

5-2009

# Combining Comprehension Reading Instruction with Video Anchors with Middle Level Learners

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COMBINING COMPREHENSION READING INSTRUCTION WITH VIDEO

ANCHORS WITH MIDDLE-LEVEL LEARNERS

by

Heidi Andreasen

A dissertation submitted in partial fulfillment  
of the requirements for the degree

of

DOCTOR OF PHILOSOPHY

in

Education

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2009

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## ABSTRACT

Combining Comprehension Reading Instruction with Video  
Anchors with Middle-Level Learners

by

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Utah State University, 2009

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Department: Secondary Education

Reading comprehension is a multidimensional process and a key component of this process is the activation of prior knowledge in the comprehension of text. This study utilized video clips as a means to anchor instruction and assist struggling middle-level readers in comprehending text. Participants in this study were 17 seventh- and eighth-grade students from a rural middle school. The study used a single-subject reversal design.

During the baseline phase of the study, students read four different titles before a stable baseline could be established. The data collected were the combined mean scores of the teacher-created comprehension assessments and commercially produced computer-based assessments at the completion of reading each title during all phases of the study. In the second and fourth phases (books 5 and 7), no treatment was used and the regular instructional routine was followed. In the third and fifth phase (books 6 and 8), the

treatment (video clips) was introduced to assist the reader with background knowledge pertinent to the content of the book being read. Books 6 and 8 were taught in combination with the viewing of video clips, class discussion of the materials viewed, and the regular instructional routine.

Findings from the study were analyzed to explore (a) what effect did viewing video clips as a means to anchor instruction have on the mean classroom scores of combined teacher-developed and commercially developed comprehension assessments for remedial, struggling middle-level readers; and (b) how did viewing video clips related to text topics affect individual student scores on combined teacher-developed and commercially developed end-of-book comprehension questions. The findings indicated that the use of video clips as a means of either activating or developing background knowledge may have a positive effect on struggling middle-level readers' comprehension test scores. This combined condition (regular instructional routine and the viewing of video clips) was better than the regular instructional routine alone; the addition of the video clips appeared to contribute to higher mean comprehension scores.

(142 pages)

## ACKNOWLEDGMENTS

The completion of this doctoral degree and dissertation would not have been possible without the assistance and encouragement of many people in my life. First, I would like to acknowledge and thank the members of my doctoral committee for their efforts on my behalf. Their ideas and suggestions throughout this study helped me to improve my work. I would like to thank Dr. Kay Camperell, my major professor and mentor. She shared her knowledge, skills, and expertise in the area of reading instruction and was always available to help no matter when I called with questions. Her guidance and the countless hours she spent reviewing and editing my work are greatly appreciated. I would like to thank Dr. Martha Whitaker for the knowledge I gained from the courses she taught, for helping me think outside of the box, and her encouragement and positive outlook on a sometimes stressful process. I thank Dr. Martha Dever for always inquiring about my progress throughout my doctoral endeavor and for her support while Dr. Camperell was on sabbatical. I thank Dr. Rhonda Menlove for her advice and recommendations during my proposal defense and always being positive and helpful while serving on my committee. I thank Dr. Nancy Glomb for sharing her ideas on my research design, her expertise in single-subject design, and recommendations for my dissertation.

Next, I thank my colleagues in education who have asked about my progress and shared their words of encouragement. Tom McFarland, my school principal for the majority of the years I worked on my degree, and Ron Wolff, my district superintendent, were particularly supportive in encouraging me to finish this degree. I thank them for

their words of encouragement and support on my behalf. I owe an enormous thank you to the teacher and students from the school who participated in my study. I also appreciate and thank my students, past and present, who have taught me so much during the last 23 years of my teaching career. I want to thank my friends and family for their never-ending understanding and patience throughout this long and arduous process. To Gina, Lynn, Marilyn, and Michelle, thanks for your support and the time spent with you charging me up so I could continue with my degree. Finally, I need to thank Kurbie, Berkle, Rylee, Aggie, P.J., and Kobie for the diversion they created, when I was not sure if I could do any more with my dissertation.

Heidi Andreasen

## CONTENTS

	Page
ABSTRACT.....	iii
ACKNOWLEDGMENTS .....	v
LIST OF TABLES .....	ix
LIST OF FIGURES .....	x
CHAPTER	
I. INTRODUCTION.....	1
Statement of the Problem .....	2
Significance of the Study .....	6
Purposes and Objectives.....	6
II. REVIEW OF THE LITERATURE.....	8
Introduction .....	8
Prior Knowledge.....	11
Comprehension Instruction .....	21
Anchored Instruction.....	28
Summary of Literature Review .....	31
III. METHODS AND PROCEDURES .....	32
Introduction .....	32
Participants .....	33
Participant Confidentiality .....	41
Intervention Setting.....	41
Dependent Variable.....	42
Independent Variable .....	44
Experimental Design.....	44
Data Collection.....	54
Confidentiality of Data.....	55
Summary .....	56



	Page
IV. RESULTS.....	57
Answering the Research Questions.....	57
Question One: Effects of Viewing Video Clips on Class Assessments.....	58
Question Two: Increase Student Scores.....	60
V. CONCLUSIONS AND RECOMMENDATIONS.....	67
Introduction.....	67
Summary of Research Questions.....	68
Limitations.....	70
Discussion.....	72
Implications for Practice.....	73
Implications for Future Research.....	74
Conclusions.....	75
REFERENCES.....	76
APPENDICES.....	84
Appendix A: Letter of Consent.....	85
Appendix B: Teacher-Created Test ( <i>Call it Courage</i> ).....	88
Appendix C: Teacher-Created Test ( <i>House of Dies Drear</i> ).....	90
Appendix D: Teacher-Created Test ( <i>Escape to West Berlin</i> ).....	93
Appendix E: Teacher-Created Test ( <i>Bearstone</i> ).....	98
Appendix F: Teacher-Created Test ( <i>Willow Run</i> ).....	102
Appendix G: Teacher-Created Test ( <i>Eyes of the Emperor</i> ).....	106
Appendix H: Teacher-Created Test ( <i>Jason's Gold</i> ).....	111
Appendix I: Teacher-Created Test ( <i>How I Found the Strong</i> ).....	115
Appendix J: Individual Assessment Scores Figures.....	119
VITA.....	129

## LIST OF TABLES

Table	Page
1. Participant’s Placement Data .....	35
2. Definitions and Examples of Question Types .....	43
3. Description of Novels Employed During the Study .....	47
4. Video Used with Eyes of the Emperor – Book #6 .....	53
5. Video Used with How I Found the Strong – Book #8 .....	54
6. Individual Mean Scores of Combined Teacher-Created and AR Test Scores for Grade 7: Book Tests 1-8 .....	59
7. Individual Mean Scores of Combined Teacher-Created and AR Test Scores for Grade 8: Book Tests 1-8 .....	61
8. Seventh-Grade Individual Mean Percentage Scores of Nontreatment Tests (Books 5 and 7) and Treatment Tests (Books 6 and 8).....	63
9. Eighth-Grade Individual Mean Percentage Scores of Nontreatment Tests (Books 5 and 7) and Treatment Tests (Books 6 and 8).....	64

## LIST OF FIGURES

Figure	Page
1. A comparison of baseline, no treatment and treatment mean scores for the seventh-grade group .....	59
2. A comparison of baseline, no treatment and treatment mean scores for the eighth-grade group.....	61
3. Kurbie's (participant 7.3) individual assessment scores .....	63
4. Lynn's (participant 7.8) individual assessment scores.....	64
5. Ramona's (participant 8.3) individual assessment scores .....	65
6. Ray's (participant 8.8) individual assessment scores.....	66
7. Andy's (participant 8.9) individual assessment scores .....	66
J-1. Gina's (participant 7.1) individual assessment scores.....	120
J-2. Berklee's (participant 7.2) individual assessment scores .....	120
J-3. Kurbie's (participant 7.3) individual assessment scores .....	121
J-4. Aggie's (participant 7.4) individual assessment scores.....	121
J-5. Ryan's (participant 7.5) individual assessment scores .....	122
J-6. P.J.'s (participant 7.6) individual assessment scores.....	122
J-7. Kobie's (participant 7.7) individual assessment scores.....	123
J-8. Lynn's (participant 7.8) individual assessment scores .....	123
J-9. Teddy's (participant 8.1) individual assessment scores .....	124
J-10. Rylee's (participant 8.2) individual assessment scores .....	124
J-11. Ramona's (participant 8.3) individual assessment scores .....	125
J-12. Bridger's (participant 8.4) individual assessment scores .....	125

Figure	Page
J-13. Heath's (participant 8.5) individual assessment scores.....	126
J-14. Thomas's (participant 8.6) individual assessment scores .....	126
J-15. Mark's (participant 8.7) individual assessment scores.....	127
J-16. Ray's (participant 8.8) individual assessment scores .....	127
J-17. Andy's (participant 8.9) individual assessment scores .....	128

## CHAPTER I

### INTRODUCTION

In today's society, information and knowledge are expanding at an unprecedented rate. As students progress through school, they are required to learn from print materials that are often increasingly complex, less personally relevant, and conceptually dense (Jetton & Alexander, 2004). Therefore, it is extremely important that individuals possess the reading skills and strategies necessary to access and utilize this information and knowledge. Possessing adequate literacy skills is critically important for young adults. Reading ability is fundamental to students' learning, to their success in school, and ultimately to their success in life. Adolescent readers must use sophisticated reading strategies as they work with increasingly complex texts and tasks (Afflerbach, 2004), and young adults are seriously disadvantaged if they cannot read well.

An unfortunate fact is that the majority of adolescent readers in our schools routinely struggle when it comes to comprehending their academic reading assignments (Underwood & Pearson, 2004). As learners move through the many grade levels, they must process information from increasingly more complex texts; at some point, the knowledge acquisition task posed by these texts reaches the point at which getting the words right and reading with greater facility and expression just does not seem to be sufficient. Data from the 1998 National Assessment of Educational Progress Report (NAEP, 1999) suggested that nearly 67% of 8<sup>th</sup>-grade and 60% of 12<sup>th</sup>-grade students are unable to perform the higher-order cognitive work required for in-depth learning of content through reading.

## Statement of the Problem

During the 1980s and early 1990s, comprehension strategies instruction received a great deal of research attention. Researchers began by investigating how readers of varying abilities utilized comprehension strategies and whether lower achieving readers could be taught to use the strategies that successful readers used. Pressley (2002) indicates that good readers use strategies to support their understanding of text. According to Pressley, the findings of some studies suggest that strategy instruction is effective. Nevertheless, the result of this research indicates that these strategies take a great deal of time and effort from teachers and students, and even with this effort, not all students appear to benefit from using them.

Recent research demonstrates the many facets that contribute to successful reading instruction for struggling readers (Baumann, Seifert-Kessel, & Jones, 1992; Brown, Pressley, Van Meter, & Schuder, 1996; Guthrie et al., 1996; Hansen & Pearson, 1983; Raphael & Wonnacott, 1985). However, these studies have been almost entirely concerned with primary and elementary grade readers.

These researchers have produced evidence on how to improve reading instruction for early readers (kindergarten to third grade), but older struggling readers (Grade 4 and beyond) encounter difficulty when it comes to the comprehension of text, not just reading the words. Literacy for older readers includes understanding what they read, identifying main ideas, linking ideas to ideas in other passages, and drawing conclusions and making inferences. Biancarosa and Snow (2004) report that some 70% of older students require reading remediation because many students can decode the words on a page but cannot

comprehend what they have read. Challenges of comprehending increase as older readers work with more complex text.

Other researchers question whether comprehension strategy instruction is the most effective way to help students improve their comprehension (Beck, McKeown, Sandora, Kucan, & Worthy, 1996). These researchers argue that students' comprehension might be better served by developing a general disposition toward an "active search for meaning" (Beck et al., p. 386). Current models of reading emphasize that successful reading is a constructive endeavor in which readers actively make sense of information in text by putting ideas together and integrating them with prior knowledge (Beck et al.). The effort to construct knowledge is affected, not only by the skills and strategies that a learner has access to, but also by the material and the readers' perceptions of the world (McVee, Dunsmore, & Gavelek, 2005). Although the comprehension strategies instruction literature discusses the importance of activating the reader's background knowledge, it does not take into consideration how the lack of relevant personal experience and world knowledge may impede comprehension processes.

Many reading scholars (Ausubel, 1963; Ausubel & Robinson, 1969; Bartlett, 1932; Huey, 1908/1968; Shapiro, 2004) acknowledge the function of background knowledge in the reading process. As readers read, they use the information in the text and their background knowledge to construct a representation of the meaning of the text. Poor readers are unlikely to make the inferences required to weave the information given in a text into a coherent overall representation. Poor readers do not seem to appreciate

consistently that—utilizing the analogy of Wilson and Anderson (1986)—comprehending a story or text is like completing a jigsaw puzzle: All of the information must be used, the information must fit into place without forcing it, and the completed interpretation must make sense.

The activation of students' background knowledge is crucial before reading new text. Instructors need to find a way to trigger or build such knowledge for students who may be unfamiliar with the topic or content that they find in the text (Soalt, 2005). Coté, Goldman, and Saul (1998) suggested that in comprehension and learning situations, children often have little prior knowledge about the content of the texts they read. A reader's experience with, perceptions about, and prior knowledge of a topic act as a framework through which he or she filters new information and tries to make sense of what is read. At present, the lack of attention to the research concerning background knowledge and its importance to struggling readers is a major concern. Research findings (Alexander, 2000; Shapiro, 2004; Stanovich, 1986; Voss & Silfies, 1996) concerning the importance of background knowledge within the realm of comprehension are often ignored in the instructional approaches that are presently promoted as a means of addressing struggling reader issues.

One way to assist students in developing or activating background information is through components of anchored instruction, an approach developed by the Cognition and Technology Group (Bransford, Sherwood, Hasselbring, Kinzer, & Williams, 1990a; Cognition & Technology Group at Vanderbilt [CTGV], 1997). The essence of the approach is to facilitate children's understanding of complex text using video



presentations that supply a dynamic visual support mechanism. Video presentations play an important role in assisting those readers who lack the necessary background knowledge to promote comprehension, especially among children who are at-risk with respect to literacy skills. Anchored instruction is designed to help novices transform “brute facts” into “significant ideas” (Dewey, 1933). The key strategy is to anchor (situate) instruction in meaningful environments that help novices appreciate the significance (connectedness) of new information that they encounter (CTGV, 2000). Video segments provide the information in a context that is rich enough that students can acquire the necessary background knowledge.

Video can be a powerful mechanism for engaging older struggling readers in active comprehension processing, and it can be used as a starting point for in-depth comprehension and writing activities. Although much has been written in favor of anchored instruction as a means of providing students’ with an anchor for their perceptions and comprehension (Bransford et al., 1990a; Bransford, Vye, Kinzer, & Risko, 1990b; CTGV, 1990, 1997; Goldman et al., 1996), there is very little research to document specifically the effects of this approach in the area of reading comprehension instruction for older struggling readers. The emphasis of the CTGV research design was to improve the mathematical thinking of students from grades five and up and to help them make connections to other disciplines such as science, history, and social studies. The present study explored the use of video clips as a means to help middle-level learners improve their levels of comprehension as they engaged with new and unfamiliar reading materials.

### Significance of the Study

My review of the literature revealed that there has not been any systemic, scholarly investigation of the influence of video anchors and whether they can assist middle-level learners in developing the necessary background knowledge to achieve higher comprehension levels with text-based materials. The emphasis of the CTGV (1997) research has been to improve the mathematical thinking of students from grades five and up, and to help them make connections to other disciplines such as science, history and social studies. This research project examined this premise and is informative regarding reading instruction in reading classes as well as content-area classrooms.

### Purposes and Objectives

The purpose of this study was to determine if the use of video segments as anchors (a means of activating and further developing necessary background knowledge) combined with comprehension instruction improves comprehension achievement of middle-level (Grades 7-8) students. Reading comprehension as it pertains to this study was defined as readers' reliance on text and what they already know to construct the meaning of sentences and to integrate information across sentences (Trabasso & Magliano, 1996). Constructing meaning from sentences occurs if readers can paraphrase a sentence, rendering its content in their own words while preserving the author's meaning for the reader. The construction and integration of information across text involves discovering antecedent conditions or providing reasons for the occurrence of the event, state, or activity referenced in the current sentence; or it may be future-oriented

and involve the generation of causal consequences or predictions about future actions or outcomes. This may involve having the reader enrich the interpretation of the current text by adding information to what is stated (Trabasso & Magliano).

Can this combination be a powerful mechanism for promoting active comprehension processes? Can video clips, as anchors be a means of improving literacy skills when used as a starting point for in-depth comprehension?

The following research questions were examined in this study.

1. What effect did viewing video clips as a means to anchor instruction have on the mean classroom scores of combined teacher-developed and commercially developed (*Accelerated Reader*) comprehension assessments for remedial, struggling middle-level readers?

2. How did viewing video clips related to text topics affect individual student scores on combined teacher-developed and commercially developed (*Accelerated Reader*) end of book comprehension questions?

## CHAPTER II

### REVIEW OF THE LITERATURE

#### Introduction

The ability to think constructively and participate fully in an information-based society is of utmost importance to the academic success of the adolescent learner. When involved in constructive thinking, a person is taking in new information and making inferences from various statements, circumstances, and situations. Literacy for older readers involves identifying main ideas, linking ideas, drawing conclusions and making inferences. Those skills are more advanced literacy skills than decoding (sounding out words) and fluency (Biancarosa & Snow, 2004). The construction of a useful coherent mental representation of text contains the various pieces of information provided in the text, is integrated with the readers' prior knowledge, and is easily accessed and applied in a variety of situations (Rapp, van den Broek, McMaster, Kendeou, & Espin, 2007). The 1998 Reading Report Card produced by the National Assessment of Educational Progress (NAEP, 1999) showed that fewer than 5% of the adolescents NAEP assessed could extend or elaborate the meaning of the materials they read.

Although learning how to decode accurately and fluently is a necessary part of reading, most researchers recognize it is not sufficient to ensure comprehension. Rapp and colleagues (2007) asserted that in text the referential and causal/logical relations readers must infer are not necessarily obvious. They can be numerous and complex. The process involves extensive background knowledge, and requires coordination of multiple

pieces of information. This complexity and the demands it puts on readers' processing capacities is a major source of comprehension difficulty. According to the RAND Reading Study Group (RRSG, 2002), readers must have a wide range of capacities and abilities to comprehend text, and the process of comprehension is multi-faceted involving vocabulary knowledge, text structure knowledge, knowledge of specific comprehension strategies, content knowledge, and the use of these knowledge sources simultaneously.

The demand to read and learn content-area materials increases in quantity and complexity across adolescent readers' years in school (Afflerbach, 2004). Middle-level learners who struggle with comprehending and utilizing text become frustrated, lose interest in learning, and are at-risk of failing content-area classes. A major concern is that they may be in jeopardy of never developing the intellectual tools and learning strategies needed to secure the knowledge that allows people to think constructively in advanced academic settings; struggling readers may lack a foundational understanding of subjects and concepts that will assist them in becoming independent, lifelong readers and learners.

Instruction that addresses the needs associated with comprehension is extremely important in helping struggling, middle-level readers. It is undoubtedly true that becoming literate still involves the development of some basic skills and strategies, but today low-level basic skills that merely involve surface-level decoding and the recall of information are hardly enough (Mazzoni & Gambrell, 2003). Although there is some evidence that teaching strategies helps, what these readers need is a more direct and more personally meaningful way to improve comprehension. Critical thinking and the ability

to personalize meaning to individual experience and apply what one reads or writes in the real world under many different circumstances and with many different types of texts may be the new “basics” to learning to read (Strickland, 2003). Learning is a complex activity that depends upon each person’s individual perspectives. Prior knowledge and experience influence a student’s understanding and can have a noticeable effect on their learning outcomes. Research on prior knowledge effects has made it apparent that existing knowledge provides a vital foundation for what one learns and understands about new information (Shapiro, 2004). Helping struggling, middle-level readers acquire the needed background knowledge and having them see how background knowledge influences the comprehension of text are areas that need to be addressed with regard to comprehension and utilization of text by middle-level learners. The knowledge and connections that are formed as each person reads and evaluates text are unique to the individual constructing them based upon their experiences and mental processes that occur while encountering new information. Students need to be encouraged to use their existing knowledge to facilitate their understanding of new ideas encountered in text (Duke & Pearson, 2002).

In this chapter, I first will review studies related to the effects of background knowledge on comprehension. Next, I will discuss comprehension instruction and the interplay of considering the importance of prior knowledge. Finally, I will analyze anchored instruction and how the component of utilizing video clips may enhance comprehension instruction.

## Prior Knowledge

Knowledge can be defined from many perspectives, but for the purpose of this study, knowledge signifies all that one knows or believes, without direct consideration of the source of that knowledge, its explicitness, or its veracity (Alexander, 2000).

Knowledge is not meant to convey some canon of simple factual tidbits or litany of academic “truths” (Hirsch, 1996). Rather, knowledge constitutes the realm of human understandings, whether accurate or incomplete, declarative or procedural, tacit or explicit (Alexander).

The idea that one’s knowledge base impacts one’s comprehension has a long history. Prior knowledge is strongly associated with learning outcomes and can have a substantial effect on learning. Most reading scholars acknowledge the function of background knowledge in reading. Huey (1968) believed comprehension results from recollecting “meaning feelings” called up by a sequence of words, sentences and phrases. Bartlett’s work (1932) is usually credited with being the major influence on comprehension and memory research of the 1980s. While accepting that experiences and reactions are used when something is comprehended or remembered, Bartlett dismissed the idea that memory is primarily a matter of retrieving information from an expansive warehouse of traces of certain past events. Instead, he maintained that specific memories are reconstructed at the occasion of recollection based on schemata (mental representation of generic and specific concepts about the outside world).

Turning to more recent influences, Ausubel (1963) believed that knowledge is structured in a hierarchical fashion, with the most abstract and inclusive ideas at the apex.

According to Ausubel (1963 p. 25; Ausubel & Robinson, 1969), in meaningful learning, already-known general ideas “subsume” or “anchor” the new particular ideas found in texts. This only occurs when the existing ideas are stable, clear, differentiated from other ideas, and directly connected to the ideas that need to be understood. The reader must be aware of the aspects of his knowledge that are relevant to this process.

The early research conducted in the late 1970s and early 1980s that demonstrated the effects of background knowledge on comprehension from a schema theory perspective were extensively reviewed by Anderson and Pearson (1984). Schema theory implies that each child brings a unique set of experiences and knowledge to reading. If additional knowledge of a topic is added to the existing schemata of a reader, there will be an improvement of comprehension and engagement. The results of this review indicated three areas that needed to be addressed based on the research reviewed. The first was that poor readers are likely to have gaps in knowledge and, because what a person already knows is a principal determiner of what one comprehends, the less one knows the less they can comprehend. Next, poor readers are likely to have impoverished understanding of the relationships among the facts they do know about a topic. Arbitrary facts and random information are a source of confusion, slow learning, slow processing, and unsatisfactory reasoning. The final area was that poor readers are unlikely to make the inferences required to weave the information given in a text into a coherent overall representation. Poor readers do not seem to realize that all the information must be used, the information must fit into place, and the completed interpretation must make sense.

For example, Anderson, Reynolds, Schallert, and Goetz (1977) conducted a study



in which 30 physical education students and 30 music education students read two passages about 145 words in length. The first passage could be interpreted either from a prison break or a wrestling perspective, and the second passage could be understood in terms of an evening of card playing or a rehearsal session of a woodwind ensemble. Each participant read the first passage, completed an interpolated vocabulary test, and then attempted a free recall of the first passage. Next, they read the second passage and worked on another form of the vocabulary test before attempting a free recall of the second passage. The participants then completed a multiple-choice test for both passages. Each multiple-choice question had two correct answers, one for each interpretation. Finally, the participants completed a debriefing questionnaire and autobiographical inventory. The items in the inventory were intended to tap matters that could be expected to relate to the interpretations given to the passages. The results indicated that people's personal history, knowledge, and beliefs influence the interpretations that the participants will give to prose passages. Scores on the multiple-choice and free-recall tests showed striking relationships to the subject's background. The fact that most participants gave each passage one distinct interpretation or another and reported being unaware of other perspectives while reading suggest that background knowledge can cause a person to see a message in a certain way, without even considering alternative interpretations.

Several other researchers also suggest that text comprehension is dependent on prior knowledge. Voss and his colleagues were some of the first to provide evidence that domain-specific knowledge influences understanding (Chiesi, Spilich, & Voss, 1979; Means & Voss, 1985; Voss & Silfies, 1996; Voss, Vesonder, & Spilich, 1980). Chiesi

and colleagues found that adult readers with high baseball knowledge recalled more information about a baseball game than low-knowledge readers did. The researchers concluded that the former subjects employed their knowledge of the domain of baseball during reading to construct and organize a more coherent representation of the text.

In another study, Lipson (1982) had third graders read eight expository passages. Before reading, the children took a pretest to determine whether they were familiar with information that would be presented in the texts. The pretests provided a measure of what information each student knew, did not know, or had misconceptions about for each text. The findings indicated that young readers might simply reject text information if they believe they already possess the “correct” interpretation. Even when prior knowledge was contradicted by the text, subjects used it, rather than the textual information, to answer questions. In this study, young readers were remarkably impervious to changing their schemata regarding familiar topics. Only when third-grade subjects in the study did not possess much knowledge prior to reading did they resort to the text for item recognition, with a consequent improvement in their post-reading comprehension scores. The implications of this study are that having adequate background knowledge is extremely important to both good and poor young readers, and it can actually equalize reading ability. However, poor- or low-level readers are not necessarily going to use text to assist themselves with item recognition and information access but tend to rely on their inaccurate background knowledge due to meta-cognitive skill issues. This suggests that it is important to help poor readers acquire the appropriate background knowledge.

Stanovich (1986) proposed in a review of the ever-growing body of literature on individual differences in the cognitive skills related to reading that individual differences in reading could be attributed in part to better readers having a stronger information knowledge base and more opportunities for skill practice, allowing them to continue to race ahead, thereby further building their knowledge base. He referred to this as “Matthew effects” in which the rich (good readers) get richer in reading. There are several factors contributing to the Matthew effects in reading development. Reading exposure, reading volume and vocabulary acquisition are all part of an active organism-environment relationship. Children who become better readers have selected, shaped and evoked an environment that is conducive to further growth in reading. They choose to read as a leisure activity, ask for books as presents, and their parents notice that looking at books is enjoyed. Thus, the parents facilitate their child’s interests and curiosity; children who lag behind in reading achievement do not construct such an environment.

Recently detailed models of comprehension have been developed by Graesser, Singer, and Trabasso (1994), Kintsch (1988), and van den Broek (1988). Probably the most widely known is that of Kintsch. He suggested that when readers comprehend text they mentally build meaning representations at multiple levels. The three levels of representation are the microstructure, macrostructure, and situation model. The microstructure is a temporary integrated representation of all the detailed ideas from a text. These ideas are reduced into a macrostructure that represents the gist or most important ideas. Together the microstructure and macrostructure form a text base that represents the reader’s memory for the literal meaning of the text. The text base supports

rote recall and recognition memory for information that has been heard or read. Readers who go beyond the literal meaning and can use the ideas to draw inferences and solve problems have formed situation model representations in which the text ideas are integrated with background knowledge. The situation model supports learning from text. The situation model, then, may be thought of as the storehouse for deeper understanding of written material. A more involved form of processing is required to create a situation model, as the new information must be integrated with prior knowledge and experiences.

Kintsch has conducted numerous studies that provide support for this theory and show the effects of background knowledge on comprehension. For example, McNamara, Kintsch, Songer, and Kintsch (1996) conducted a study with middle-school students. Rather than providing them with tutorials designed to build prior knowledge, they assessed existing prior knowledge with pretests and used those scores to examine the relationships between prior knowledge, text coherence, and learning. An interaction between the text coherence and prior knowledge level was found. Participants between the ages of 11 to 15 with high prior knowledge tended to score better on posttests of meaningful learning, such as inference making and problem solving, when presented with minimally detailed or less coherent text. For the low prior knowledge participants this pattern of results was reversed. Explicitly coherent text was most effective for both the recall and situation-model measures, which supports the prediction that participants who are unable to do inferential processing on their own (use prior knowledge to connect text ideas) require a text that does that for them.

Control of the fundamental decoding skills and the ability to access vocabulary

knowledge and other prior knowledge rapidly allow children to make sense of what they read quickly and easily. When students are presented with a means of comparing new information with something familiar, comprehension and retention also improve (Alexander & Murphy, 1998). Not only does lack of knowledge about a topic impede comprehension, McKeown, Beck, Sinatra, and Loxterman (1992) showed a connection to the extent of knowledge influences and the quality of understanding that a reader constructs. In their study, they provided 48 fifth graders with relevant background knowledge through a carefully prepared knowledge module about the American Revolution that was part of an experimenter-led presentation. Students were then assigned to one of two text conditions: the original text material from a fifth-grade social studies textbook or a revised more explicit version of the text. The results showed that students who read the revised text recalled significantly more material and answered significantly more questions correctly than those who read the original text. The combination of background knowledge in addition to more coherent text resulted in better comprehension for the students assigned to that text condition.

Kozminsky and Kozminsky (2001) examined the relationship between general knowledge, skills in applying reading strategies, and reading comprehension with 205 ninth-grade students at varying educational levels: academic, semi-academic, vocational students, and students with learning disabilities. Academic students were defined as students who were expected to complete a full high school program and succeed in a full course of the national matriculation examinations. Semi-academic students were defined as students who were expected to complete the full high school program, take the school

examinations, obtain a high school diploma, and take a few of the national matriculation examinations. Vocational students were defined as students who only were expected to complete the high school program and obtain a diploma. Students with learning disabilities were students who were diagnosed by psychological services as disabled and placed in special classes. They were expected to complete 12 years of schooling and obtain a diploma. All participants received a battery of tests evaluating their general knowledge, skills in applying four reading strategies (summarizing, self-questioning, clarifying, and predicting), and two reading comprehension tests. The findings revealed differential contributions of general knowledge and strategy application to reading comprehension. The researchers compared the academic students with semi-academics and found the semi-academic students lacked strategic skills. The vocational students lacked strategic skills and had poor general knowledge, which further impeded their reading comprehension. The low achievement of students with disabilities went beyond skills and general knowledge. The results led the researchers to recommend different foci of comprehension intervention for each of the groups. Some readers need help building prior knowledge, others need strategies and skills and some need both. The study, therefore, suggests comprehension instruction on strategies alone is not sufficient.

Bransford, Stein, and Vye (1982) investigated the differences in approach to learning that academically successful and less successful fifth graders had with explicit and implicit text. The results suggested that less successful students do indeed frequently fail to activate knowledge that can help them understand and remember new information. The less successful students could decode quite effectively, but even when they have the

necessary prior knowledge, they may fail to activate and utilize it to help them comprehend implicit or explicit texts. The less successful students in the Bransford and colleagues study took a much more passive approach to the problem of learning the information. Their primary mode of study was to simply reread the passage and once they had reread the passage, they deemed themselves ready for the test.

Taken together, the studies reviewed in this section repeatedly demonstrate the effects of activating and utilizing background knowledge on reading comprehension. Nevertheless, current models of reading comprehension instruction focus on the decoding and strategy development.

Hirsch (2003), for example, pointed out that after several decades of research on reading comprehension from varied angles in the humanities and sciences, there is current scientific agreement on three principles that have implications for improving students' reading comprehension. The three areas are fluency, breath of vocabulary (a measure of prior knowledge) and domain knowledge. He also made the point that if readers do not know a domain, they cannot construct a meaningful situation model of what is being read or heard. Reading and listening require readers to make inferences that depend on prior knowledge, not on decontextualized "inferencing" skills or strategies, to form a coherent representation of the meaning of a text.

Decades of research on prior knowledge effects have made it clear that existing knowledge provides an important foundation for new knowledge and that the level of existing knowledge largely determines the amount and kind of information that students comprehend and learn (e.g., Bransford & Johnson, 1972; Lipson, 1983; Voss & Silfies,

1996). General knowledge is likely to expedite reading comprehension when it entails a rich accumulation of ideas, experiences and terms, allowing the reader to more easily understand material that is varied and extensive (Koziminsky & Kozminsky, 2001). Nevertheless, research concerning background knowledge effects appears to be being ignored (Shapiro, 2004), while strategy instruction is becoming the dominant approach to comprehension instruction.

Although there has been a significant amount of research recently focusing on differences in vocabulary development, fluency, and phonemic awareness and how they might be acquired, there has been relatively little discussion of differences among children in content knowledge and its relationship to achievement (Neuman, 2006). This is a critical oversight because indications are that limited content knowledge might ultimately account for what appear to be comprehension difficulties (Vellutino et al., 1996) or higher-order thinking difficulties in older children.

Reading teachers and specialists are often faced with readers who have difficulty comprehending and recalling text for various reasons. They may have those readers who can decode text adequately but have little prior knowledge or do not know how to apply the knowledge they have while reading. These readers tend to over rely on accurate word processing or text-based comprehension. When readers lack background knowledge they cannot form a situation-model so that they do not interpret themes and morals, the higher order comprehension levels when reading (Kintsch, 1988). What readers might be able to do is recall and remember, but what we want are readers who are able to interpret the material they are reading.



## Comprehension Instruction

In the world of educational research, reading comprehension instruction is a component that is rich in practices, designed to improve reading comprehension. Where an actual practice begins, depends on how one chooses to define reading comprehension and instruction. However, between 1978 and 1981 comprehension instruction moved to the forefront of educators' awareness with four publications. First, Pearson and Johnson (1978) wrote *Teaching Comprehension*, which was less than 250 pages long, and only one of its chapters would be regarded today as pertinent to comprehension instruction. The second publication was Durkin's (1978-1979) *Reading Research Quarterly* article. Durkin's work reveals that the teaching profession at that time did little in the way of providing instructional time on "how" to actually carry out any of the comprehension skills included in the reading curriculum. Educators were good at testing comprehension, but did little to teach it. This study probably did more than any other to motivate researchers to design and carry out research concerning comprehension instruction by any definition. The third and final publications were published in 1981. Santa and Hayes's (1981) *Children's Prose Comprehension: Research and Practice* included two chapters describing the kinds of comprehension skills presented within the leading basal reading series, and *Comprehension and Teaching: Research Reviews* (Guthrie, 1981) was published by the International Reading Association and included 12 chapters dedicated solely to research about comprehension instruction.

In 1984, Tierney and Cunningham assembled a breakthrough chapter in the first volume of the *Handbook of Reading Research*. This chapter was significant because it

was the first to make the distinction between research that examines instructional interventions as a means of increasing comprehension and research that examined what causes readers to comprehend better than they would under other circumstances. Another important aspect of the Tierney and Cunningham review was the fact that they caution the reader about the mechanistic character of much of the research concerning improving students' ability to comprehend on their own, particularly the strategy instruction research. They wondered whether the emphasis on the systematic and sequential had been achieved at the expense of the aesthetic aspects of reading.

Block and Pressley (2002) stated that nearly 30 years have passed and many educators have continued or taken up the cause of working to improve students' understanding of what they read. A large share of the research attention in recent years has gone to the role of the teacher as the deliverer of explicit instruction in how to perform comprehension skills and strategies. Comprehension strategies instruction was an important concern of reading researchers during the 1970s and 1980s. A number of strategic processes were studied, including activating background knowledge, generating images, analyzing text for story grammar elements, summarizing and questioning (Pressley, Johnson, Symons, McGoldrick, & Kurita, 1989), however, most of these studies dealt with teaching and having students use a single strategy. Although there were notable studies on the effect of background knowledge and its impact on comprehension (Anderson et al., 1977) and the interactive effect of background knowledge and strategies instruction on comprehension (Pichert & Anderson, 1977), the outcome measures still tended to focus on "objectively" correct main ideas and low-level

inferences. In most strategies instruction studies, students' interpretations during post reading testing were scored "correct" only when consistent with decidedly text-based interpretations.

Singer and Donlan (1982) examined a problem-solving schema for comprehending short stories that was improved by construction of schema-generated questions. The questions were based on five basic characteristics of a short story or a schema for stories: (a) the leading character, (b) the character's goals, (c) obstacles, (d) outcomes of the character's struggle to achieve goals, and (e) the theme, the underlying idea that caused the author to write the story. Fifteen 11<sup>th</sup>-grade students randomly assigned to an experimental group were instructed on how to derive story-specific questions from the general story schema questions as they read complex short stories. A comparison group simply read to answer questions posed beforehand by the teacher. Each group read six short stories over a 3-week period. Criterion-referenced tests administered after each story resulted in statistically significant differences between the two groups. The results suggested (a) that instruction can help students improve in reader-based processing of text and (b) the need for more adequate schemata and appropriate cognitive structures with strategies for processing, storing, and retrieving information for reading complex short stories. Those students who were assigned to the experimental group showed significant improvement when applying schema-general questions to complex stories and utilizing a strategy of generating story-specific questions from the schema-general questions.

In a fourth study, Dole, Valencia, Greer, and Wardrop (1991) conducted one of

the few studies comparing the relative effectiveness of two prereading instructional treatments designed to build and activate students' prior knowledge. The researchers randomly assigned fifth-grade students to three groups. These were (a) a teacher-directed condition in which teachers read prepared scripts designed to provide students with important information necessary for understanding up-coming texts, (b) an interactive condition in which teachers activated and discussed students' prior knowledge about the topics of up-coming texts, and (c) a control condition in which no pre-reading instruction was provided. The results of this study provided evidence that the teacher-directed strategy instruction was more effective than the interactive instruction. When students were given carefully structured information about concepts and ideas important to an understanding of the upcoming text, they comprehended the text better than when they were engaged in activities to activate, discuss, and integrate their prior knowledge about those same concepts and ideas.

Starting in the 1990s researchers began to investigate efforts of multiple strategy instruction. Anderson (1992), for example, investigated effects of an intervention for providing teachers with strategies for helping adolescent delayed readers take an active approach to reading informational texts. Nine experimental, seven control teachers and their students took part. Experimental teachers received peer support from previously trained teachers and took part in self-evaluative workshops as they applied strategic reading techniques with their students. Students participating in the study were from Grades 6 through 11. The primary purpose was to investigate how and whether the transactional teaching atmosphere resulted in related changes in student performance

during reading instruction. Transactional teaching refers to dynamic instruction through a wide range of reading strategies in interactive settings. It also emphasizes the teacher's ability to provide explicit explanations of thinking processes. Further, it emphasizes the ability of teachers to facilitate student discussions in which students collaborate to form joint interpretations of text and acquire a deeper understanding of the mental and cognitive processes involved in comprehension.

The findings of the study were in two different categories.

1. Training teachers in the area of transactional instruction and whether there would be a positive impact in the classroom.

2. The impact on student learning with teachers receiving teacher development training in transactional strategy instruction.

Concerning the area of teacher development within a transactional approach, the nature of classroom discussion of content area texts was plentiful and generally showed that the most common, stable and enduring mode of such instruction is recitation, where the teacher models their thinking processes, encourages student inquiry and keeps their students engaged in the review about their reading assignments. Teachers and students' sharing of reading problems was another feature of the transactional approach to instruction.

In addressing the results as they pertained to the students, the findings indicated that, indeed, a change in teacher interaction was reflected in their students. Students were more involved and willing to acknowledge reading problems and attempt to solve them, demonstrating that transactional instruction can help diminish some of the passivity and

resistance often found in adolescent poor readers. Analysis of reading comprehension subtest showed that experimental students made gains with approximately 80% of the experimental group compared to 50% of the control group. The results spoke well for any form of explicit instruction with informational text, but also indicated that transactional strategy training may be more effective for text comprehension in that it helps teachers to go beyond decoding problems and focus on text meaning in more productive and transferable ways.

Gaskins, Anderson, Pressley, Cunicelli, and Satlow (1993) utilized a discourse analysis procedure developed at the Benchmark School to analyze 18 lessons produced by six teachers. All six teachers were committed to transactional strategies found in the Benchmark model, which are designed to be flexible and adaptive for dealing with situations and to be consciously applied within a larger understanding of the sense-making function of reading. The findings indicated that the teachers tended to select one or two strategies for instructional focus, with these focus strategies varying from lesson to lesson and from teacher to teacher. The teachers explicitly reminded their students to use a number of strategies that had been taught previously. The most frequent of these previously taught strategies were (a) asking for clarification, (b) visualizing or picturing, (c) surveying, (d) accessing background knowledge, and (e) having materials open to the right page when class began. Typically, two to four nonfocal strategies would be cued during a 20- to 40-minute lesson. Thus, the use of multiple strategies was orchestrated in any given unit of instruction. In lower-level classes teachers devoted more time to content only due to the inability of the students to read the texts independently. In contrast, the

better readers possessed adequate reading ability and background knowledge to deal with both content and process simultaneously, but in the case of poor readers, they required the assistance of the teacher to process the content.

In another study, Reutzel, Smith, and Fawson (2005), evaluated two approaches for teaching comprehension strategies to 7- and 8-year-old children in four second-grade classrooms using science information texts. The first approach focused upon explicitly teaching a series of single comprehension strategies, one at a time (SSI). The second approach focused on teaching a “set” or “family” of transacted comprehension strategies within a collaborative, interactive and engaging routine (transactional strategies instruction [TSI]). Results showed no difference between the TSI students and SSI students on a standardized test of reading comprehension performance, recall of main ideas, a reading motivation survey, and strategy use survey. However, results did show significant differences between TSI students and SSI students on measures of elaborated knowledge, retention of content knowledge, and curriculum-based reading comprehension test scores. The TSI students out performed in these categories. The strategies may have been a means of getting the readers more actively involved in the content. TSI fosters the learning of how to appropriately select, coordinate, and apply cognitive strategies across content areas and across different texts (Dole, Nokes, & Drits, 2009). The inclusion of readers linking text with prior knowledge to construct meaning is one of several underlying principles of TSI instruction.

Most of the recent research on comprehension instruction addresses teaching students to use multiple comprehension strategies, but it makes sense to do all things

possible to encourage students to develop worthwhile world knowledge through reading and other experiences. Sinatra, Brown, and Reynolds (2002) explained that the number of strategies teachers ask students to learn may present a challenge for cognitive resource allocation. If students are taught to apply a large number of strategies during the reading process, they also develop the perception that all texts require ongoing deliberate processing. As they attempt to do what they have been instructed, they may be overwhelmed by the sheer number of tasks they must perform, and comprehension may actually suffer.

Readers often do not relate what they are reading to what they already know. Combining knowledge based on extant research examining comprehension with ways of encouraging more extensive use of prior knowledge by at-risk readers may be a means of having readers relate what they encounter in text with what they already know.

### Anchored Instruction

Anchored instruction is the use of computers and videodiscs to create rich problem-solving environments that serve as shared contexts for exploration and discussion (Bransford, Kinzer, Risko, Rowe & Vye, 1989). Ideally, anchored instruction involves a problem-oriented approach to instruction with sustained thinking in groups about the problems. It permits students to integrate skills and knowledge that in many classrooms remain disconnected. Anchored instruction does not presuppose extensive background knowledge, but was developed to give teachers and students the opportunity to work cooperatively to acquire knowledge from a shared experience perspective



(McLarty et al., (1989). From the anchored instruction perspective, a primary goal is to create realistic, interesting contexts to encourage active knowledge construction by students.

The work of several theorists was examined and became significant in the origination of the anchored instruction concept. Insights were combined from (a) Dewey (1933) about using theme-based learning; (b) Gragg (1940) on the use of case-based instruction and the advantages stemming from it; and (c) Dewey (1933) and Hanson (1970) who both emphasized the differences between expert and novice knowledge (CTGV, 1990).

Utilization of video as a means of providing background information concerning a target event or problem situation is a major premise of anchored instruction. It is a means of creating a rich context that facilitates the development of shared experience, or an “anchor,” to aid learning. Video-based anchors also allow teachers to provide instruction that is more inclusive because the use of video bypasses the text, thereby enabling students with or without disabilities to have increased access to content. Thus, non-successful readers can be active participants in the learning process, thereby enhancing their motivation to participate in academic activities (Kinzer, Gabella, & Rieth, 1994).

The idea of anchored instruction can be illustrated by the CTGV Young Sherlock project (Bransford et al., 1989). The CTGV group worked with teachers and their fifth-grade classes of below-average and average fifth-graders for approximately 4 hours each week for the entire school year. The project was designed to help students learn language arts and social studies content. For the experimental group, all instruction is anchored

(situated) in a macrocontext that involves explorations of the movie *The Young Sherlock Holmes* (the major anchor) and *Oliver Twist* (a secondary anchor situated in the time period as Sherlock). In the study, students were encouraged to “play Sherlock” and check the details of the Sherlock movie for authenticity. Early in the Sherlock film, a young Watson notes that he is in London in December in the middle of the Victorian Era. The first ten-second scene contained a number of clues that students could explore for more detail. If the date is 1880s to 1890s, is it accurate for Watson to be riding in a horse-drawn carriage rather than using other transportation? Other scenes were used to invite inquiry concerning dress, lighting, transportation, chemistry, physical education, and type of school. The movie was used to provide a wealth of issues that could be explored. In looking for interesting issues, the researchers’ intent was for the students to learn to find and define their own problems, once they had identified particular issues, students would develop important information finding skills. Much was published describing the study, but actual published data concerning this study was not found.

The premise of anchored instruction is the utilization of video in an attempt to develop a rich context in which the viewer can develop necessary background knowledge. Assisting struggling middle level readers in developing the necessary background knowledge for higher levels of comprehension of text was the challenge of this study. Strong, historical anchors that link events from around the world presented in a vivid manner. Video as a visual representation of the content found in the text used as a means of assisting students’ ability to integrate knowledge from a historical perspective can be enhanced, thus increasing their ability to comprehend complex text.

## Summary of Literature Review

In this Chapter, I synthesized the literature that exists in three areas: (a) prior knowledge, (b) comprehension instruction, and (c) anchored instruction. In the first section, prior knowledge, I delved into research studies that emphasized the importance of prior knowledge and one's ability to activate it as part of the comprehension process. In section two, comprehension instruction, I explored research studies that focused on strategy instruction that incorporated either the generation of background knowledge or the accessing of it as part of comprehension instruction. In section three, anchored instruction I examined research studies that permitted students to integrate skills and knowledge through the utilization of video in an attempt to develop a rich context in which the viewer can develop necessary background knowledge.

The need clearly existed to examine whether the using of video anchors with struggling middle level readers assisted them in increasing their comprehension scores. This study was designed to answer the following questions.

1. What effect did viewing video clips as a means to anchor instruction have on the mean classroom scores of combined teacher-developed and commercially developed (*Accelerated Reader*) comprehension assessments for remedial, struggling middle-level readers?
2. How did viewing video clips related to text topics affect individual student scores on combined teacher-developed and commercially developed (*Accelerated Reader*) end of book comprehension questions?

## CHAPTER III

### METHODS AND PROCEDURES

#### Introduction

Single-case experimental research designs are popular and acceptable ways to conduct classroom-based research. Single-case or single-subject, experimental research design can personalize the data collection process because data are collected on each subject, or participant, and are analyzed individually (Neuman & McCormick, 1995). Single-case designs provide a methodological approach that permits experimental investigation with single groups.

The methodology for this study was a single subject research design employing a reversal design. I gathered data from two reading intervention classes with a total of 17 participants. The instructor for this class has a doctorate in curriculum and instruction with a literacy emphasis. The goal of this research was to see if video clips could be used to assist students in gaining the necessary prior knowledge for comprehension of text.

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*Reader*) end of book comprehension questions?

Chapter III is organized to provide a description of the methods and procedures that were utilized to address the above research questions. In this Chapter, I will describe the (a) participants, (b) intervention setting, (c) independent and dependent variables, (d) experimental design, (e) procedures, and (f) data collection procedures.

### Participants

The study took place with a two groups of students enrolled in reading intervention classes in a rural middle school in the Intermountain West. One group was made up of eight seventh-grade students and the second group was made up of nine eighth-grade students for a total of 17 participants. Of the 17 participants, 11 were Caucasian male and six were Caucasian female. The reading levels of the participants ranged from 3<sup>rd</sup> percentile to 64<sup>th</sup> percentile based on their total score on the Gates-MacGinite Reading Test (GMRT), Form S that was administered at the beginning of the 2007-2008 school year. The students were Tier 2 students based on the state's Tier Model of Literacy Instruction. The state Three Tier Model of Literacy provides a process for delivering comprehensive, quality reading instruction for all students, from kindergarten through high school. The model consists of three tiers, or levels, of instruction: Tier 1, Tier 2, and Tier 3. Tier 1 refers to core classroom instruction for all students to teach critical elements outlined in the state's core curriculum. These students are progressing as expected in their regular progression of state's general education curriculum standards. Tier 2 students are those students who are not progressing as

expected in some part of the general education curriculum and lacked adequate progress. When a student is not progressing as expected in some part of the general education curriculum, they are considered Tier 2 and should receive supplemental target instruction up to 60 minutes per day. Tier 3 is for students who have not responded adequately to at least one round of Tier 2 instruction. These students usually have severe reading difficulties.

Placement in the intervention reading class was determined by factors within district and school policy. One criterion for inclusion was failure to achieve adequate yearly progress on the 2007 end-of-year grade level Language Arts Criterion Referenced Test (CRT). The Criterion Reference Test is used by the State Office of Education for the purpose of the student assessment requirement of No Child Left Behind legislation. Test results on the language arts CRT place students in one of four categories: Level 1 (minimal mastery), Level 2 (partial mastery), Level 3 (sufficient mastery), and Level 4 (substantial mastery). The percentage scores represent the students' total percentages on the language arts section of the CRT. Students who were considered not proficient, those scoring at either Level 1 or Level 2 on the language arts CRT were the participants of the study. The second criterion that was important in placing a student in a reading intervention class was the recommendations of school administration, the school reading specialist/teacher and the school counselor. During the 2007-2008 school year, participants who were Level 1 or Level 2 were placed in an additional reading class that included encouragement of purposeful reading, as well as instruction about how to answer various types of comprehension questions, and how to follow text structure.

Placement in the class allowed for additional practice reading to solidify and extend learning. Each of the participant's placement data is presented in Table 1.

At the beginning of the 2007-08 school year at the middle school where the participants of this study attend, all students are assessed utilizing the GMRT. The GMRT is a norm-referenced standardized test that measures a student's level of reading achievement. The 17 participants' GMRT reading levels and percentile rank are presented in Table 1. All 17 participants based on the information contained in Table 1 and school criteria were Tier 2 students requiring 60 minutes of additional reading instruction in their school day. The 17 students who participated in this study are described next using a random pseudonym.

Table 1

*Participant's Placement Data*

Participant	GMRT percentile rank	GMRT grade equivalent	State CRT percentage	State CRT level
7-1	16	5.0	67	2
7-2	25	5.5	65	2
7-3	40	6.4	63	2
7-4	10	4.4	68	2
7-5	62	8.4	67	2
7-6	64	8.5	56	2
7-7	30	5.8	47	2
7-8	28	5.7	65	2
8-1	24	6.1	40	1
8-2	12	5.0	69	2
8-3	8	4.5	52	2
8-4	3	3.8	29	1
8-5	15	5.3	40	1
8-6	8	4.5	39	1
8-7	16	5.0	52	2
8-8	17	5.5	58	2
8-9	12	5.0	29	1

Gina (Participant 7.1) was a 12-year-old seventh-grade female. Her percentile rank was 16 with a corresponding 5.0 grade equivalency (GE) on the GMRT. Gina was a Level 2 based on her 2007 end-of-year CRT with a percentage score of 67. Her attendance was very good with seven absences for the entire 2007-08 school year (96% attendance). Gina was a very hard worker and always gave her best effort in everything she did in or outside of class. She has been participating in a reading intervention class since fifth grade.

Berklee (Participant 7.2) was a 12-year-old seventh-grade female. Her percentile rank was 25 with a corresponding 5.5 GE on the GMRT. Berklee was a Level 2 on her 2007 CRT with a percentage score of 65. She missed 27 days of the school year (85% attendance). Berklee was not very conscientious about her work or completing work that she missed when she was absent. This was Berklee's first year in the reading intervention class.

Kurbie (Participant 7.3) was a 12-year-old seventh-grade female. Her percentile rank was 40 with a corresponding 6.4 GE on the GMRT. Kurbie was a Level 2 on her 2007 CRT with a percentage score of 63. She missed 9 days of the school year (95% attendance). Kurbie worked very hard and she wanted to improve her reading scores and become a better reader. Kurbie first participated in a reading intervention class in fifth grade, scored high enough on her end-of-year testing not to be required in the program and then returned due to low-test scores during her sixth-grade year.

Aggie (Participant 7.4) was a 12-year-old seventh-grade female. Her percentile rank was 10 with a corresponding 4.4 GE on the GMRT. Aggie was a Level 2 on her



2007 CRT with a percentage score of 68. She missed 17 days of the school year (90% attendance). Aggie had her good days where she would participate, focus and give a strong level of effort, but there were days where she did not to participate in class discussions or complete her required work. Aggie started in a reading intervention class in sixth grade.

Ryan (Participant 7.5) was a 12-year-old seventh-grade male. His percentile rank was 62 with a corresponding 8.4 GE on the GMRT. Ryan was a Level 2 on his 2007 CRT with a percentage score of 67. He missed 16 days of the school year (91% attendance). Ryan was not working to his fullest potential. He was a much better student than what he actually produced for class. This was Ryan's first year in an intervention class.

P.J. (Participant 7.6) was a 12-year-old seventh-grade male. His percentile rank was 64 with a corresponding 8.5 GE on the GMRT. P.J. was a Level 2 on his 2007 CRT with a percentage score of 56. His attendance was very good with nine absences for the entire school year (95% attendance). P.J.'s quality of work and effort depended totally on his mood. This was P.J.'s first year in a reading intervention class.

Kobie (Participant 7.7) was a 12-year-old seventh-grade male. His percentile rank was 30 with a corresponding 5.8 GE on the GMRT. Kobie was a Level 2 on his 2007 CRT with a percentage score of 47. He missed 28 days of the school year (89% attendance). Kobie had many personal issues that stood in his way. He had family members with severe health issues, a relative he was very close too was in the military and being deployed to the Middle East. He just could not seem to work through the

personal issues and concentrate on school. Kobie has been participating in a reading intervention class since fifth grade.

Lynn (Participant 7.8) was a 12-year-old seventh-grade male. His percentile rank was 28 with a corresponding 5.7 GE on the GMRT. Lynn was a Level 2 on his 2007 CRT with a percentage score of 65. He missed 12 days of the school year (93% attendance). Lynn really did not see the importance of school; he was just going to farm and raise animals. Lynn has been participating in a reading intervention class for the last year and a half. He entered an intervention class in the middle of his sixth-grade year.

Teddy (Participant 8.1) was a 13-year-old eighth-grade male. His percentile rank was 24 with a corresponding 6.1 GE on the GMRT. Teddy was a Level 1 on his 2007 CRT with a percentage score of 40. He missed 40 days of the school year (78% attendance). Teddy had so much potential but with family issues dividing his attention and attendance, he just was not able to really show what he was truly capable of doing. This was Teddy's first year in an intervention class.

Rylee (Participant 8.2) was a 13-year-old eighth-grade female. Her percentile rank was 12 with a corresponding 5.0 GE on the GMRT. Rylee was a Level 2 on her 2007 CRT with a percentage score of 69. She missed 11 days of the school year (94% attendance). Rylee did not appear to be focused on the class material and assignments. Several of her assignments and class work were incomplete. This was Rylee's first year in a reading intervention class.

Ramona (Participant 8.3) was a 13-year-old eighth-grade female. Her percentile rank was eight with a corresponding 4.5 GE on the GMRT. Ramona was a Level 2 on

her 2007 CRT with a percentage score of 52. She missed 22 days of the school year (88% attendance). Ramona was more concerned with a particular male classmate and she appeared to have no real interest in putting in the level of practice she would need to increase her reading levels. Ramona has been in a reading intervention class since sixth grade.

Bridger (Participant 8.4) was a 13-year-old eighth-grade male. His percentile rank was three with a corresponding 3.8 GE on the GMRT. Bridger was a Level 1 on his 2007 CRT with a percentage score of 29. He missed 32 days of the school year (82% attendance). Bridger's ADHD was a problem; along with being tardy to school a great deal of the days he actually attended. Bridger saw no importance to reading and engaging in the lessons and material presented in class. He has been participating in an intervention class since fifth grade.

Heath (Participant 8.5) was a 13-year-old eighth-grade male. His percentile rank was 15 with a corresponding 5.3 GE on the GMRT. Heath was a Level 1 on his 2007 CRT with a percentage score of 40. He missed seven days of the school year (96% attendance). Heath was very disconnected from school; he saw no importance to what he wanted to do and what he did in school. He has been participating in a reading intervention class since fifth grade.

Thomas (Participant 8.6) was a 13-year-old eighth-grade male. His percentile rank was eight with a corresponding 4.5 GE on the GMRT. Thomas was a Level 1 on his 2007 CRT with a percentage score of 39. He missed nine days of the school year (95% attendance). Thomas's ability was very low, but he tried very hard and in some respects

did better than those who had much higher ability levels. He really became interested in reading the two years he attended class. This was Thomas's second year in a reading intervention class.

Mark (Participant 8.7) was a 13-year-old eighth-grade male. His percentile rank was 16 with a corresponding 5.0 GE on the GMRT. Mark was a Level 2 on his 2007 CRT with a percentage score of 52. He missed 15 days of the school year (92% attendance). Mark has a hearing loss; it was a factor in his reading ability. He tried to do his best in the work that he completed in class, but at times, he would become discouraged and lose confidence. This was Mark's first year in a reading intervention class.

Ray (Participant 8.8) was a 13-year-old eighth-grade male. His percentile rank was 17 with a corresponding 5.5 GE on the GMRT. Ray was a Level 2 on his 2007 CRT with a percentage score of 58. He missed eight days of the school year (96% attendance). Ray lacked the motivation and interest needed to bring his scores up. He had been in the class for two years and saw it as an opportunity to be with the people to whom he was connected. This was his first year in a reading intervention class.

Andy (Participant 8.9) was a 14-year-old eighth-grade male. His percentile rank was 12 with a corresponding 5.0 GE on the GMRT. Andy was a Level 1 on his 2007 CRT with a percentage score of 29. He missed 71 days of the school year (60% attendance). Andy had attendance issues and felt that rules did not apply to him. He felt he could do whatever he wanted to do because of his athletic abilities. He never assumed responsibility for his schoolwork, and it was always everyone else's job to get him to a passing grade. Andy has been in an intervention class since fifth grade.

## Participant Confidentiality

All procedures in the IRB assurance document at Utah State University were addressed for this study. Obtaining voluntary and written informed consent, maintaining documentation of consent forms and protecting confidentiality of research subjects were main points within the document.

When conducting research with human participants, particularly minor children, it is extremely important to maintain the confidentiality of the participants while at the same time having methods in place for accurately working with the data. The classroom teacher explained disclosure statements, informed consent documentation, and signed documentation was returned to the classroom teacher to ensure anonymity. Parental permission for student participation was obtained by written consent (see Appendix A for a copy of the permission letter).

## Intervention Setting

The study took place in a regular education classroom located in a rural school in the Intermountain West on the backside of a beautiful mountain range. The classroom was a 945 square feet with 15 desks and five 4-foot-long tables with unattached chairs. The teacher had a podium at the front of the classroom where she placed an audio player that was used to play recordings of seven of the eight book titles used in this study. The eighth book was read aloud by the teacher. The entire back wall of the room served as a bulletin board where the teacher had many different posters and student-generated book talk posters from her advanced and intervention reading classes. The classroom also

contained many book displays and was bright, inviting, and stimulating. The teacher also had a book nook where there was a classroom library with hundreds of titles and many genres present. The teacher had also provided large pillows for seating during free reading time.

The teacher who instructed the participating students during the study had a doctorate in curriculum and instruction with a literacy emphasis and a Utah Level I Reading Endorsement. The teacher had been working with many of the participants since they entered fifth grade at the middle school and had a high level of knowledge and understanding of their needs, interests, and abilities.

#### Dependent Variable

The effect of treatment conditions on students' reading comprehension was assessed by measuring correct answers on teacher-created reading comprehension assessments and commercially produced tests on the selected titles. Reading comprehension was defined as the ability to respond correctly to a series of questions that followed the reading of each book. Students completed a teacher-created test as well as a commercially produced test with each of the eight novels used in the study. The format for the teacher-created test was divided into two sections. The first section included multiple-choice questions, while the second section students were asked to write a short answer to the question in the space provided. The teacher-created assessments contained literal, think and search, and inferential questions (see Table 2). The think and search category of questions are based on the Question-Answer-Relationships (QAR) research

Table 2

*Definitions and Examples of Question Types*

Question type	Definition	Example
Literal	A question where the answer is located in a single place within the book.	Cloyd works extremely diligently at building the fence because he wants to -----? with four answer choices.
Think and search	A question where the participant needed to put together facts from different places within the book.	One of the reasons that the bearstone is especially meaningful to Cloyd is that it: with four answer choices pulled from within the chapters covered.
Inferential	A question where the reader makes logical connections among facts in the book.	Which of the following traits would Cloyd probably dislike in a person?

of Raphael and Wonnacott (1985). These types of questions are used for both comprehension instruction and assessment. For the last 20 years, the QAR framework of assessing comprehension has provided a reliable means of assessment in the field of reading education (Raphael & Au, 2005). The classroom teacher and the researcher created QAR comprehension tests for each of the titles used in this study (see Appendices B-I). These tests had a range of 10 to 25 questions. The number of questions varied due to the length and content of the books, but the scores used were percentages and not total correct. Commercially produced assessments, *Accelerated Reader* (AR) tests for each of the selected titles were also used as part of this study. AR is a computer-based, reading management and motivational system designed to complement existing classroom literacy programs for grades K-12. AR software provides extensive lists of tens of thousands of comprehension tests featuring 5 to 20 multiple-choice questions. Each of the commercially produced tests for the selected titles had 10 questions and percentage

scores were used with these assessments. The questions contained in these tests are primarily factual recall questions. No reliability or validity exists concerning the individual tests, but the questions are primarily text recall questions.

### Independent Variable

Anchored instruction video clips were added to the instructional routine to determine if their use increased reading comprehension scores of remedial, struggling middle-level readers. Video clips to anchor instruction consisted of video segments from commercially produced videos that contained portions of content that could assist students with necessary background knowledge that the teacher could incorporate into class discussions to assist the participants in a deeper understanding of the selected titles used for instructional purposes.

### Experimental Design

Single-case experimental designs are designs that can be applied when a number of individuals are considered as one group (Gall, Borg, & Gall, 1996). These designs are typically used to study the behavioral change a group exhibits as a result of some treatment. In single-case designs, the group serves as their own control because the group is exposed to a nontreatment and a treatment phases, and performance is measured during each phase.

There are several types of designs to choose from when utilizing single-case research. The most familiar types include the withdrawal design, alternating treatment



designs, multiple-baseline designs, and the reversal designs (Neuman & McCormick, 1995). According to Neuman and McCormick, of the above options, the ABAB reversal design has several important advantages for research and instruction. It is used to examine applied questions within the context of instruction, with minimal interference to ongoing classroom activity and to compare different approaches relatively quickly, allowing for instructional decision-making. The goal of the study was to examine anchored instruction in a reading intervention class (Bransford et al., 1990). The ABAB reversal design was chosen due to its unobtrusiveness and ease of use in an already existing class for struggling middle-level readers.

A feature of the ABAB design with one treatment furnishes two opportunities for confirming the outcomes of the intervention and strengthens the implication that any improvements or changes in performance are due to the intervention variable and not due to uncontrolled factors. It is the alternating of interventions and counterbalancing of session-by-session rather than over time as in a multi-treatment design (Tawney & Gast, 1984). The aim of single-subject experimental research is to establish clearly the effects of an intervention (Neuman & McCormick, 1995). As with traditional group experimental studies, the intent is to ensure that changes in responses are indeed the result of that intervention and are not a consequence of chance or other factors. This study included four phases: (a) an initial baseline where the independent variable was absent, (b) an intervention phase where the independent variable was introduced, (c) a return to the baseline conditions by the withdrawal of the independent variable, and (d) a return to an intervention phase where the independent variable was utilized.

*Procedures (Intervention)*

The most common method of evaluating the effects of a given variable is to impose it on an ongoing measure of behavior obtained in its absence. These original data serve as the baseline against which any observed changes in behavior when the independent variable is applied can be compared. A baseline serves as a control condition and does not necessarily mean the absence of instruction or treatment as such, only the absence of a specific independent variable of experimental interest.

Baseline data were gathered during the initial phase of the research where all conditions were carefully controlled while the students read four different books over a 16-week period. During this 16-week period, student assessment scores were used to show variations in their responses. With the first four selections, the mean scores of the group appeared stable. The range of mean scores for the seventh-grade group was two percentage points over the 16-week period and the eighth-grade group was three percentage points. The data showed no evidence of an upward or downward trend and all the measures fell within a three-percentage point range. Books one through four were read during the baseline phase of the study, books five and seven followed the same instructional pattern as books one through four and books six and eight were the titles where the participants viewed video clips in conjunction with reading the books. Table 3 gives a brief summary of each of the utilized titles for this study.

The classroom teacher and the researcher selected the eight titles used in the study. The classroom teacher had been working with several of the students for up to four years and had discerned areas of interest for each of the participants. Utilizing the

Table 3

*Description of Novels Employed During the Study*

Book #	Title and author	Description of book
1	<i>Call it Courage</i> by Armstrong Sperry	A boy (Mafatu), who in a desperate attempt to overcome his fears and to prove he is not a coward, boldly hops into a canoe. Equipped with only his dog, a few nuts, and his fish spear, Mafatu bravely sets sail and the ensuing events prove that he is more than brave. His deeds and the obstacles that he overcomes, prove that he is truly a hero.
2	<i>The House of Dies Drear</i> by Virginia Hamilton	A black family who tries to unravel the secrets of their home, which was once a stop on the Underground Railroad.
3	<i>Escape to West Berlin</i> by Maurine F. Dahlberg	Based in East Berlin in 1961, Heidi, a thirteen-year-old copes with the stress of a crisis with her best friend, government pressure on her father to leave his West Berlin job, her mother's pregnancy, and the ever-present threat of the closing of the border with West Berlin.
4	<i>Bearstone</i> by Will Hobbs	A troubled Native American boy. Cloyd Atcitty is 14 and very miserable. In hopes of helping him turn his life around he is sent to work for the summer for an old farmer whose caring ways help Cloyd experience the beauty of the mountains and his ancestry on his way to manhood.
5	<i>Willow Run</i> by Patricia Reilly Giff	A young girl whose life is turned upside down by World War II, Meggie Dillon must move away from her home, her grandfather, and her brother who is sent away to fight in the war. Her family lives in government housing while her parents work in a factory building supplies to help the soldiers fighting overseas. She makes friends with other children, who have their own stories, of what they have left behind, or what they are gaining during their brief time away from their families' homes.
6	<i>Eyes of the Emperor</i> by Graham Salisbury	Eddy Okana, a Japanese-American lies about his age and joins the Army in his hometown of Honolulu only weeks before the Japanese bomb Pearl Harbor. Suddenly he is viewed as the enemy, and even the U.S. Army doubts the loyalty of Japanese-American soldiers. The Army sends Eddy and a small band of Japanese-American soldiers on a secret mission to a small island off the coast of Mississippi. Here they are given a special job, one that only they can do. Eddy's going help train attack dogs. He's going to be the bait.
7	<i>Jason's Gold</i> by Will Hobbs	Fifteen-year-old Jason embarks on a 10,000-mile journey to meet up with his brother and strike it rich in the Klondike gold fields. On his journey, he meets an adventurous girl named Jaime and a not-yet famous Jack London, but for the most part, he travels alone with King, a husky he rescues from a madman.
8	<i>How I Found the Strong</i> by Margaret McMullan	Frank Russell's life in Mississippi is shattered by Lincoln's declaration of war on the South. Young and old are taking up arms and marching off to war, but not ten-year-old Frank, although he is eager to enlist in the Confederate army, he is not allowed to enlist. The war takes a great deal from Frank. With the loss of family members, food, and his boyhood gone are his idealistic dreams of heroic battles and hard fought victories. His experiences with the war and his changing relationship with the family slave change his thinking.

student interests and titles that were already being used by the teacher, the researcher and teacher discussed the order they would be read in the study. After making those choices, there was a need for five additional titles. By using the 2005 and 2006, *Notable Social Studies Trade Books for Young People* supplements, a publication of the National Council for the Social Studies, selections were made based on student and teacher interest, appropriateness for middle school students, and content that would lend itself to the utilization of video clips.

The first five nontreatment books were taught without video clips, using the regular classroom instructional routine. The regular instructional routine included the following elements: (a) pretesting the students on the selected titles with a commercially produced computer-based test, (b) a brief introduction of each book, classroom reading of chapters with follow-up discussion, that included a review of what had been read and the questioning of students concerning the material read during the class session, (c) daily completion of book reading assignment sheets, a record of discussion stop points, as well as a means of having students keep their place in the text, (d) weekly assessments on the chapters completed, and (e) a final teacher-created test as well as a final computer generated test on each of the titles. What follows is a more detailed description of the regular instructional routine that was used with the two reading classes that participated in this study.

The first step of the instructional routine involved pretesting the students participating in the study prior to starting each book. This was accomplished by having all students complete a commercially produced computer-based test on the selected titles.

This gave the teacher and the researcher a preliminary measure for each student, on each book, prior to starting the reading and instruction. The pretesting component was a means of assessing any prior knowledge on the selected books.

After the pre-assessment was completed, the instruction for each of the books occurred. What follows is a brief description of the regular instructional routine followed by the classroom teacher for each of the selected book titles.

The teacher began each unit with an introduction of the book including brief background information about the author. Book elements such as characters, setting, and plot were discussed by the teacher with the students prior to starting the books as well as stopping at strategic points throughout the books as needed for clarification. The teacher would summarize the main points of the day's reading with the assistance of the students at the conclusion of each class period and would review previous reading at the beginning of each class session. The teacher used questioning strategies throughout the books to also check for student understanding. This questioning process took place through conversation with the students. With slight prompting from the teacher the students would make predictions, talk about questions that occurred to them as they read, report the images they got while reading, discuss parts of the book that were hard to understand, and generate their interpretations of what they had read. When video clips or segments were used in conjunction with the books (with books six and eight), the teacher followed the same procedures to introduce and review the videos as were used for introducing each of the books.

To control for decoding problems, word recognition problems, and students

simply not reading the selected materials, one title was read aloud by the teacher, while the other seven were read by professional readers on commercially produced books on tape. Each student followed along with the reading in an individually assigned copy of each book. To increase the likelihood that students would follow along and be attentive to the reading, daily book assignment sheets were developed for each of the titles. The students were required to complete a reading assignment sheet for each book. The daily completion of these assignment sheets was a means used by the teacher to indicate that the students were attending to the oral reading of the day's chapters. The daily reading assignment sheets consisted of the students recording the page number where they began reading, the page number where the teacher either stopped the tape recording or where the teacher stopped reading for class discussion, and the next three words following the stopping point. The daily assignment sheets were reviewed by the teacher at the conclusion of each class period as an additional check that students were actively participating.

In addition to the daily reading assignment sheets, students completed weekly assessments in the form of quizzes for the chapters completed. The daily reading assignment sheets and summative assessments for each book were collected by the teacher at the conclusion of each unit, to be scored and then applied to the student's final grade for the class. These materials were also scored by the researcher and data was recorded for later analysis. Upon completion of each book, the students were asked to complete the two posttest assessments, one the teacher-created written test and the other the commercially produced computer test.

All assessments were graded first by the classroom teacher and then by the researcher for inter-rater agreement or reliability. Inter-rater agreement was computed by obtaining a frequency ratio (i.e., the smaller assessment score divided by the larger assessment score times 100). All teacher-generated assessments were assessed. The mean inter-rater agreement was 100%. Prior to testing the students, the teacher and researcher developed an answer key for all questions on the final assessments. Both agreed not to deviate from the answer key. This is the reason for the high inter-rater agreement. All assessments had a student code number on them rather than the student's name before the researcher received them for scoring in order to keep student information confidential and so the researcher was blind to students, controlling for bias.

The sixth title selection was taught in combination with the viewing of video clips, class discussion of the material viewed, and the regular reading instructional routine described above. *Eyes of the Emperor* (see Table 2) was the first book to combine the treatment with the regular instructional routine. With this particular title, the teacher used five video clips as part of the instructional process. Each of the five videos was selected to assist students with concepts found in the book. *Japan – Beyond Our Borders* was selected to assist participants in understanding the father, or the Japanese patriarch character in the book. The content of the video discussed the importance of family and country. One concept that was important in understanding the father was that of Japanese honor. Many of the father's actions and comments in the book were inclusive of the Japanese code of honor. The second clip from the movie, *Pearl Harbor* was used as a visual depiction of what was described in the book. The instructional video *Pearl*

*Harbor and World War II* was utilized as an overview of the Pearl Harbor period of U.S. History. This video summary of that historical time period was deemed important due to the fact students in the middle grades have not received much, if any formal instruction concerning World War II. In *Eyes of the Emperor*, the author mentions Franklin D. Roosevelt as the president who made the decision to place Japanese-Americans into internment camps. To provide historical knowledge concerning the 20<sup>th</sup> Century presidents the video *Franklin D. Roosevelt: 1933-1945 – 20<sup>th</sup> Century Presidents Series* was shown to give a complete picture of his presidency. The final video that was used as part of the instructional process for *Eyes of the Emperor* came from *The History Channel* and was entitled *Red Sun, Black Sand: The Making of Letters from Imo Jima*. This video was used to give the students a Japanese perspective on the conflict and a deeper understanding of the cultural material presented in the book. The titles, length, and description of each video are included in Table 4.

With each video segment the teacher gave a brief introduction about why the students were viewing the information and reminded them that they would be discussing its relevance to the readings they had completed to that point in class.

Book Seven, *Jason's Gold* was a nontreatment title returning to baseline and the teacher went back to the regular instructional routine for this book.

Book Eight, *How I Found the Strong* (see Table 2) was the final book and the second treatment phase of the study. This selection was taught in combination with the viewing of video clips, class discussion of the materials viewed, and the regular reading instructional routine described earlier. Videos for *How I Found the Strong* were shown



Table 4

*Video Used with Eyes of the Emperor – Book #6*

Title	Length	Description
<i>Japan – Beyond Our Borders</i>	30-min	Instructional video for intermediate and junior high students, which discussed the Japanese culture, beliefs and historical perspective.
<i>Pearl Harbor</i>	9-min	A reenactment of the Japanese catching the United States off guard and bombing Pearl Harbor.
<i>Pearl Harbor and World War II</i>	12-min	Instructional video concerning the implications of the bombing and the rationale concerning what the country was going through during this particular period of World War II.
<i>Franklin D. Roosevelt: 1933- 1945 – 20<sup>th</sup> Century Presidents Series</i>	23-min	Instructional video concerning his life and accomplishments.
<i>Red Sun, Black Sand: The Making of Letters from Imo Jima</i>	40-min	<i>The History Channel</i> documentary concerning background information from the Japanese side of the conflict.

in an attempt to give the participants a feel for the Civil War time period, the historical figures mentioned in the book and a deeper understanding of the causes of the Civil War. *Causes of the Civil War – U.S. History Collection* was used to give students background information concerning historical information referred to in the book. The story was written from the Confederate perspective and the main character makes a derogatory comment concerning President Lincoln so using the instructional video *Abraham Lincoln – Our Presidents in America’s History Series* was used to give a complete picture of his presidency and a better understanding of the comment made in the book. The *Ken Burns – Civil War* episodes were used to further assist the students with understanding the historical period and the historical figures mentioned in the book. Descriptions and lengths of the videos used with *How I Found the Strong* are contained in Table 5.

Table 5

*Video Used with How I Found the Strong – Book #8*

Title	Length	Description
<i>Causes of the Civil War – U.S. History Collection</i>	14-min	An instructional video that discusses causes of the Civil War.
<i>Abraham Lincoln – Our Presidents in America’s History Series</i>	11-min	An overview of his presidency and his role in the Civil War.
Ken Burns – <i>The Civil War – Episode 1 – 1861 The Cause</i> - Chapters 11 & 12	19-min	Chapter 11 – Manassas was an introduction into the personality and background of “Stonewall” Jackson and Chapter 12 - the Union’s plan to destroy the Confederacy.
Ken Burns - <i>Episode 3 – 1862 – Forever Free</i> -Chapter 3	6-min	“Stonewall” Jackson’s importance and some of the actions the confederacy in trying to gain support from Europe.
<i>Red Badge of Courage</i> (1950s Version)	85-min	A depiction of a young boy’s view of the Civil War.

## Data Collection

*Baseline*

No videos were shown during baseline. Baseline consisted of four of the eight selected titles. Returning to baseline also occurred with the fifth and seventh selected titles. As previously noted, data collection took place through teacher-created tests for each of the eight selected book titles that were utilized for this study (see Appendices B-I) and commercially produced computer-based multiple-choice assessments. Each teacher-created test was scored first by the teacher and then given to the researcher to score. Each assessment was then assessed for interrater agreement. The computer-based assessments were scored by the computer program. All assessments were scored for the total number correct and a percentage score was calculated based on that data. The

participants' percentage scores were used as the final data.

### *Treatment*

Interventions took place with the sixth and eighth books. With each treatment condition, participants were pretested on the treatment titles prior to reading the books to assess any existing prior knowledge of content in each title. The treatment consisted of the addition of video clips containing content that could assist the readers with background knowledge pertinent to the content of the books to the baseline instruction. Data were collected through teacher-created and commercially developed (*Accelerated Reader*) tests on the sixth and eighth books.

### Confidentiality of Data

To insure that the identities of the students participating in this study remained anonymous, several precautions were taken. First, student names were not included with the end scores of each of the assessment tools that I received. The assessments were tracked by numbers assigned to individual students prior to completing the assessments, and the list of student numbers was stored in a separate location than the actual assessment documents. All assessment data, was stored in a locked and secure location unless it was being analyzed. The data will be kept for 2 years after my dissertation is completed. The names of the participating school and location also remained confidential.

## Summary

In this chapter, I have explained the single-case reversal design that I utilized for my study. I have described the instruments I used to collect data from the students who were study participants and how those participants were selected. I have explained the classroom and study's procedures and how the data were collected and analyzed.

## CHAPTER IV

### RESULTS

#### Answering the Research Questions

The purpose of this study was to see if video clips could be used to assist students in gaining prior knowledge to help them comprehend texts at higher levels.

Therefore, this study explored these specific research questions.

1. What effect did viewing video clips as a means to anchor instruction have on the mean classroom scores of combined teacher-developed and commercially developed (*Accelerated Reader*) comprehension assessments for remedial, struggling middle-level readers?

2. How did viewing video clips related to text topics affect individual student scores on combined teacher-developed and commercially developed (*Accelerated Reader*) end of book comprehension questions?

In this chapter, I will address each of these research questions through examination and analysis of posttest scores for each of the books read in the study. This analysis focused on the data collected during the 2007-08 school year in two remedial reading classes. The majority of the findings in this chapter will be presented using text, tables, and figures that represent the comprehension scores of students who participated in this study.

### Question One: Effects of Viewing Video Clips on Class Assessments

As discussed in Chapter II, background knowledge is central to the comprehension of text. The first question that this study sought to answer was: What effect did viewing video clips as a means to anchor instruction have on the mean classroom scores of combined teacher-developed and commercially developed (*Accelerated Reader*) comprehension assessments for remedial, struggling middle-level readers? The data examined student mean scores on the teacher-created final tests and the *Accelerated Reader (AR) Reading Practice Quizzes* for each of the participants. For each participant a mean score was computed. Scores were based on the percentage of correct responses on the final comprehension assessment for each book read. Prior to including each of the participant's scores, an analysis of the scores was carried out to identify any outliers. This process involved determining the upper and lower quartile value for each book during the baseline and intervention phases. After determining the value of each quartile, the upper quartile value was subtracted from the lower quartile value to determine the inter-quartile range. Next, the inter-quartile range was multiplied by one and a half to determine the value to use to add to the upper quartile and subtract from the lower quartile to find the limits for the outliers. There were no outliers in either group, although with books six and seven one seventh-grade participant (7.7) was within one point of being an outlier. The individual mean assessment scores for the seventh-grade participants are presented in Table 6 and results across the experimental phases for the combined seventh-grade group are presented in Figure 1.

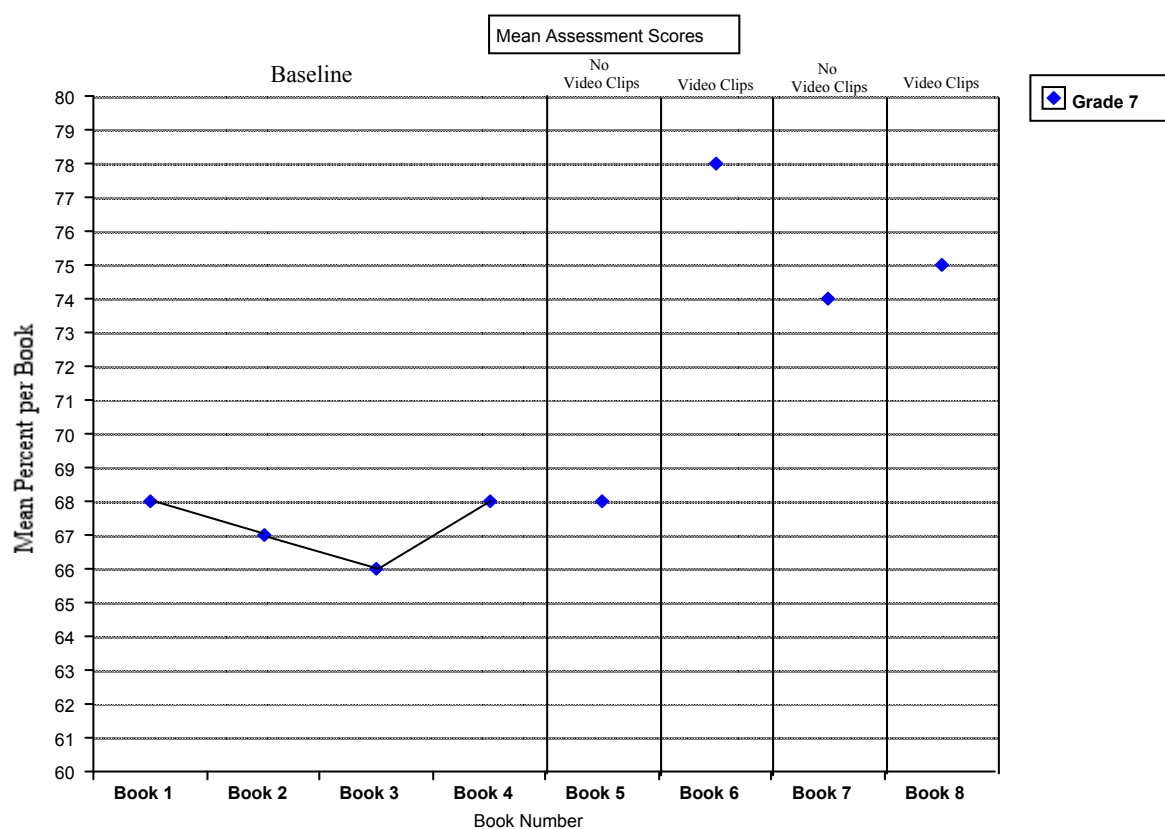
Table 6

*Individual Mean Scores of Combined Teacher-Created and AR Test Scores for Grade 7:*

*Book Tests 1-8*

Participant	Book 1	Book 2	Book 3	Book 4	Book 5	Book 6	Book 7	Book 8
7.1	60	84.5	81	60	80	96	71.5	70
7.2	70	53.5	55	77.5	62.5	77	81	55.5
7.3	70	82	90	82.5	70	96	78.5	88.5
7.4	60	61.5	54	35	40	52	57	75
7.5	90	89.5	92	75	95	91	88	95.5
7.6	85	70.5	72	92.5	85	85	86	75
7.7	60	39.5	22	37.5	30	29	43	46
7.8	45	58.5	59	82.5	80	98	88	93.5

$N = 8$



*Figure 1.* A comparison of baseline, no treatment and treatment mean scores for the seventh-grade group. Each data point represents the mean percentage score for the combined seventh-grade group under the five different phases.

The seventh-grade group participants demonstrated gains in their mean score relative to baseline and the nontreatment tests. Baseline scores represented no intervention and consisted of four data points, which was sufficient to reflect baseline stability prior to intervention. In the first intervention phase, video clips were used in conjunction with the regular instructional routine. Examination of the scores indicates a slightly better performance (10 percentage points) under the treatment condition. Both treatment book mean scores were the highest scores for both the seventh and eighth-grade groups. The seventh-grade group exhibited the greatest gain from baseline to the final phase.

The mean assessment scores for the individual eighth-grade participants are presented in Table 7 and results across the experimental phases for the combined eighth-grade group are presented in Figure 2. The eighth-grade group participants also demonstrated a smaller gain than the seventh-grade group in their mean score relative to baseline and the no treatment assessments.

#### Question Two: Increase Student Scores

The second question that this study sought to answer was: How did viewing video clips related to text topics affect individual student scores on combined teacher-developed and commercially developed (*Accelerated Reader*) end of book comprehension questions? The data that were examined in answering this research question reflect the mean percentage scores of the nontreatment tests with the mean percentage scores of the treatment tests for each participant. To determine if viewing



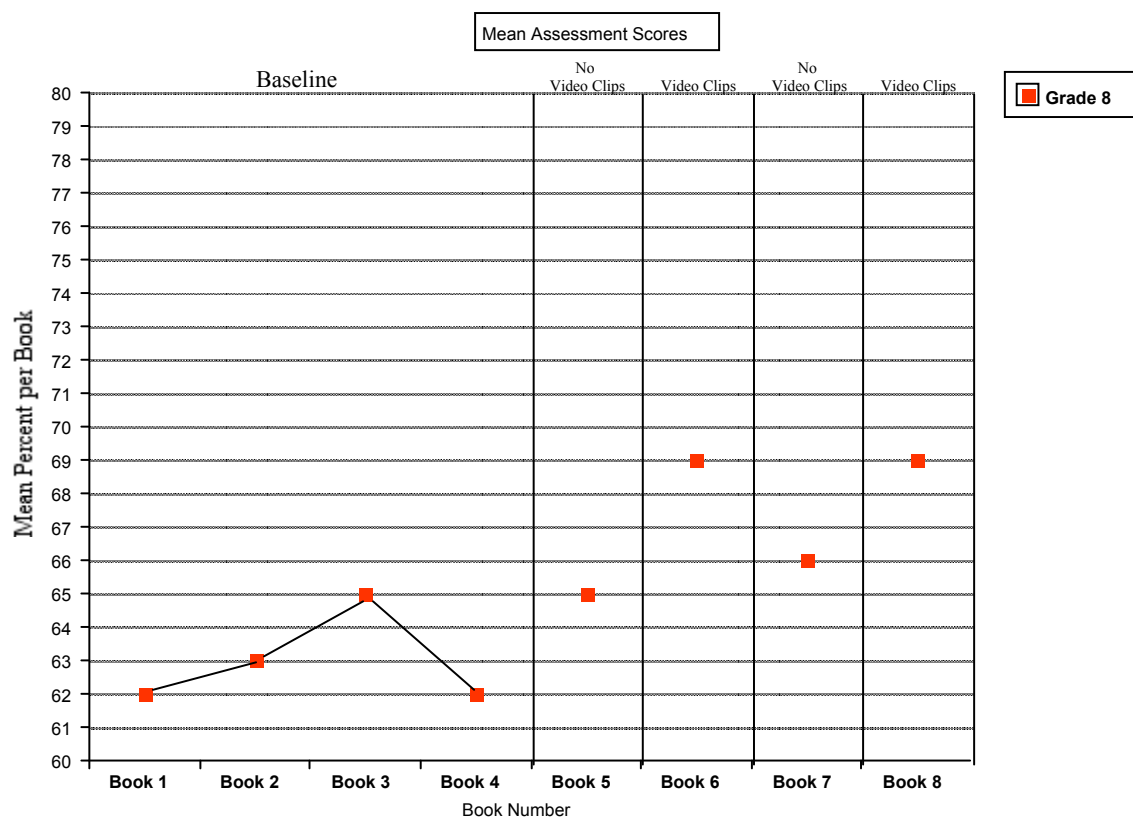
Table 7

*Individual Mean Scores of Combined Teacher-Created and AR Test Scores for Grade 8:*

*Book Tests 1-8*

Participant	Book 1	Book 2	Book 3	Book 4	Book 5	Book 6	Book 7	Book 8
8.1	80	85.5	81	92.5	85	69	60.5	86.5
8.2	75	88	72	65	90	86	100	86.5
8.3	55	60	77	40	35	73	39.5	48.5
8.4	30	12	45	40	30	34	57.5	36.5
8.5	85	66.5	71	45	75	75	77	65.5
8.6	90	88	89	92.5	82.5	90	97.5	93.5
8.7	50	75.5	50	57.5	75	50	76	83.5
8.8	75	66.5	81	87.5	75	94	71	76.5
8.9	15	20.5	22	27.5	40	46	14	41

$N = 9$



*Figure 2.* A comparison of baseline, no treatment and treatment mean scores for the eighth-grade group. Each data point represents the mean percentage score for the combined eighth-grade group under the five different phases.

video clips increased the participants comprehension test scores, examination of the individual mean scores of the treatment tests with individual mean scores of the nontreatment tests took place. Gina (7.1), Kurbie (7.3), Aggie (7.4), Ryan (7.5), Kobie (7.7), and Lynn (7.8) were seventh-grade participants who demonstrated an increase in their mean scores for the treatment tests. With the eighth-grade participants, Teddy (8.1), Ramona (8.3), Ray (8.8), and Andy (8.9) were the four out of the nine participants who demonstrated an increase in the mean scores for the treatment tests. The assessment scores of the seventh-grade participants are highlighted in Table 8 showing the actual mean percentage test scores for both the nontreatment and treatment tests for each participant.

The highest increase was a 19-percentage point change for Kurbie (7.3) and the lowest increase was a one-percentage point change for Ryan (7.5) and Kobie (7.7). The increases in the mean scores for the other participants who had increases ranged from 7 to 15 percentage points. Berklee (7.2) and P.J. (7.6) actually had a decrease in their mean percentage scores on the nontreatment and treatment book assessments.

Kurbie (7.3) and Lynn (7.8) demonstrated a strong difference in the treatment to the nontreatment scores (see Figures 3 and 4). Both participants had higher treatment scores than nontreatment scores in all phases.

Test results for eighth-grade participants are highlighted in Table 9 showing the actual mean percentage scores for both the nontreatment and treatment assessments for each participant. Ramona (8.3) achieved the highest point increase of the four participants who had increases in their mean percentage scores of nontreatment to treatment

Table 8

*Seventh-Grade Individual Mean Percentage Scores of Nontreatment Tests (Books 5 and 7) and Treatment Tests (Books 6 and 8)*

Participant #	Nontreatment Tests Books 5 and 7	Treatment Tests Books 6 and 8
7.1	76	83
7.2	72	66
7.3	74	92
7.4	49	64
7.5	92	93
7.6	86	80
7.7	37	38
7.8	84	96

$N = 8$

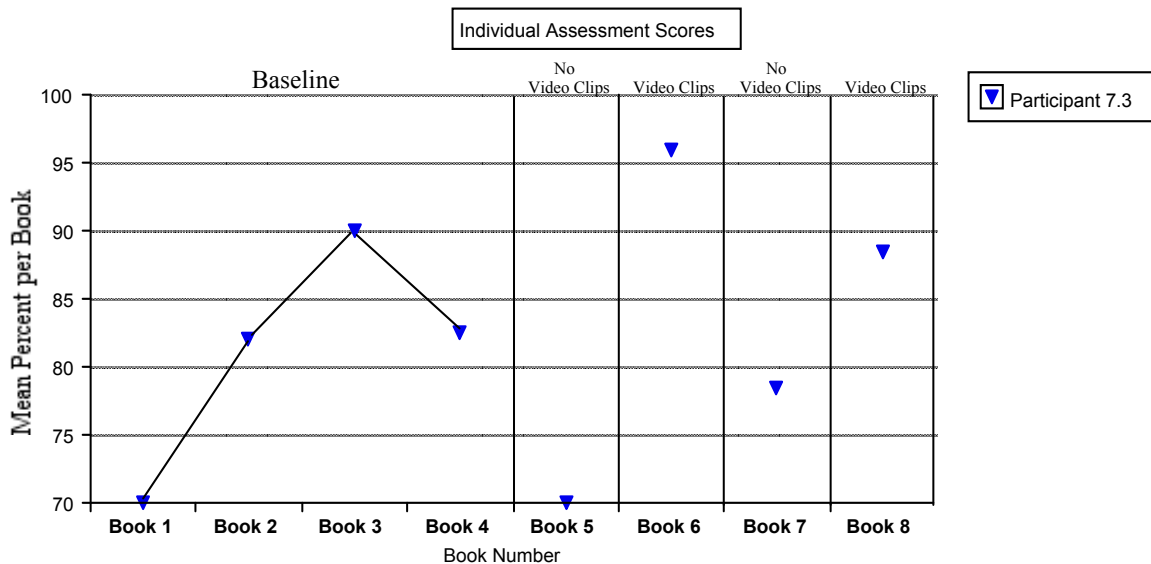


Figure 3. Kurbie's (participant 7.3) individual assessment scores.

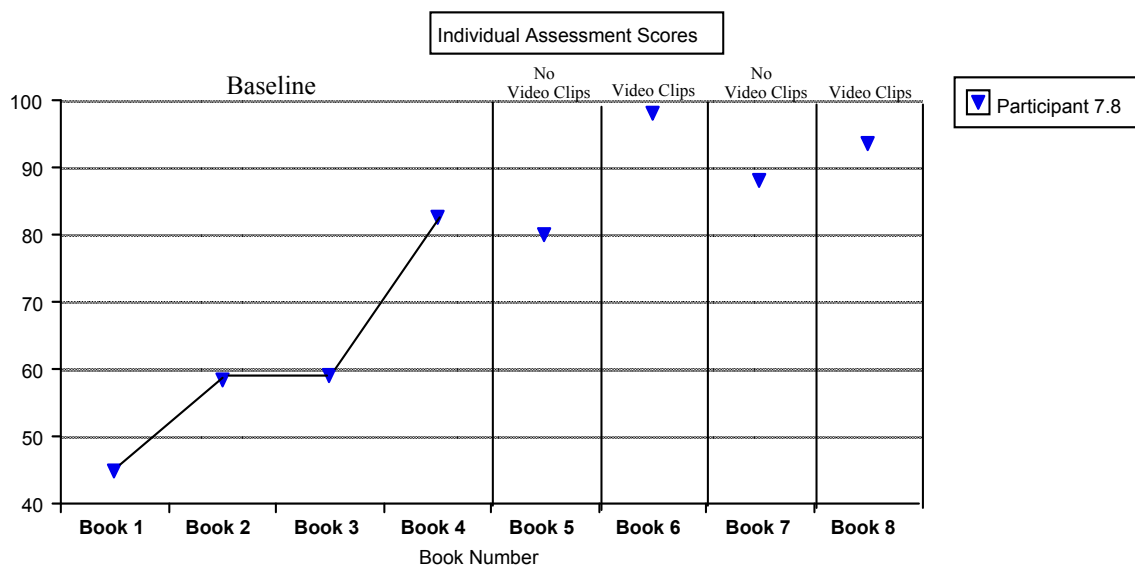


Figure 4. Lynn's (participant 7.8) individual assessment scores.

Table 9

*Eighth-Grade Individual Mean Percentage Scores of Nontreatment Tests (Books 5 and 7) and Treatment Tests (Books 6 and 8)*

Participant #	Nontreatment scores Books 5 and 7	Treatment scores Books 6 and 8
8.1	73	78
8.2	95	86
8.3	37	61
8.4	44	35
8.5	76	70
8.6	92	92
8.7	76	67
8.8	73	85
8.9	27	44

$N = 9$

assessments. This student had a 24-percentage point increase. Teddy (8.1) had the lowest percentage point change with a 5 percentage points. Rylee (8.2), Bridger (8.4), Heath (8.5), Thomas (8.6), and Mark (8.7), the other five eighth-grade participants, did not show an increase in their mean percentage scores for nontreatment to treatment book tests. Individual assessment scores figures for all of the participants are located in Appendix J.

Ramona (8.3), Ray (8.8), and Andy (8.9) demonstrated a strong difference in the treatment to the nontreatment scores (Figures 5, 6, and 7). Each participant had higher treatment scores than nontreatment scores in all phases.

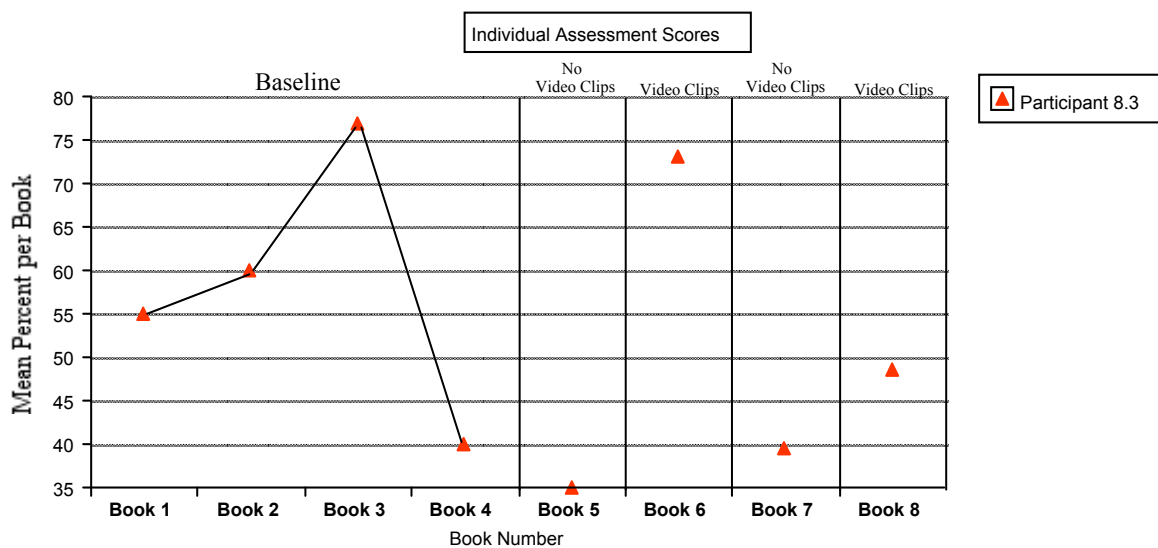


Figure 5. Ramona's (participant 8.3) individual assessment scores.

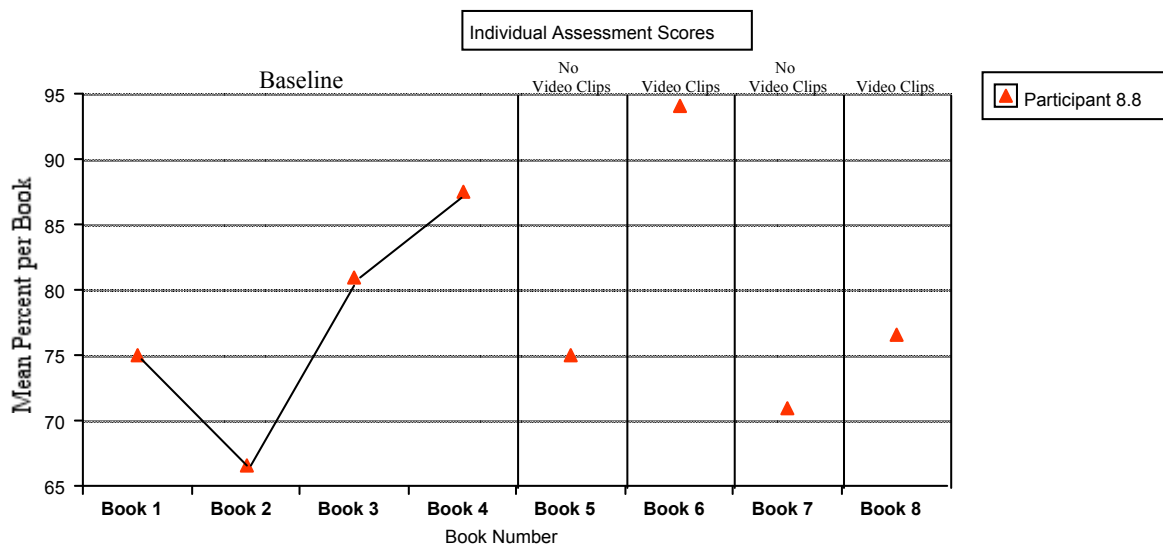


Figure 6. Ray's (participant 8.8) individual assessment scores.

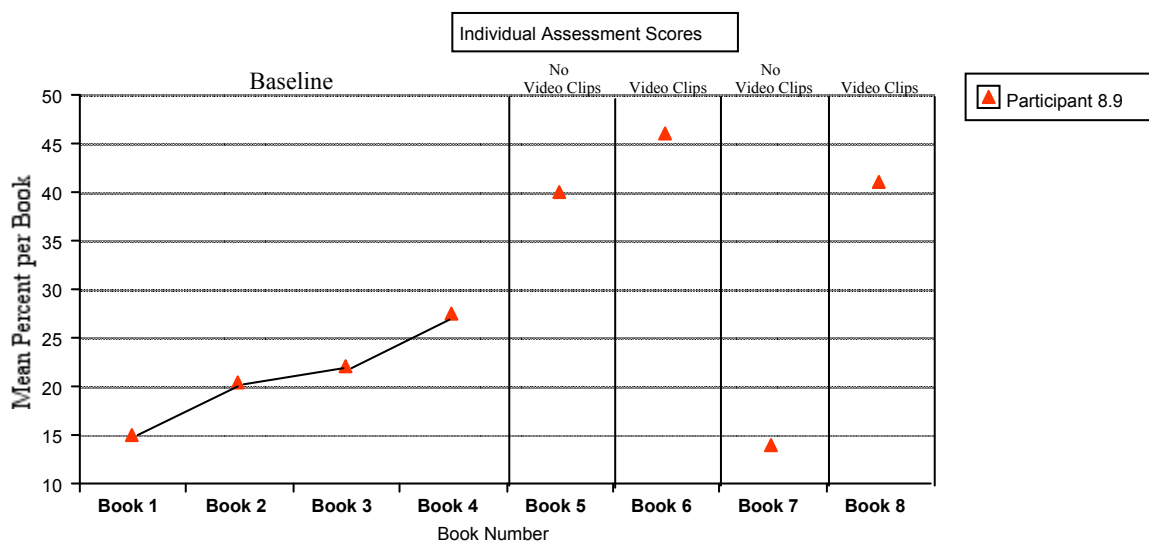


Figure 7. Andy's (participant 8.9) individual assessment scores.

## CHAPTER V

### CONCLUSIONS AND RECOMMENDATIONS

#### Introduction

Single-case experimental research designs are popular and acceptable ways to conduct classroom-based research. Single-case or single-subject, experimental research design can personalize the data collection process because data are collected on each subject, or participant, and are analyzed individually (Neuman & McCormick, 1995). Single-case designs provide a methodological approach that permits experimental investigation with single groups. Of significance to this particular research design was the ability to examine applied questions within the context of instruction, with minimal interference to ongoing classroom activity. Thus, the purpose of this study was to gain a more accurate idea about the information embedded in the following research questions:

3. What effect did viewing video clips as a means to anchor instruction have on the mean classroom scores of combined teacher-developed and commercially developed (*Accelerated Reader*) comprehension assessments for remedial, struggling middle-level readers?

4. How did viewing video clips related to text topics affect individual student scores on combined teacher-developed and commercially developed (*Accelerated Reader*) end of book comprehension questions?

In the remainder of this chapter, I will address each of these research questions through a summary and discussion of findings from the assessment scores of the student

participants. I will then discuss limitations of this study as well as the implications for practice and future research in the area of anchored reading instruction.

### Summary of Research Questions

Current models of reading emphasize that successful reading is a constructive endeavor in which readers actively make sense of information in text by putting ideas together and integrating them with prior knowledge (Beck et al., 1996). The effort to construct knowledge is affected not only by the skills and strategies that a learner has access to but also by the material and the readers' perceptions of the world (McVee et al., 2005). As readers read, they use the information in the text and their background knowledge to construct a representation of the meaning of the text. Poor readers are unlikely to make the inferences required to weave the information given in a text into a coherent overall representation. One way to assist students in developing or activating background information is through components of anchored instruction, an approach developed by the Cognition and Technology Group (Bransford et al., 1990a; CTGV, 1997). The goal of the approach is to facilitate children's understanding of complex text using video presentations that supply a dynamic visual support mechanism. The key strategy is to anchor (situate) instruction in meaningful environments that help novices appreciate the significance (connectedness) of new information that they encounter (CTGV, 2000). Video segments provide the information in a context that is rich enough that students can acquire the necessary background knowledge.

Two research questions were explored in this study. The first question addressed



was: What effect did viewing video clips as a means to anchor instruction have on the mean classroom scores of combined teacher-developed and commercially developed (*Accelerated Reader*) comprehension assessments for remedial, struggling middle-level readers?

To answer the first research question participants' mean comprehension assessment scores on teacher-selected books were gathered during the 2007-2008 school year. The participants' mean assessment scores were examined (Figures 1 and 2) and during the treatment phases would indicate that comprehension scores improved with the use of video clips with the regular instructional procedure. The group comparison for the seventh-grade participants demonstrated a gain in their mean scores relative to the baseline and the nontreatment scores. Furthermore, the treatment scores were superior to the nontreatment phases (regular instructional routine). The eighth-grade group also made gains in their mean treatment scores in comparison to the baseline and nontreatment scores. Their gain was not as great as the seventh-grade group, but there was an increase in the mean percentage scores. Although these results indicate that the combination of video clips with the regular instructional routine did not differ markedly for either group, the use of video clips with the regular instructional routine was slightly more effective and, according to their teacher, was preferred by the participants.

The second research question was: How did viewing video clips related to text topics affect individual student scores on combined teacher-developed and commercially developed (*Accelerated Reader*) end of book comprehension questions?

In order to answer this research question individual mean nontreatment test scores

and mean treatment test scores were compared to determine if video clips increased the participants comprehension test scores.

Gina (7.1), Kurbie (7.3), Aggie (7.4), Ryan (7.5), Kobie (7.7), and Lynn (7.8) were six of the eight seventh-grade participants who had an increase in their mean treatment book scores compared to their nontreatment assessment scores. The highest increase was a 19-percentage point change between the mean treatment and nontreatment scores. Teddy (8.1), Ramona (8.3), Ray (8.8), and Andy (8.9) were four of the nine eighth-grade participants that showed increases and the highest percentage point change was 24 points. Figures for each of the participants are found in Appendix J.

### Limitations

Remedial reading students historically exhibit both attendance and behavioral issues. They often bring their personal problems into the classroom, a fact that interferes with the quality of their learning. This limits the effectiveness of a research design that is dependent on daily student participation. Student absences were a concern in this study, especially for participants Kobie (7.7), Teddy (8.1), Ramona (8.3), Bridger (8.4), and Andy (8.9). Kobie missed 28 days, Teddy 40, Ramona 22, Bridger 32, and Andy 71 days during the 2007-08 school year. These five students had some of the lowest placement data. The absence issue was not the actual number of days missed, but the missing of content, class discussions and the viewing of important video clips.

The cognitive development (maturation) of the student clientele is another limitation that must be considered when interpreting the results. The remedial reading

class was taught in addition to the participants regular language arts class, which also included instruction concerning the comprehension of text. Students over an entire school year may make gains regardless of any special interventions.

Another factor that may have contributed to differences in the participants' scores was the length of the selected titles. The number of pages per book ranged from 128 to 256 pages. The longer the book the more content to remember and the longer the test length was in proportion to the length of the book.

Gender-linked issues may have contributed to differences in the participant's scores due to the content of the selected titles. The content may have connected more strongly with one gender more than another. In the selection of the titles, the researcher and classroom teacher attempted to balance gender specific interests within the content of the titles, but did find that the male participants related to certain titles, while female participants related more to another grouping of titles.

Time was a limiting factor. With this study, it would have been helpful to have additional treatment and nontreatment books given the trends that were developing, but the fact was the school year ended and no more time was available to explore further the trends that were emerging. All of the titles that were used in this study were within the genre of historical fiction, which is a limited spectrum of reading materials available for classroom instruction.

This study examined the treatment conditions on a small group of lower reading ability students. Hence, conclusions about the success of the intervention can only be made within these specific groups. Further experimental studies would need to be

conducted to generalize data to a larger group of individuals. Replication with more subjects to get a broader picture of students with different ability levels and grade levels is warranted.

Finally, this study took place over an entire school year. It is unclear whether the intervention of video clips was the sole reason for improvement in test scores or was it simply a maturation concern in a yearlong reading class.

### Discussion

This study utilized video clips as a vehicle to increase background knowledge for struggling middle level readers in attempt to determine if this would assist students with comprehension of text. After examining the data I collected from participants in my study, the following points for discussion can be made. First, findings based on comprehension test scores indicated that video clips might have assisted the participants with further understanding of the material covered in the books that they read. Secondly, video clip usage appears to be a means of assisting students in activating or developing necessary background knowledge for increased comprehension of text.

The overall results of this study indicate that the use of video clips as a means of either activating or developing background knowledge may have a positive effect on struggling middle-level readers' comprehension test scores. This combined condition (regular instructional routine and viewing video clips) was better than just the regular instructional routine condition. Although it was not markedly better than the regular instructional routine alone, the addition of the video clips appeared to contribute to higher

mean comprehension test scores. Further, six of the eight seventh-grade participants showed an increase in their mean test scores when combining the regular instructional routine with video clips. Even though the eighth-grade group did not have as many participants who had increased mean scores, four out of nine did have an increase.

Individual test scores among the study participants may have differed due to other factors that affected consistency. These factors included book length, gender-linked interests, personal issues that prevented students from fully engaging in the selected books (e.g., parental divorce), medical issues that interfered with the ability to focus and interact with text (e.g., ADHD), motivational levels, book topic interest, and attendance issues. Berklee (7.2), one of the seventh-grade participants who did not have an increase, had personal issues that prevented her from fully engaging in the class content as well as having attendance issues. The eighth-grade group had the highest number of participants with attendance issues. Three of the eighth-grade participants had attendance issues and missed a great deal of class discussions and video clips. The range of absences among the participants was between 7 to 71 days for the entire 2007-08 school year.

### Implications for Practice

As a remedial reading teacher who has been faced with assisting student in developing a deeper understanding of text, I understand firsthand the complex nature of trying to assist struggling readers in developing the necessary skills to further comprehend the various types of text they will encounter throughout their academic life and beyond. I conducted this research to better understand the importance of prior

knowledge to the understanding of text-based information and to determine if the viewing of video clips related to the content could serve as a means of addressing a lack of necessary background knowledge for struggling readers. Analysis of the data collected throughout the study led me to the following implications for practice. First, video clips can be used as a means of further developing a student's knowledge of a historical period and help students better understand historical fiction. Second, the more we as teachers do to give students a better picture of what is going on in text-based materials, the more they can actually take from the material. Finally, knowledge of abilities and interests of the students that you are working with can also have an impact on comprehension of text. Over the course of the study, participants read a variety of historical fiction novels dealing with different historical periods and events. Using a wide variety of materials may aid us in working with struggling middle level students and assist them in becoming better readers.

### Implications for Future Research

Although the outcome of the invention was rather positive for the participants, it should be noted that I could not be completely sure that the improved scores came from the use of the video clips. Comprehension of text is a multidimensional process and in dealing with 17 different participants and what they bring to the reading arena as individuals cannot be entirely quantified. It would be a benefit to broaden the research in the use of video clips with other genres and expository text to determine how valuable the use of video clips would be to other content areas. Additional research exploring whether

the academic benefit found in working with small reading groups can be transferred to the regular classroom setting. Future research focusing on the effectiveness of using video clips in regular literature classes and if their usage increased the overall comprehension scores of students could be a viable direction of further study. Another implication for research would be to increase the number of treatment and nontreatment phases as well as employing a true experimental design.

### Conclusions

The significance of this study was in finding a means to assist students in either activating or developing the background knowledge in order to understand historical fiction. My hope is that the knowledge gained by conducting this study can be used as a springboard to promote the importance of prior knowledge in comprehending text and that video clip usage is one way of helping struggling readers develop prior knowledge.

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APPENDICES



Appendix A  
Parent Permission Letter

Date Created: March 28, 2008; Page 1 of 2  
USU IRB Approved: 03/28/2008  
Approval terminates: 03/27/2009  
Protocol Number: 2038  
IRB Password Protected per IRB Administrator:

Dept. of Secondary Education  
2815 Old Main Hill  
Logan UT 84322-2815  
Telephone: (435) 797-2222  
Fax: (435) 797-1441

## PARENT PERMISSION

### Combining Comprehension Reading Instruction with Video Anchors

Dear Parent(s),

**Introduction/Purpose:** To complete the requirements for a Doctoral Degree in Education at Utah State University (USU), I am conducting a research project regarding reading comprehension instruction. As a certified reading teacher, I am very interested in determining whether using video clips can assist students in developing the necessary background knowledge for higher comprehension. I hope in analyzing data compiled by their reading intervention teacher will help us find additional ways to support better comprehension. The goal of this research project is to determine if the utilization of video clips containing background information that supports the teacher assign text improves student comprehension levels. Professor Kay Camperell in the Department of Secondary Education at USU has oversight of the study.

**Procedures:** As part of this research project I intend to use assessment scores of students enrolled in reading intervention classes at Morgan Middle School. Permission from district and school administrators and the reading teacher has been obtained to allow me to use data from these classes. I am now asking for your permission to allow your child's scores I will receive a reference-coded list of scores of assessments completed in their reading class. These are the standard assessments that they are expected to complete as part of their class. If you would like a full description of the results of the study after it is completed you may contact Heidi at (801) 829-3467 or by e-mail at [handreassen@morgan.k12.ut.us](mailto:handreassen@morgan.k12.ut.us)

**Risks:** There are no anticipated risks in this study.

**Benefits:** There may or may not be any direct benefit to your child from this research study. The investigators, however, may learn more about the use of video clips as a means of developing necessary background knowledge for better comprehension. It is my hope that the findings from this project will help teachers in assisting teachers in increasing levels of comprehension in their students' reading.

**Voluntary participation and right to withdraw:** Participation in research is strictly voluntary and you may refuse or withdraw your student from this study at anytime without consequences. Students are assessed on a regular basis in their reading class; however, your permission is requested so that researchers can have access to your child's assessment scores for this particular study.

**Explanation and offer to answer questions:** If you have any questions about this project, please contact Heidi Andraesen at 801-829-3467 or [handreassen@morgan.k12.ut.us](mailto:handreassen@morgan.k12.ut.us).

**Confidentiality:** Research records will be kept confidential consistent with federal and state regulations. The assessment scores received from your child's reading teacher will not contain your child's name because a reference code will be used in place of his/her name that will allow us to review information. Only Dr. Kay Camperell, the primary investigator, and Heidi Andraesen, the graduate researcher will have access to the compiled data.

Date Created: March 28, 2008; Page 2 of 2  
 USU IRB Approved: 03/28/2008  
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 Logan UT 84322-2815  
 Telephone: (435) 797-2222  
 Fax: (435) 797-1441

## PARENT PERMISSION

### Combining Comprehension Reading Instruction with Video Anchors

It is important to us to protect the privacy of the people who participate in the project. Here is how we will protect your privacy:

- No names will be used in the data or published work.
  - The data will be in a locked filing cabinet in a locked room.
  - Only the researchers will have access to the data.
  - The compiled data will only be used for research purposes.
  - None of the data will appear in your child's school records.
- The compiled data will not be used to evaluate your child in any way.

**Institutional Review Board:** The Institutional Review Board (IRB) for the protection of human subjects at Utah State University has reviewed and approved this research project. If you have any questions about your rights please call the IRB office at 435-797-1821.

**Copy of Consent:** If you give permission for your son/daughter to participate in this research study, please sign two copies of this Parent Permission document which have been given to you. Please keep one copy for your files and return the second signed copy to school with your child. His/her teacher will collect them for me. Your signature on this form tells us that you understand the procedures involved and that you give your permission to participate.

Sincerely,

\_\_\_\_\_  
 Dr. Kay Camperell  
 Principal Investigator  
 Secondary Education Dept.  
 Utah State University  
 435-797-2501

\_\_\_\_\_  
 Date

\_\_\_\_\_  
 Heidi Andreasen  
 Graduate Researcher  
 Secondary Education Dept.  
 Utah State University  
 801-829-3467

\_\_\_\_\_  
 Date

**Parent Permission:** By signing below I give my permission for my son/daughter's assessment scores be used in this research study.

\_\_\_\_\_  
 Signature of Parent/Guardian

\_\_\_\_\_  
 Date

\_\_\_\_\_  
 Telephone Number

\_\_\_\_\_  
 Student's name (please print)

Appendix B

Teacher-Created Test (*Call It Courage*)

Name \_\_\_\_\_ Date \_\_\_\_\_

**Call it Courage: Final Test**

- \_\_\_\_\_ 1. How did Mafatu know the eaters-of-men had arrived?  
A. He heard their drums.  
B. He found human bones on the island.  
C. He saw their canoes on the beach.
- \_\_\_\_\_ 2. How was Mafatu's new island different from his home?  
A. One was cold, and the other was warm.  
B. One was flat, and the other was mountainous jungle.  
C. One was flat and jungle; the other was hilly and desert.
- \_\_\_\_\_ 3. What made Mafatu sure that the lagoon fire belonged to his people?  
A. He recognized the lagoon.  
B. Kivi flew toward it.  
C. Uri barked.
- \_\_\_\_\_ 4. How did Mafatu's father react to Mafatu's fear of the sea?  
A. He encouraged him daily.  
B. He pretended it wasn't true.  
C. He grew silent and grim.
- \_\_\_\_\_ 5. What did Mafatu kill along the trail up the plateau?  
A. A wild boar.  
B. A large snake.  
C. A wild dog.
- \_\_\_\_\_ 6. What finally caused Mafatu to leave the island?  
A. The boys called him a coward.  
B. His father made him leave.  
C. The albatross seemed to call him away.
- \_\_\_\_\_ 7. Why was Mafatu afraid of taking the spear?  
A. It was on a scared platform.  
B. It was bloody.  
C. It didn't belong to him.
- \_\_\_\_\_ 8. Who left the island with Mafatu?  
A. Uri and Kivi  
B. The albatross  
C. Mafatu's dog  
D. All the above
- \_\_\_\_\_ 9. What did Tabana Nui call Mafatu?  
A. Brave Warrior  
B. Honored One  
C. Stout Heart
- \_\_\_\_\_ 10. What made Mafatu go after the shark?  
A. Uri fell into the water.  
B. The shark tipped the raft.  
C. The shark was going after Uri.  
D. All the above

Appendix C

Teacher-Created Test (*House of Dies Drear*)

Name \_\_\_\_\_ Date \_\_\_\_\_

***The House of Dies Drear: Final Test***

- \_\_\_\_\_ 1. Thomas finds out that the house of Dies Drear is supposedly haunted by  
A. talking to neighbors.  
B. reading a report about the house.  
C. doing research at the library.  
D. asking Mr. Pluto.
- \_\_\_\_\_ 2. The Small family arrives at the house and finds their furniture  
A. piled in the hallway.  
B. hidden from view  
C. polished and placed in rooms.  
D. vandalized
- \_\_\_\_\_ 3. Thomas believes that Pluto  
A. wants the Small family to leave the house.  
B. wants to be part of the Small family.  
C. is like his father.  
D. is tired of caring for the house.
- \_\_\_\_\_ 4. Mr. Small says that the triangles placed in the walls could be  
A. a gift.  
B. a sign of welcome.  
C. a warning  
D. a decoration from years ago.
- \_\_\_\_\_ 5. The Small's kitchen was vandalized by  
A. Pluto.  
B. Mayhew.  
C. the Carrs.  
D. the Darrows.
- \_\_\_\_\_ 6. According to the will of Dies Drear, the items in the cavern should go to  
A. the first son of slaves to find it.  
B. his relatives.  
C. the family that moves into the house.  
D. the church.
- \_\_\_\_\_ 7. Pluto, Mayhew, Mr. Small, and Thomas discourage the Darrows from continuing to search for the treasure by  
A. reporting them to the police.  
B. scaring them and making them look foolish.  
C. giving the treasure to charity.  
D. asking the preacher to talk to them.
- \_\_\_\_\_ 8. To Pluto, the items in the cavern represent  
A. a way to make peace with the Darrows  
B. artistic achievement  
C. comfort for his only son.  
D. his heritage.

9. Describe Thomas's relationship with his grandmother. \_\_\_\_\_

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10. What do Mayhew, Mr. Small, and Pluto think about preserving their heritage? \_\_\_\_\_

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11. Do you think Pluto and Mr. Small glorify slavery by preserving their heritage? \_\_\_\_\_

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12. What does Pluto fear when the Smalls move into the Drear house? \_\_\_\_\_

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13. Why does the cavern mean so much to Pluto? \_\_\_\_\_

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14. Describe how Thomas's view of Pluto changes over the course of the novel. \_\_\_\_\_

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## Appendix D

Teacher-Created Test (*Escape to West Berlin*)

Name \_\_\_\_\_ Date \_\_\_\_\_

***Escape to West Berlin: Final Test***

- \_\_\_\_\_ 1. What did Karl Klenk, Heidi's father do for work?  
A. Auto mechanic  
B. Farmer  
C. Office manager  
D. Director of the Pioneer Program
- \_\_\_\_\_ 2. How does Heidi address her mother and father?  
A. Oma and Opa  
B. Mom and Dad  
C. Karl and Annemarie  
D. Mutter and Vater
- \_\_\_\_\_ 3. What border does Karl Klenk cross each day to go to work?  
A. West Germany to East Germany  
B. East Berlin to West Berlin  
C. East Germany to Soviet Union  
D. East Germany to Czechoslovakia
- \_\_\_\_\_ 4. What was one of Heidi's favorite things to do with her father?  
A. Watch Western TV  
B. Listen to the Radio  
C. Work in the garden  
D. Go to the public swimming pool
- \_\_\_\_\_ 5. What happen to make the Klenks decide it was time to leave East Berlin?  
A. Herr Brecht's threats increased  
B. Karl Klenck could not find a job in East Berlin  
C. A border crosser's wife died because she was refused treatment at the hospital  
D. Herr Ulbricht threatened the entire family
- \_\_\_\_\_ 6. Who helped the Klenks get some of their things over the border?  
A. Petra and Herr Hansen  
B. Hans and Emmy Bauer  
C. Opa and Oma Fritz  
D. The Weppelmanns
- \_\_\_\_\_ 7. The Klenks received a phone call telling them that some had past way, who was it and how?  
A. Oma Fritz – heart attack  
B. Petra – diving accident  
C. Opa Fritz – heart attack  
D. Herr Sterns – auto accident
- \_\_\_\_\_ 8. Who attended Heidi's grandfather's funeral?  
A. Heidi  
B. Petra  
C. Annemarie  
D. Karl

- \_\_\_\_\_ 9. How did the Klenks get some of their personal items over the border?
- A. They sent them through the mail
  - B. Mother took them in her suitcase when she went to the hospital
  - C. They wore clothing with secret pockets to take their things over the border
  - D. Friends secretly transported their personal items over the border as gifts
- \_\_\_\_\_ 10. What did the East Berlin government tell the people about West Berlin?
- A. It was a beautiful place with many freedoms
  - B. There was a great deal of crime and there was a polio outbreak
  - C. Life was not that much different no matter where you lived
  - D. The Republic was growing stronger and great benefits would be available to the loyal members
- \_\_\_\_\_ 11. Where was Heidi's grandfather when he collapsed?
- A. In his home
  - B. In grandmother's flower garden
  - C. In the barn
  - D. In the field helping the harvesters
- \_\_\_\_\_ 12. When Heidi got to her grandmother's house she told her about the plan to move west. Why does her grandmother need to go with Heidi on Sunday?
- A. Because they don't want her grandmother traveling alone
  - B. They want her there when the baby is born
  - C. They are afraid the border will be closing soon
  - D. They need her blessing on the new apartment
- \_\_\_\_\_ 13. What was in Heidi's grandmother's suitcase that bothered Heidi when they left it behind?
- A. Seeds for flowers
  - B. Photographs and a pink mug
  - C. Jewelry
  - D. Baby gifts
- \_\_\_\_\_ 14. When did the border close?
- A. Friday Evening
  - B. Noon Saturday
  - C. Saturday Evening
  - D. Sunday Morning
- \_\_\_\_\_ 15. How does Heidi finally get across the border?
- A. Swimming across a canal
  - B. Walking across a bridge
  - C. By automobile
  - D. By train
- \_\_\_\_\_ 16. Why didn't Heidi want to go on the next Pioneer Trip to the Müggelsee?
- A. She was tired of being forced to attend political rallies.
  - B. She didn't want to have to lie to her parents about where she was.
  - C. Soldiers had teased her during the group's previous outing there.
  - D. She had almost drowned during her last visit to the lake.

- \_\_\_\_\_ 17. What did Heidi and her Mutter do after the family was threatened with eviction?
- A. They took the subway to West Berlin and told Vater what had happened.
  - B. They made a list of the places that Vater could go to too apply for a new job
  - C. They hid the Western magazines and newspapers they had in the apartment.
  - D. They went to see Petra's father and asked for his help with the landlord.
- \_\_\_\_\_ 18. One reason Vater said the family had to defect quickly was that he –
- A. thought he would be arrested any day.
  - B. knew he could lose his job if he didn't move quickly
  - C. expected the border to be closed soon
  - D. had seen someone following him during the past few days.
- \_\_\_\_\_ 19. Why didn't Heidi get across the fence before the policeman shouted at her?
- A. She lost her balance and fell backward away from the fence.
  - B. She let an elderly man go across the fence before her.
  - C. Her suitcase fell open, and she stopped to gather up her belongings.
  - D. Her skirt caught on a barb and pulled her back.
- \_\_\_\_\_ 20. What was one thing Heidi's grandmother did before she and Heidi left for Berlin?
- A. She burned all the pictures that could identify her family members.
  - B. She sewed a pocket inside her skirt lining to hold papers and seeds
  - C. She wrote a letter to the Schaefer's and hid it in the refrigerator.
  - D. She mailed a box of her belongings to Adelheide's address in West Berlin.

21. Why did Petra tell Heidi she could not come see her any more?

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22. What items did Heidi send to West Berlin?

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23. What were some of the things that were being said about West Berlin and its people as he border was being closed?

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24. What things do you think Heidi will miss now that she cannot return the East Berlin?

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25. Describe Heidi's final meeting with Petra?

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Appendix E

Teacher-Created Test (*Bearstone*)

Name \_\_\_\_\_ Date \_\_\_\_\_

**Bearstone: Final Test**

- \_\_\_\_\_ 1. Why does Cloyd run away before driving into Walter Landis's ranch?
- A. He recognizes that Landis is his father.
  - B. He is afraid that Landis will treat him cruelly.
  - C. He does not want to spend the summer away from his family.
  - D. He believes that the spirits of his ancestors haunts the ranch.
- \_\_\_\_\_ 2. After Cloyd overhears Walter talking with Susan James, he begins to:
- A. wish that he could run away forever.
  - B. respect Walter and his way of life.
  - C. abandon his traditional beliefs.
  - D. hope that someone will come to rescue him.
- \_\_\_\_\_ 3. Which of the following trait would Cloyd probably dislike in a person?
- A. the ability to ride a horse very well
  - B. the habit of asking personal questions
  - C. the belief that a man and nature should live in harmony
  - D. a cheerful and energetic attitude
- \_\_\_\_\_ 4. Walter does not stress the importance of Cloyd's work on the ranch. What does this suggest about his character?
- A. He does not believe in the value of work.
  - B. He understands that success takes time.
  - C. He thinks that work should not be discussed between friends.
  - D. He values Cloyd's company as much as his productivity.
- \_\_\_\_\_ 5. One reason that the bearstone is especially meaningful to Cloyd is that it:
- A. belonged to his father
  - B. reflects his own cultural heritage
  - C. is carved from valuable turquoise
  - D. resembles a pet he once loved
- \_\_\_\_\_ 6. After enjoying his time at the ranch, Cloyd becomes discontented when he realizes that:
- A. Walter wants to return to his mine
  - B. he cannot finish building the fence soon enough
  - C. the peach trees are more abundant than his grandmother's were
  - D. he will be able to own Blueboy
- \_\_\_\_\_ 7. The main reason that Cloyd dislikes Rusty is that Rusty is:
- A. one of Walter's closest friends
  - B. a white man
  - C. a bear hunter
  - D. an employee at the Eaglewing group home
- \_\_\_\_\_ 8. Why does Cloyd kill the peach trees?
- A. He knows the trees make Walter sad.
  - B. He is angry with Walter.
  - C. He has an accident with the chain saw.
  - D. He does not want to return to the group home.

- \_\_\_\_\_ 9. Why is Cloyd especially eager to help Walter return to the mining?
- A. Cloyd wants to become rich.
  - B. Cloyd wants to visit the home of his ancestors.
  - C. Cloyd wants to learn another useful skill.
  - D. Cloyd wants to help Walter become financially independent.
- \_\_\_\_\_ 10. What event shows that Cloyd has grown to trust Walter Landis?
- A. Cloyd gets caught in a dangerous rainstorm.
  - B. Cloyd helps Walter mine for gold.
  - C. Cloyd tells Walter his secret name.
  - D. Cloyd thinks of Walter when he is on top of the Rio Grande Pyramid.
- \_\_\_\_\_ 11. One of the reasons that Cloyd gets injured in the hailstorm is that he:
- A. is not used to traveling alone in the woods
  - B. often makes rash, careless decisions
  - C. wants to make Walter angry with him.
  - D. expects the bearstone to work as a lucky charm to protect him.
- \_\_\_\_\_ 12. Cloyd and Blueboy have a life-threatening accident while they are climbing in the mountains. From this experience, Cloyd learns that animals:
- A. that are in danger will not consider human needs
  - B. always know the best path to take when climbing
  - C. should not be used for routine tasks or chores
  - D. can act to protect humans in emergencies
- \_\_\_\_\_ 13. How does Cloyd feel when he reaches the top of the Rio Grande Pyramid?
- A. tired and disappointed
  - B. confused and frightened
  - C. repentant and lonely
  - D. joyous and peaceful
- \_\_\_\_\_ 14. Which of the following statements best reflects Walter's attitude toward mining?
- A. It is boring but a reliable way to make a living.
  - B. It is a discouraging and repetitive task.
  - C. It is a thrilling search for enormous treasures
  - D. It is too dangerous a task for a young man to consider.
- \_\_\_\_\_ 15. Cloyd feels responsible for the bear's death because he:
- A. removed the bearstone from a burial
  - B. was not aware that Rusty was hunting the bear
  - C. told Rusty that he had seen the bear
  - D. accidentally injured the bear when he first saw it
- \_\_\_\_\_ 16. Which of the following best describes how Cloyd feels about Walter?
- A. He does not understand the things that are important to Walter.
  - B. He thinks that Walter is annoying and negligent.
  - C. He is grateful to Walter for helping him to learn.
  - D. He is resentful of Walter's contentment.



- \_\_\_\_\_ 17. Why does Cloyd decide not to tell the game warden what he saw during the bear hunt?
- A. He has come to respect Rusty's actions.
  - B. He wants to protect Walter from trouble.
  - C. He no longer wants to take revenge on others.
  - D. He is afraid that Rusty will prevent him from staying with Walter.

- \_\_\_\_\_ 18. What does the bear symbolize for Cloyd?
- A. the strength of will ad determination
  - B. the significance of humans
  - C. the moral responsibility to tell the truth
  - D. the power and beauty of nature.

19. Why does Cloyd want to go to Utah for the summer?

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20. How does Cloyd show respect for the Ancient Ones?

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Appendix F

Teacher-Created Test (*Willow Run*)

Name \_\_\_\_\_ Date \_\_\_\_\_

***Willow Run***: Final Test

- \_\_\_\_\_ 1. What did Meggie do instead of taking Big Bertha to the junkyard?  
She helped Lily fix her bicycle.  
She wiped the swastika off Grandpa's window.  
She followed Mikey and Muscle Man to the park.  
She hid in the closet to listen to Dad's secret.
- \_\_\_\_\_ 2. In what state, is Willow Run located?  
A. Minnesota  
B. Michigan  
C. New York  
D. Wisconsin
- \_\_\_\_\_ 3. Who was the best friend that Meggie was leaving in Rockaway?  
A. Eddie  
B. Virginia  
C. Lily  
D. Jamie
- \_\_\_\_\_ 4. Grandpa said he was not going to Michigan because he .....  
A. was afraid of being arrested in Michigan.  
B. had to grow his garden and wait for Eddie.  
C. was too old to earn his keep.  
D. needed to take care of Meggie's house.
- \_\_\_\_\_ 5. What did Meggie do the afternoon her family moved to Willow Run?  
A. She looked for a new blanket.  
B. She filled out an entry form for a contest.  
C. She toured the entire airplane factory.  
D. She mended all the families socks.
- \_\_\_\_\_ 6. What did a blue star in a home's window mean?  
A. They had a soldier fighting in the war.  
B. A jewish family lived there.  
C. The family living there supported the war.  
D. A soldier who lived there had been killed in action.
- \_\_\_\_\_ 7. What did Meggie's grandfather give her before leaving for Willow Run?  
A. A letter from her grandmother.  
B. An envelope of seeds for salad vegetables.  
C. His war medal  
D. An oatmeal contest letter
- \_\_\_\_\_ 8. What did Meggie do right after she met Harlan and Jamie?  
A. She took two ice pops out of the ice cream truck.  
B. She invited them over to her place to play.  
C. She told them to be quiet at night so she could sleep.  
D. She climb a tree and ripped her school skirt.

- \_\_\_\_\_ 9. Why did Harlan think someone was in trouble?  
A. An accident had happened on Meggie's street.  
B. Arnold the spy was wearing a swastika around his arm.  
C. Soldiers brought a telegram to Meggie's apartment.  
D. Meggie's apartment was on fire.
- \_\_\_\_\_ 10. Why did Meggie have to go to the movies after receiving information from the military?  
A. To be able to laugh without trying too hard.  
B. To have time alone to let the news about her brother sink in.  
C. To see if her brother was the soldier with daisies on his helmet.  
D. To keep Lulu busy so that Ronnelle could sleep.
- \_\_\_\_\_ 11. After Meggie planted her seeds at night, Arnold came and told her to ....  
A. treat each day as if it were a special gift.  
B. always take the path less traveled.  
C. remember all good things about those who are less fortunate.  
D. be careful about jumping to conclusions about people.
- \_\_\_\_\_ 12. What was in the package that her grandpa had sent her?  
A. A bag of seeds from the first apple of the year.  
B. A photo of Grandma Margaret.  
C. His victory medal from the Great War.  
D. his favorite red cap
- \_\_\_\_\_ 13. Arnold said he was a coward because he did not ....  
A. move out of his mother's home.  
B. write to his brothers who were fighting in the war.  
C. go into the service right after his birthday.  
D. take a dangerous job at the airplane factory.
- \_\_\_\_\_ 14. Meggie' bedroom walls were very thin and she overheard a conversation between another family. Who were they?  
A. Jamie, Uncle Leo & Jamie's father  
B. Patches, Kennis & their brother  
C. Arnold, Harlan, & Uncle Leo  
D. Harlan, Kennis & their father
- \_\_\_\_\_ 15. What did Meggie do that she later wishes she had not?  
A. went to the movies  
B. broke a window  
C. cut a hole in the wall  
D. took some ice cream without paying for it
- \_\_\_\_\_ 16. In what state is Rockaway located?  
A. Minnesota  
B. Michigan  
C. New York  
D. Wisconsin

17. Why didn't Meggie want Grandpa to go with them to Willow Run?

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18. Describe Meggie's new home in Willow Run?

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19. Meggie had a treasure box - list at least three items in the box.

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20. A saying that was used in the book Willow Run was "It's just for the duration". What did this saying mean as it was used in the book?

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Appendix G

Teacher-Created Test (*Eyes of the Emperor*)

Name \_\_\_\_\_ Date \_\_\_\_\_

***Eyes of the Emperor: Final Test***

- \_\_\_\_\_ 1. Why did Eddy's father stop speaking to him?  
 A. His father's dreams for Eddy were shattered  
 B. He didn't want Eddy to fight against Japan  
 C. He needed Eddy to help with the family business  
 D. He wanted him to finish ROTC before entering the army
- \_\_\_\_\_ 2. Why did the sinking of the "Red Hibiscus" influence Eddy to join the army?  
 A. It ruined the family business  
 B. He wanted to show that he was an American  
 C. His father needed the money to rebuild the boat  
 D. He wanted to prove to his father that he was now a man
- \_\_\_\_\_ 3. How does Cobra think the army views the Japanese American soldiers?  
 A. as a secret weapon  
 B. as a needed resource  
 C. as expendable  
 D. as a second-rate soldier
- \_\_\_\_\_ 4. What is the Bushido code?  
 A. Honor your father's wishes  
 B. Don't attack another unless they attack you first  
 C. The shame of surrender or capture is a disgrace  
 D. Respecting your elders
- \_\_\_\_\_ 5. What are Eddy's father's influential words to Eddy when he leaves to serve in the army?  
 A. "What you doing now .... It's right"  
 B. "You have betrayed your father's wishes"  
 C. "Don't disgrace your family name"  
 D. "Remember you are a true American"
- \_\_\_\_\_ 6. Who convinced the President that the secret project would work?  
 A. Army dog trainers  
 B. Secret service agents  
 C. Franz from Switzerland  
 D. Army researchers
- \_\_\_\_\_ 7. Why do the Japanese American soldiers strike the dogs?  
 A. To make the dogs more docile  
 B. So the dogs will recognize the Japanese as the enemy  
 C. To get the dog's attention  
 D. To make the dogs complete commands
- \_\_\_\_\_ 8. What "mantra" keeps repeating itself in Eddy's head?  
 A. "Can't be helped"  
 B. "Remember Pearl Harbor"  
 C. "Tough it out"  
 D. "Honor thy Family"

- \_\_\_\_\_ 9. Did Eddy believe that his scent differs from that of other human beings?  
A. At first he did, but later he is not sure  
B. He really doesn't know for sure  
C. Yes, of course he did  
D. No, he never did
- \_\_\_\_\_ 10. Does Smith believe that Japanese American soldiers have a unique scent?  
A. He offers no opinion  
B. No, but he is following orders  
C. At first he does  
D. Yes, it was a very strong belief
- \_\_\_\_\_ 11. In the last trial, why does Smith not command Kooch to "stand down"?  
A. He is a racist.  
B. He dislikes Eddy.  
C. His reasoning is unclear.  
D. He is trying to make a point.
- \_\_\_\_\_ 12. What did Eddy think of President Roosevelt?  
A. He thought the President's decision was understandable under wartime circumstances.  
B. The President's decision made him sad.  
C. He lost all respect for him as a man.  
D. He supported all aspects of the decision.
- \_\_\_\_\_ 13. What is Major Parrish's parting words to the Japanese American soldiers?  
A. "I never believed in this project"  
B. "Your mission here is not finished"  
C. "The worst is still ahead"  
D. "You're going to war"
- \_\_\_\_\_ 14. What is Leroy's parting words to the Japanese American soldiers?  
A. "I'm proud to know you"  
B. "I'll never forget you guys"  
C. "I thought you were different"  
D. "I will never see you again"
- \_\_\_\_\_ 15. What did Smith do that convinced Eddy that he had finally gained Smith's respect?  
A. He apologized to Eddy.  
B. He dipped his chin to Eddy.  
C. He told Eddy that he had never met someone as tough.  
D. He told Eddy how proud he is of him.
- \_\_\_\_\_ 16. In a phone call, what did Herbie tell Eddy about their father?  
A. Immigration had put their father on a list for deportation.  
B. Their father was being sent inland to Arkansas.  
C. Their father had barricaded himself in the house and refused to come out.  
D. The FBI had let their father go because they needed him to help fix boats.



- \_\_\_\_\_ 17. What did Herbie give Eddy for a good-luck charm?  
A. An iridescent piece of mother-of-pearl  
B. His high school ring  
C. A smoothly polished, deep blue stone  
D. The cover from one of his old baseballs
- \_\_\_\_\_ 18. The bravest thing Eddy had seen in the army involved a soldier ....  
A. stepping into a nest of manta rays in the shallows of Cat Island.  
B. swimming out to a rowboat to help save another soldier's leg.  
C. pulling one of the dogs off another soldier's leg.  
D. shoring up the barracks in a storm.
- \_\_\_\_\_ 19. After Smith stepped up Kooch's training, what did Eddy do that wasn't smart?  
A. He stumbled into a crocodile's nest.  
B. He climbed a dead tree.  
C. He waded into a pond to hide.  
D. He opened and ate a candy bar.
- \_\_\_\_\_ 20. What was in the look Smith had given Eddy just before the test?  
A. fear  
B. respect  
C. hatred  
D. embarrassment

21. What was the "Japanese Problem"?

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22. Why are soldiers from the mainland positioned behind the Japanese American enlistees at the beach?

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23. What is the secret mission for whom the Japanese American soldiers are singled out?

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24. What does Smith do, which Eddy finds insulting?

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25. Why does Eddy attack Smith after the final preparatory exercise?

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Appendix H

Teacher-Created Test (*Jason's Gold*)

Name \_\_\_\_\_ Date \_\_\_\_\_

**Jason's Gold: Final Test**

- \_\_\_\_\_ 1. What is Jason's job when the story begins?  
A. newspaper seller  
B. dogsled driver  
C. writer  
D. camp cook
- \_\_\_\_\_ 2. How does Jason get from New York to Seattle?  
A. He jumps a train.  
B. He hitchhikes.  
C. He hikes on foot.  
D. He rides a horse.
- \_\_\_\_\_ 3. What had Jason's brothers done before going to Alaska?  
A. They had taken the money set aside for him.  
B. They had secured a job for him at the sawmill.  
C. They left a credit card for room and board.  
D. They bought a ticket for him to join them.
- \_\_\_\_\_ 4. How did Jack help Jason leave Juneau?  
A. by getting him a job helping transport horses  
B. by buying a pass on the next boat  
C. by hiding him in a large flour sack  
D. by finding room for him in an Indian canoe
- \_\_\_\_\_ 5. Why did Kid Barker and his gang beat up Jason?  
A. Jason refused to become involved with their scam to cheat passengers.  
B. Jason told the ship's captain how they were cheating the passengers  
C. Jason stole money from them.  
D. Jason threatened to turn them in to the captain.
- \_\_\_\_\_ 6. After Jason saved the dog, he heard the madman...  
A. drop his pack  
B. attack his horse  
C. shoot himself  
D. begin to cry
- \_\_\_\_\_ 7. From the head of One Mile River, Jason watched....  
A. King rescue Jamie from the swirling icy water  
B. Kid Barker stumble into camp with his pack  
C. Old William get beaten for stealing food  
D. Jamie and her father canoe through the rapids
- \_\_\_\_\_ 8. Why did Jason become trapped at Five Fingers for the winter?  
A. He was injured when a bull moose trampled him.  
B. He didn't build a boat in time to cross the lake.  
C. King became injured and Jason had to stay with him.  
D. He lost the map he was following and took a wrong turn.

- \_\_\_\_\_ 9. Jason cleared the mountie station successfully by....
- A. portaging to a small stream behind the station
  - B. crossing on the other side of the lake at night
  - C. packing all the caribou to make the required weight
  - D. making a small raft and picking up extra gear
- \_\_\_\_\_ 10. What was Jason doing when he found the blood trail of the moose?
- A. following boot prints in the fresh snow
  - B. gathering rose hips to prevent scurvy
  - C. collecting firewood to dry some salmon
  - D. cutting pine boughs to build a shelter
- \_\_\_\_\_ 11. Why had Charlie and his party left Dawson City?
- A. They had not had time to build a decent cabin.
  - B. They had heard of a strike farther south.
  - C. They did not have enough food for winter.
  - D. A smallpox epidemic had broken out.
- \_\_\_\_\_ 12. What caused Charlie to lose his leg?
- A. frostbite
  - B. cancer
  - C. a fight with a bear
  - D. a sawmill accident
- \_\_\_\_\_ 13. What did Jason find shortly before he stopped following the moose?
- A. an empty cabin with a small cache of food
  - B. parts of a crushed skiff trapped in the ice
  - C. a cabin in which two men had starved to death
  - D. wolf tracks that joined the moose tracks
- \_\_\_\_\_ 14. After the terrible encounter with bears, Jason realized that....
- A. he could not find his way to the cabin
  - B. only one small bear had been killed
  - C. his dog had been mortally wounded
  - D. he was afraid to leave the tree
- \_\_\_\_\_ 15. What did Jason discover when he finally reached Dawson City?
- A. His brothers owned and operated a sawmill.
  - B. Jack London had become a famous writer.
  - C. Charlie's uncle had staked a claim in his name.
  - D. His brothers were rich after staking a claim on Gold Creek.
- \_\_\_\_\_ 16. Why did Jason's friend, Jack London leave Dawson City?
- A. He had dreams of becoming a writer.
  - B. He had become rich and decided to go home and get married.
  - C. He was starving and couldn't earn enough money to eat.
  - D. He was sick and needed to get back to the States to get medicine.
- \_\_\_\_\_ 17. What was Jaime doing when Jason finally found her in Dawson City?
- A. She was reading her father's poetry at the theater.
  - B. She and her father were guiding hunting parties in the bush.
  - C. She had come into town to buy supplies.
  - D. She was managing a store that sold mining equipment.

18. When Jason first meets Kid Barker he doesn't trust him. How does Kid try to gain Jason's trust?

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19. People were not always prepared for all the dangers traveling to the Yukon and gold fields. How did this affect their behavior?

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20. There were many dangers on the way to the gold fields. Name some of the dangers the Klondikers faced getting to the gold fields?

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21. Would Jason have survived being alone for the entire winter without Charlie?

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22. Jason seems to meet up with Jack London when he most needed a friend. Why do you think London helped Jason out so many times?

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Appendix I

Teacher-Created Test (*How I Found the Strong*)

Name \_\_\_\_\_ Date \_\_\_\_\_

***How I Found the Strong: Final Test***

- \_\_\_\_\_ 1. After Pa and Henry left for the war, Frank realized that...  
A. his father hadn't said goodbye to him  
B. he still had Henry's rabbit's foot in his pocket  
C. Buck wanted to join up as well  
D. his mother was seriously ill with consumption
- \_\_\_\_\_ 2. Frank's mother teaches whom to read?  
A. John  
B. Henry  
C. Buck  
D. Tempy
- \_\_\_\_\_ 3. One night after Pa left, Ma told Frank that the...  
A. stork had come and dropped a baby in her belly.  
B. preacher was thinking about moving into the little shack behind the house.  
C. red sky during sunset that night was a bad omen for Pa.  
D. cellar contained more provisions than one family could use in a year.
- \_\_\_\_\_ 4. What is Frank's nickname?  
A. Bit  
B. Tempy  
C. Shank  
D. Buck
- \_\_\_\_\_ 5. Out in the yard one night, Frank learned of Grandpa's plan to....  
A. leave the family and head to Texas.  
B. join the Confederate Army even though he was too old to enlist.  
C. sell some silver to keep the family going.  
D. run off with some fleeing slaves.
- \_\_\_\_\_ 6. Where did the townspeople set up a temporary hospital?  
A. Liberty Church  
B. General Store  
C. Town Hall  
D. School House
- \_\_\_\_\_ 7. Ma sent Frank to the old schoolhouse to fetch help because....  
A. Irene was delirious with a high fever.  
B. Grandma had died and needed to be put to rest.  
C. Buck had been badly injured when an axe fell on him.  
D. they were completely out of food and water.
- \_\_\_\_\_ 8. Who was the "white man in chains"?  
A. Henry  
B. Bit  
C. Tempy  
D. Jack



- \_\_\_\_\_ 9. Who helped Ma deliver Little Bit?  
A. Irene's socialite mother  
B. Tempy, a Confederate soldier who had deserted  
C. Tid Smith, a neighbor who lived five miles away  
D. Brother Davenport, a tall, big-boned preacher
- \_\_\_\_\_ 10. One of the Russell men doesn't believe in fighting, which one is it?  
A. John  
B. Jack  
C. Henry  
D. Frank
- \_\_\_\_\_ 11. Why did the "big boys up at the house" laugh when Frank visited Irene?  
A. He wore handmade shoes that were much too large.  
B. He had combed and greased his hair flat to his small head.  
C. He was tongue-tied and stuttered a lot.  
D. He grinned like a fool the whole time.
- \_\_\_\_\_ 12. Why didn't Frank's father and brother write to the family?  
A. No writing tools  
B. Nothing to report to the family  
C. They didn't know how to write.  
D. There was no delivery system available.
- \_\_\_\_\_ 13. Frank, Pa, and the parson cried at the sight of . . . in Pa's wagon.  
A. the small, wrapped body of a deceased baby boy  
B. Henry's battered hat  
C. Pa's rifle  
D. a hamper full of food donated by Tempy
- \_\_\_\_\_ 14. What two things did Frank's grandpa give to him?  
A. shoes and a white shirt  
B. harmonica and arrowhead  
C. rifle and knife  
D. corncob pipe and tobacco
- \_\_\_\_\_ 15. What did Buck, Pa and Frank see on their return trip from the store in town?  
A. A cow that had been killed and slaughtered on the road.  
B. Three Confederate soldiers carrying off a young slave girl.  
C. The body of a boy hanging from a tree.  
D. A partially filled sack of old potatoes.
- \_\_\_\_\_ 16. What document did President Lincoln issue that said all slaves in the South were free?  
A. Emancipation Proclamation  
B. Bill of Rights  
C. Gettysburg Address  
D. Declaration of Independence
- \_\_\_\_\_ 17. Frank worked to save his father after . . .  
A. a soldier stabbed Pa with a bayonet.  
B. Pa nearly drowned in the Strong River.  
C. a plantation owner shot Pa in the neck.  
D. Pa and Buck were attacked by drunken townspeople.

- \_\_\_\_\_ 18. What was one permanent difference in Frank's life after he returned with Pa?
- A. He was the only man of the house.
  - B. He also brought home Irene as his young bride.
  - C. He would not be called Shanks anymore.
  - D. He and Buck would work side by side as a free man.

19. Why is Buck afraid of water?

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20. What is Christmas like in 1861 for the Russells?

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21. What does Ma make Frank and Buck promise not to tell people?

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22. What is Pa's homecoming like?

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23. What happened at Brother Davenport's house when Frank and his father went to visit?

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Appendix J

Individual Assessment Scores Figures

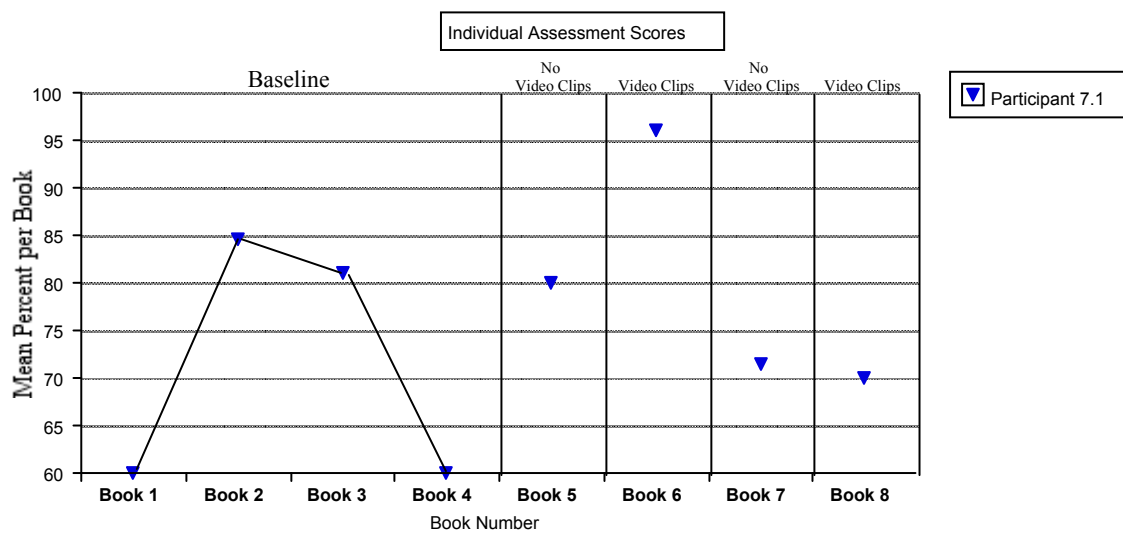


Figure J-1. Gina's (participant 7.1) individual assessment scores.

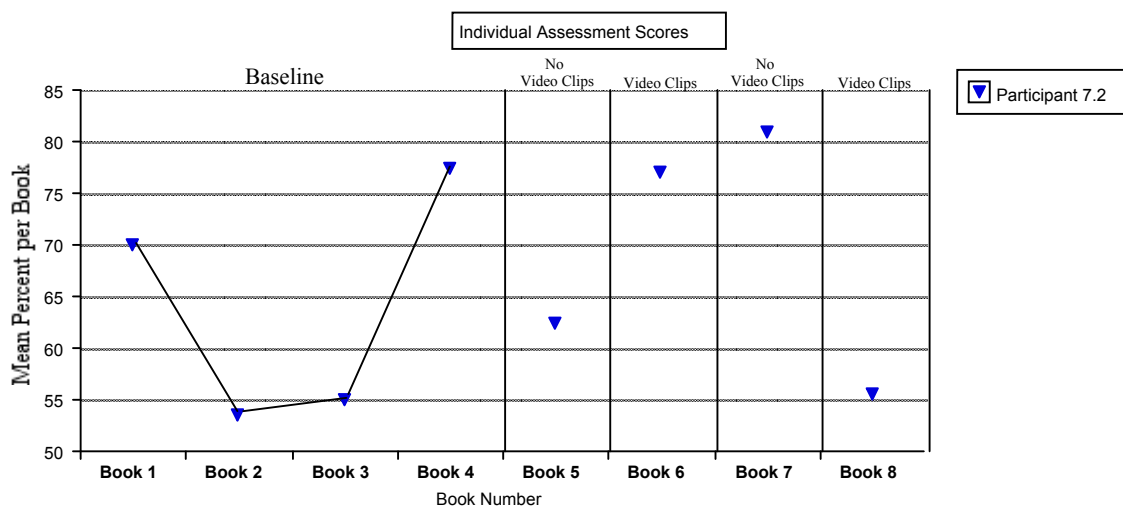


Figure J-2. Berlee's (participant 7.2) individual assessment scores.

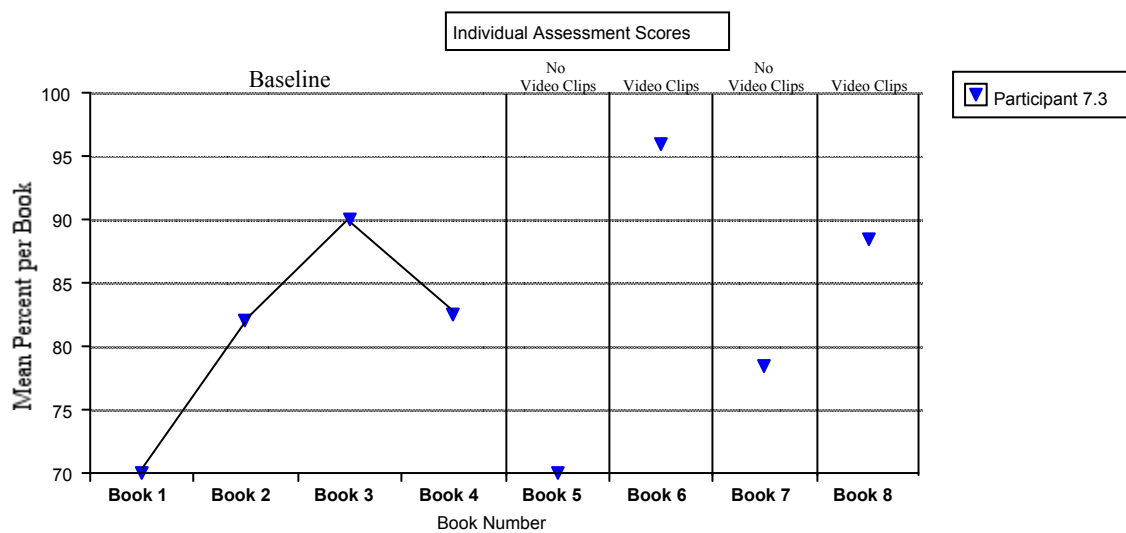


Figure J-3. Kurbie's (participant 7.3) individual assessment scores.

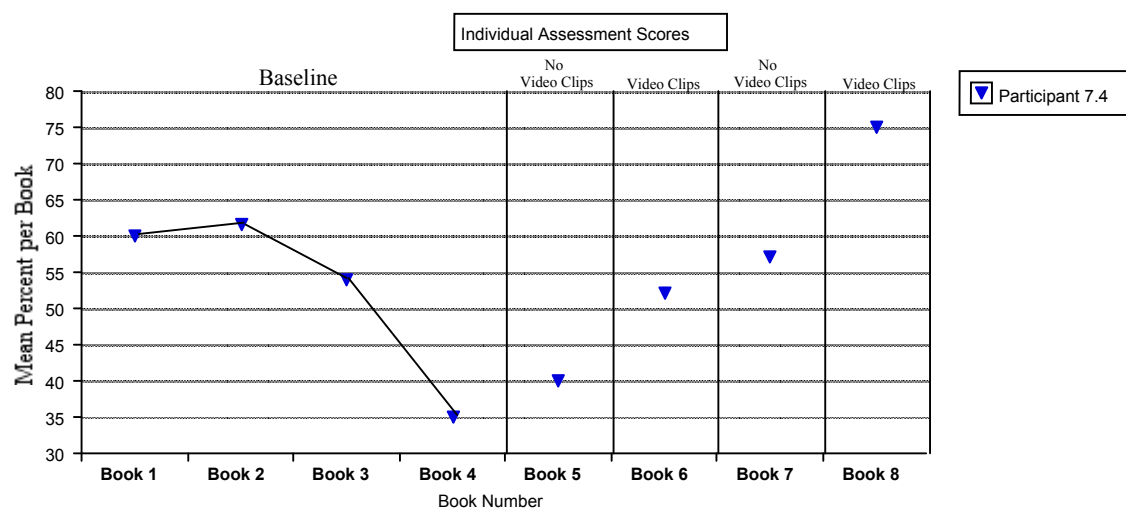


Figure J-4. Aggie's (participant 7.4) individual assessment scores.

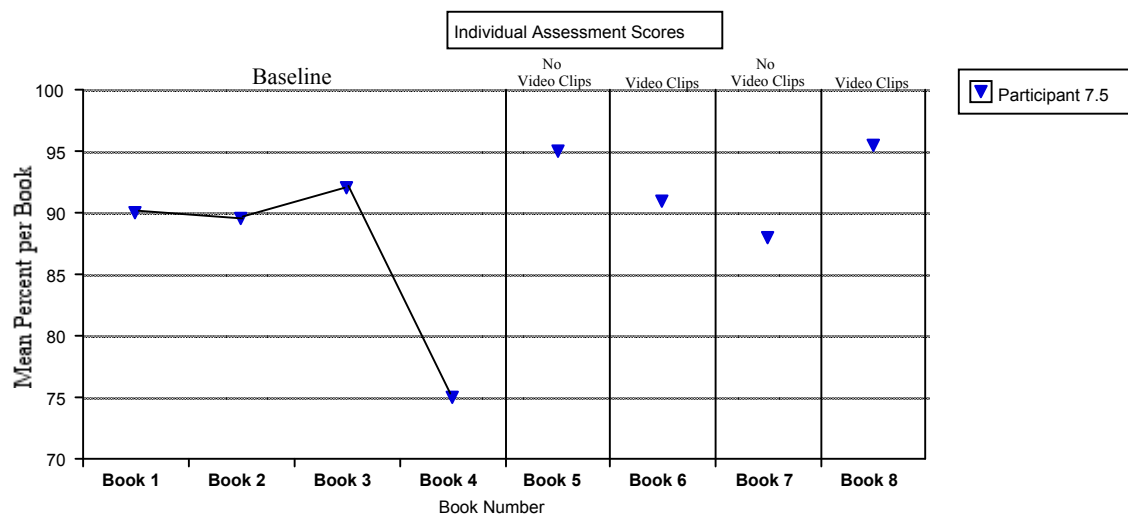


Figure J-5. Ryan's (participant 7.5) individual assessment scores.

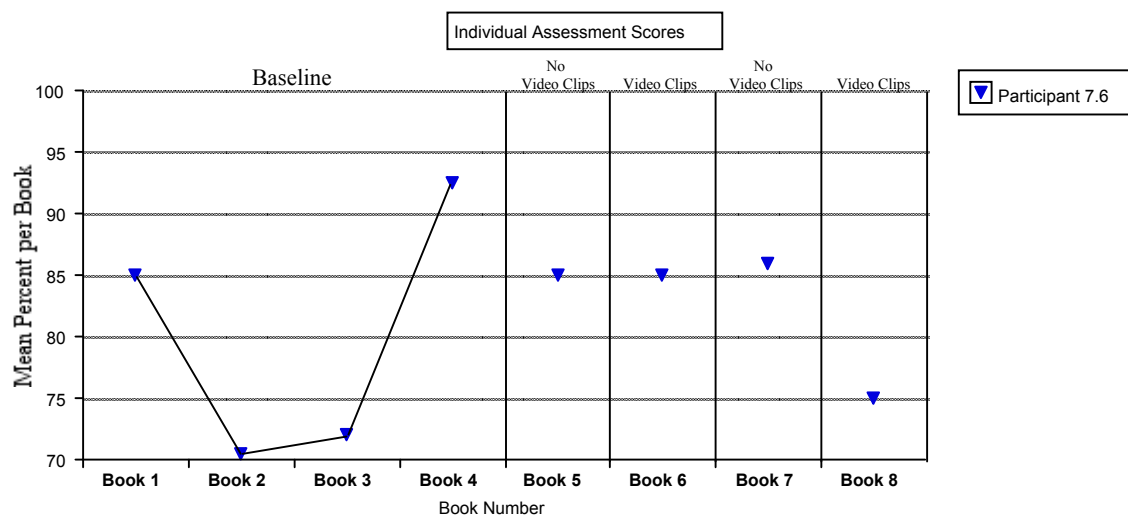


Figure J-6. P.J.'s (participant 7.6) individual assessment scores.

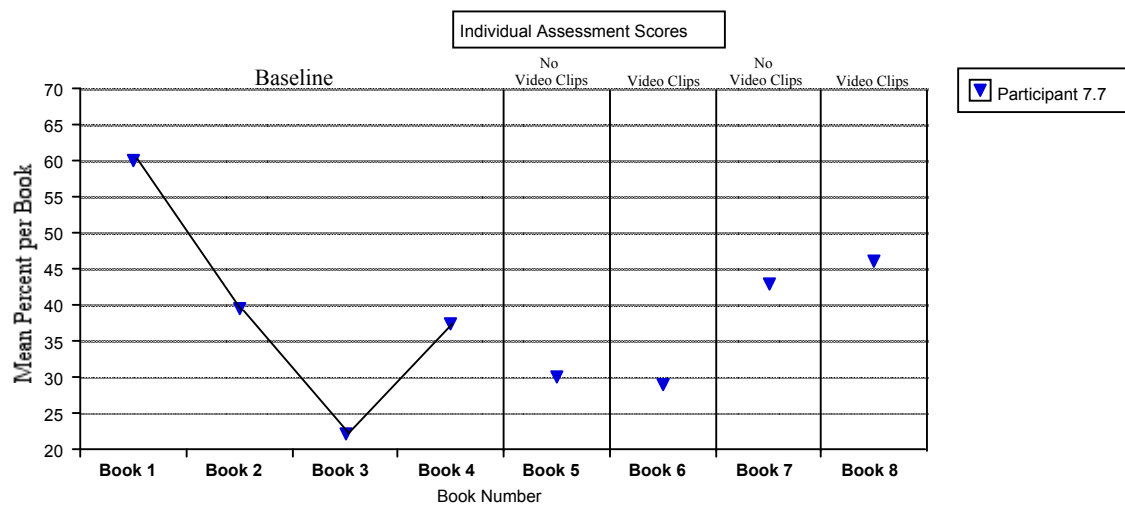


Figure J-7. Kobie's (participant 7.7) individual assessment scores.

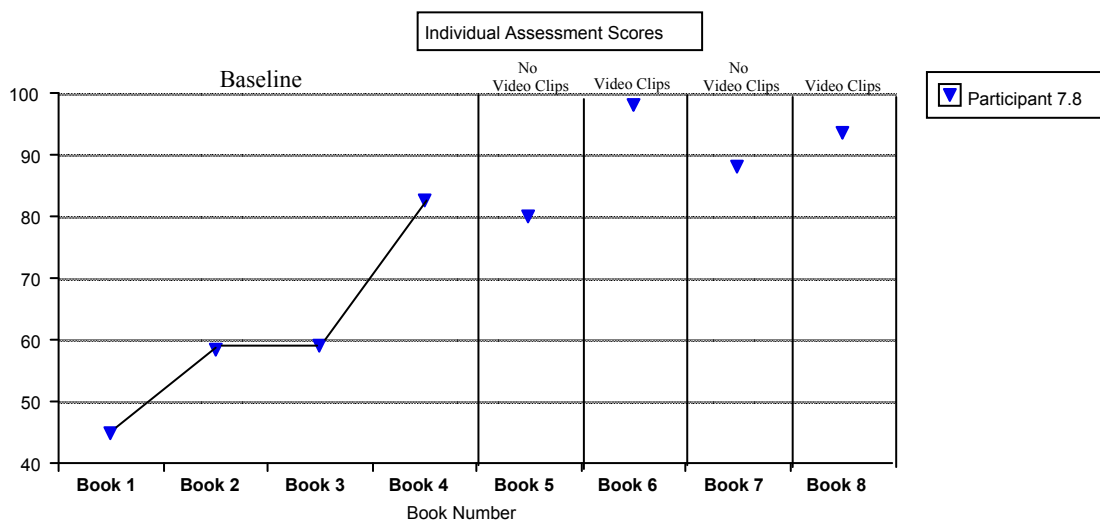


Figure J-8. Lynn's (participant 7.8) individual assessment scores.

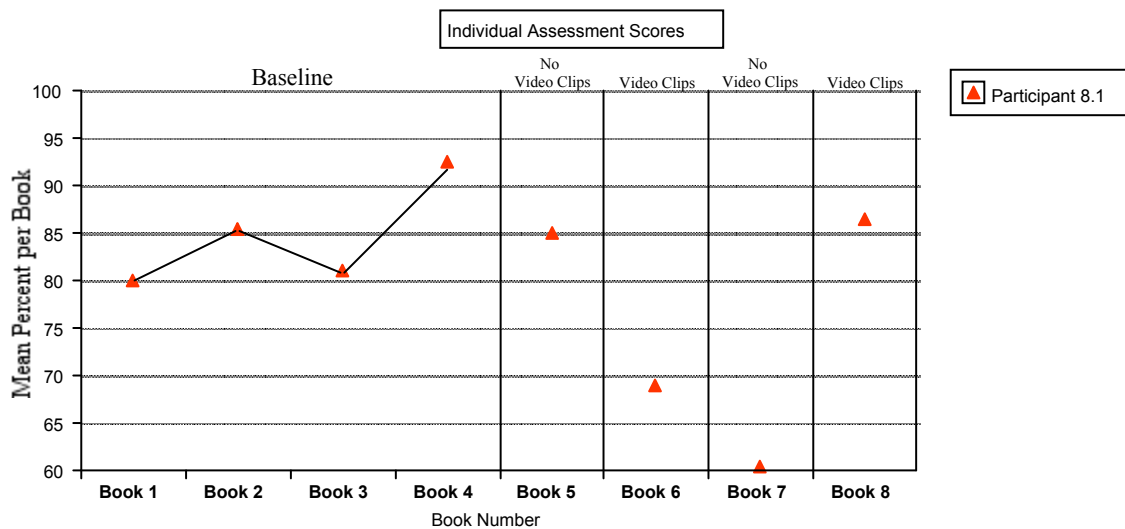


Figure J-9. Teddy’s (participant 8.1) individual assessment scores.

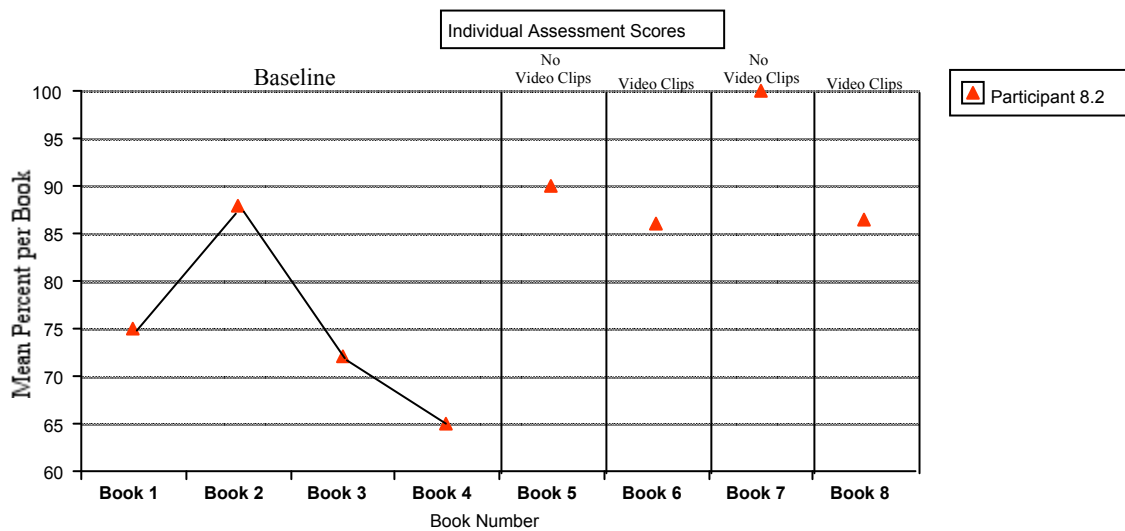


Figure J-10. Rylee’s (participant 8.2) individual assessment scores.



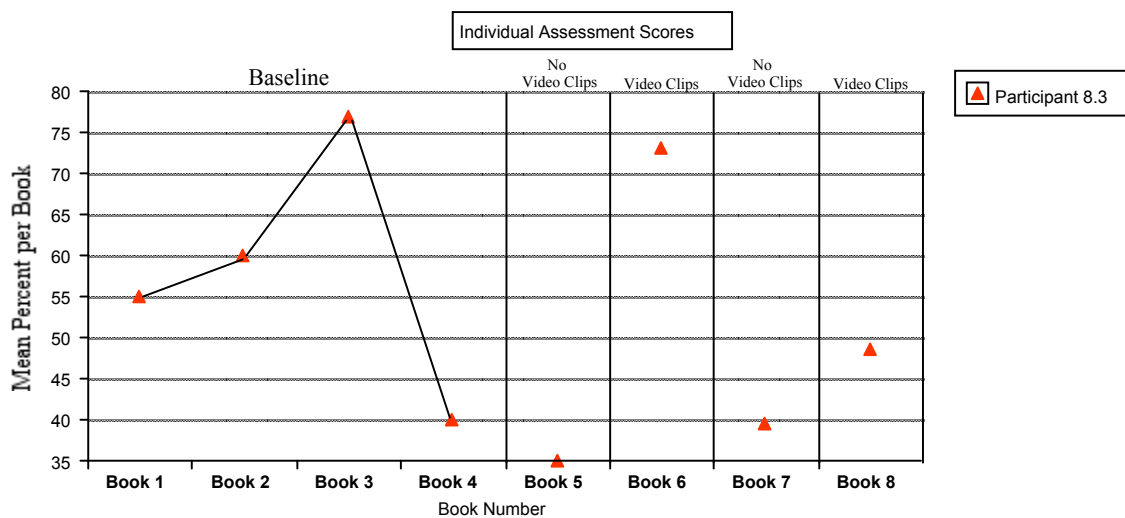


Figure J-11. Ramona's (participant 8.3) individual assessment scores.

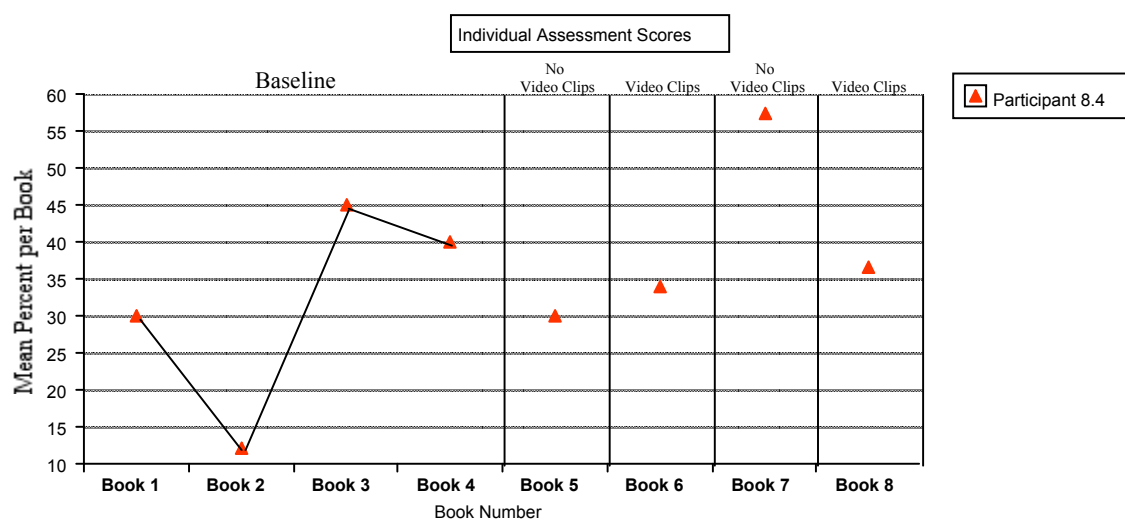


Figure J-12. Bridger's (participant 8.4) individual assessment scores.

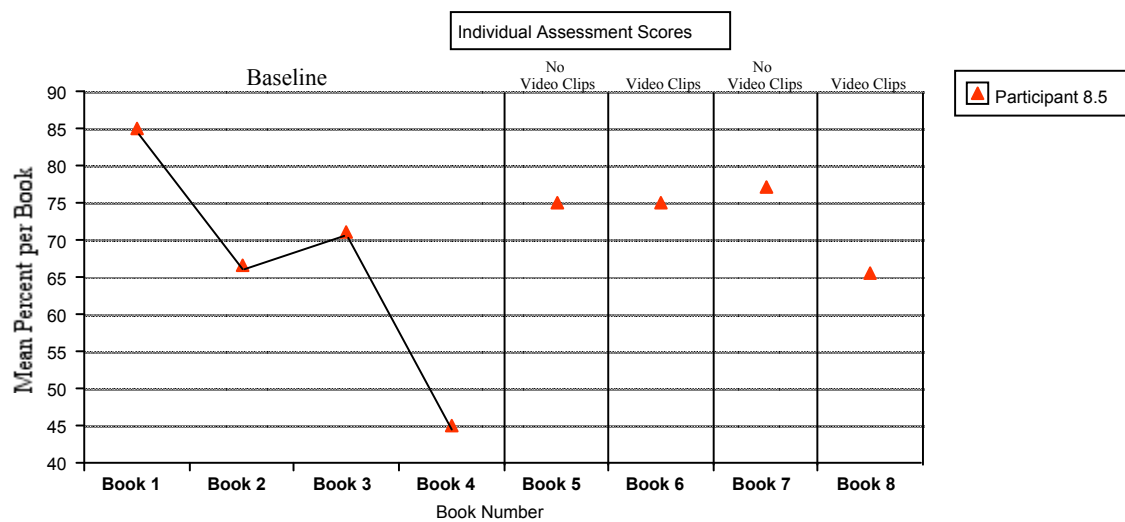


Figure J-13. Heath's (participant 8.5) individual assessment scores.

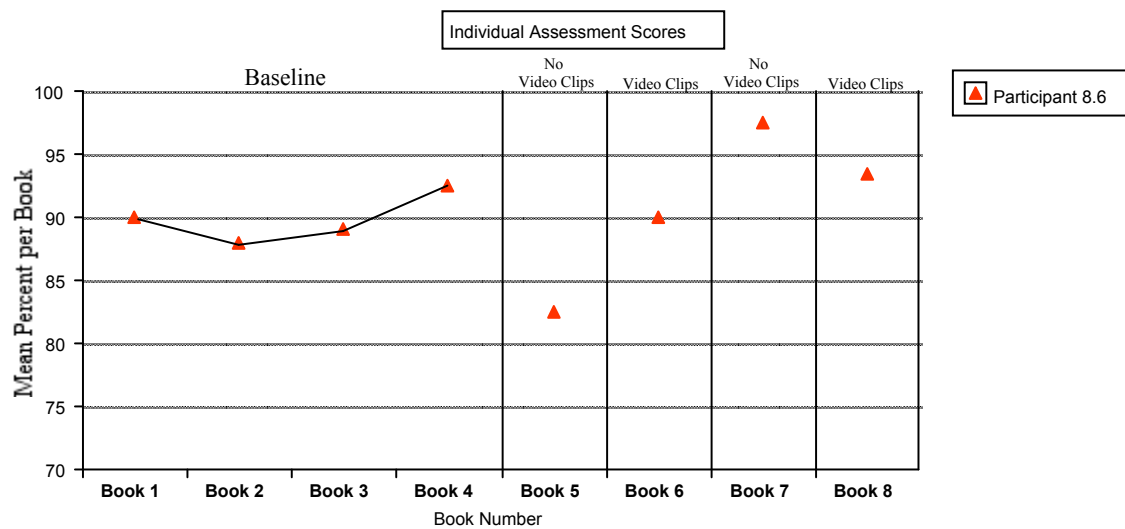


Figure J-14. Thomas's (participant 8.6) individual assessment scores.

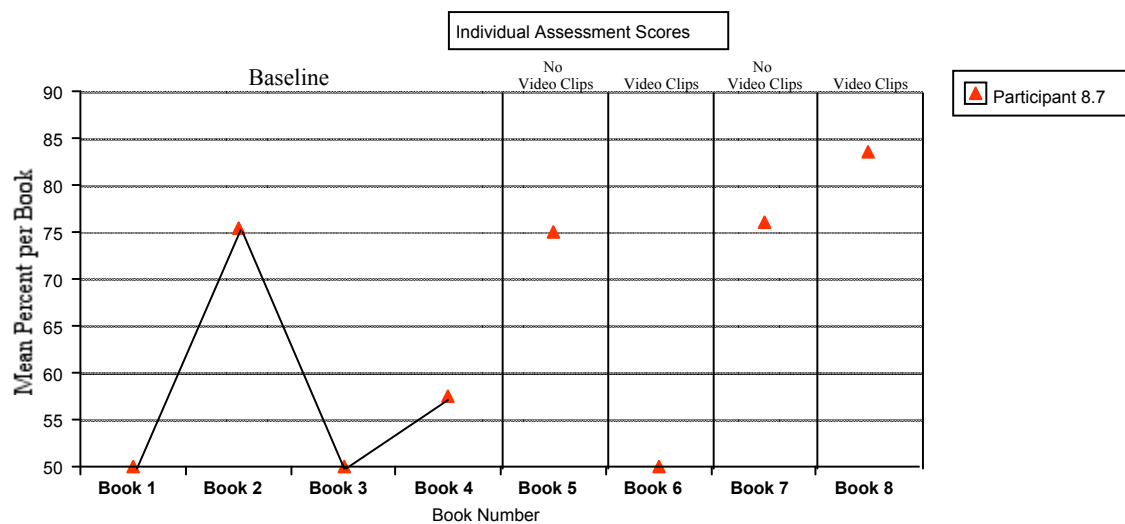


Figure J-15. Mark's (participant 8.7) individual assessment scores.

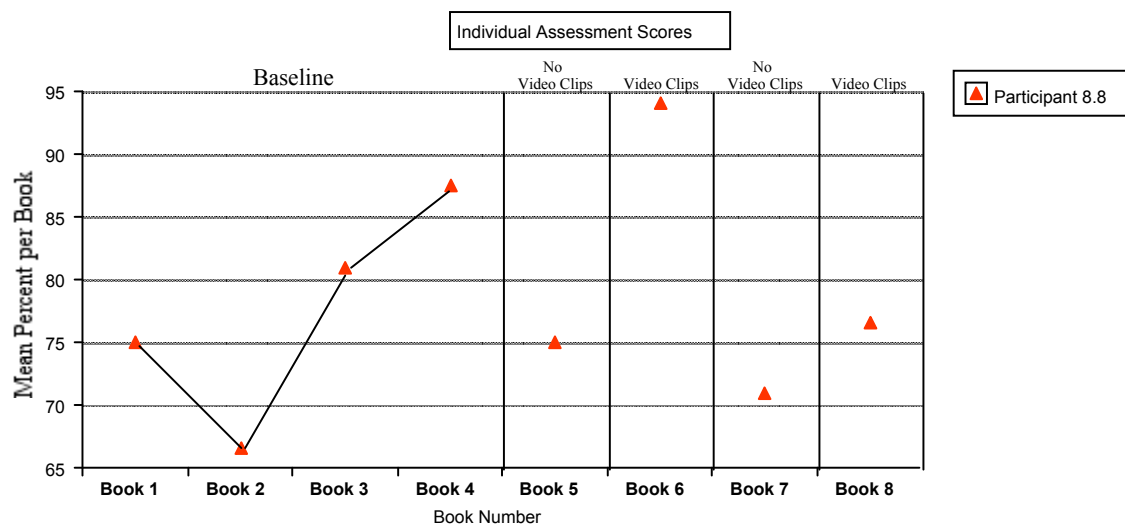


Figure J-16. Ray's (participant 8.8) individual assessment scores.

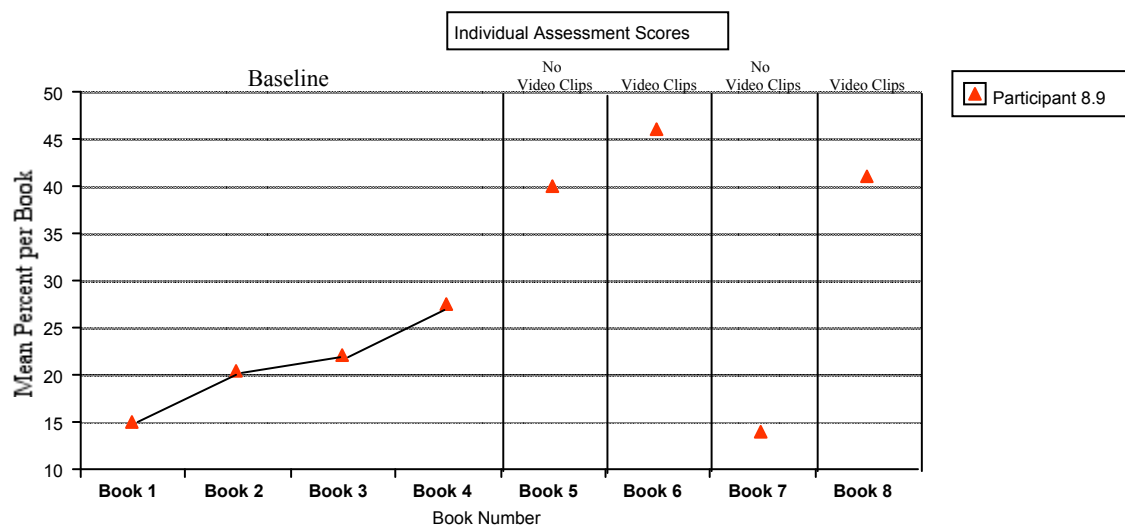


Figure J-17. Andy's (participant 8.9) individual assessment scores.

## VITA

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**EDUCATION**

Doctor of Philosophy, 2009  
Curriculum and Instruction with a Literacy Emphasis  
Utah State University, Logan UT  
Dissertation Topic: Development of Background Knowledge utilizing Video Clips

Administrative /Supervisory Certificate and Reading Endorsement, 2002  
Utah State University, Logan, UT

Master of Education, 1990  
Instructional Technology with a Library Media Emphasis  
Utah State University, Logan, UT

Bachelor of Science, 1985  
Elementary Education  
University of Southern Maine, Portland/Gorham, ME

Bachelor of Science, 1980  
Marine Biology  
University of New England, Biddeford, ME

**UNIVERSITY TEACHING EXPERIENCE**

Weber State University Extension Instructor (2005-2007)  
MEDUC 6350 Reading Comprehension Instruction, Fall 2005  
MEDUC 6350 Reading Comprehension Instruction, Spring 2006  
MEDUC 6350 Reading Comprehension Instruction, Fall 2006  
MEDUC 6350 Reading Comprehension Instruction, Spring 2007

### **ADMINISTRATIVE EXPERIENCE**

Morgan Middle School, Morgan, UT 2000-01

Completed an Administrative Internship at Morgan Middle School and Morgan Elementary School. Worked in cooperation with Principals Thomas McFarland, Ralph Pomeroy, and Kemmeth Adams to complete various assigned administrative tasks.

Member of Morgan Middle School Community Council

Member of Morgan Middle School Advisory Council

Scheduled, organized and planned school-wide RAD activities

Member of the Morgan Middle School Literacy Committee

Completed full-time teaching assignment in addition to intern responsibilities

### **TEACHING EXPERIENCE**

Morgan Middle School, Morgan, UT 1987 – Present

Completed teaching assignments in 5<sup>th</sup> grade, 6<sup>th</sup> grade, 7<sup>th</sup> and 8<sup>th</sup> Grade Mathematics, Reading and Library Media

Taught 5<sup>th</sup> grade 1987-1991

Taught 6<sup>th</sup> grade 1991- 1995

Taught 7<sup>th</sup> and 8<sup>th</sup> grade Mathematics 1995 – 1997 and 2006 – present

Library Media Specialist/Teacher 1997 – present

Taught Reading In-service for middle school teachers 1997-1999

Taught Remedial Reading to struggling 5<sup>th</sup> – 8<sup>th</sup> grade students 2000-2007

### **PROFESSIONAL HIGHLIGHTS**

Morgan Middle School, Morgan, UT 1987 – Present

First and foremost has been the opportunity to teach students in Morgan County for the past 23 years (1987- present)

Personal and professional improvement through continued education from 1976-present

Member of the International Reading Association 2002 – present

Presenter at the American Reading Forum National Convention 2004

Member of the Morgan Middle School Literacy Committee 1999 – present

Attended Goals 2000 reading In-service during the 1997-98 school year that lead to reading in-service for several teachers from the middle school staff during the 1997-98 school year. This in turn resulted in the development of the Middle School Literacy Committee.

Attended the Rocky Mountain Middle Level Symposium during the summer of 1998 with several other teachers from the middle school staff. Our efforts from this experience resulted in the creation of the Morgan Middle School Student Handbook and a Student Advisory Program.

Level 2 Mathematics Endorsement 1996-97

Member of the National Education Association and Utah Education Association 1987-present

Served as Morgan Education Association President 1990-91

Served as Eastern UniServ President 1991-92

Morgan Education Association Negotiation Team 1989-92

Member of the Morgan Middle School Administrative Team 1987- 1989 and 1992-93

Member of the Morgan Middle School Building Core Team 1987-1990

Mentor Teacher to several new teachers 1997-present

Member of the Choice and Responsibility Committee that worked to improve student discipline 1993-94. The work done by this committee became the foundation for the (SRC) Student Responsibility Center that is in operation at our school today.

### **PROFESSIONAL PRESENTATIONS**

American Reading Forum, Marco Island, FL 2004

Presentation Title: Promoting Reading Improvement for Adolescents