and go from there.

This study indicates it is also unwise to assume the instructional use of digital literacies practices will be well received by the students, but for different reasons than indicated by previous research (Schultz, 2002). The results of the VG focus group conversations indicate that teachers may need to balance their desire to empower 21st century learners with digital literacy skills with the in-school, often 20th century, literacy demands represented by standardized testing requirements that might be disrupted by practice in digital literacies. The VG focus group participants in this study seemed to be aware of this distinction and understood the importance of testing results in their future educational careers.

Another implication for educational practice uncovered in this study is that there is a need to offer more instruction that allows students to actively employ strategic reading processes to improve their reading comprehension of informational texts. The VG and the CG focus groups both indicated that they did not often get practice in using active reading practices while reading, and if they did, it was not in English classes. In addition, the

qualitative data alluded to the use of reading strategies being influenced by participant differences in documented reading proficiency, with weaker readers embracing a strategy that stronger readers do not need to use. Teachers should consider customizing reading strategy instruction according to students' reading levels.

One unexpected finding that could interfere with the instructional implication for strategy instruction differentiated according to students' reading levels was that English class placement was not strongly informed by documented student reading levels. EOG8 reading scores and class placement in this study had a correlation of only .31. Furthermore, reading ability significantly accounted for only 8% of the variance in grade 10 English class placement for the study's participating school. Customizing strategy instruction according to students' reading levels cannot easily be done if English class placement is not strongly informed by documented student reading levels. If this does not occur at the school level, such as the case in the current study, then educators could look for ways to customize their reading strategy instructional practices to serve differentiated student reading levels within the classroom.

Implications for Future Research

This study experimentally investigated the influence student-generated video as a form of external visualization may have on reading comprehension of informational texts would have an impact on reading comprehension, and the results, while statistically insignificant, do have potentially important implications for future researchers.

The area of genre-specific reading comprehension instructional practice is a potential

area of future research indicated by the findings of this study. Participants from both treatment the VG and VG groups identified that the different text types represented different reading challenges; unfortunately, the small samples included in this study precluded analyzing the results to test for treatment effect at the individual passage level. Kintsch (2013) suggests, "In all probability, genre-specific strategies exist" (p. 829). A larger sample size would allow the data to be analyzed contrasting the two types of informational texts included in the study, science and history, with a narrative fictional text. This would expand the previous research that investigated the influence visualization strategies have on reading comprehension of narrative text (e.g., Montague and Carter, 1973) or expository texts (e.g., Van Meter, 2001) but not on both in a contrastive analysis. This is an area for future study that could explore possible interactions between student text response mode, reading comprehension, and genre-specific reading strategies.

Although the study did not produce significant treatment effects, the direction of the results was of interest and point to a potential area of future research on the influence external visualization may have on reading comprehension question categories. Although none of the findings reached the $p < .05$ level of significance, the VG treatment group exceeded the CG group's adjusted mean scores on retrieval inference questions, and the CG treatment group exceeded the VG group on generation inference. Similar directional findings were obtained for the concrete/abstract question category scores. Although none of the findings reached the $p < .05$ level of significance, the VG treatment group exceeded the CG group's performance on concrete questions, and the CG treatment group exceeded the VG

group on abstract questions. If this same directional findings were produced by a more robust sample size and reached the $p<.05$ threshold of significance, it might indicate that external visualization enhances the reader's comprehension of retrieval inferences and concrete text.

The correlation between the two theoretically distinct pairs of reading question categories is another area with potential for future exploration. Despite the small sample size of this study, the retrieval inference and concrete reading comprehension scores correlated at 0.78. Perhaps the bridges built during retrieval inferencing (Kintsch, 2013) involve what DCT defines as the more concrete imagery of the nonverbal code (Sadoski & Paivio, 2004). Following this line of thinking, CI generation inferencing questions that require the reader to think beyond the text (Kintsch, 2013) would correlate higher with word-based questions labeled as abstract in DCT (Sadoski & Paivio, 2004). In this study generation inferencing questions scores did garner a correlation of 0.80 with the abstract question category scores. Perhaps the generation inferencing processes, such as deductive reasoning, create more activation in the abstract, verbal code. Future research with larger participant samples could explore this possible relationship between the retrieval/generation inferencing and concrete/abstract text that CI and DCT theoretically assert influence reading comprehension.

Study Limitations

Instrumentation. The multiple choice test items used to measure reading comprehension in this study were similar to those typical of standardized testing in that they were drawn from state field tests. These types of measures actually map better with traditional print based literacy instruction, focusing primarily on surface level text-based

recall and inferencing (Honan, 2008). As a result some students reported a perception of increased comprehension that was not supported by the standardized measurements. In addition, the comprehension measures were too short to render meaningful reliability coefficients, although the use of repeated rounds of brief readings and comprehension measures have been used in the external visualization research (e.g., Glenberg et al., 2011; Van Meter et al., 2006) to help address this experimental limitation.

Although experienced teachers were trained to score the open-ended prior knowledge measures, they only achieved an inter-rater reliability of 89% averaged across the three measures of prior knowledge. The second passage in particular posed a challenge to the raters, and it was only through recursive training that they achieved an inter-rater reliability of 84% for the second passage. Only a moderate inter-rater reliability also occurred during the categorization of the research test questions into subgroups of retrieval/generation inferencing and concrete/abstract reading comprehension questions. Inter-rater reliability for the retrieval/generation inferencing rating was 84% and was 76% for the concrete/abstract rating.

Another limitation in the data collection related to the scheduling of the focus group interviews. The best-case scenario would have been to use in-school time to conduct the focus group interviews rather than after a potentially exhausting school day (Cote-Arsenault & Morrison-Beedy, 2005). However, the study was conducted during the exam review period at the end of the academic year and no time was allowed for conducting in-school focus groups. After-school focus group interviews were employed in this study, resulting in an

uneven representation with only two students participating in the CG focus group interview while eight showed up and had to be divided into two groups for the VG focus group interview.

Sampling. The initial participant pool was purposively selected to be grade 10 students from one public charter high school. In order to add rigor to the sample used in this research, students drawn from a grade 10 participant pool were randomly assigned to one of two treatment groups which served to reduce selection bias and to enhance the external validity of findings (Creswell & Plano Clark, 2011). Although efforts were made to gather the largest sample possible, this study obtained a final sample of 42 participants per treatment group (total N=84). Eight participants dropped out of the experiment during the study, and this attrition occurred in a non-random pattern, resulting in uneven treatment sizes (CG, n=34; VG, n=42). Small sample sizes have been found to exaggerate the negative impact the small group effect has on individuals' willingness to be forthcoming in focus groups (Hesse-Biber & Leavy, 2011). The relatively small and uneven sample sizes may also have contributed to the limited data collection from the CG focus group interviews. Apparently using $10 iTunes cards as incentives was insufficient to garner robust CG focus group participation, particularly during the exam review time of the academic calendar.

Teacher effect. The intent of using scripted videotaped protocols was to keep every aspect of the treatment as similar as possible, varying only the mode of the reading response activity, which represented the primary independent variable, and was the focus of the research problem. It was the aim of this study specifically to limit the unintended variance

teacher effect can introduce into the treatment protocols, and the use of a randomized block design reduced the impact of the teacher effect which would be otherwise be considered a potential limitation. It must be noted, however, that the grade 10 participating teacher was in her first year of instruction and the impact of her inexperience did surface in the VG1 focus group interviews in some instances of overly directive behavior as she conducted the focus group.

Conclusions

Two main conclusions can be drawn from the integration of the qualitative and the quantitative data. First, the treatment assignment had no significant impact on student reading comprehension of the informational texts. Although the VG focus group participants noted that the concrete text passages seemed to be less complex than did the more abstract passages, their descriptions of how the passages were less complex made it clear that this perception seems to be an artifact of the image based instructional treatment task rather than an independent observation. Furthermore, none of the CG participants noted a difference in the passages due to the presence or absence of concrete images in the texts. The lack of a significant interaction between the treatment assignment and reading question type in the quantitative data results supports this conclusion. In addition, student concerns about the potential negative effects of the VG treatment protocol on the reading comprehension test results prompted additional quantitative tests that indicated there was no negative significant treatment effect (VG or CG) on the reading comprehension test results.

A second conclusion indicated from the combined data is that class placement, at least at the school that participated in this study, needs to be controlled in any investigation concerning students' reading comprehension. The qualitative and quantitative data together seemed to indicate that English class placement is not determined primarily by student reading level but that English class placement is a variable that may be in some other way strongly related to reading comprehension scores. With the exception of two outliers, the EOG8 scores of all of the focus group participants were nearly identical, and the low correlation between English class placement and EOG8 was confirmed statistically. Yet, the qualitative data revealed class placement differences in the participants' use of the graphic organizer and in their attitude toward the instructional treatment's impact on informational text reading comprehension scores.

Regardless of treatment assignment, regular English class students employed the graphic organizer as a strategy *during* reading and believed the experience would help them on the reading comprehension quizzes, whereas the honors English class students completed the graphic organizer *after* reading, and they did not anticipate any gain in their test scores due to their instructional treatment. Although the quantitative measures employed in this study could not triangulate these specific qualitative results regarding class placement and the students' reading attitudes, the quantitative data did confirm that class placement was a significant predictor of student reading comprehension accounting for more variance in reading comprehension scores than was EOG8 or PK.

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APPENDICES

APPENDIX A

Design Overview

PHASE 1 QUAN	Parent & Participant Consent Forms
	Access Participants' English Language Arts EOG8 Scores
	Measure of Prior Knowledge
	Experimental Group (VG) Reading #1 and Video Response Generation / Comparison Group (CG) Reading #1 and Written Response Generation
	Informational Reading 1 Comprehension Measure
	Measure of Prior Knowledge
	Experimental Group (VG) Reading #2 and Video Response Generation / Comparison Group (CG) Reading #2 and Written Response Generation
	Informational Reading 2 Comprehension Measure
	Measure of Prior Knowledge
	Experimental Group (VG) Reading #3 and Video Response Generation / Comparison Group (CG) Reading #3 and Written Response Generation
	Informational Reading 3 Comprehension Measure
PHASE 2 qual	Focus Group with Experimental Group (VG) / Focus Group with Comparison Group (CG)

APPENDIX B

Informed Consent Letter

North Carolina State University
INFORMED CONSENT FORM for RESEARCH
This form is valid from 4/14/2014 through 4/14/2015

Title of Study
High School Students Reading Informational Texts

Principal Investigator   Faculty Sponsor
Melissa E. Bartlett   Dr. Hiller A. Spires

What are some general things you should know about research studies?
You are being asked to take part in a research study. Participation in this study is voluntary. You have the right to be a part of this study, to choose not to participate or to stop participating at any time without penalty. The purpose of research studies is to gain a better understanding of a certain topic or issue. You are not guaranteed any personal benefits from being in a study. Research studies also may pose risks to those that participate. In this consent form you will find specific details about the research in which your student is being asked to participate. If you do not understand something in this form it is your right to ask the researcher for clarification or more information. A copy of this consent form will be provided to you. If at any time you have questions about your participation, do not hesitate to contact the researcher(s) named above.

What is the purpose of this study?
We are conducting research on how to improve instruction in reading informational nonfiction texts. Currently high school students are expected to read increasing amounts of nonfiction material, and we are interested in investigating new classroom methods to help our students better understand the growing amounts of nonfiction they are expected to read as part of their regular English course of study.

What will happen if a student takes part in the study?
If you agree to participate, you will be asked to participate in the following activities:

1. Four days of English class instruction in reading three short informational texts on history and science topics, summarizing the important information from the readings, and answering comprehension questions on each passage. (four 60-minute classes)

2. Approximately 16 students will be drawn from a pool of volunteers to participate in after-school small group interviews. (60 minutes)

The focus group interviews will be digitally audio recorded and saved on an external hard drive. The audio recordings will be transcribed using numerical identifiers for speakers, not names. The transcriptions and the digital recordings will be secured in a locked fireproof safe in the researcher's home. These recordings will be kept only until the transcriptions are complete, at which point they will be destroyed (deleted).

3. In addition, previous grade 8 EOG English language arts reading scores will be used as a baseline measure for reading comprehension skills for all study participants.

Risks
There are no foreseeable risks.

Benefits
There is no direct benefit to you from participating since the same English reading content will be provided to students who do not participate, but the results of the study may help improve reading instruction practices related to informational texts.

Confidentiality
The information in the study records will be kept confidential to the full extent allowed by law. Data will be stored securely in a locked facility. No reference will be made in oral or written reports that could link you to the study. You will NOT be asked to write your name on any study materials to further protect your identity.

Compensation
You will have an opportunity to sign up for a volunteer pool from which 16 students will be selected to participate in after-school focus group interviews. The students who participate in the after-school interviews will each receive a 10$ iTunes card to compensate for the 60 minutes of after-school time the interview will require.

What if you have questions about this study?
If you have questions at any time about the study or the procedures, you may contact the researcher, Melissa E. Bartlett at 704/450-5615.

What if you have questions about your rights as a research participant?
If you feel you or your student have not been treated according to the descriptions in this form, or your student's rights as a participant in research have been violated during the course of this project, you may contact Deb Paxton, Regulatory Compliance Administrator, Box 7514, NCSU Campus (919/515-4514).

Consent To Participate
"I have read and understand the above information. I have received a copy of this form. I agree to allow my student to participate in this study with the understanding that I may choose for him or her not to participate or to stop participating at any time without penalty or loss of benefits to which the student is otherwise entitled."

Student signature _____**Date** _____

Parent/Guardian signature _____**Date** _____

Investigator's signature _____**Date** _____

APPENDIX C

Protocol Instructions

VG Instructions

(adapted from Gambrell et al., 1987)

In addition to the overview of the VG text response tasks the students will complete, the teacher will deliver the following instructional protocol using her laptop and an LCD projector to share with the students the relevant text used in modeling and to lead them in a guided practice in the use of Flickr and Animoto.

Teacher Modeling.
- ***Introduction.*** The first step is to work through a brief passage to identify images to include in the Animoto. The images should convey the important ideas of a passage. During modeling, the teacher should read aloud the passage modeling using a graphic organizer to jot down lines from the reading and their potential images. Explain that more images should be included that the students' think they might use just in case they don't find on Flickr the photo for one of their desired images.

- ***Demonstration***. There are three parts to the demonstration.

  o Passage reading**.** The teacher brings up on the screen the short passage below and follows the following demonstration. "I have a short passage called 'Rivers Shape Life' that I'm going to read aloud to you. As I read I'll start off jotting down lines and images I think of that are related to what I'm reading and you join in adding images you can think of as we go along. I'll use comment boxes to note these image ideas, but you will use hard copy graphic organizers when you do this on your own.

Rivers Shape Life

In a country without roads the first colonists relied on rivers to get themselves and their goods from place to place. In Virginia, rivers like the James and the Potomac were broad, deep, and slow moving. Ocean-going vessels could sail up them for many miles. The ships brought the products of Europe to inland tobacco farmers and took away their barrels of cured tobacco for sale in England. Farms spread along the riverbanks. There were few towns because buying and selling could take place at each farmer's riverside dock. [Adapted from American History, by John A. Garraty, Harcourt Brace Jovanovich, New York, N.Y., 1982.]

o   Image acquisition. The teacher signs in to her Flickr account using the study's assigned user ID and password (bartlettlastnamefirstinitial/researchproject) and uses the search box to locate photos for the images noted in the reading. These images are copied to the desktop.

o   Animoto creation. The teacher then signs in to the Animoto account the researcher has established for each participant in the study with the user name of mebartlett*ASSIGNEDNUMBER*@gmail.com and the password of "researchproject." There will be a master list of these account ids for easy reference in the classroom and the researcher will be available to help troubleshoot account log ins where necessary. The teacher then demonstrates the creation of a brief Animoto including the images saved on the desktop. A preview of the video is followed by publishing the final product titled "Modeled Reading Passage."

• **Guided practice.** As with the modeled practice, the guided practice has three parts.

o   Passage reading. The teacher gives students a graphic organizer to jot down images that come into their minds as they read the next sample text. The teacher tells the students that they will use these sheets to help them think about what to include in their video responses to the readings. The graphic organizer is a simple two column table with one column identifying the line of text and the second column identifying possible images that related to the line. Students then silently will read the brief passage and take notes. Students should be given 15 minutes to read the brief passage and make a few notes.

Padre Island National Seashore, Texas

Profile of a Barrier Island

Padre Island is one of a chain of islands that stretches along the
Atlantic and Gulf coasts of the United States from Maine to Texas.
These islands are barrier islands, so-called because they guard the
mainland from the direct onslaught of storms. On many of these low-
lying islands, man has left his mark: seaside homes, lighthouses,
fishing villages, vacation resorts. But on Padre Island, it is not the
work of man but the handiwork of nature that is most evident.

Padre Island, like all barrier islands, is a dynamic place where you
can witness change:
· change wrought by the gentle touch of breezes,
· by the relentless crashing of waves,

· by the rhythmic coming and going of tides, and, most dramatically, by the violent battering of tropical storms and hurricanes.

The many environments of Padre Island—beach, dunes, grasslands, and tidal flats—are shaped and reshaped daily in response to these natural sculptors. You can see the signs of change everywhere: sand blowing in the wind, new seashells deposited by a wave, a washover channel cut into the island by the power of a great storm. Another more subtle change that is occurring, according to scientists, is the slow expansion of the entire island toward the mainland as winds and storms deposit sand on the island's west side.

The plants and animals of Padre Island are well-adapted to the ever-changing nature of their native home. Sea oats, for example, thrive here. This wild shore plant is a pioneer species, one that moves into areas of loose, blowing sand where few other plants can grow and takes root. With the sand anchored by roots, other plants take hold and dunes grow, sometimes to heights of 30 or 40 feet. The dunes are held in place unless something destroys the plants. A particularly fierce storm can do it. People can do it, by trampling the grasses or driving over them; that's why hiking and driving in the dunes are prohibited.

(Adapted from EOG Grade 8 ELA Released Forms, 2012-2013, NCDPI Accountability Services Division.)

o Image acquisition. Students then will open a tab in their Internet browsers on their laptop computers and sign in to their Flickr accounts the researcher established prior to the first day of instruction. The students' user IDs are created just as the teacher's user id and password were crafted - with "bartlett and student's last name first initial" and everyone's password is "research project." The example, user id – bartlettsmithb, password – research project, should be written on the board for students to refer to. Students should be given 15 minutes to acquire at least 3-4 images.

o Animoto creation. The students then sign in to their Animoto accounts established and creates a brief Animoto including the images saved on the desktop. A preview of the video is followed by publishing the final product titled "Modeled Reading Passage." The teacher and the researcher should circulate to troubleshoot where necessary until all the students have successfully created a brief Animoto.

CG Instructions

(script adapted from Gambrell et al., 1987)

In addition to the overview of the text response tasks the students will complete, the researcher will deliver the following instructional protocol with an accompanying PowerPoint of the relevant text used in modeling and guided practice to review summarizing.

- **Teacher modeling.**

  o *Introduction.* The first step is to convey the characteristics of a good summary. It is brief, it has the important ideas of a passage, and it does not include supporting details. During modeling, the teacher will read aloud a passage and then demonstrate how a summary is developed.
  o *Explanation.* Explain why supporting details are omitted from summaries and how to identify topic sentences in sections of the document by using the headings and subheadings as main idea dividers.
  o *Demonstration.* The teacher will model the hierarchical summary strategy similar to one developed by Taylor and Beach (1984). Briefly, this makes use of a topical outline augmented by marginal notes and students' own main idea statements.

    "I have a short passage called 'Rivers Shape Life' that I'm going to read aloud to you. I'm also going to try to make summary statements of main ideas about what I read. I'll describe how I use topic sentences to understand and remember what I read." The passage selected for teacher modeling should be brief. Here is an example:

    Rivers Shape Life

    In a country without roads the first colonists relied on rivers to get themselves and their goods from place to place. In Virginia, rivers like the James and the Potomac were broad, deep, and slow moving. Ocean-going vessels could sail up them for many miles. The ships brought the products of Europe to inland tobacco farmers and took away their barrels of cured tobacco for sale in England. Farms spread along the riverbanks. There were few towns because buying and selling could take place at each farmer's riverside dock. [Adapted from American History, by John A. Garraty, Harcourt Brace Jovanovich, New York, N.Y., 1982.]

- **Guided practice.** Give students a simple graphic organizer that consists of a one column table that contains separate blocks in which to jot down main ideas that come into their minds as they read through the assigned texts. Tell them that they will use these sheets to help think about what to include in their responses to the readings.

Padre Island National Seashore, Texas

Profile of a Barrier Island

Padre Island is one of a chain of islands that stretches along the Atlantic and Gulf coasts of the United States from Maine to Texas. These islands are barrier islands, so-called because they guard the mainland from the direct onslaught of storms. On many of these low-lying islands, man has left his mark: seaside homes, lighthouses, fishing villages, vacation resorts. But on Padre Island, it is not the work of man but the handiwork of nature that is most evident.

Padre Island, like all barrier islands, is a dynamic place where you can witness change:
· change wrought by the gentle touch of breezes,
· by the relentless crashing of waves,
· by the rhythmic coming and going of tides, and, most dramatically, by the violent battering of tropical storms and hurricanes.

The many environments of Padre Island—beach, dunes, grasslands, and tidal flats—are shaped and reshaped daily in response to these natural sculptors. You can see the signs of change everywhere: sand blowing in the wind, new seashells deposited by a wave, a washover channel cut into the island by the power of a great storm. Another more subtle change that is occurring, according to scientists, is the slow expansion of the entire island toward the mainland as winds and storms deposit sand on the island's west side.

The plants and animals of Padre Island are well-adapted to the ever-changing nature of their native home. Sea oats, for example, thrive here. This wild shore plant is a pioneer species, one that moves into areas of loose, blowing sand where few other plants can grow and takes root. With the sand anchored by roots, other plants take hold and dunes grow, sometimes to heights of 30 or 40 feet. The dunes are held in place unless something destroys the plants. A particularly fierce storm can do it. People can do it, by trampling the grasses or

driving over them; that's why hiking and driving in the dunes are prohibited.

(Adapted from EOG Grade 8 ELA Released Forms, 2012-2013, NCDPI Accountability Services Division.)

Main Ideas	Textual Evidence

Images Representing main ideas	Textual Evidence

APPENDIX D

Lexile Ratings, Informational Texts, and the Related Comprehension Measures

Reading #1. Excerpt from "Meet the *Moai* of Easter Island" *by Gigi Guerra*

Reading 1 Results from the Lexile Analyzer: Lexile Measure – 1200L, Mean
Sentence Length – 18.69, Mean Log Word Frequency – 3.36, Word Count – 542.

"Welcome to Rapa Nui," said my driver, referring to Easter Island in the vernacular, as we worked our way through the tiny airport on the outskirts of the only town, Hanga Roa. I'd made the two-day journey solo—not a single friend was interested in accompanying me halfway around the world to a place with so little to do, not to mention such steep airfare. That said, I felt far from alone: The airport was astonishingly crowded, especially considering it was near midnight and only a handful of passengers had disembarked. "People hang out to see who arrives," my greeter explained, as I looked around at perhaps a quarter of the island's 4,900 residents. "It's an excuse to socialize." Families, boisterous groups of teens, and even energetic seniors were milling about the parking lot and lawns, chatting and greeting tourists. Tranquility, no—but a warmer welcome than I ever could've imagined.
  2
  Named by a Dutch explorer who landed there on Easter Sunday, 1722, Easter Island was actually settled centuries earlier, likely by curious Polynesians drifting eastward in catamarans, and later by South American migrants. Nobody knows for sure. As with most things about this island, from its volatile history involving colonial meddling and an ecosystem collapse to the origins of its hybridized language to the story of the *moai*, or monolithic lava-rock figures, there's speculation but no consensus. And that's what makes it so fascinating. Not to mention the inherent loneliness of the place, both geographically and culturally: Years of disease, coupled with massively depleted resources, at one point nearly wiped out the population (in the late 1800s, barely 100 islanders were left). It's a destination with solitude built into its DNA.
  3
  In the light of day, things got more curious. As I scanned the volcanic coastline and grassy hills from the patio of my hotel, the Vai Moana, not a single palm tree blocked my view. The hotel, too, was more minimalist than tropical, with simple tiled floors and all-white linens. My first impression was Scottish countryside rather than South Pacific. Then, in the distance, I saw the distinct outline of giant heads.

Most of Easter Island—a mere 15 miles wide and seven miles long—is a World Heritage Site. Crammed into that compact space are more than 800 *moai*, each of which, it's said, took a team of six men more than a year to complete, and as many as 250 to transport and raise.

The challenge of moving the *moai*, I learned, might explain the island's deforestation: A theory goes that during the heyday of *moai* construction, all the jungles were felled for wood to create a transport system of rolling logs greased by sweet potato pulp. Shockingly, none of the statues are in the least bit protected from the elements or vandals. Still, it's an unspoken rule for visitors to heed the don't-upset-the-spirits vibe and keep their distance. That first day, I set out on foot and quickly encountered the best-known *moai*. Standing at attention in uniform clusters atop platforms that fringe the shore, they face landward, silently observing. Tales abound about why these commanding figures were created—and range from the spiritual (to memorialize ancestors), to the reverential (in honor of powerful chiefs), to the far-fetched (the work of industrious extraterrestrials).

Reading #1. Comprehension Measure. (Correct answers are bolded.)

1. What is an objective summary of the selection?

    A Very little is known about the *moai's* history on Easter Island.

    B The *moai* are an integral part of the island's tourist industry.

    C The island is becoming a popular tourist attraction.

    D The island's residents are very hospitable to visitors.

2. What is the purpose of beginning the selection with dialogue and then moving to geographical and statistical information?

    A The reader is not able to comprehend the geographical and statistical information without the dialogue.

    B Given the geographical and statistical information later on, the reader can relate the information to personal experiences.

    C The information explaining why the island is such a tourist attraction helps the reader to decide whether he or she wants to visit.

    D By starting with dialogue and the author's experience at the airport, the reader's interest is captured, and he or she wants to keep reading.

3. What can be inferred from paragraph 2?

    A Europeans are clearly connected to Easter Island's most famous attraction.

B Europeans are not as central to the island's history as some may think.

C Europeans were the originators of Easter Island's famous *moai* sculptures.

D Europeans have completely rewritten Easter Island's history.

4. What does the author mean when she describes Easter Island as "a destination with solitude built into its DNA"?

A Her friends would not accompany her to the island.

B Her motivation for leaving was misplaced.

C The island is an unusually lonely place to live.

D The island's natives are different and quirky.

5. Why does the author include the sentence below from paragraph 3?

   "Then, in the distance, I saw the distinct outline of giant heads."

A to emphasize the size of the island's population

B to create intrigue over the island's most famous feature

C to conclude the story with a riddle

D to summarize her points about the *moai's* origins

6. What is the significance of the statement below from the last paragraph?

"A theory goes that during the heyday of *moai* construction, all the jungles were felled for wood to create a transport system of rolling logs greased by sweet potato pulp."

A It suggests the possibility of how the *moai* were moved to their current locations as well as why all of the forests were destroyed.

B It explains why sweet potatoes were at once a massive crop on the island.

C It tells the reader why the logs were valuable in the construction of the *moai* found all over the island.

D The men who constructed the *moai* destroyed the forests because they blocked the view of the *moai* from other points on the island.

7. What is the author's purpose in writing this selection?

   A to expose the truth about the origin of the *moai* on Easter Island

   B to describe the mysteries of Easter Island

   C to persuade travelers to visit and eventually relocate to Easter Island

   D to provide a history of Easter Island

8. How does the author unfold her ideas about Easter Island?

   A She explains each thought in the same order as her research.

   B She addresses each aspect of the island as she experienced it.

   C She uses the *moai* as a metaphor for the island's numerous mysteries.

   D She parallels the island's history with travelers' previous encounters.

The question you read next will require you to answer in writing.

   1. Write your answer on separate paper.
   2. Be sure to write your ID number on each page.

9. In the "Excerpt from 'Meet the *Moai* of Easter Island' " how does the author use language to advance her point of view? Use evidence from the selection to support your answer.

********END OF READING MEASURE #1********

Reading #1. Constructed Response Item Scoring Rubric.

In the Excerpt from "Meet the *Moai* of Easter Island," how does the author use language to advance her point of view? Use evidence from the selection to support your answer.

Score	Criteria
2	• Identifies the author's point of view • Uses examples of how the author uses language to advance her point of view • Writes a response that analyzes how the author uses language to advance her point of view
1	• Identifies the author's point of view • May or may not use examples of how the author uses language to advance her point of view • Writes a response that analyzes how the author uses language to advance her point of view
0	• Fails to identify the author's point of view • Fails to use examples of how the author uses language to advance her point of view • Writes a response that fails to analyze how the author uses language to advance her point of view

Reading #2. "Excerpt from *To the Person Leaving*" by Alicia Dujovne Ortiz, translated by Amanda Hopkinson

> Reading 2 Results from the Lexile Analyzer: Lexile Measure – 1320L, Mean Sentence Length – 23.38,   Mean Log Word Frequency – 3.47, Word Count – 678.

I have emigrated three times in my life. In 1978, I emigrated from Argentina to come to France, because a military dictatorship had taken hold in my country. In 1999, I emigrated from France, where I'd lived for twenty years, in order to return to Argentina, because I missed it so much. And in 2002, I emigrated from Argentina to return to France, because a financial dictatorship had taken hold in my country. This triple experience of emigration from one side of the planet to the other permitted me to compare the two. The Argentines now leaving are not the same as those who left earlier. The earlier émigrés discussed matters as if they understood them. Today's maintain only a perplexed silence.

Before them there had been, of course, others. It is not necessary to repeat here the cliché of the artist who traveled to make his mark in Paris at the turn of the last century, or that of the estate-owner who did much the same, but brought his cow along with him.
I met successors to the first type in the 1960s and 1970s; unfortunately I did not meet any of the second type (had we managed to coincide, I could, perhaps, have claimed a glass of milk

for my sustenance), but they clearly did not constitute any kind of a mass movement. Nor did the exiles emigrating during the dictatorship—and yet the Argentine abroad became a more significant phenomenon during this period, both in quantity and in symbolic effect. Between 1976 and 1982, these Argentines became the representatives of a country of thinkers, intellectually respected throughout Europe.

3

The intellectual status so generously attributed to the exiles may have formed the basis of that generally ridiculous division into Those Who Left and Those Who Stayed Behind. It was as though the two groups belonged to two distinct peoples.

4

Whether openly or in private, each group regarded itself as more persecuted than the other, and one of them—the exiles—considered itself the more distinguished. They competed over their levels of suffering and conscience, running some kind of race at the end of which the prize consisted of determining who had the greater conscience and who had suffered the most. Only, at the time, the prestige attached to the journey was such that those who did not leave attempted to justify themselves by discrediting those who did—the long-suffering sippers who had found themselves obliged to swallow the salty caviar of exile. For their part, those who left adopted a faint, albeit heroic, air of superiority, at times no doubt justified, and at others in no way so, as if somehow those who had stayed had been really, really dumb. Without overlooking, of course, that among those who had stayed there were some thirty thousand corpses. But neither those who had left, nor the corpses, added up to a majority: Argentina as a whole, and I say this without intending criticism but as fresh evidence of my attempt to view things dispassionately on my return, was not in the same state of generalized loss as it feels today.

In 2002, the difference between those who left and those who stayed no longer attracted capital letters (for we live in a lowercase era, without great pretensions). We are no longer a people divided between those who, on the one hand, have a home and, on the other, a suitcase; or, in one instance, the hero persecuted for political reasons and on the other the meek lamb who did not protest. In a land where there's no need to abandon one's home in order to lose the roof over one's head, everyone is on the road.

It's a journey everyone makes as best they can, according to what strengths they have. This renders us all more indulgent, or perhaps more mature, in cases where maturity is measured in sadness. Who would now dare to decide whether it was more courageous to remain in Argentina, or more cowardly to leave, or both at the same time?

Reading #2. Reading Comprehension Measure. (Correct answers are bolded.)

1. Which statement summarizes the central idea of the selection?

   A **The author wants an émigré to recognize the costs of staying or leaving, realizing that neither is more courageous nor cowardly than the other.**

   B The author feels that, though life may be lost in Argentina, it is more courageous to remain in one's homeland.

   C The author wishes to expose those who leave as cowards, though she herself has fled twice.

   D The author wants émigrés to take the story of Argentina into the world and share their grief.

2. In paragraph 3, what effect does the word *generously* have on the selection?

   A It shows that the author feels fortunate to have been safe in Europe.

   B It shows that the author includes herself as a member of the intellectual class.

   C It shows that the author is being serious when she describes the division of the population as being ridiculous.

   D **It shows that the author does not agree that most exiles were intellectuals.**

3. What is the effect of the metaphor in the sentence below from paragraph 4?

   "Only, at the time, the prestige attached to the journey was such that those who did not leave attempted to justify themselves by discrediting those who did—the long-suffering sippers who had found themselves obliged to swallow the salty caviar of exile."

   A It shows that the safety of exile was small compared to the costs.

   B It shows that exile was not a pleasant experience.

   C It shows that exile was only for special occasions and for those who were wealthy.

   D **It emphasizes how those individuals who were exiled were ridiculed by those who were not.**

4. What is the effect of the phrase below from paragraph 4 on the overall selection?

"the long-suffering sippers who had found themselves obliged to swallow the salty caviar of exile."

A The allegory demonstrates the perceived importance of some of the people who left.

B The simile exemplifies the repeated use of figurative language as a rhetorical device.

C The metaphor illustrates the idea that some of the people who left savored their special kind of suffering.

D The alliteration signals and emphasizes a place deserving special attention from the reader.

5. What is the purpose of the figurative language in the sentence below from the last paragraph?

"In 2002, the difference between those who left and those who stayed no longer attracted capital letters (for we live in a lowercase era, without great pretensions)."

A The description of the two eras demonstrates the author's ironic tone while differentiating the change in perception between the time periods.

B The description of the two eras shows the importance of language to the author.

C The description of the two eras eliminates the possibility that the two time periods were similar in any way.

D The description alludes to previous use of analogies and metaphors by the author which demonstrates the similarity between the two time periods.

6. Which statement describes the connection between the selection and the oxymoron "both at the same time"?

A The division between the two groups is not as distinct in the more recent, financial crisis as it was during the dictatorship.

B Many of those who stayed, as well as those who left, lost their homes and were exiles.

C Those who left had the freedom to protest, while those who stayed were afraid to

protest.

D The author criticizes Argentina, despite her immigration during turbulent times.

7. What can be inferred from the author's focus on Argentina's troubled past and present situation?

A The people who have left Argentina are better off than those who stayed.

B The people who have stayed in Argentina are better off than those who left.

C The Argentinian people as a whole have lost any sense of security.

D The leaders of Argentina have made life intolerable for all Argentinian citizens.

The question you read next will require you to answer in writing.

1. Write your answer on separate paper.
2. Be sure to write your ID number on each page.

8. In the "Excerpt from *To the Person Leaving*" why does the author choose to end the selection with a rhetorical question? Use examples to support your answer.

********END OF READING MEASURE #2********

Reading #2. Constructed Response Item Scoring Rubric.

In the excerpt from *To the Person Leaving,* why does the author choose to end the selection with a rhetorical question? Use examples to support your answer.

Reading #3. *Geology Fieldnotes: Big Bend National Park, Texas*

   Reading 1 Results from the Lexile Analyzer: Lexile
Measure – 1360L, Mean Sentence   Length – 21.13,   Mean Log Word Frequency – 3.18,
Word Count – 972.

Park Geology

Big Bend is a special place to study geology. The rocks are clearly exposed, thanks to
sparse vegetation and recent erosion. A remarkable array of geologic processes are
displayed here, from volcanoes and landslides to fossils and flash floods.

A Land of Constant Change

2
That portion of the earth's surface known as "the Big Bend" has often been described
as a "geologist's paradise." In part this is due to the sparse vegetation of the region,
which allows the various strata to be easily observed and studied. It is also due to the
complex geologic history of the area, presenting a challenge to students and
researchers from all over the world. Not all field geologists, however, refer to the Big
Bend as a paradise. For some, this land of twisted, tortured rock is a nightmare.

The abundance, diversity and complexity of visible rock outcrops is staggering,
especially to first-time observers. From 500-million-year-old rocks at Persimmon Gap
to modern-day windblown sand dunes at Boquillas Canyon, geologic formations in
Big Bend demonstrate amazingly diverse depositional styles over a vast interval of
time. For most of us, time is measured by the passing of days, years and generations.

Score	Criteria
2	• Explains the reason for ending the selection with a rhetorical question • Uses specific details to support the reason for ending the selection with a rhetorical question • Writes a response that analyzes the reason for ending the selection with a rhetorical question
1	• Explains the reason for ending the selection with a rhetorical question • May not use a specific detail to support the reason for ending the selection with a rhetorical question • Writes a response that may or may not analyze the reason for ending the selection with a rhetorical question
0	• Fails to explain the reason for ending the selection with a rhetorical question • Fails to use any specific details to support the reason for ending the selection with a rhetorical question • Writes a response that fails to analyze the reason for ending the selection with a rhetorical question

The concept of geologic time, however, is not so easily understood. Events that occurred 2 million, 26 million, or as many as 120 million years ago are, at best, difficult to comprehend. Since astronomers now place the age of the earth at approximately 4.6 billion years, we should perhaps consider ourselves fortunate that the oldest rocks found in the Big Bend are only about 500 million years old.

Initial commentary on the geology of the Big Bend was provided by early-day explorers and adventurers in the 1800s. Subsequent studies by numerous twentieth-century researchers enable us now to reasonably reconstruct the complex geologic history of the Big Bend. For a period of at least 200 million years, ending some 300 million years ago in the Paleozoic Era, a deep-ocean trough extended from present-day Arkansas and Oklahoma into the Big Bend region of far West Texas. Sediments from highlands to the north accumulated in that trough to form layers of gravel, sand and clay. With the passing of time, these layers became sandstone and shale beds. About 300 million years ago these strata were "squeezed" upward by collision with a continent to the south to form the ancestral Ouachita mountains. Subsequent erosion over an interval of 160 million years left only the roots of those mountains visible. These remnants may be observed today in the Ouachita Mountains of southeastern Oklahoma, in the immediate vicinity of Marathon, Texas, and in Big Bend National Park near Persimmon Gap.

A warm, shallow sea invaded the Big Bend during the Cretaceous Period, some 135 million years ago, providing the setting for deposition of lime mud and the remains of sea-dwelling organisms such as clams and snails. Limestone layers formed from those shallow muds are now visible throughout much of the Big Bend. They comprise the dramatic walls of

- Santa Elena, Mariscal, and Boquillas canyons,
- the entire range of the Sierra del Caballo Muerto (Dead Horse Mountains), and
- the magnificent cliffs of the Sierra del Carmen in Coahuila, Mexico, towering above Rio Grande Village.

Approximately 100 million years ago the shallow Cretaceous sea began a gradual retreat to its present location, the Gulf of Mexico. Sandstone and clay sediments that formed along the retreating shoreline are found in lowlands surrounding the Chisos Mountains.

Shallow water strata of this episode contain the fossil remains of

- oysters,
- giant clams,
- ammonites, and

• a variety of fishes and marine reptiles.

Near-shore deposits in Big Bend have yielded

• petrified wood,
• fossil turtles, and
• crocodiles—one almost 50 feet long!

Deposits from further inland contain fossil remains of a variety of dinosaurs. Perhaps the most famous of Big Bend's fossil treasures from this period is the giant flying reptile, *Quetzalcoatlus northropi*, with a wingspan over 35 feet. (A replica of the bones of one wing is now on exhibit at the Panther Junction Visitor Center.)

Near the end of the Cretaceous Period, a west-to-east compression of the earth's crust marked the beginning of the second major mountain-building period in Big Bend. This compression, which began in Canada, moved gradually southward, uplifting and folding ancient sediments to form the Rocky Mountains. In Big Bend National Park, Mariscal Mountain represents the southernmost extension of the Rockies in the United States.

Broad uplift punctuated by upward folding exposed both the erosion-resistant lower Cretaceous limestones and the less resistant overlying sandstones and clays to the onslaught of erosion. Limestone cliffs throughout the region continue to be eroded today; most of the more easily removed sandstone and clay is gone from the mountains.

For almost 10 million years after uplift ended, nonmarine sediments of the Tertiary period constitute the only record of events in the Big Bend. Dinosaurs had long been gone from the land, their places taken by a proliferation of mammals, many of whose remains have been found in Big Bend . . . horses, rhinos, camels, and rodents, as well as fossils of the plants on which they thrived.

All was not to remain quiet for long. Near the present northwest boundary of Big Bend National Park, the first of a long series of volcanic eruptions occurred approximately 42 million years ago. Upwelling magma lifted the mass now known as the Christmas Mountains, fracturing and weakening overlying strata, allowing massive outpourings of lava to spread across the land. The oldest volcanic rocks in Big Bend owe their origins to this eruptive cycle.

Between roughly 38 and 32 million years ago, Big Bend itself hosted a series of volcanic eruptions. Initial activity in this cycle centered in the Sierra Quemada, below the present South Rim of the Chisos Mountains. Subsequent volcanic activity at Pine

Canyon, Burro Mesa, near Castolon, and elsewhere in the park is responsible for the brightly colored volcanic ash and lava layers of the lower elevations and for most of the mass of the Chisos Mountains.

Volcanic activity was not continuous during these eruptive cycles. Periods of hundreds of thousands or perhaps millions of years passed between eruptions. During the quiet interludes, the forces of erosion carved new landscapes, many of which were destined to be buried under layers of ash and lava from later eruptions. Life returned to the land only to be displaced by future eruptions.

Elsewhere in the Big Bend, rising magma sometimes failed to reach the surface. Instead, it spread within existing layers of rock, uplifting and fracturing overlying strata. Once the magma cooled and crystallized, it formed solid masses of erosion-resistant intrusive igneous rock, which have now been exposed by erosion of the overlying material. Maverick Mountain, the Grapevine Hills, Nugent Mountain, and Pulliam Ridge are among many examples in Big Bend of such "frozen" magma chambers.

Beginning some 26 million years ago, stresses generated along the West Coast of North America resulted in stretching of the earth's crust as far east as Big Bend. As a result of these tensional forces, fracture zones developed, which, over time, allowed large bodies of rock to slide downward along active faults. The central mass of Big Bend National Park, including the Chisos Mountains, from the Sierra del Carmen to the east to the Mesa de Anguila to the west, comprises such a block of rocks dropped downward by faulting. Direct evidence of this faulting is readily observed at the tunnel near Rio Grande Village. There the limestone layer through which the tunnel passes is the same layer that forms the skyline of the Sierra del Carmen to the east, dropped down over 4,800 feet by faulting. To the west, at the mouth of Santa Elena Canyon, the highest elevation rises 1,500 feet above the river, while at the parking area the same layer lies some 1,500 feet below the surface. Displacement along these faults did not occur in a single event, rather in a series of lesser episodes of faulting punctuated by earthquakes.

The 1995 magnitude 5.6 earthquake near Marathon, Texas, 70 miles north of Panther Junction, indicates that the responsible stresses are still active . . . .

The Greek philosopher Heraclitus once said "There is nothing permanent except change." This phrase could have been directed to the Big Bend, where geologic processes have been constantly changing the land for over 500 million years. Each time you return to Big Bend National Park, it will be different, for with every passing day the land is indeed changing.

Reading #3. Reading Comprehension Measure. (Correct answers are bolded.)

1   According to the selection, why has "the Big Bend" been described as a "geologist's paradise"?

   A because it contains rocks

   B because many geologists vacation there

   C because sparse vegetation allows easy access to interesting strata

   D because there are many jobs for geologists there

2   What is the effect of the metaphors in the sentences below from paragraph 2?

   "Not all field geologists, however, refer to the Big Bend as a paradise.
   For some, this land of twisted, tortured rock is a nightmare."

   A They compare Big Bend to a contradictory dream world.
   B They emphasize the allure and repulsiveness of the landscape.

   C They explain how Big Bend is enthralling to many people.

   D They express how interesting the landscape is to many people.

3. How does the author structure the text?

   A general overview, geographic placement, volcanic highlights, types of creatures found, chronological history

   B general overview, chronological history, geographic highlights, volcanic activity, faults, earthquakes
   C chronological histories by area, details about sediments and findings, earthquake information, and volcanic effects

   D overall history of area, history by specific time periods, descriptions of geologic events, and major discoveries

4. What is the significance of the selection's structure?

   A It clarifies the existing natural boundaries of the area.

B It highlights the types of living creatures that existed in the area.

C It emphasizes the constant geological changes that have shaped the area.

D It provides the reader with an inside look at how geological maps are created.

5. How does the author connect ideas in the selection?

A by describing geologic time periods

B by explaining the effects of volcanoes

C by comparing fossil remains to volcanic ash

D by giving descriptive geologic details about the topic

6. Which group of words from the selection conveys the author's attitude about his topic?

A *remarkable, amazing, dramatic, magnificent*
B *paradise, fortunate, proliferation, thrived*
C *complex, challenge, staggering, nightmare*

D *invaded, retreating, uplifted, erupted*

7. How does the author achieve his purpose?

A by using descriptive phrases to explain difficult ideas

B by using only formal scientific language to list data

C by using bulleted phrases to clarify ideas
D by using quotes from famous people to support facts

The question you read next will require you to answer in writing.

1. Write your answer on separate paper.
2. Be sure to write your ID number on each page.

8. In the excerpt from *Geology Fieldnotes,* how does the use of subheadings and bulleted lists help the author achieve his purpose? Use examples to support your answer.

********END OF READING MEASURE #3********

Reading #3. Constructed Response Item Scoring Rubric.

In the excerpt from *Geology Fieldnotes,* how does the use of subheadings and bulleted lists help the author achieve his purpose? Use examples to support your answer.

Score	Criteria
2	• Explains the purpose for using subheadings and bulleted lists to explain difficult ideas • Uses specific details to support the use of subheadings and bulleted lists • Writes a response that analyzes the reason for using subheadings and bulleted lists
1	• Explains the purpose for using subheadings and bulleted lists to explain difficult ideas • May not use a specific detail to support the use of subheadings and bulleted lists • Writes a response that may or may not analyze the reason for using subheadings and bulleted lists
0	• Fails to explain the purpose for using subheadings and bulleted lists to explain difficult ideas • Fails to use any specific details to support the use of subheadings and bulleted lists • Writes a response that fails to analyze the reason for using subheadings and bulleted lists

APPENDIX E

Reading Comprehension Question Analysis Protocol

Reading Comprehension Question Analysis Protocol Directions: Mark each question as requiring either retrieval or generation inferencing and as referencing concrete or abstract textual information. Note any rationale you used in your decision-making.

Passage Title	Reading Comprehension Question and Answer	C-I Theoretical Framework (Kintsch, 2013)		Dual Coding Theoretical Framework (Sadoski & Paivio, 2013)		NC DPI Classification
		Retrieval Inferences	Generation Inferences	Nonverbal/ Concrete	Verbal/ Abstract	ELA CCS English II
Excerpt from *Meet the Moai of Easter Island*	1. What is an objective summary of the selection? **A. Very little is known about the *moai's* history on Easter Island.** B. The *moai* are an integral part of the island's tourist industry. C. The island is becoming a popular tourist attraction. D. The island's residents are very hospitable to visitors.	X			X	EII.RI.2. Determine a central idea of a text and analyze its development over the course of the text, including how it emerges and is shaped and refined by specific details; provide an objective summary of the text.
Excerpt from *Meet the Moai of Easter Island*	2. What is the purpose of beginning the selection with dialogue and then moving to geographical and statistical information? A. The reader is not able to comprehend the geographical and statistical information without the dialogue. B. Given the geographical and statistical information later on, the reader can relate the information to personal experiences. C. The information explaining why the island is such a tourist attraction helps the reader to decide whether he or she wants to visit. **D. By starting with dialogue and the**		X	X		EII.RI.3. Analyze how the author unfolds an analysis or series of ideas or events, including the order in which the points are made, how they are introduced and developed, and the connections that are drawn between them.

Excerpt	Question					Standard
	author's experience at the airport, the reader's interest is captured, and he or she wants to keep reading.					
Excerpt from *Meet the Moai of Easter Island*	3. What can be inferred from paragraph 2? A. Europeans are clearly connected to Easter Island's most famous attraction. **B. Europeans are not as central to the island's history as some may think.** C. Europeans were the originators of Easter Island's famous *moai* sculptures. D. Europeans have completely rewritten EasteIsland's history.	X			X	EII.RI.1. Cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.
Excerpt from *Meet the Moai of Easter Island*	4. What does the author mean when she describes Easter Island as "a destination with solitude built into its DNA"? A. Her friends would not accompany her to the island. B. Her motivation for leaving was misplaced. **C. The island is an unusually lonely place to live.** D. The island's natives are different and quirky.	X		X		EII.RI.4. Determine the meaning of words and phrases as they are used in a text, including figurative, connotative, and technical meanings; analyze the cumulative impact of specific word choices on meaning and tone (e.g., how the language of a court opinion differs from that of a newspaper). (Secondary Standard – EII.RI.5a. EII.RI.5.a. Interpret figures of speech (e.g., euphemism, oxymoron) in context and analyze their role in the text.)
Excerpt from *Meet the Moai of Easter Island*	5. Why does the author include the sentence below from paragraph 3? "Then, in the distance, I saw the distinct outline of giant heads." A. to emphasize the size of the island's population **B. to create intrigue over the island's most**		X	X		EII.RI.5. Analyze in detail how an author's ideas or claims are developed and refined by particular sentences, paragraphs, or larger portions of a text (e.g., a section or chapter).

	famous feature C. to conclude the story with a riddle D. to summarize her points about the *moai's* origins					
Excerpt from *Meet the Moai of Easter Island*	6. What is the significance of the statement below from the last paragraph? "A theory goes that during the heyday of *moai* construction, all the jungles were felled for wood to create a transport system of rolling logs greased by sweet potato pulp." **A. It suggests the possibility of how the *moai* were moved to their current locations as well as why all of the forests were destroyed.** B. It explains why sweet potatoes were at once a massive crop on the island. C. It tells the reader why the logs were valuable in the construction of the *moai* found all over the island. D. The men who constructed the *moai* destroyed the forests because they blocked the view of the *moai* from other points on the island.	X			X	EII.RI.1. Cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.
Excerpt from *Meet the Moai of Easter Island*	7. What is the author's purpose in writing this selection? A. to expose the truth about the origin of the *moai* on Easter Island **B. to describe the mysteries of Easter Island** C. to persuade travelers to visit and eventually relocate to Easter Island D. to provide a history of Easter Island	X			X	EII.RI.6. Determine an author's point of view or purpose in a text and analyze how an author uses rhetoric to advance that point of view or purpose.
Excerpt from *Meet the Moai of Easter Island*	8. How does the author unfold her ideas about Easter Island? A. She explains each thought in the same order as her research. **B. She addresses each aspect of the island as she experienced it.**		X		X	EII.RI.3. Analyze how the author unfolds an analysis or series of ideas or events, including the order in which the points are made, how they are introduced and developed, and the

	C. She uses the *moai* as a metaphor for the island's numerous mysteries. D. She parallels the island's history with travelers' previous encounters.					connections that are drawn between them.
Excerpt from *Meet the Moai of Easter Island*	9. In the Excerpt from "Meet the *Moai* of Easter Island," how does the author use language to advance her point of view? Use evidence from the selection to support your answer.	X	X	X	X	EII.RI.6. Determine an author's point of view or purpose in a text and analyze how an author uses rhetoric to advance that point of view or purpose.
Excerpt from *To the Person Leaving*	1. Which statement summarizes the central idea of the selection? **A. The author wants an émigré to recognize the costs of staying or leaving, realizing that neither is more courageous nor cowardly than the other.** B. The author feels that, though life may be lost in Argentina, it is more courageous to remain in one's homeland. C. The author wishes to expose those who leave as cowards, though she herself has fled twice. D. The author wants émigrés to take the story of Argentina into the world and share their grief.	X			X	EII.RI.2. Determine a central idea of a text and analyze its development over the course of the text, including how it emerges and is shaped and refined by specific details; provide an objective summary of the text.
Excerpt from *To the Person Leaving*	2. In paragraph 3, what effect does the word *generously* have on the selection? A. It shows that the author feels fortunate to have been safe in Europe. B. It shows that the author includes herself as a member of the intellectual class. C. It shows that the author is being serious when she describes the division of the population as being ridiculous. **D. It shows that the author does not agree that most exiles were intellectuals.**	X			X	EII.RI.4. Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grades 9–10 reading and content, choosing flexibly from a range of strategies.

Excerpt from *To the Person Leaving*	3. What is the effect of the metaphor in the sentence below from paragraph 4? "Only, at the time, the prestige attached to the journey was such that those who did not leave attempted to justify themselves by discrediting those who did—the long-suffering sippers who had found themselves obliged to swallow the salty caviar of exile." A. It shows that the safety of exile was small compared to the costs. B. It shows that exile was not a pleasant experience. C. It shows that exile was only for special occasions and for those who were wealthy. **D. It emphasizes how those individuals who were exiled were ridiculed by those who were not.**	X			X	EII.RI.5.a. Interpret figures of speech (e.g., euphemism, oxymoron) in context and analyze their role in the text. (Secondary Standard – EII.RI.4. Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grades 9–10 reading and content, choosing flexibly from a range of strategies.)
Excerpt from *To the Person Leaving*	4. What is the effect of the phrase below from paragraph 4 on the overall selection? "the long-suffering sippers who had found themselves obliged to swallow the salty caviar of exile." A. The allegory demonstrates the perceived importance of some of the people who left. B. The simile exemplifies the repeated use of figurative language as a rhetorical device. **C. The metaphor illustrates the idea that some of the people who left savored their special kind of suffering.** D. The alliteration signals and emphasizes a place deserving special attention from the reader.	X		X		EII.RI.5.a. Interpret figures of speech (e.g., euphemism, oxymoron) in context and analyze their role in the text. (Secondary Standard – EII.RI.4. Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grades 9–10 reading and content, choosing flexibly from a range of strategies.)
Excerpt from *To the Person*	5. What is the purpose of the figurative language in the sentence					EII.RI.5.a. Interpret figures of speech (e.g., euphemism,

Leaving	below from the last paragraph? "In 2002, the difference between those who left and those who stayed no longer attracted capital letters (for we live in a lowercase era, without great pretensions)." **A. The description of the two eras demonstrates the author's ironic tone while differentiating the change in perception between the time periods.** B. The description of the two eras shows the importance of language to the author. C. The description of the two eras eliminates the possibility that the two time periods were similar in any way. D. The description alludes to previous use of analogies and metaphors by the author which demonstrates the similarity between the two time periods.		X		X	oxymoron) in context and analyze their role in the text. (Secondary Standard – EII.RI.4. Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grades 9–10 reading and content, choosing flexibly from a range of strategies.)
Excerpt from *To the Person Leaving*	6. Which statement describes the connection between the selection and the oxymoron "both at the same time"? A. The division between the two groups is not as distinct in the more recent, financial crisis as it was during the dictatorship. **B. Many of those who stayed, as well as those who left, lost their homes and were exiles.** C. Those who left had the freedom to protest, while those who stayed were afraid to protest. D. The author criticizes Argentina, despite her immigration during turbulent times.	X			X	EII.RI.3. Analyze how the author unfolds an analysis or series of ideas or events, including the order in which the points are made, how they are introduced and developed, and the connections that are drawn between them.
Excerpt from *To the Person Leaving*	7. What can be inferred from the author's focus on Argentina's troubled past and present situation? A. The people who have left Argentina are better off than those who		X		X	EII.RI.1. Cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.

	stayed. B. The people who have stayed in Argentina are better off than those who left. **C. The Argentinian people as a whole have lost any sense of security.** D. The leaders of Argentina have made life intolerable for all Argentinian citizens.					
Excerpt from *To the Person Leaving*	8. In the excerpt from *To the Person Leaving*, why does the author choose to end the selection with a rhetorical question? Use examples to support your answer.	X	X	X	X	EII.RI.6. Determine an author's point of view or purpose in a text and analyze how an author uses rhetoric to advance that point of view or purpose.
Geology Fieldnotes: Big Bend National Park, Texas	1. According to the selection, why has "the Big Bend" been described as a "geologist's paradise"? A. because it contains rocks B . because many geologists vacation there **C. because sparse vegetation allows easy access to interesting strata** D. because there are many jobs for geologists there	X		X		EII.RI.4. Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grades 9–10 reading and content, choosing flexibly from a range of strategies. (Secondary Standard - EII.RI.1. Cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.)
Geology Fieldnotes: Big Bend National Park, Texas	2. What is the effect of the metaphors in the sentences below from paragraph 2? "Not all field geologists, however, refer to the Big Bend as a paradise. For some, this land of twisted, tortured rock is a nightmare." A. They compare Big Bend to a contradictory dream world. **B. They emphasize the allure and repulsiveness of the landscape.** C. They explain how Big Bend is enthralling to many people. D. They express how interesting the landscape is to many people.		X	X		EII.RI.5.a. Interpret figures of speech (e.g., euphemism, oxymoron) in context and analyze their role in the text.
Geology Fieldnotes: Big Bend	3. How does the author structure the text? A. general overview,					EII.RI.4a. Use context (e.g., the overall meaning of a sentence,

National Park, Texas	geographic placement, volcanic highlights, types of creatures found, chronological history **B. general overview, chronological history, geographic highlights, volcanic activity, faults, earthquakes** C. chronological histories by area, details about sediments and findings, earthquake information, and volcanic effects D. overall history of area, history by specific time periods, descriptions of geologic events, and major discoveries	X		X		paragraph, or text; a word's position or function in a sentence) as a clue to the meaning of a word or phrase.
Geology Fieldnotes: Big Bend National Park, Texas	4. What is the significance of the selection's structure? A. It clarifies the existing natural boundaries of the area. B. It highlights the types of living creatures that existed in the area. **C. It emphasizes the constant geological changes that have shaped the area.** D. It provides the reader with an inside look at how geological maps are created.	X		X		EII.RI.3. Analyze how the author unfolds an analysis or series of ideas or events, including the order in which the points are made, how they are introduced and developed, and the connections that are drawn between them.
Geology Fieldnotes: Big Bend National Park, Texas	5. How does the author connect ideas in the selection? A. by describing geologic time periods B. by explaining the effects of volcanoes C. by comparing fossil remains to volcanic ash **D. by giving descriptive geologic details about the topic**		X		X	EII.RI.3. Analyze how the author unfolds an analysis or series of ideas or events, including the order in which the points are made, how they are introduced and developed, and the connections that are drawn between them.
Geology Fieldnotes: Big Bend National Park, Texas	6. Which group of words from the selection conveys the author's attitude about his topic? **A. *remarkable, amazing, dramatic, magnificent*** B. *paradise, fortunate, proliferation, thrived* C. *complex, challenge, staggering, nightmare* D. *invaded, retreating, uplifted, erupted*		X		X	EII.RI.3. Analyze how the author unfolds an analysis or series of ideas or events, including the order in which the points are made, how they are introduced and developed, and the connections that are drawn between them.
Geology Fieldnotes: Big Bend National	7. How does the author achieve his purpose? **A. by using descriptive phrases to explain difficult**					EII.RI.4. Determine or clarify the meaning of unknown and multiple-meaning words and

Park, Texas	**ideas** B. by using only formal scientific language to list data C. by using bulleted phrases to clarify ideas D. by using quotes from famous people to support facts		X		X	phrases based on grades 9–10 reading and content, choosing flexibly from a range of strategies.
Geology Fieldnotes: Big Bend National Park, Texas	8. In the excerpt from *Geology Fieldnotes,* how does the use of subheadings and bulleted lists help the author achieve his purpose? Use examples to support your answer.	X	X	X	X	EII.RI.6. Determine an author's point of view or purpose in a text and analyze how an author uses rhetoric to advance that point of view or purpose.

APPENDIX F

Focus Group Protocol

(Section headings drawn from Krueger & Casey, 2000)

Welcome

Good afternoon. I'm so happy that all of you decided to participate in the interview in addition to already having participated in the reading part of this study. Go ahead and get some refreshments and then find your seat next to the table tent with your name on it.

Overview

As you may recall from our earlier work, I'm conducting this study as part of my work to get my PhD at NC State University. For the study, I'm interested in finding out what you think and feel about reading and responding to informational texts. This interview will help us explore the reading you did, the responses you created, and how well you understood the readings.

Ground Rules

Since finding out what you think and how you feel are what I'm interested in, there are no right or wrong answers. I do not expect you to have the same answers or opinions about how the text reading experience went for you. Please feel free to share your thoughts and points of view, even if they are different from what others say. There are no right or wrong answers, and I'm just as interested in negative comments as I am in positive comments.

In order to get everything that everyone says, we're tape recording the interview, but know that I will not be sharing this recording with anyone else; it is simply to help me remember what everyone says. I've also made the name tents for each of you to help me remember all your names.

If during the interview you want to follow up on something someone else said or if you want to agree or disagree, that's all right and, in fact, it's good to have conversations with each other about your experience in this study. You can talk to each other; you don't have to just talk to me. I am here to ask questions, to listen, and to make sure everyone has a chance to say what they want to say. I want to hear from each and every one of you. So if one of you starts talking a lot, I may ask you to give others a chance to speak. Likewise, if one of you is not speaking at all, I may call on you. I just really want to hear from everyone.

Are there any questions about the ground rules before we begin? (Answer the questions that arise.)

Introductory Questions

1. Priming Activity: Remind the students that they all participated in the same instructional treatment mode, VG or CG. Then show them a response example from their instructional treatment condition making certain in advance that it is one produced from a student **NOT** in this focus group. Using an example produced by a focus group participant would risk introducing unequal power relationships into the focus group dynamics (Krueger & Casey, 2000). Invite the participants to comment on the response they just viewed.

2. Now I'd like each of you to take turns describing the response to the text reading *you*

created. (This is intended as a surface question of basic description, but note that it might go deeper – depending on how comfortable the students are and how willing they are to share.)

3. In what classes and/or subjects have you been given an assignment like this before now?

Probing Questions

4. What are the advantages and/or disadvantages of the required response where you had to summarize the main points in the readings?

5. Describe how you decided on the explanation of what were the main points of informational readings.

6. How might creating your particular mode of response (VG or CG) have affected your performance on the multiple-choice questions at the end of each reading?

7. What could have made these reading assignments a better experience for students?

Closing Questions

8. Would you recommend this type of lesson to other teachers? Why or why not?

9. Do you have any questions for me? Are there any questions I should have asked but didn't?

Conclusion

Thank you so much for agreeing to participate in this focus group. I have a thank you gift iTunes card for each of you, which is just a small token of how much I appreciate your sharing your time and your opinions with me today. If you would be interested in receiving a summary of all of the focus group answers, I can send one to you through your English teacher. Just let me know before you leave this afternoon. Once again, thanks a bunch!

APPENDIX G

Transcripts

Transcription of VG Focus Group Interview Section 1

Four students had signed up, but 8 showed up for the VG focus group session; therefore, the VG participants were split into two interview groups. The participating teacher had observed the earlier CG interview session and agreed to conduct VG section 1 while the primary researcher conducted the VG section 2 interview. All names are pseudonyms except the primary researcher, Bartlett.

T = teacher, FS = female student, MS = male student
MS1 = 119 (John) (Regular English II, EOG 344), MS2 (Paul) = 4215 (Honors English II, EOG 366), FS1(Sally) =2130 (Regular English II, EOG 363), FS2 (Mary)=112 (Regular English II, EOG 366)

Transcription Starts Here:

T - Okay, this is the focus group for people who were in 2nd and 5th periods during the study and y'all did the images and the Animoto videos. Is that correct. #00:00:18.4#

Ss - Yes #00:00:16.5#

T - Okay. Good afternoon. I'm so happy that all of you decided to participate in the interview in addition to already having participated in the reading part of the study. As you may recall from our earlier work, I'm conducting, Mrs. Bartlett is conducting the study as part of her work to get her PhD at NC State University. For this study she's interested in finding out what you think and feel about reading and responding to informational texts. That's what that's the three passages that y'all read last week. This interview will help us explore the reading you did, the responses you created, and how well you understood the readings. Here's some ground rules: so since finding out what you think and feel is what she's interested in, there are no right or wrong answers. She does not expect you to have the same answers or opinions about how the text reading experience went for you. So please feel free to share your thoughts and points of view, even if they are different from what others say. There are no right or wrong answers and she's just as interested in negative comments as she is in positive comments. In order to get everything that everyone says, I'm tape recording the interview, but know that she will not be sharing this recording with anyone else. It's just to help her remember what everyone says. Let's see . . . okay, um if during the interview you want to follow up on something that someone else said, if you want to agree or disagree that's

alright and in fact it's good to have conversations with each other, uh, about your experience in this study. You can talk to each other; you don't have to just talk to me. I'm here to ask questions, to listen, and to make sure that everyone has a chance to say what they want to say. I want to hear from each and everyone of you so if one of you starts talking a lot I may ask you to give others a chance to speak. Likewise, if one of you is not speaking at all, I may call on you. I just really want to hear from everyone. Are there any questions about the ground rules before we begin? #00:02:10.7#

FS1 - no ma'am.

T - Okay. So you all participated in the same instructional treatment mode, so y'all did the, you're in the video group and let's see. . . mmmm, mmm, mmm. So I'm supposed to show you a response example from your instructional treatment condition. So I'm guessing that would be one of y'all's videos. While I pull that up I just want you to maybe talk in general about um your feelings about creating the videos in class last week. #00:02:53.9#

MS 1 - I hated it; it didn't work for me. #00:02:59.0#

T - can you elaborate on that a little bit. #00:03:02.2#

MS 1- my computer would not pull up Animoto or what is it, Flickr? So I, one day I pulled my pictures up and created the video and then the next day I didn't finish cuz it won't enough time in the hour that we had. And the next day it worked okay but it was still running slow #00:03:25.6#

FS1 - I'm sorry (said sarcastically). #00:03:33.4#

MS2 - Along with the fact that we got to use such vivid and colorful pictures to describe the feeling, of how we felt about the story #00:03:44.0#

FS1 - and there were a lot of like options with the pictures. I really liked the pictures we got to use. #00:03:49.3#

MS2 - Whoever took those pictures was such a good photographer #00:03:50.9#

FS1 - I agree

T - Alright, so I've got, um, an Animoto video that somebody in the study produced, and we're going to watch one or two of those and then y'all can, um, describe, we're going see, ah, just a general example of

MS2 - Don't watch mine #00:04:27.6#

T - one of these. This is a, this is just a random person's; it's not one of y'all's. #00:04:34.9#
MS1 - It couldn't be random #00:04:35.2#
T – Shhh. Can y'all see back there? (this part of the recording is not too clear, but T is making sure students are in a position to watch the video) #00:04:39.5#

(They watch video and make an exclamation - I'm not sure about what.) (ASK ROUX) #00:04:53.4#

MS2 - Wow, that was a great video (dripping with sarcasm).
 #00:04:54.2#

Ss – (snickering) #00:04:56.2#

T - Stop. #00:05:03.3# . . . Okay #00:05:07.5#

MS2 - (unclear whispering with students) . . . just going along? #00:05:18.7#

MS1 - says something like "mine is a little bit" . . . #00:05:18.7# #00:05:18.1#

T – Shhhh. #00:05:24.8#

T – All right, so it looks like the videos are not going to be . . . Unfortunately we're having difficulty, um, loading the videos; so let's just talk about, we've talked a little bit so far, um, I would like for you to comment on the videos that y'all made. #00:05:47.5#

T - I know we've already heard from John and Paul (MS2?) a little bit about this #00:05:52.8#

FS 2 – so, maybe an easy way to, can you hear me? (microphone was moved closer) There are so many ways you could make a video, but Animoto's just terrible. Really. You can use one of the Moviemakers, but Animoto is just too complicated to use #00:06:13.3#

FS1 - I thought it was pretty simple. I liked it. #00:06:18.4#

T – John's body language is, he's rolling his eyes a little bit I know you had some technical difficulties with yours and Mary's saying that she has easier options to make videos. Paul? How did the video making go for you? #00:06:32.3#

MS2 - It was pretty easy. All you do is download it and then clicked upload and then it uploaded #00:06:41.4#

T – um, and what classes and/or subjects have you been given an assignment like this before

now? #00:06:49.3#

All Ss - none, never #00:06:49.8#
FS 2 - We had, um, the history class with Mr. Smith, um, when you had that Civil War project #00:06:57.6#

FS1 - What did we have to do? #00:06:58.9#

FS2 - We had to use a Moviemaker and just, like it just had a certain event #00:07:03.8#

FS1 - Oh yeah #00:07:05.0#

FS2 - I think one person had Paul Revere #00:07:05.9#

FS1 - Oh I remember that #00:07:10.1#

T - Was this this year? #00:07:10.1#

FS1 & FS2 - No, that was like 8th grade (2 years ago) #00:07:12.4#

T - 8th grade, y'all had to make the video for about like Paul Revere in 8th grade? #00:07:17.3#

FSs - Yeah #00:07:17.3#

FS1 - But we had to, like, film that to do #00:07:18.8#

FS2 - Yeah #00:07:19.8#

FS1 - That was different #00:07:21.0#

T - Mmhmm, so y'all were, like, acting? #00:07:21.9#

FS1 - Yeah #00:07:26.0#

T - But you haven't seen this in any of your other classes? #00:07:27.4#

FSs - Hhnhn (meaning no) #00:07:27.4#

MS2 - No #00:07:30.7#

T - Well, if you take Mrs. Bartlett's class next year, you just may see Animoto again. Okay,

so what do y'all think are the advantages or disad-, and/or disadvantages of the required response where you had to, uh, sss-, list or summarize the main points in the readings y'all had to find the images, right, and then the lines in the text that supported it #00:08:00.2#

MS1 - The advantages was that you could just look back on it and just give a general idea and made you think about what was going on with the story #00:08:08.5#

T - Mmhmm #00:08:13.8#

FS1 - Some of them are easier, say, like, describe a lot of what, like, the scenery and then some of them, like, didn't #00:08:18.2#

T - Mmhmm. So it's easier to find images for the ones that talked about scenery? #00:08:23.0#

FS1 - Yeah. Like, the first one about the island. That one was the easiest cuz it was like talking about, like, houses and waves and stuff. It gave you a lot to work with. #00:08:32.7#

T - Mmhmm #00:08:33.2#

FS2 - I found it kind of easy too cuz if it mentioned a place, then eventually someone's gonna take a picture of that place and post it on Flickr because the Internet will allow everyone to post everything. Like, like, all I'm saying is for the first article, that one was incredibly easy cuz I just typed in the island's town name and instantly 30 something photos came up #00:08:55.5#

T - Mmhmm #00:08:58.3#

MS2 - It had zero disadvantages #00:09:02.2#

T - Anyway, are there any disadvantages to having to pick out images and then finding lines from the text to support it? #00:09:06.4#

FS2 - Nope #00:09:06.4#

FS1 - Huh uh (as in no) #00:09:11.9#

T - Okay, so how did you decide on the explanation of what were the main images to focus on in the informational readings? #00:09:21.1#

FS1 - To try, like, to get the most important ones or the ones that, like, were mentioned more than once. #00:09:31.1#

MS2 - I concur with Sally that if the word appeared more than twice, I wrote it down #00:09:34.8#
FS1 - Definitely #00:09:37.6#

T - Good, so y'all were looking out for repetition ? #00:09:41.5#

FS1 & 2 and MS2 - Yes, mmhmm #00:09:42.4#

T – Yeah, and any other criteria that y'all used for picking out images? #00:09:45.3#

MS1 - Spotting the main idea #00:09:48.9#

T – So, John, you looked for the main idea #00:09:50.3#

MS1 - Yeah, probably what was going on in the story #00:09:52.7#

T - Mmhmm. . . And how do you think that creating your particular Animoto response, that's the, the video, how would that have, do you think, would affect your performance; how did you think it affected your performance on the multiple choice questions at the end of the reading? #00:10:12.0#

MS1 - I think it helped me that much.#00:10:13.7#

FS1 - It didn't really affect me at all. #00:10:17.0#

T - Mmhmm

FS1 - with answering the questions.

MS1 - It just made me remember the story's about better. #00:10:23.7#

T - Maybe you remember the story? #00:10:24.6#

MS1 – like, long-term #00:10:26.2#

T - Mmhmm #00:10:28.9# Paul's shaking his head. Elaborate on that. #00:10:31.1#

FS1 - I didn't make a difference #00:10:34.6#

T - Yeah? So you thought it was maybe not helpful? #00:10:39.3#

MS2 – Nah. #00:10:41.9#

T - Mary, what did you think of the videos? #00:10:44.2#
FS2 - It didn't help any at all. #00:10:50.5#

T - Okay, um, so, what do you think could have made these reading assignments a better experience for students? #00:11:03.0#

FS1 - If someone read the story to me.

MS2 - If it were a lower of grade reading level. #00:11:08.6#

FS1 - If the story had been fiction.

FS2 -Yeah, the first one was manageable; the other two I wasn't crazy about #00:11:22.6#

MS2 - If it had been more of an elaborate setting such as a castle with a dragon. #00:11:27.4#

FS1 – Yes, that would have been more fun too. #00:11:31.8#

T - That's so bad, a castle and a dragon, and that would be more interesting? #00:11:34.3#

MS2 - Yeah #00:11:39.0#

T – or, Sally, if somebody had read out loud to you? #00:11:39.0#

FS1 - Yeah I would have liked that.

T - You know, sometimes hearing, you know, a story can help you remember it a little bit better . . . and I think interest is something that's coming up with a lot of these passages, just not trying to make them a little more interesting #00:11:59.6#

T - Anything else that could have made the reading assignments better for y'all? #00:12:06.2#

MS1 - like more interesting less to _____ (not clear here) #00:12:11.7#

T – Yeah, it's a lame school???? (The recording is not clear here.)

MS1 - A little bit #00:12:16.0#

FS1 - Yeah that's it #00:12:16.6#

T - Oh, all right. Okay. So, would you recommend this type of lesson to other teachers?

FS1 - No #00:12:27.9#

MS2 - Yeah #00:12:27.9#

MS1 - I didn't like ...one afternoon....no body else take it??? (This is not clear on the recording.)

FS1 - Like we didn't get, we didn't achieve a lot, like #00:12:34.3#

MS1 - Yeah #00:12:34.3#

FS1 - It was a lot of, like, nothing #00:12:37.8#

MS1 - Too much time and not enough wonder (not clear here) #00:12:38.1#

T - What do y'all think you spent the most time doing in the study last week? #00:12:47.4#

FS2 - Answering the questions #00:12:49.2#

FS1 - Yeah #00:12:49.2#

MS2 - Doing the Animoto work #00:12:51.0#

MS1 - Yeah #00:12:51.0#

FS1 - Answering the questions #00:12:51.0#

MS2 – Like, finding the pictures #00:12:52.3#

MS1 - Finding the pictures and putting them on the Animoto #00:12:55.5#

FS1 - I liked finding the pictures, I thought that didn't take too long, but the questions were a little difficult. #00:13:02.1#

T - So we've got two votes for the difficulty of the questions being what took so much time and then two votes for just the technology . . . #00:13:11.3#

FS1 - The websites

T - . . . not working and, yeah, the websites. What about the making the video itself? Do you think that was, like, a worthwhile thing to do? #00:13:17.7#

FS1 - Yeah #00:13:19.9#

MS1 - Mmhmm, not really, it was boring; I didn't like it. #00:13:23.2#

FS1 - I liked watching it, like, and you get to choose, like, the different type of . . .#00:13:28.5#

MS1 - I never got to watch it; it never worked for me. #00:13:30.8#

MS2 - You have to upload it. #00:13:31.6#

FS1 – Yeah, it didn't really help, but I just like to watch it and it seemed like, like I did that and it was cool #00:13:37.0#

T - Mmhmm. Do you think you would use Animoto again, like . . . #00:13:41.0#

MS1 - Never in my life. #00:13:41.0#

T - Never? #00:13:43.9#

Ss – (laughter) #00:13:43.9#

FS1 - Me?

FS2 - I'd try it. #00:13:48.9#

T - Yeah, it may be, I don't know some people do it like for vacation photos, like that, like for favs? #00:13:54.2#

FS1 - Yeah #00:13:57.0#

MS1 – Never! #00:13:59.5#

T - Maybe in another class. Okay, so do you have any questions for me? #00:14:07.8#

MS1 - Why did you make us do this misery? #00:14:10.8#

All – (laughter) #00:14:13.7#

MS1 - Nah, I'm just kidding. #00:14:17.5#

T - (laughing) Why did I make you do this misery? That's funny. Paul - #00:14:20.0#

MS2 - Are we almost done? #00:14:21.4#

T - All right, we're almost done. So, do you think are there any questions that, like, we should have asked in this response that we didn't, or anything that you want to talk about that didn't come up? #00:14:31.5#

MS1 - I think that covered most of it. What I, that was the questions I had pretty much anyway.
T - Mmhmm #00:14:40.1#

MS1 - The point of it was to make us learn, that was about it.

FS1 – Maybe, like, the stories were, like, um, let's, like, I don't know, like, they all were the same. Like you read more and more and got to know more about one thing, but they were all kind of different. #00:14:55.0#

T - Mmhmm #00:14:57.1#

FS1 - . . .boring #00:14:59.2#

T - Yeah, like, if the stories linked together somehow? #00:15:00.9#

FS1 – Yeah. #00:15:03.9#

T - . . .that would have been better #00:15:09.2#

T - Great. So let's see. Do y'all have any other comments? Okay, well, thank you so much for agreeing to participate in this focus group. I have thank you gifts ITunes cards and Wal-Mart Cards for as just a small token of how much I really appreciate y'all coming after school and sharing time and your opinions today. If you would be interested in receiving a summary of all the focus group answers, we can send one to you. Ah, I can give it to you next week. Just let me know before you leave this afternoon and thank you, thank you so much. #00:15:51.3#

MS1 - You are so very welcome. #00:15:52.2#

FS1 - You're welcome #00:15:54.5#

Transcription of VG Focus Group Interview Section 2

Only 4 students had signed up for the VG session, but 8 showed up. Therefore, the VG participants were split into two interview groups and the primary researcher conducted this VG section while the participating teacher, having observed the CG interview session, conducted the other VG group interview. All names are pseudonyms.

T = teacher, FS = female student, MS = male student, MS1 = 1114 (Peter) (Regular English II, EOG 365), MS2 (James) =2140 (Regular English II, EOG 368), FS1=5224 (Maria) (Honors English II, EOG 375), FS2=5227 (Karen) (Honors English II, EOG 477).

Transcription Starts Here:

T - uh, it's on now, but, yeah, so here we are. I'm also going to do a back up with my phone although it's not as easy to, these voice memos, if they get too big, have you ever tried to email, like, a way to big voice memo; it's kind of a pain. I'm just deleting everything off (the recorder). #00:00:53.3#

T - So, if y'all could go around, and I, do you remember your ID numbers from the cards?

Ss - Mmhmm. .#00:01:00.0#

T - If you could say your ID number, that way I'll know who's who; I'll draw a, um, I'll draw a, see normally two people do this and, like, someone takes notes while someone is talking, but, okay, so, go ahead #00:01:14.7#

MS1 - Me? #00:01:16.9#

T - Mmhmm..

MS1 – 1114. #00:01:21.1#

T – Okay.

MS2 – 2140. #00:01:23.0#

T – Mmhmm..

FS1 - 5224 #00:01:26.0#

T - Mmhmm.

FS2 - What? Okay. 5227. #00:01:30.4#

T - Okay. That, I didn't mean to de-humanize you! #00:01:33.6#

Ss – (laughter) #00:01:34.8#

T - But for my, since I don't, I don't teach y'all every, regularly, um, I wanted to make sure I

know who I'm talking to when I start looking at the data by your numbers. Okay, so, I'm going to do this one (the other recorder) too. Okay. So, I think that one's working too. Okay, well, I have a thing I follow so that I'm saying the right stuff (sniff). Good after-, and she has one too, so we're doing the same thing in both rooms. It's just we had the good problem of having too many people so. Um, good afternoon. I'm so happy that, um, all of you decided to participate in the focus groups this afternoon in addition to already having participated in all of the activities that you had in your, in your classroom, um, to help me with the study. So, um, at any rate, y'all are already seated, so let's go ahead and start. #00:02:27.8#

T - You may recall from, um, what we've been doing in in Ms. Smith's classroom for the last few days that I'm, um, conducting this study as part of my work to get my PhD at NC State University. Go Wolfpack! So for this study (sniff), I'm interested in finding out what you think and feel about reading and responding to informational texts, which were the texts that, that we used in the study. There were no fictional texts, and I know on the, um, EOC tomorrow - Y'all are taking your EOC tomorrow right? Um, I know that, um, you will have some fiction, but there will be a lot of nonfiction and informational texts too; so, I'm really interested in, uh, how what you think and how you feel about reading these informational texts. This interview will help us explore the reading you did (sniff), pardon me, as part of our study and, um, the responses that you created and also how well you understood the readings. So, um, here's some ground rules. Um, since finding out what you think and how you feel are what I'm interested in, there are no right or wrong answers to any of the questions I'm going to ask you. I don't expect you to have the same answers or opinions about how the text reading experience went for you. You, you may have very, very different experiences. Please feel free to share your thoughts and points of view, even if they're different from what others say. There are no right or wrong answers, and I'm just as interested in negative comments as I am interested in positive comments. It's nothing personal; I don't own any of the readings or any of that sort of thing (sniff). In order to get everything that everyone says, we're tape recording with two devices just in case, we're tape recording, um, the interview, but I know, but know that I will not share this with anybody. The minute that I transcribe it, I will delete it from the devices. So no one will ever hear what you've said at all. Okay? (sniff) Um, and pardon me for sniffing. I, I guess I've caught a cold, I don't know. So, um, if during the interview, if you want to follow up, um, on something someone else says (sniff), has said, or if you, uh, want to agree or disagree, that's all right. In fact, if you agree or disagree, it's even better. I want ALL of you to be able to share, um, your experience with the study. Um, you can talk to each other too. You don't have to talk just to me if you want to talk to each other about it. I'm just here to ask questions and to listen and to make sure that everyone has the chance to say what they want to say. I want to hear from each and everyone of you. So . . .if one of you starts to talk a lot, I may ask you to give the others a chance to speak. All right. Also, (sniff) if you're not speaking at all, I may call on you and say, Hey, what do you think about this. Um, I just really want to hear from all of you, and that's really . . . are there any questions about these ground rules? #00:05:23.6#

Ss – (shaking heads no)

T - Okay. So, shoot, the, I was going to show you, um, let me get a computer. I want to show you, all of you made an Animoto, correct? #00:05:35.8#

MS2 (and others) - Mmhmm.

T – So, I wanted to, for us to look at one or two of them as a, just to remind you of what you did. So, let me, see, if we were going to be there (the other room), she was going to have it up on the screen already, but I have my Mac here, so we can use this one. So, let's see, all right, let me see if Ms. Smith can. Should I ask her to send . . . you emailed them to her, didn't you? #00:06:08.9#

Ss - Mmhmm.

T - You emailed the Animotos. Um, let me have, y'all, I'll have, would one of y'all mind sharing your Animoto? That way I can get into Animoto and you can log in. Do you remember how to log in? #00:06:23.0#

FS2 - Mmhmm. #00:06:23.7#

T – Okay. Okay, so, oh, it automatically logged into video 26. I don't know who that is. Let's log out. Mmhmm, that's interesting (sniff). Okay, so you can (turns the computer to face the group) - It's an Air, very light (sniff). So, she's logging in. What I wanted to do was have you look, um, look at a couple of these, so if any of the rest of you are willing to share your Animoto (sniff), the password is going to be bulldogs13. #00:07:11.2#

FS2 - I remember my number, like, the #00:07:13.2#

T - Okay, so it would be smithl; what's her middle . . . #00:07:22.7#

FS1 & MS2 - M

T - okay @+your number. Wait a minute, I'm wrong, I'm wrong, wait. #00:07:28.9#

FS2 - It was, like, smith . . . #00:07:30.8#

FS1 - . . . video . . . #00:07:30.8#

FS2 - . . . something . . . #00:07:32.6#

FS1 - . . . smith.video . . . #00:07:35.5#

T - Yeah, smith.video . . oh, wait, I have the cards, I have the cards that have the log in

information on them! #00:07:42.1#

FS2 - I remember my number, but that's all. #00:07:46.1#

T - (digging out the cards from the bag of materials) I have your cards in here. Yeah, okay (sniff), uh, it's going to be . . . I stopped writing it after awhile, but I've got some that had it written; I started running out of time. Let's see, I wrote it on a few. Okay - smith dot video dot rcs dot plus yournumber at gmail dot com. #00:08:13.4#

FS2 - Thank you. #00:08:14.8#

T – You're welcome. If y'all get warm, let me know. (The air condition was really loud.) Okay, so, let's see, um, all right, so, I'll show, which one would you prefer for us to look at? #00:08:39.8#

FS2 - If you want one with captions, you can do the, ah, Easter Island. #00:08:43.6#

T - Easter Island? Okay. Okay, so, maybe I can get it full screen. Have y'all ever used Animoto before? #00:08:50.6#

FS1 - No. #00:08:52.0#

T - Okay, so full screen it. Now, I don't know what kind of music, there's a way to do all these things, but, so, take a look at, this is what she did for . . . Can you see it? I need to tilt right? (sniff) #00:09:07.3#

(video plays with music . . .) #00:09:15.4#

T - Okay, so, that's her Animoto on Easter Island. Okay, let's log her out. and let's have, (scrolling through videos), I think that video was somebody's, cuz you're video 48, right? #00:09:36.0#

FS2 – Yeah. #00:09:37.7#

T - Okay, so, is there anybody else who'd be willing to share one of your Animotos? #00:09:44.9#

MS1 - I don't know what my number was. #00:09:46.4#

T - Well, okay, I might have it. Okay, so you are here, you hold my Mac for a second cuz I wrote down your, I've got, I've got all the cards; so, you're 1114, and they're in order and everything, so (sniff). All right, here you are. You are, you are 24. So it'd be smith (sniff) dot

video dot rcs . . .

MS1 – ah . . #00:10:30.9#

T – dot rcs dot plus 24 at gmail dot com. #00:10:40.0#

MS1 - is that dot at rcs, uh #00:10:41.6#

T - No, it's dot rcs dot plus 24 at gmail dot com. #00:10:47.4#

MS1 – plus . . .

T - 24 at #00:10:48.6#

MS1 - at gmail dot com? #00:10:49.5#

T – Yeah, and then your password is a small b bulldogs13. #00:10:56.1#

T - And we'll just look at this, just, so, y'all (sniff) . . . #00:11:04.6#

Ss – (laughter) #00:11:06.7#

MS1 - So, which one? #00:11:11.4#

T - You choose, yeah, whichever one you want to. #00:11:14.7#

MS1 - All right, I'll just pick one. #00:11:15.4#

T – Okay. #00:11:23.0#

MS1 - Mine don't have captions. #00:11:24.1#

T - That's okay, that wasn't, it wasn't anything that you had to do. But, now, know that you still have this account for as long as it takes me to finish all the data and everything. You can use this and make, like, pictures of your friends, and do, and then you post them on your Facebook page and Twitter; it's just friendly in that way. Okay, he's sharing his Big Bend video. #00:11:50.7#

#00:11:54.8# (The video with music plays.)

T - Oh, this one (the music) has words! #00:12:04.3#

MS1 – Mmhmm, yeah . #00:12:06.2#

T - All right. Thank you. Well, I don't know if you could hear it when you were making it, but yeah, because we didn't have, we had to do it silently and all that, but thanks for sharing that. So, (sniff), so that took all of y'all having time, regardless if you were in 2nd period or if you were in 5th period. I think two of you must have been in 5th and two of you must have been in the 2nd period class. So (sniff), I'll probably write some things as I'm asking the questions, just taking notes so I don't forget - in case we have an epic fail.

Ss – (laughter) #00:12:36.9#

T - Or something, like, I walk next to a big magnet, or something like that. So, um, now, uh, how did you, what you just viewed, okay . . . what did you think about it? When you, when you were watching it...what'd you think? What did you think of her (FS2) video? #00:12:51.7# . . . (sniff) . . . #00:12:54.6#

MS1 - I thought it was just a different way to show stuff cuz I never seen one of those things before so, like, new. #00:13:05.1#

T - Mmhmm.

MS1 – So, like, it's a kind of different power (this is not very clear here) or something #00:13:07.8#

T - Mmhmm.

MS1 - Just something . . . #00:13:10.7# . . .

T - Mmhmm. . . . so it's like an alternative?

MS1 – (nods)

T - Good, um, I don't think this (the air condition) is quite as loud as hers is (their English teacher's); mine doesn't scream, but hopefully I, I want to let it run (the air condition) cuz otherwise you might get a little warm in here, but we'll see how long it lasts. Um, any comments about the video that you saw, either one of these guys' (videos)? #00:13:35.0#

MS2 - I found it interesting, like with music and videos. #00:13:37.0#

T - Mmhmm.

MS2 - I liked it. #00:13:39.9#

T - You liked it too? How about you? #00:13:42.2#

FS1 - It was really, like, short and to the point and everything, and you could get the information a lot faster than if you made a PowerPoint. #00:13:47.2#

T - How about you? #00:13:48.3#

FS2 - I'm a visual learner, so, I attach, I remember things with pictures in my mind, so, that, that helps me a lot. #00:13:55.0#

T - Mmhmm., so, um - Okay, I'd like for you to take turns, I didn't see (the videos); I had to hold (the computer), I didn't get to see either one of your videos just now, so - What I'd like for you to do is to take turns describing the response that YOU created for the text. It could, we had the Easter Island, and we had that middle one about immigration. I know a lot, I've heard a lot of students say they had a hard time with that one, they found it . . . , I don't know if y'all felt the same way, but, um, and then we had the Big Bend one too. So, I'd like for you to take turns and just talk a little bit about what YOU created in your Animotos, what kind of pictures you used, anything like that; just describe. Let's start and go around in a circle. Go ahead. #00:14:50.6#

FS1 - Um, well, it was really, sometimes it was really difficult to find certain pictures because we had to use the Creative Commons instead of going on and just looking for any picture that really came to mind that we could use. #00:15:03.7#

T – So, what kind of pictures, do you remember any of the pictures you chose for your, um, Animoto? #00:15:10.9#

FS1 - They were, like, for the most part, they were pictures that were set in the text instead, like, an alternative to what was said in there #00:15:22.6# . . .

T - Mmhmm, so actually, like, things that were mentioned in the text were things that you, that you chose. Um, how about the, the graphic organizer? Did that help you? I may come back and talk about that a little bit more, but did you put the images, did you find the images you put in the graphic organizer in the Creative Commons? #00:15:48.7#

FS1 - I found most of them. #00:15:49.8#

T - Most of them? Okay. How about you? I know that we saw, they saw one of yours, but do you want to talk about it? #00:15:59.9#

FS2 - Well, for the Big Bend and the Easter Island, there was a lot of landscape mentioned, so, that's what those images were, and for the, for the immigration one, it was more symbols

like a lamp (lamb?) and, and I had a, for, for hero that stayed, I had a medal . . . #00:16:19.7#

T - Mmhmm.

FS2 - . . . which was not mentioned #00:16:21.3#

T – Right. #00:16:23.0#

FS2 - That was just more a mental symbol rather than a literal landscape image. #00:16:31.6#

T - How about you?
MS2 – The, uh, the immigration one was probably one of the hard ones because I had to, like, reread it a couple of times to find actual photos to use. The Easter Island one was easy cuz #00:16:38.2# . . . the descriptions, like, the descriptive places it gave, and the Big Bend had a lot of description, but a lot of things it had were pretty hard to find photos for. #00:16:54.7#

T – Mmhmm. I know I saw some students looking for pictures of people in crowds and airports, crowded airports, that was for the immigration one. How about you?

MS1 - Well, like they said . .   #00:17:10.0# . . . the third one, the hard one, was definitely the hardest because mainly the other two had, like, had to do with landscapes and stuff. #00:17:21.0#

T - Mmhmm, are you talking about the immigration one was the hardest? #00:17:22.5#

MS1 - The immigration, the immigration one didn't have anything to base it, like, any like physical things that you pick out and go, "Oh, I can put that in there." #00:17:30.9#

T - Mmhmm. #00:17:33.2#

MS1 – Like, the other two had it, like, Easter Island and Big Bend; you can actually take those out and find them, but the third one, it didn't really have that. #00:17:42.0#

T – So, does it, so, what I think I'm hearing y'all say is that some of the passages had more, had easier, it was easier to f -, to, to pick images from the passage than for that middle passage with the immigration, and y'all are nodding. They're nodding (said to the recorder) #00:18:00.7#

Ss – (laughter) #00:18:01.9#

T - So, all right, so my next question is, um, what classes or subjects have you ever been given an assignment like this before? #00:18:11.5#

FS2 - Assignment like what? Like reading and answering questions, like comprehension? #00:18:17.8#

T - And the way you summarized by picking out images. #00:18:28.8#

FS1 - Science (looking really doubtful) . . . #00:18:28.8#

T - You've had to, like, do things . . . I mean if, even if it wasn't an Animoto, you could think of PowerPoint as similar or as visual. #00:18:34.9#

MS2 – History. #00:18:36.3#

T - So science and history. #00:18:43.2#

MS1 - Nothing quite like this, but, like, pulling pictures out of certain things, yeah, even tied into science and history. #00:18:49.4#

T – MMhmm. #00:18:49.4#

MS1 - And all that. # #00:18:50.7#

T - So science and history. Um, alright; so - What are, what are advantages, I want you to think about what are advantages and disadvantages of our asking you to create an Animoto or a visual representation, like, with images - whether it's an Animoto, I mean, I'm specifically interested in Animoto cuz it's easy, um, it seems like it's a lot easier than PowerPoint to physically put together . . . #00:19:23.9# really fast. So, um, what are some of the advantages and some disadvantages that you, um, see from using visual imagery to summarize the main ideas of, uh, the informational readings? And think for a second, so you can think of some plusses and some minuses . . . #00:19:44.6# . . .and then, whenever something comes to you, you can share it. #00:19:54.9#

MS1 - Well, I think one of the advantages of using this, like, visual . . . #00:20:00.0#

T - Mmhmm. #00:20:00.0#

MS1 – . . . is if you're a visual learner, and this is a lot easier for you cuz you can actually put a picture with words, where a disadvantage could be if you're not a very visual learner, you're more of a textual, I guess . . . #00:20:11.0#

T - Mmhmm. #00:20:11.0#

MS1 - . . . it wouldn't be as helpful to you cuz you couldn't, you wouldn't be able to match something because you're not as visual. #00:20:20.6#

T - Mmhmm. #00:20:20.6#

MS1 - And then another advantage, I guess, is that it's a lot easier and quicker, so you can, like, put the pictures, you can pick them out and put them in there, so it'd be a lot easier than, like, having to study ALL these words . . . #00:20:37.4#

T - Mmhmm. #00:20:37.4#

MS1 - . . . like, this whole, like, you have a big packet or something you gotta study #00:20:40.5#

T - Mmhmm. #00:20:40.5#

MS1 - You can just go on Animoto and look and see. #00:20:43.6#

T - Mmhmm.

MS1 - It's right there in front of you. Simple. #00:20:47.0#

T - Mmhmm. #00:20:49.0#

FS2 - I like how, how quick and easy it was, and I really liked the Creative Commons thing because I use that for all my classes now, and I don't have a ridiculously long cited page at the end, umm #00:21:02.2#

T - . . .because they're all legal, that they're all legal to use wherever you want? #00:21:03.5#

FS2 - I like that a lot. Um, like I said, I'm a visual learner, but I feel, like, if I were to do the picture thing for everything, I would rely more heavily on that, and then that doesn't help me when I'm in a situation where I CAN'T do that. So, I would rather broaden my learning styles and be able to decide what the main idea is when that's all I have, when I don't have resources of Animoto or images #00:21:35.7# . . . When I'm in the middle of a college exam or something, and I need to right there. #00:21:41.6#

T – . That's, yeah, that's interesting, yeah. I know that many college classes are beginning to recognize alt - this kind of response, but you're right, um, if you became dependent on it, it would, yeah . . . I'm just writing stuff down . . . . How about you? Anything? Plusses,

minuses? #00:22:14.5#

FS1 - I think the advantage is when you're doing it, you get pictures that make sense to you . . . #00:22:17.8#

T - Mmhmm. #00:22:17.8#

FS1 – . . . so it's good for yourself, but you couldn't really show it to anybody else because they might look at it differently than you do, and you'd have to explain that. So, it's good for your self-learning, but not, like, other people. #00:22:29.4#

T - So, so, the personalization or customization of it is on both sides? It's a plus and a minus. How about the technology aspect of it - any advantages or disadvantages? #00:22:45.3#

MS1 - Well, it's probably quicker than actually having to write stuff out and learn it that way #00:22:49.3#

T - Mmhmm.

MS1 - It'd be a lot quicker so . . .

MS2 - Some people thought about doing that kind of stuff and can't really do it that good, though. #00:22:55.2#

T - Yeah, could be, if they're not used to the technology, technology can get in the way. Um, I think during the first day in, it might have been first period, were either of you in the first, no, because first period didn't do the Animoto, but in the second period class, didn't, weren't there some issues that first day with, with the wireless? #00:23:17.4#

MS1 - It was slow. #00:23:17.4#

T - Yes, so I know. . . #00:23:19.4#

MS1 - There were so many people in there. #00:23:22.4#

T – So, one of the guys that's in the other focus group, remember his (wheel icon) kept spinning and spinning and spinning . . . Um, talk, let's talk about what, how you decided on, um, the explanation of what were the main points in the actual informational reading. How did you decide what to, to pick from the readings? And this time let's go around this way. Let's go around this way. #00:24:00.2#

MS1 - Well, how did I decide by, see, for the Easter Island, I mainly, it was about places, so I

picked out major points, like, in the Easter Island one it was the Moai. #00:24:11.4#

T - Mmhmm. #00:24:11.4#

MS1 - And so it was the major thing, mainly, what it was about, so, I was able to explain it cuz it was the major part and most of the pictures. And then on the last one, I did have a lot harder time. #00:24:22.3#

T - Big Bend or the Immigration?

MS1 - The immigration #00:24:26.1#

T - Mmhmm.

MS1 - I had a harder time explaining it because . . . I couldn't really figure out a lot of the images; it was harder to. #00:24:35.2#
T - Mmhmm, but, but even, even, let's not think about just the images cuz I know that one was hard, but how about just the main ideas of the passage, figuring out, like, when you look at a passage, an informational passage and you try to figure out what this is about mainly, how would you pick, how did you go about picking out what you thought was important? I don't know if that clarifies the questions or not? #00:25:01.8#

MS1 - Well, if it's mainly how it clarifies it, well, I'd have to say that it helps you out explaining, wow, um, shoot, it's like I have it but . . . #00:25:17.3# (Student did not follow the shift in the question here.)

T - Well, like, when you, okay, and we can come back, cuz I'm thinking forget the images for a second and just think about when you look at the text, how do you go about figuring out what are the BIG ideas, not the details, but just the big ideas. Okay, anybody want to chime in? #00:25:33.0#

FS2 - I used my chart as sort of, like, when you write an outline. #00:25:40.0#

T - Mmhmm. #00:25:40.0#

FS2 - So I, I finished the reading and then I . . . ca-, came to the decision about what maybe the purpose is and the main idea, and then I thought about, you know, the things that, the big things that support that. #00:25:58.3#

T - Mmhmm. #00:25:58.3#

FS2 - I'm not sure that answers it. You asked me how I came up with the main idea, and I just

said #00:26:07.4#

T - So you used the, okay; so let me ask you this as a follow up. Did you fill, and the rest of y'all think about your answer to this - Did you, did you fill in chart AS you read . . . #00:26:16.9#

FS2 – No. (really fast) #00:26:16.9#

T - . . .cuz you sounded like you did it after. #00:26:20.0#

FS2 - I did it after. #00:26:20.0#

T - So you read it, and then you filled in the chart? #00:26:21.1#

FS2 – Yes. #00:26:21.1#

T - And the chart had five boxes so . . . #00:26:24.0#
FS2 - I mean, as I read the first time, I just read, and I kept in mind, you know, what we were trying to do. And then when I finished, I went to my chart and I skimmed through . . . #00:26:36.5#

T – Again? #00:26:36.5#

FS2 - . . . starting at the beginning of the selection. #00:26:38.5#

T - . Did you, did you fill your chart in as you read or after you read? #00:26:43.6#

FS1 - After #00:26:45.5#

T - After. How about you? #00:26:45.5#

MS2 - I think as I read. #00:26:49.7#

T - As you read? #00:26:49.7#

MS2 - I can't really remember when . . . if I read it and then I go to fill in the chart, I'll forget everything I just read. #00:26:54.2#

T - Right, so, how, so, how did you, how did you determine what went in the chart as you were reading? #00:26:59.3#

MS2 - I just relate, like, I'd come to something and I'd relate it to the title of the story

#00:27:03.7#

T - Mmhmm.

MS2 - And relate it, and if it did, I'd put it down. #00:27:05.9# . . . .

T - . Okay, so everything had to relate back, so you kept thinking. #00:27:09.0#

MS2 – . . . like, when they described the Moai, they're a main part of Easter Island, so it had to go in there. #00:27:15.2#

T - Right. Okay. And how about you? Did you fill your chart in while you read or after? #00:27:21.7#

MS1 – While. #00:27:21.7# . . .

T - While you read? #00:27:23.6#

MS1 - Yes, cuz it's, it's easier for me because as I'm reading I can read the sentence and be, like, hey, that goes along with what the main point . . . #00:27:32.5#

T - Mmhmm. #00:27:32.5#

MS1 - . . . of the thing is, the passage is, so that's how I did it. #00:27:36.0#

T - Sort of, like, what you just described, back and forth between the main idea. Alright, so, so were there any, were there any pieces of the passage or anything at all that made you think this is a main idea besides relating back to the title? #00:27:54.8#

FS2 - If the problem kept reoccurring or, you know, something that just kept coming back up again. #00:27:58.5#

T - Mmhmm. Like, repetition, it just kept repeating it . . .so . . . Here's a, here's a question I want to hear from everyone of you on (sniff). Um, do you think that the fact that y'all, cuz you know the other groups didn't create the video; they did something else. Everything else was the same, the test they took was the same, the chart was almost identical, but they didn't create the Animoto. Do you think that creating the Animoto as your response to the reading, the main ideas in the reading, do you think that it might have affected, I haven't graded them yet, so I don't know the answer, so I just wanted to let you know, but do you think that it might have affected the way you answered the multiple choice, like how accurately you answered either the constructed item or the multiple choice? Think about if for a second. Do you think it might have had an impact? #00:29:06.2#

FS2 - Am I allowed to ask what they did instead of making the video? #00:29:07.1#

T - Yeah, yeah, they wrote a summary on the computer, I mean, it was a digital summary, but they wrote, like, a paragraph of the main points. #00:29:17.2#

MS2 - I think the images affected mine. #00:29:19.6#

T - How so? #00:29:19.6#

MS2 – Cuz, like, if I just read a passage and you go to answer it, I know I forget a lot of stuff and I have to go back, but if I have to do some work after it and, like, make pictures, I remember the question about the picture I made and then, like . . .#00:29:30.3#

T - Mmhmm.

MS2 - . . . and then answer it. #00:29:34.2#

T - So, you think it might have bumped up your, um, score?
MS2 – (nodding)

T - How about you? #00:29:44.0#

FS2 - I don't know I, (soft chuckle) um, it's hard to say. If, if I had not done this, and you had asked me which I would rather do for a study, I probably would have chosen writing a summary . . . #00:29:59.0#

T - Mmhmm. #00:29:59.0#

FS2 - . . . as far as helping me remember . . . #00:30:00.8#

T - Mmhmm. #00:30:00.8#

FS2 – . . . the information. Just, because the pictures I choose may not necessarily be what the questions are about. #00:30:12.5#

T - Mmhmm. #00:30:12.5#

FS2 - And then I would be afraid that my focus was taken away from what the questions were and directed at somewhere else. #00:30:20.4#

T - That wouldn't be needed? #00:30:24.4#

FS2 - Matched to the test, yes. So, I pulled out what I thought was important, but what I think is important is not necessarily what the test makers think is important so . . . #00:30:42.4# . . .

FS1 - I think that with, um, summarizing, you kind of pull out everything that it talks about; with Animoto you just kind of take out pictures and images that come to mind when you read it. #00:30:51.1#

T - Mmhmm. #00:30:51.1#

FS1 - But with summarizing, you have to go back and read it and remember certain parts and what was the most important to you or what you thought would just, it's what you thought would be the main idea of it #00:31:02.9#

T – Mmhmm, so the images, but when you, in the, in the, um, graphic organizer when you put the images in, you also had to put text that they were supposed to represent the main ideas, so you put text in there too. But you're saying, what I think you're saying, is that the Animoto images might not have captured the main ideas or something like that? #00:31:24.2#
FS1 – Yeah. #00:31:27.2#

FS2 - I actually added captions on it, too. I did not add captions on the immigration because I didn't have time (laugh), but I added captions because I was thinking if I showed this to someone else, would they understand the images I picked out. #00:31:40.4#

T - Mmhmm. #00:31:42.5#

FS2 - So I added the captions try to explain #00:31:42.6#

T - Mmhmm. #00:31:42.6#

FS2 - You know, this, this is why I picked this image. #00:31:45.6#

T - Right. How about you? #00:31:51.6#

MS1 – Uh . . . #00:31:54.9#

T - You think it might have affected, I mean, I'm, this is just, there are no right or wrong answers, I mean, I don't know, I will look for it, I really will, I mean, I'm very interested in this #00:32:05.0#

MS1 - I don't know if this helped me as much because going through it mainly I was thinking

about I've got to pick out certain points and images out of this text, so I may not have been focusing on the, certain things like the questions, what they asked the questions on. #00:32:19.8#

T - Mmhmm. #00:32:19.8#

MS1 - I was probably more focusing what's in it, not what's more, like, some of the questions they asked about how this affects this. #00:32:28.8#

T - Mmhmm. #00:32:29.5#

MS1 - So I was focusing more on the stuff in it, so that may have, didn't, I don't really see how it helped me as much. #00:32:36.4#

T – Okay (sniff). Um, what could have made these reading assignments a better experience for students, what could have been done to make this a better experience? #00:32:49.1# . . . I know I'm asking you to be really critical here, but . . . . . . #00:33:04.8#

FS1 - I mean, it would be more work, but with the graphic organizer that you have, you have the photo and then a caption that ex-, that, like, about why you put your photo, but I think if you added also, like, describe why it's important to put the photo in there, that might have helped you, like, to remember it even better than just, like, it was in the text, but you have to put, like, why was it important to the text #00:33:22.7#

T - Like, why you selected it? #00:33:26.3#

FS1 – Yeah. #00:33:26.3#

T - Explain the importance of the picture, so it'd be three columns maybe . . . Anything else that could have made this a better experience? #00:33:47.4#

FS2 - Well, I, I'm kind of loosely interpreting "better;" I don't know exactly what you mean, but as for, in class, especially in English when we're, when we're learning things, discussion, discussion helps me understand, you know . . . #00:34:01.7#

T - Mmhmm.

FS2 - . . .ideas, ideas and purpose and . . . #00:34:09.0#

T - So allowing discussion, and I think if it weren't an experimental environment, when, I think that would have been the, I would hope . . . #00:34:14.6#

FS2 – Yeah. #00:34:14.6#

T - . . . that if teachers were to use this technique, I would hope that they ...(the other teacher walked in with the other focus group recorder) . . . Are you finished? Okay, we're close. (the other teacher leaves) . . . Um, I would hope that teachers would allow that. I know I do when they're . . . so allowing discussion (sniff). Anything else? Um, okay, so I only have two more questions, so don't think that they got out easier than you did! #00:34:38.0#

Ss – (laughter)

T - Uh, would you recommend this type of lesson to other teachers? Why or why not? #00:34:47.4#

FS1 - I don't think I would because, I mean, unless you were making each student do one for their own, I wouldn't present it as a whole for one class because it's, like, the teacher takes out what they think is important but the child might, like, the student might take it out as this is important and this is important and the teacher might put what the main points are, but it's up to the student, like, what they learn out of it. #00:35:07.8#

T - Well, you mean, allow students to do this with their video? #00:35:11.9#

FS1 – Yeah. #00:35:14.5#

T - Yeah? #00:35:14.5# Why? #00:35:18.3#

FS1 - It's better than . . . standardization. The personalization, I think, helps helps you learn. #00:35:25.7#

T - Mmhmm. How about you guys? #00:35:29.9#

MS1 - Like I was saying, said before, _____ (not clear here) . . . I don't know if I'd make the whole class do this exact thing cuz you never know, cuz I guess, like I said before, visual learner and textual learner. #00:35:43.8#

T - Mmhmm. #00:35:43.8#

MS1 - So I wouldn't do it with the whole class cuz some of the people might not be as visual learners, it might help half the class but might not help the other half. I might try to figure out what type of learner they are and then . . . . #00:35:58.7#

T - Let them choose?

MS1 - Let them choose what they wanted some way. #00:35:59.6#

T - All right, um, all right. Do y'all have any questions for me? #00:36:16.5#

FS2 - Can I ask your personal opinions or is that . . .? #00:36:20.0#

T - Well, sure, I mean, it's a focus group, what's said, we're in the Dome. #00:36:24.7#

Ss – (laughter)

FS2 - Um, what is your personal opinion of technology as it was used this year (at the one-to-one laptop school)? #00:36:28.0#

T - Um, I think that technology can be really powerful if people know how to use it. Um, what I've seen, um, my PhD is, I'm getting my PhD focused on literacy and technology because what I've seen is that teachers will take, and I'm not saying anybody here, but I've seen teachers take the Chrome Books and make their students type notes. I would never have my students type notes. If I have notes, I share them with my students so they have the notes. There's nothing, in other words, I'm not going to use technology to replace a pencil, and that's the mistake that's made often with technology. All that is is digitalizing what we already do. I'm more into using technology to do new things like . . . This Animoto can be really interes-, you can do really interesting things. Or with an Avatar - You can do really dangerous science experiments with an avatar or, so it's a real different, I have a real different take on technology because some technology is, like, I don't know if Animoto is going to make a difference, it might. That's what I'm looking at. I'm going to be comparing your scores on all these, these, these reading things to see if it makes a difference. If it doesn't, then I want to let that go out there that it really doesn't help, especially if you're a textual learner or this sort of thing, so I, I don't think technology is, just for technology's sake, is a really good thing. So, I think you have to know what technology is best suited for what behavior that you want and what kind of learning. That, we're, we're, there's a lot of room for research because I'm just seeing a lot of technology replacing, just, like, replicating old style teaching, and that is not cool at all. It's, like, we would never have another snow day if we could use technology properly. That, that appeals to me. #00:38:31.1#

Um, any other questions for me? . . . I know y'all look like you're about ready to hit the road. Um, there's one last thing. Are there any questions I should have asked you? #00:38:40.2# . . . Nope? Okay, #00:38:45.9#

MS2 - I've got something.

T - Huh? #00:39:42.0#

MS2 - No, I said all the questions have been something??? (Not clear here, I think he was trying to be funny) #00:40:02.2#

T - Okay, well, thank y'all again so much for being in this focus group. I know this was off (the school) schedule and y'all had to deal with your own transportation. I do have a gift for you, a thank you card, um, a thank you ITunes card just as a small token of how much I appreciate your sharing your time and your opinions with me today. If you are interested in receiving a summary of all the focus group answers, I have to transcribe all of these, um, I'm hoping to use technology to do that, rather than my typing, but, um, I can, um, send a, I can send you, like, a summary of all the comments if you want. You just have to ask Ms. Smith, and she'll get it for you. Okay, so let me stop this (recorder) #00:42:33.6#

Transcript of CG Focus Group Interview

This was the first interview date and 6 students signed up to participate, but only two showed up for the interview. The primary researcher conducted the interview and the cooperating classroom teacher observed and took notes. The two students seemed very familiar to each other, almost as boyfriend and girlfriend. The interview lasted 35 minutes and the students seemed very willing to talk to the interviewer. All names are pseudonyms.

T=teacher, MS1 = 2141 (George) (Regular English II, EOG 364), FS1 = 2144 (Jane) (Regular English II, EOG 359)
Transcription Starts Here:

T – So, just, uh, know that it's recording and if you could just, yeah, record who's here... #00:00:08.7# Um, well, good afternoon. I'm happy that ALL of you (only 2 showed up) decided to participate in this interview in addition to already having participated in the reading part of the study. I really do appreciate it. It's a lot, I know, this is extra time of your busy schedule Um, so you're comfortable, you have your lotion and (they laugh as they are putting scented lotion on) #00:00:32.9#

 MS1 & FS1 – (laughing) Yeah, yeah. #00:00:32.9#

T - I think we're ready to go. Um, as you may recall from the consent letter, um, I'm doing this study as part of my PhD work at NC State University, and for this study I'm interested in finding out what you think and feel about reading and responding to informational texts. This interview will help us explore, um, the reading you did, the response that you created, and how well you understood the readings. So, I want to set some ground rules first. Since finding out what you think and how you feel are what I'm interested in, there are no right or

wrong answers. #00:01:10.5#

MS1 & FS1 - Okay. #00:01:11.7#

T – So, anything you say is, is okay. I don't expect you to have the same answers or opinions about how the text, um, reading experience was for you (sniffing). I'm sorry, I'm going to sniff throughout this whole thing. #00:01:22.2#

MS1 - No, you're all right. #00:01:22.2#

T - I've got a cold; I don't know what happened (sniff). I think I worked too hard last week. #00:01:26.4#

ALL – (laughter) #00:01:26.4#

T – So, please feel free to share your thoughts and your point of view, even if they're different from hers. #00:01:32.0#

MS1 - Mmhmm, yes ma'am #00:01:32.0# #00:01:33.8#

T – Yeah, the person who's attached to you (girl was holding on to young man's arm) #00:01:34.8#

ALL – (laughter)

T – So, let's see what else...I'm interested, I'm just as interested in negative comments as I am in positive comments. In order for everything, um, to get everything that everyone says, I'm recording this interview, but know that I will not be sharing this recording with anyone else. No one else will hear it at all. Um, it's simply to help me remember what everyone says, I'll also be writing, um, uh, notes #00:02:01.4#

MS1 - Yes ma'am #00:02:02.7#

T - Just in case this is an epic fail (pointing at the recorder). #00:02:04.7#

ALL – (laughter) #00:02:04.7#

T - You know it's, it real-, it happens. #00:02:06.3#

ALL – (laughter) #00:02:06.3#

T - If during the interview, you want to follow up on something somebody else said or if you, uh, want to agree or disagree, that's all right. In fact, it's good to have conversation with each other about, um, your experience in this study. You can talk to each other. You don't have to just talk to me. I'm here to ask questions and to listen and to make sure that everyone has a chance to say what they want to say. I want to hear from each of you and, um, from every one of you. So, if one of you starts talking a LOT, you know, I guess if this were a bigger group, if one of you starts talking a lot, I may ask that you give others a chance to speak. #00:02:43.5#

ALL – (laughter, probably because there are only two students there) #00:02:43.5#

T – (sniffing) Sorry, I definitely don't want for anyone to hear this recording! #00:02:49.9#

ALL – (laughter) #00:02:49.9# #00:02:52.0#
T - I didn't want to take any notes cuz you might think it's stupid??? (this is not clear on the recording)

MS1 – Yeah. #00:02:54.7#
T – So, um, so, where was I? Telling people who talk too much to be quiet. #00:03:02.1#

MS1 – Yeah. #00:03:02.9#

T – Um, likewise, if one of you is not speaking at all, I may, you know, call on you specifically. I just really want to hear from all, from every body. Are there any questions about the ground rules? #00:03:15.7#

MS1 & FS1 - No. #00:03:17.0#

T - Okay, so there's, uh, the first thing I want to do is have Ms. Smith, I want to remind you, what you, uh, participated in – um, one of the things, can you show them the examples of the summary so to remind you of what you did, you, you read a passage, you took some notes, um, turn around to the back (to see the example projected on the wall) um, we don't know who this is, I don't think it's either one of you. #00:03:44.5#

MS1 - huh uh (meaning no) #00:03:44.5#

FS1 - huh uh (meaning no) #00:03:44.5#

T – So, you read the passage and then you took some notes on it, and after that you wrote a summary, and here's one of the summaries. So, "During the first part of the story a guy had just reached Easter Island and is talking to his driver and he's told about the island and the people around n the airport then the story gives a brief history of the island it talks about when it was settled and how it's geographically and culturally lonely After that the person starts talking about the look of the island and then it talks about the Moai and ideas about how and why they were put there." So that's one (summary) So, do you have, you got one more? Okay. Here's another one from a different student. "A person was going to Easter Island and no one wanted to go with her. When she got there, everyone greeted her. She found out there were not as many people on the island. She saw the strange statues. There are many stories about how the statues were made." So these are two very different summaries #00:04:44.1#

MS1 & FS1 – Yeah. #00:04:44.1#

T - . . . of the same story. So, that's basically, um, what you, what you did. Uh, do you want to make any comments on those summaries that you just read? #00:04:56.7#

MS1 - With the second one, she showed us, like, it was not as detailed as the first one, and the first one, it could of had a little more detail; um, it, it gave the basics and it summarized it, but it's like if somebody really wanted to know what it was about, they need a little more detail, and the second one, it kind of just went along the lines maybe the main ideas, like we did (on) the sheets. It just kind of put small stuff in there in the summary. #00:05:23.8#

T - Okay. How about you? #00:05:23.8#

FS1 - Um, I felt like they had different point of views. Um, in the second one she thought it was a girl and in the first one she thought it was a guy, and the first one was more detailed and it talked about arriving there, and the second one it just talked about, about when she got there and how lonely it was and the statues, and that was basically it. #00:05:45.0#

T - So depending on who wrote this #00:05:49.3#

FS1 - Uh huh (meaning yes). #00:05:49.3#

T – So, it really depended on who wrote it? #00:05:50.0#

FS1 – Mmhmm. #00:05:50.0#

T – Mmhmm. #00:05:51.8#

MS1 – Yeah . . . I didn't even pick up on that one thought it was a guy and one thought it was a girl. #00:05:56.6#

T – Yeah, what, did either of you think about the gender? #00:06:02.5#

MS1 - Huh uh (meaning no) #00:06:04.3#

FS1 - I said, I didn't know, I said #00:06:05.9#

MS1 - I think I said it was a girl #00:06:09.1#

FS1 - No, I said the uh "narrator"

MS1 & FS1 – (laughter) #00:06:13.2#

T - The generic narrator #00:06:13.2#
FS1 - Yeah, that's what I put #00:06:12.5#

MS1 – (laughter) Yeah. #00:06:15.1#

T - That's interesting. So, um #00:06:23.8#

MS1 - I noticed another thing in the, in the first summary it says that she saw the Moai and in the second one it says she saw strange statues so . . . #00:06:33.8#

T – Right. #00:06:33.8#

MS1 - and the book, uh, the passage that we read was, it, uh, was Easter Island or the Moai of Easter Island #00:06:40.8#

T – Mmhmm. #00:06:40.8#

MS1 - and in the second one it kind of was "oh there was some statues" you know, like, it could have been the Eiffel Tower or . . . #00:06:46.0#

T – Right. #00:06:46.9#

MS1 - . . . or the thing that Michelangelo made or whatever - Leonardo de Caprio #00:06:50.8#

T – Right. #00:06:50.8#

MS1 & FS1 – (laughter) #00:06:51.8#

FS1 - You said the tower! #00:06:55.3#
MS1 - it .... I don't know, maybe it's the one in Vegas! #00:06:57.2#

FS1 - Huh uh! #00:06:58.9#

MS1 & FS1 – (laughter from both) #00:06:58.9#

T - So, so let's take, let's take turns talking about the responses that you created #00:07:09.4# um, um, I really wasn't thinking we'd put your specific response up, but can you remember what you wrote? #00:07:18.4#
MS1 - spshhhhh, um . . . #00:07:19.7#

FS1 - I don't know #00:07:19.7#

MS1 - It looks like #00:07:23.3#

T - Do you want to pull them up? #00:07:23.3#

MS1 - It's kind of along the same lines, I mean, I put a lot of detail. I didn't know exactly what we were supposed to put. But . . . #00:07:28.8#

T - Mmhmm #00:07:29.7#

MS1 - . . . but, um, but different stuff. I know one of the ones I picked up on in the first one was it said that, like, her friend didn't want to go with her, and then when she got there, like,

everybody was greeting her and cuz all the people there wanted to ...oh - that one's mine #00:07:43.7#

T – Okay, so I'm going to read it out loud, all right? #00:07:47.9#

B&FS1 - Okay #00:07:48.4#

T – "The island is really small, it's only about 15 miles wide. There's one town on the whole island and that is Hankarowa. The people on the island, because it is small, don't get to see a whole lot of people. When you get off the plane at the airport in Hankarowa, the villagers come and watch to see who gets off. They socialize and give you a warm welcome so to speak . . ." #00:08:08.0#
MS1 – Yeah (laughing) #00:08:08.0#

T – "The island was named by a Dutch explorer in 1722 but it was said that the island was actually settled centuries before then. The island is very lonely. People say that it is a destination with solitude built into its DNA. Years of disease and depleted resources almost killed on (sic) the people . . ." #00:08:26.4#

MS1 & FS1 – (laughter for the typo) #00:08:27.4#

T - ". . . of the island. At one point there was over 100 people left on the island. There are statues there called Moai. They are the spirits of the island. The people warn visitors not to disturb them . . ." #00:08:40.1#

MS1 & FS1 – (laughter) #00:08:40.1#

T – " . . . of to get too close because it affect the island. They represent different things on the island. The spiritual to the referential to the far-fetched." #00:08:51.9#

MS1 & FS1 – (laughter) #00:08:54.9#

T - Do you notice that when I'm reading it, I'm filling in (the missing words) - that's not what's important. #00:08:59.8#

MS1 - That's one thing I hate about this, there's no spell check #00:09:03.6#

FS1 - I'm probably the worst. #00:09:03.6#

T - so we're not, that's not part of what we're interested in, I mean . . . #00:09:07.5#

MS1 – No, I got you. #00:09:09.2#

T - We're just looking at, we're just reminding you of what you did. So here is your words – "When visiting Easter Island, residents crowd the airport to see who has arrived. The name Easter Island was founded by the Dutch explorer who landed there Easter Sunday 1722. This island is a mere 15 miles wide and 7 miles long. A theory was made to help will . . ." #00:09:32.5#

FS1 – with #00:09:32.5#

T – ". . . to transport things from one place to another. The theory goes that during the heyday the jungles was filled with wood to help create a transport system." #00:09:42.5#

T - Okay - so these are your two summaries. So, um, so, what were you thinking when you had mentioned earlier that you didn't quite know what you were supposed to . . . #00:09:52.7#

MS1 – Mmhmm. #00:09:52.7#

T - . . . to put in there? #00:09:53.9#
MS1 - When I, when I did my summary, like, I was thinking, okay, for somebody that hasn't read the story and that is looking at a summary or, like, when you get a book and you read the back of it and they kind of summarize what the back of the book is. #00:10:05.7#

T – Mmhmm. #00:10:05.7#

MS1 - It's like they go into kind of, they kind of dip into the main plot and then they kind of put some supporting facts around it. And I was thinking, okay, I'll put some details to somebody, to the untrained eye that doesn't know the story, would kind of get a feel for it, like, okay she, she's there, she, the Moai #00:10:23.4# . . . and what they are and exactly what the island is, to get the grasp of how small it is and the different features of it #00:10:30.7#

T – Mmhmm. #00:10:30.7# How about you? #00:10:32.3#

FS1 - I kind of put, like, if someone asked, Hey, what was this story about, you could just give them a brief summary. So, like, oh, okay, not . .   #00:10:39.9#

MS1 – Yeah. #00:10:39.9#

FS1 - . . . not just give them all the details and, like, you know, they were, like, just asking what it was about and not everything. #00:10:45.2#

MS1 - Yeah. #00:10:46.0#
T - When you wrote your s..., when you wrote your summary . . #00:10:47.8#

FS1 – Mmhmm. #00:10:47.8#

T - . . . um, did you use, I'm going to add this as a question - did you use the little box, the graphic organizer? #00:10:56.4#

MS1 - Yeah, I did. #00:10:57.0#

T - Can you talk a little bit about how you used it? #00:10:58.7#

MS1 - I would . . . #00:11:01.2#

FS1 - I thought that helped out a lot because if I didn't have that, I don't think I'd have wrote a summary pretty w-- . . . like . . . #00:11:07.8#

MS1 - as well #00:11:07.8#

FS1 – Yeah. #00:11:09.0#

MS1 - Yeah, it kind of, it gave you, kind of, I don't want to say an answer key, but it's kind of, it was almost along that lines cuz when you're reading, when you're typing it, you kind of were able to put the summary into the flow of the story. #00:11:19.4# because you #00:11:20.3#

FS1 – Yeah. #00:11:20.3#

MS1 - When you read the story, you had the main ideas of each paragraph and that you'd picked out, so you were kind of able to flow it a little better than if . . . #00:11:27.9#

FS1 - . . . and if like you read the text and then you put it in the box, like, you kind of summarized that line instead of just looking at the paper #00:11:34.3#

MS1 – Mmhmm. #00:11:34.3#

FS1 - and then summarizing it and putting it word for word. #00:11:36.2#

MS1 - Yeah #00:11:36.7#

T – Mmhmm. #00:11:36.7#

MS1 - and with the, like, you had the main idea and then you had the sentences that supported it #00:11:41.7#

T – Yeah. #00:11:41.7#

MS1 - Excuse me, and, uh, you could without having, like, to skim through it, you could get a gist of and explain that sentence that you put that supported it. #00:11:51.4#

FS1 & T – Mmhmm. #00:11:51.4#

MS1 - But it made it, it made it a little ... less hectic, kind of, trying to find and #00:11:56.8#
FS1 – Yeah. #00:11:56.8#

MS1 - and look, but it, it helped, it helped a lot. #00:11:59.5#

T – Mmhmm, and this was the example of the first reading. I think, I don't know what, did you notice, and this is another one that's not on here, but I'm thinking of them as I go along . . . #00:12:08.6#

MS1 - Mmhmm #00:12:08.6#

T - . . . but I put that in my description that these, these kind of focus group questions, they grow from what you say. #00:12:15.0#

MS1 – Yeah. #00:12:15.0#

T - Um, did it, did you find that it became, that it, the process of writing the summaries, was different as you progressed through the three readings? #00:12:26.4#

MS1 - From my point of view, well, from my perspective, it got a little harder cuz you had bigger para-, you got bigger stories and #00:12:34.2# . . . different and bigger descriptions of stuff, of the actual paper. #00:12:38.3#
FS1 – Yeah. #00:12:38.3#

MS1 - and it got a little harder to write the summary cuz you didn't know exactly how to put something or how to word a main idea that you found in the text. #00:12:46.5#

T – Mmhmm. #00:12:46.8#

MS1 – And, um it, it, of course the summaries got longer cuz you had a bigger story #00:12:51.6#

T – Right. #00:12:51.6#

MS1 - So you had more, a little more detail and some more stuff to follow up on that, that was in the story than, rather than the first one where you had four or five paragraphs. #00:13:00.7#

T - Right. Did you . . #00:13:02.1#
FS1 - and I think it was the last passage, it was, like, differently worded than the other ones #00:13:05.8#

MS1 - Mmhmm #00:13:05.8#

FS1 - so I was, like, trying to, like, break down the words to make it easier to write in a summary #00:13:10.9#

T – Mmhmm. #00:13:10.9# . . . .and you're right, the first two were almost like history . . .#00:13:18.7#

MS1 - Yeah #00:13:18.7#

T - . . . or something . . .

FS1 - Yeah #00:13:19.5#

T - or. . . stories. #00:13:20.5#

MS1 – Yep. #00:13:20.5#

T - Narrative whereas that third one - do you remember what it was about? #00:13:24.6#

FS1 - Nnnhnn (as in no) #00:13:29.0#

T - The really long one? #00:13:29.0#

B&FS1 - Yeah #00:13:30.3#

FS1 - Really long. #00:13:30.3#

MS1 – Oh, it was, ah, it was, I know, it had something to do with earth based or volcanoes or something. #00:13:34.6#

FS1 – Yeah, the . . . #00:13:34.6#

MS1 - Yeah #00:13:36.2#

FS1 - . . . and they had the bullet things. It was about vol- . . .oh, the (snapping fingers) - the Big Bend! #00:13:39.8#

MS1 - Yeah! #00:13:40.9#

FS1 - I swear. #00:13:40.9#

MS1 - The national park. #00:13:42.5#

FS1 - YES! #00:13:42.5#

T - Yeah, it was, more, so #00:13:43.9# it, what class would you have more likely found that

one in? #00:13:48.9#

MS1 - I would probably say, like, science . . . #00:13:50.3#

FS1 - Yeah #00:13:51.0#

MS1 - . . . cuz you have, like, you had your fossils, and that had a lot more of upscale, I don't know if that's the right word, but upscale words than the other passages cuz you had a lot of, uh, Latin roots and different stuff for different names . . . #00:14:03.7#

T – Right. #00:14:03.7#

MS1 - . . . that were a lot of #00:14:05.0#

FS1 - Mmhmm #00:14:05.0#

MS1 - . . . it was a, it had some comprehension to it that, where the other ones you couldn't just go through to use context and go, oh yeah, I know what that means and get different clues off of it. With the Latin terms of some of the words, and they may not have even been Latin, but some of the harder words in the third one describing different fossils and different layers and all this stuff, it was, it was a little harder to write the summary because you didn't know exactly how to word it cuz you're, like, oh, #00:14:28.9# . . . okay, I don't have a clue what that word means #00:14:30.1#

T – Mmhmm. #00:14:30.1#

MS1 - But it took a little more thinking than the other ones #00:14:33.2#

T - Right #00:14:33.2#

FS1 - I like how that passage had bullets on it. I think that was easier . . . #00:14:37.3#

MS1 – Yeah. #00:14:37.3#

FS1 - . . . to kind of put in the little graph thing. #00:14:41.6#

T - Okay, so you, you used the bullets to kind of help you . . #00:14:43.7#

FS1 - Mmhmm #00:14:43.7#

T - . . . fill in your, the . . . #00:14:45.8#

FS1 – Yeah, like fill in blanks. #00:14:50.2#
T – So, I was asking what kinds of classes or subjects have you been given an assignment like this before? #00:14:55.1#

MS1 - I'd probably have to say history cuz Ms., um, our history teacher, she does a lot of, uh, SASS curriculum pathways . . . #00:15:03.8#

T – Mmhmm. #00:15:03.8#

MS1 - . . . or whatever, and we have a lot of different passages that we have to read, and sometimes they're played to us through earphones and we listen to them and we have different slides and focus points to, uh, capitalize on and to get the main idea, and then sometimes we have research, which she gives us a paper, and then we have to click on the different links and go down through there and read it but, but that would probably have to be that, and science. Science we do a lot of, we do a lot of reading, specially now towards the end of the school year, we have a lot of prep. #00:15:34.7#

T - For the tests? #00:15:34.7#

MS1 – Mmm, yeah #00:15:35.9#

FS1 - Yeah. I think Spanish cuz we have to read about Spain and then he makes us . . . #00:15:39.7#

MS1 – Mmhmm. #00:15:39.7#

FS1 - . . . write a whole page summary, so I think it's Spanish and stuff about Spain or something about culture #00:15:48.7#

MS1 – Yeah. #00:15:48.7#

FS1 - and #00:15:49.7#

T - Like the Moai, that one about the Moai? #00:15:50.6#

FS1 – Yeah, so, uh, I think it's kind of like that. He makes us summarize it and then turn it in and #00:15:57.3#

MS1 – Yeah. #00:15:57.3# . . .We . . . #00:15:58.5#

T - Do you write it in Spanish or in English? #00:16:00.0#

FS1 - English. If it's about Spain, we write in English. #00:16:02.4#

T - Uh huh #00:16:02.4# (to B) Sorry, I step on your . . . #00:16:04.4#

MS1 - No, no, no, no, you're fine. We had to do that earlier in the year. We had something on the history of Spain, except with us we had to write it in Spanish cuz we're Spanish II. #00:16:13.5#

T - So are you in Spanish I? #00:16:14.0#

MS1 - (for FS1) Yeah. #00:16:15.9#

T -So it's just the very . . . #00:16:15.9#

MS1 - and they do a lot of more, like, background and cultural things, and we do a lot of verbs and all that kind of stuff, but we had some readings so I would, it (the study activity) would correlate some with Spanish. #00:16:25.3#

T - Did your other teachers give you graphic organizers? #00:16:28.2#

FS1 - Nnnhuh (as in no) #00:16:29.7#

MS1 - Nnnhuh (as in no) #00:16:29.7#

T - But it sounded like the SASS curriculum pathways sort of, kind of, did? #00:16:32.9#

MS1 – Yeah. #00:16:34.1#

T - On the computer? #00:16:34.1#

MS1 – Yeah. #00:16:34.7#

FS1 - Mmhmm #00:16:34.7#
MS1 - It ki-, it organized it out to where it was, like, step by step, so it went through, kind of, sort of, the years, so you started off with this, and it, kind of, worked its way through, um, we did the Watergate scandal, and it kind of started from the beginning where Nixon was elected and then worked its way through and you got, like, the heart of the Watergate scandal in the middle of it and then it weaned out towards, towards the impeachment and all that stuff and where he resigned. #00:16:59.5#

T - Mmhmm #00:16:59.5#

MS1 - But cuz you go through probably 30 different bullets on it and you, it plays each one, and you have different focus points but . . .

T - Well, so, you're required, when you read, um, for this, for this experiment . . . #00:17:17.1#

MS1 – Mmhmm. #00:17:17.1#

T - . . . the passages you read, and then you had to fill in the graphic organizer and then summarize then write a summary, what're, what do you perceive are the advantages of that or the disadvantages - you could have advantages and disadvantages to your actually reading and understanding the passage. #00:17:35.6#

MS1 - I, I think it has some ad, more advantages cuz I think you get a better feel for it once you kind of, you read it and you kind of go back over it, some things start clicking and you kind of get, like, the gears start turning almost when, and once you rewrite it, you kind of, like, you get, you get how to word it rather than just reading it. Um, when you read it, you're, you go through it and you're, you're kind of shuffling a little bit, trying to kind of figure out what it means, and when you write it, like, a lot of times, um, like, visual learners or, I don't know what the other kind of learner is, but, um, a lot of times they get better, they get, they can, ah, understand it better writing it down. #00:18:13.3#

T – Mmhmm. #00:18:13.3#

MS1 - . . . cuz they get a, they have a better perception of if and I think I wouldn't read, when you're reading it, when you write it down, a lot of times you're able to put your own, like, emphasis on different stuff, and you kind of . . . #00:18:24.3#

T - You're talking about when you write it down on the graphic organizer? #00:18:27.6#

MS1 - Mmm, yeah. #00:18:30.8#

T - Not in the summary and . . 0:18:30.8#

MS1 – Yeah, and then in the summary when you're, when you're elaborating on it, you kind of, you're able to kind of get the gist of it better than when you're just reading it. #00:18:35.4#

T – Mmhmm. #00:18:35.4#

FS1 - I thought it helped because when I read, sometimes I start reading it and I start daydreaming and I'm, like, what did I just read? So I wrote it down before I reread it, so I wrote down all the points I thought I needed. #00:18:48.2#

T - While you were reading? #00:18:48.2#

FS1 - Yeah, while I was reading. I would read one paragraph and I was, like, oh, okay, this is what I got from this. Then I'd read the second one, and this is what I got from this #00:18:53.7# Then I'd break it down and put it in the graphic organizer. And then I'd reread over it and put everything together. #00:18:59.8#

MS1 - and then I ended up with a graphic org-, It could have a disadvantage cuz I know sometimes I caught myself, I'd be trying , I would get to skimming instead of reading it, trying to find different stuff .#00:19:09.3#

T - To fill in the graph? #00:19:10.2#

MS1 - To fill into it because I felt like, #00:19:16.0#

FS1 - Mmhmm #00:19:16.0#

MS1 - I was, like, I just read that, now, all right, I have to go up and go back through it and write a thing down cuz you had five different little squares, and then with the last one, like, sometimes I felt, like, okay, I'm filling it too soon, let me skip a couple, let me read through a couple and then I'd kind of be, like, okay, I don't know what's happened. So, then I'd feel like I'd have to go back and fill it in, and so, then I, I felt like I was rushing sometimes to like, have an obligation to fill it in. #00:19:37.9#

T – Mmhmm. #00:19:37.9#

MS1 - . . . and, but sometimes, I know on, like, the Easter Island, kind of, they kind of fit the squares, so you were able, but when they got longer, was kind of, like, Oh, gosh. I gotta fill it in. And then you're, like, oh, I'm filling it in too fast; let me slow down and, but, but it helped for me, it helped for me in the long run, but . . . #00:19:54.0#

FS1 - Mmhmm #00:19:54.0#

T - That's interesting in that disadvantage of it becomes, it's almost like that becomes the task rather than . . . #00:20:00.4#

MS1 – Yeah. #00:20:00.4#

T - . . . the reading #00:20:01.4#

MS1 - . . . than the reading, yes #00:20:02.2#

FS1 – Mmhmm. #00:20:02.2#

T – So, how, so, this question is, so, my next question is - Describe how you decided on the explanation of were the main points in the informational readings. How did you choose what to put? I think you kind of mentioned it. #00:20:27.2#

MS1 - Mmhmm #00:20:27.2#

T - that when you, I'll read a paragraph #00:20:28.9#

FS1 - Mmhmm #00:20:28.9#

T - and I'd stop #00:20:29.8#

MS1 - Yeah #00:20:29.8#

T - But then if it had a bunch of paragraphs, that it's easy when you've got five. #00:20:33.1#

B&FS1 - Mmhmm #00:20:33.1#

MS1 – Yeah. #00:20:36.1#

T - So what process, what, how did you decide that? Let's go a little deeper into that whole decision making. #00:20:40.5#

MS1 - Mmhmm #00:20:40.5#

T - Because I think that's what you were talking about just now. #00:20:43.2#

MS1 - Yeah, you want to take that one? #00:20:44.3#

FS1 - dig??? (not clear on recording) #00:20:47.8#

MS1 - When, oh, durn, I forgot what the question was. Okay, so when I would read, we would read a paragraph and, especially with the longer one about the changes with the different landscapes with the big Bend, um, you kind of had to go through it ju-, you had to highlight sort of with your eyes to try to figure out, okay, that's a big point; let me jot that down, and you had some other ones, and I remember a lot of times I'd catch myself trying to pick up, um, like taking notes . .   #00:21:16.1#

T - Mmhmm #00:21:16.1#

MS1 - on different stuff, like, um, Miss, our Ms. Smith, our history teacher, she's always, like, look, don't write down everything I put, don't write down everything I write. She was, like, try to sum it up, and a lot of times I'd catch myself trying to, like, I'm grabbing small points, and a lot of times I miss the big points trying to grab all this other small stuff that's buzzing around, and #00:21:37.4# with the graphic organizer you, in the story you kind of had to go through and, and you kind of had to grasp, grasp the, the bigger plots, like, the bigger idea of the story instead of grabbing small stuff, and that's, goes back to trying to fill it

in with, that you kind of had to just, you kind of had to go through and you had to realize, Okay, that paragraph's important, that I'm gonna need that and maybe you'd have to read a few and know that, okay, that's a supporting - I can go back and look at that if I need to, um, writing my summary, and then you have another big point and you're, like, okay, that, that's something I need; that's something I need, so write that down, and then skip a couple more, and, and it may be even two right back to back, but you kind of had to go through and you had to grab the ones that you, you really knew would grab the reader's attention that would let them know, oh, okay, I know what that is, that's a, that's a national park or, instead of, okay, well there's a bend, it's in Texas and all this stuff. So you had to, you kind of had to grasp the bigger ideas. #00:22:38.3#

T – Mmhmm. #00:22:38.3#

FS1 – Well, what I did when I read, if there was something that they talked about and then it got repeated in the same paragraph, I was, like, okay, that's a big point because they repeated about it #00:22:50.2#

T – Mmhmm. #00:22:50.2#

FS1 – So, then I'd go to the next paragraph and I'd keep reading it and if they repeated something, . . . #00:22:56.5#

MS1 - Mmhhmm #00:22:56.5#

FS1 - . . . about something else, I'd write that down cuz that's obviously a big point. #00:23:00.3#

T – Mmhmm. #00:23:00.3#

FS1 - And then, um, if I saw something that stood out to me that I thought, oh, that's good information for someone to know, I'd write it down. Something like that. #00:23:08.9#

T - So repetition . .   #00:23:10.0#
B - Yeah. #00:23:10.0#

FS1 – Mmhmm. #00:23:10.0#

T - . . . of ideas and then the importance somehow? #00:23:13.9#

B&FS1 – Yeah. #00:23:13.9#

FS1 - It's, like, stands out #00:23:16.4#

T - It stands out. #00:23:17.7#
MS1 – Yeah, then I would I agree with her on that, that, that is if you see something repeated, I know a couple months ago at my church that I go to, we were reading 1st Peter and they, he talked about suffering for the Lord, and it was, I think, our Sunday school teacher, I mean, it was, like, 23 times that he said it . . . #00:23:34.9#

T – Mmhmm. #00:23:34.9#

MS1 - . . . in just 1st Peter, and she's, like, Y'all gotta realize that maybe he's trying to get a point across, and with her when, with repetition, you're kind of, okay, he's done said that two or three times and I need to pick up on that a little bit more. #00:23:46.3#

T - Mmhmm #00:23:46.3#

MS1 – So, I'd I totally agree with her on that standpoint. (regarding repetition means it's something important) #00:23:52.5#

T - So, so after you finished your summary for whatever reasons you decided to include what you did, . . . #00:23:59.0#

FS1 – Mmhmm. #00:23:59.0#

T - . . .um, then which got, if I understand you correctly, got a little more complicated the longer the readings were . . . #00:24:05.1#

FS1 - Mmhmm #00:24:05.1# #00:24:06.2#

B- Mmhmm.

T - . . . because they'd didn't fit into five little boxes? #00:24:07.7#

MS1 – Yeah. #00:24:07.7#

FS1 – Mmhmm. #00:24:08.4#

T - So, so, it was kind of requiring you to do a little bit more, ah, decision-making. And then you, and then you took a quiz? #00:24:18.0#

FS1 – Yeah. #00:24:18.9#

MS1 - Mmhmm #00:24:18.9#

T - A multiple choice question test kind of thing. #00:24:22.0#

FS1 - Mmhmm #00:24:22.0#

T - You had one constructed response, but the rest were multiple choice. So my question is how did, how do you think, and we haven't graded them yet . . #00:24:31.1#

MS1 - Mmhmm #00:24:31.1#

T - . . .so I don't know how you did yet, but how do you think, ha - having to fill in the, um, graphic organizer and then write the summary, how did that affect your performance on the quizzes? #00:24:44.4#

FS1 - I feel like it added, like, a little more, like, it's kind of, like, we reread it then summarized it until you kind of grasped everything it said. #00:24:54.7#

T – Mmhmm. #00:24:54.7#

FS1 - And then you put it towards the questions and you're, like, oh, I remember that blah, blah, blah, and then you do your answer cuz it's kind of, like, you been over it, you've read it, you've summarized it, it's, like, you've done the whole big bang so you know the answer. #00:25:08.9#

T – Mmhmm. #00:25:10.1#

MS1 – Like, it helped along, oh, when, say, it was mentioned that #00:25:16.3# (this is not clear on the recording)

FS1 – (laughter) #00:25:17.8#

MS1 - Um, it, it, it makes you think of doing tests when you have the paper right in front of you #00:25:22.0#

T – Mmhmm. #00:25:22.0#
MS1 - With the graphic organizer and the summary, when you're reading the quiz, um, and the answers, you pick up on stuff a lot quicker because you've read it, you've done put it in a graphic organizer and then you summarized it again and, uh, repetition again when you have, when you're doing those things three times in a row and looking back through it and having to read it, when you look at on the quiz, it almost it's almost like a light bulb goes on . . . #00:25:49.2#

T – Mmhmm. #00:25:49.2#

MS1 - . . . and it's, like, I know exactly what that is, and the ones that you struggle with, it helps to go back and kind of look and kind of scan. You kind of, you get the gist, you know, like, okay, I remember going over that; I remember looking, and there's the main idea I just wrote down right under that, and it helps you recognize the answers quicker, I think, and, uh, it helps you to narrow it down, uh, easier than if you hadn't of done it. #00:26:15.0#

T – Mmhmm. #00:26:15.0#

FS1 - I think it's easier when they ask questions, like, what's the main idea, well, that's what you've been looking for the whole time, so you've basically know the answer. #00:26:22.2#

MS1 – Mmhmm. #00:26:22.2#

T – So, they, I know that you don't get graphic organizers on the EOC, but you do get, ah, scratch paper. #00:26:31.9#

MS1 – Mmhmm. #00:26:31.9#

T - Even if it's an electronic test, right? #00:26:33.7#

MS1 – Mmhmm. #00:26:34.1#

T – So, it's something that you could, while you're, because I know time is a factor in a lot of these tests. #00:26:39.4#

MS1 – Yeah. #00:26:39.4#

FS1 – Mmhmm. #00:26:40.1#

T – So, while you are reading, you could do the same if you felt it was beneficial, which it sounds like y'all felt like it was. #00:26:46.8#

MS1 – Yeah. #00:26:46.8#

T - You can always do that on your scratch paper as you're reading through the passages for your EOC. #00:26:52.4#

B- Yeah. #00:26:52.4#

FS1 - Mmhmm #00:26:52.4#

T - And then, that way, when it comes to answering the questions, you would at least have something . . . #00:26:55.2#

MS1 – Mmhmm. #00:26:55.2#

FS1 - Mmhmm #00:26:55.2#

T - . . . to look at. What would have made these reading assignments, um, a better experience for you? #00:27:01.7#

FS1 - Not in the morning! #00:27:03.3#

MS1 – (laughter) #00:27:04.7#

T - That's right, so, you must have been 1st period? #00:27:06.2#

MS1 - Yeah, we were both in 1st period. #00:27:08.8#

FS1 - . . . in the morning.

MS1 – Um . . . #00:27:10.3#

FS1 - and if it had been right when I'd had food, that would have made it so much better, right when I had food. #00:27:14.5#

MS1 - Yeah, um, I mean, my, personally, I felt, like, it was, it was a good learning experience, um, it helped me with my comprehension skills and different stuff that I struggled with a little bit. #00:27:28.2#

T – Mmhmm. #00:27:28.2#

MS1 – Um, and being able to pick stuff out of, being able to pick some things, different things out in the paragraphs and in the story (the intercom interrupted here) um, like I was saying, um, #00:27:54.8# it, ah, uh . .

T - You got stuck? #00:27:54.8#
MS1 - Uh, uh, yeah, I don't remember where I was going with that now. #00:27:56.5#

T - How to do it, the question was, could, how could we have made this an even better . . . #00:28:02.4#

MS1 - Oh,

T - . . . experience. #00:28:05.3#

MS1 – Okay, um, uh, with, with helping me, like, "Oh, okay I got it now." Um, with helping me (laughing) look at the diff-, at the paragraphs and being able to pick up stuff easier than, I know a lot of times me reading books, I catch myself kind of wandering off, yet I'm still reading, and then I get to the end, and it's kind of, like, I have to catch myself going back and kind of looking through and kind of scanning and catching stuff. #00:28:31.0#

T – Yeah. #00:28:31.7#

MS1 – and, um, have, uh, almost, like, a highlighter, you have to go through and pick stuff out and then it kind of starts coming back to you and then you're, like, okay, yeah, you kind of start telling yourself that, okay, blah, blah, she did this and this happened and then they went here and it, it helps to, it helps me think quicker and makes it flow a little bit better. #00:28:53.6#

T - Could, could, could, is there anything we could have done, like, what would have been something else we could have done with this in a classroom if this weren't an experiment and we had more time in the classroom? #00:29:02.9#

MS1 – Yeah. #00:29:02.9#

T - What would have been the next step or something that could have, you know, made it even better? #00:29:07.8#

FS1 – Um, if we had got to choose the book to read, like, something . . . #00:29:12.2# . . . #00:29:13.7#

T - Another passage? #00:29:14.5#

MS1 – Mmhmm.

FS1 – Yeah, something that we like and we had to summarize what it was and what our book was about and to have something being chosen, like, oh, this is so boring, so you just like . . . #00:29:23.7#

MS1 – Yeah. #00:29:23.7#

FS1 - . . . do garbage on it. #00:29:25.8#

MS1 - It would keep, it would keep, what she's saying it would keep us in tuned . . . #00:29:29.0#

FS1 – Yeah. #00:29:29.0#

MS1 - . . . a lot better cuz we would be interested in it. Like, I know a lot of people are, they are very fascinated with facts about holocaust and di- I mean, every body's perceptions and opinions are different, but if we wou-, if we got to choose our own passage, it would, we wouldn't want to daydream; we would want to keep reading. Um, I know I read The Hunger Games books . . #00:29:51.1#

FS1 - Yeah, huh. #00:29:51.1#

MS1 - . . . and it was, that's one of them books, like, when you read it and you find out that something just happened in one of the districts and you, it's one of the things that just grabs your attention; you're kind of, like, dude, I can't, I gotta turn the next page; I can't stop. #00:30:04.0#

T – Right. #00:30:04.0#

MS1 - and it I know traveling less (this is not clear here)? Um, reading that book, it's, like, you just had to keep going, but, um, I feel if we got, if we would have been able to maybe collaborate on it as groups, um, cuz then you would have had, you wouldn't of had more of a, a wider horizon of, uh, comparison and different, different opinions on it to where you would, you would have somebody who would agree on you but you would have some constructive cit-, criticism at the same time. #00:30:33.7#

T – Right. #00:30:33.7#

MS1 - And you'd be able to kind of compare and kind of realize, okay, yes, we're on the same track, I get what you're saying, um, cuz I know we did that a lot a lot in English with different stuff. We have group with, okay, um, we read Siddhartha and we were able to collaborate on it as a group and kind of, yeah, Dravinda did this and that with the river, he found this, and it helped a lot . #00:30:55.9#

T – Yeah, that's a . . .

MS1 - . . . being able to collaborate as a group

T - . . . tough #00:30:59.0#

MS1 - Yeah #00:31:00.6#

T - I find that book very challenging. #00:31:00.6#

MS1 – Yeah. #00:31:01.3#

FS1 - That is such . . . #00:31:01.3#
MS1 - It was really easier #00:31:02.3#

FS1 - . . . and that book I had to substitute names in there and I had a friend that did that, like, . . . #00:31:06.3#

MS1 – (laughter) #00:31:07.3#

FS1 - . . . Ted did this to Bob . . . #00:31:08.9#

T - Yeah, Steve . . . #00:31:10.6#

FS1 – Mmhmm. #00:31:10.6#

MS1 – Yeah, but I, it, groups help me a lot, being able to collaborate with each other and kind of get a feel for what each other thought and being able to collaborate on it. #00:31:26.9#

T - So - Would you recommend this type of, um, lesson to other teachers? #00:31:32.6#

FS1 – Yes. #00:31:32.6#

T - Why? #00:31:33.8#

MS1 - I . . . #00:31:34.8#

FS1 - I think it gives them a different way of teaching and it gives the students a different way of learning and maybe it'll work for some students, maybe it won't, but at least you tried and seeing if it works . . . #00:31:47.3#

MS1 – Mmhmm. #00:31:47.3#

FS1 - . . . better for your kids if they get better scores or not. #00:31:51.0#

T - Well, when, so, when a teacher, when you have to read material in in your classes, how do they do it? #00:31:58.9#

FS1 - It's either you sit down and you read to yourself, you read a few chapters, it's for homework, or you either read it in class, or you read in groups and discuss it, you know, it's not, like, you write a summary about it and then you take a quiz on it, and like kind of like

that #00:32:16.9#

T – Mmhmm. #00:32:18.4#

MS1 - I feel that the experiment, it gave us a little more drive to do it cuz that, which, uh, which . . .#00:32:24.1#

FS1 – Oh, yeah. #00:32:24.1#

MS1 - . . . which with the focus group, I mean offering the different things for participating, it gave us, it gave me a drive to do it, and with the, with the com - I don't think commencement (he means CONSENT FORMS), but doing the, uh, getting the sheets, or whatever, signed, I mean, yeah, you'd be doing the same thing, but, you know, like, why not just go ahead and do it? I mean, I'm going to get something out of it either way, um, but I feel, like, it gave us doing it a little more, a more, a little more drive, and I would, yes, I would recommend it, I don't know if we skipped that or went over, or went over that question. #00:32:58.4#

T – Yeah. . . #00:32:58.4#

MS1 - But I would, I would recommend it to teachers cuz I think it, it gives it better point of view to kids that are maybe struggling with, with reading and different comprehension skills and being able to pick that stuff out, it boosts their confidence to know that, Hey, I can do this. #00:33:13.8#

T - Mmhmm #00:33:13.8#

MS1 - And it, it, it steps it down a little bit to an easier level to where they're not so frantic on trying to pick different things out and trying to do all this other stuff, and with the beginning prior knowledge, like, with the Easter Island, Miss, uh, our English teacher, she asked . . . #00:33:31.7#

FS1 – (laughter) #00:33:31.7#

MS1 - I didn't know if we were supposed to mention names. #00:33:32.5#

T - It doesn't matter. #00:33:32.5#

MS1 – Oh, okay, well, Miss Smith, she was, she was kind of, like, she was, like, Look, I want y'all to write down some prior knowledge to, uh, to what y'all already know, and with, when we were at the first one, I didn't have a clue, and then somebody else mentioned statues and I was, like, Oh, I know what they were talking about, but . . .   #00:33:48.0#

FS1 – Yeah, I was, like, that, like, some big statue heads . . . #00:33:48.0#

MS1 - Of course, time was up by then, so it didn't really matter.

FS1 - . . . and the movie Hop #00:33:52.9#

MS1 - But it, it, um, it ha-, I think it helped kids think a lot better, they, they get a better understanding of it, um, with being able to know that they can, they don't have to, they're not on a time limit, they don't have to rush, um, they, they're able to point different stuff out, maybe that they're thinking is important that somebody else may not, so I feel like it's, it, it, it'll, it helps kids in the long run. #00:34:19.1#

T – Mmhmm. #00:34:19.1#

MS1 - It'll help them with their different, their reading skills. #00:34:23.6#

T – So, um, do y'all have any questions for me? #00:34:27.5#

FS1 - Nuhhuh? #00:34:32.6#

T - Are there any questions I should have asked you? #00:34:33.6#

MS1 - I think we've covered it pretty good. #00:34:35.7#

FS1 – Yeah, I thought it was pretty good. #00:34:39.5#

T – Okay, well, then, thank you for, um, very much for agreeing to participate in this focus group. I have a thank you gift of an ITunes card for each of you which is just a small token of how much I appreciate your sharing your time and your opinions with me today #00:34:54.8# If you would be interested in receiving a summary of all the focus group answers, I can send you one through your English teacher. Just let me know, and once again thanks. #00:35:10.7#