6-19-2011

Visual Approaches to Vocabulary Instruction: Teacher and Adolescent Learner Perceptions

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VISUAL APPROACHES TO VOCABULARY INSTRUCTION: TEACHER AND ADOLESCENT LEARNER PERCEPTIONS

A Dissertation

Submitted to the School of Graduate Studies and Research

in Partial Fulfillment of the

Requirements for the Degree

Doctor of Education

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May 2011

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ABSTRACT

Vocabulary plays an important role in the academic lives of adolescents; if students lack a mature vocabulary, their reading comprehension suffers significantly. Adolescent students also have need of instruction that is motivating and engaging. If students are not engaged in the lesson, very little learning takes place. Engaging adolescents through stimulating instruction is one of the keys to learning, and one way to hold students' attention is to incorporate visual prompts and examples.

This study investigated the effects of using three different visual approaches to vocabulary instruction on students' engagement and perceptions. Twelve 11th grade students enrolled in an academic English course and their classroom teacher were the participants in the study. Student-created graphics, still commercially-made vocabulary cartoons, and vocabulary DVDs were each used to augment the vocabulary instruction.

Findings indicated that each visual approach served to increase student engagement and perceptions of their learning. Overall, students preferred the student-created vocabulary visuals. Using these visuals, students could draw on prior knowledge to create personal connections that were relevant to their own lives. This approach was also most engaging since students were actively creating their own images.

Moreover, the classroom teacher's perceptions of the visual approaches were favorable; her comments supported the use of all three visual approaches for vocabulary instruction.

It was concluded that middle and high school educators can support literacy and vocabulary development by providing literacy experiences that stimulate students' interests and incorporate a variety of strategies that will help students build on prior knowledge. Incorporating visual approaches into vocabulary instruction is one viable strategy that can be used to achieve this goal.

ACKNOWLEDGEMENTS

"Heights by great men reached and kept were not obtained by sudden flight but, while their companions slept, they were toiling upward in the night."

Henry Wadsworth Longfellow

This has been a long journey, but one that I will never forget. I recall driving to Indiana before sunrise and not returning home until after sundown. I drove through rainstorms, plowed through snow, detoured around accidents, and skated over ice. Each time, I thought to myself *what am I doing?* A few miles down the road, I would remind myself of the great sense of relief I would feel at the end of the road—when I finally reached my destination.

Similarly, I have traveled through some personal "stormy weather" while writing this dissertation. More than once, I have stopped and thought I would never make it to the end; the road seemed too long, and the journey seemed too arduous. Some days it felt as though I was traveling uphill or even in reverse. But, many people have helped to "get me in gear" and rolling again. I would like to take this opportunity to thank all of them.

First, I would like to thank my dissertation chairperson, Dr. Jalongo. You have been my guide—my personal Global Positioning System—throughout this journey! You have given me direction, warned me to slow down and proceed with caution, and have often advised me to "recalculate" before moving ahead. I owe you a sincere debt of gratitude; without you, I would have been truly lost.

I would also like to thank my committee members—Dr. Hooks and Dr. Laverick.

I would also like to thank my family. To Todd—thank you for believing in me. You always had confidence in my abilities even when I had very little faith in myself. Thank you.

To my sisters, Stacy and Megan--you are both exceedingly busy with your own careers and children and lives—but never too busy to talk to me and provide necessary support. Thank you!

To my children, Emilee and Ethan--you are the most important people in my life! I can only hope that my diligence throughout this process and my value of education have encouraged you to try your best in all your endeavors. I love you, and I am so proud of both of you!

To my parents—you have always been my inspiration! I have always strived to live up to the examples you have set. You have unfailingly encouraged and supported me. You have made me the person I am today, and I love you both.

Finally, I would like to thank God for carrying me through the recent storms of my life and granting me refuge.

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CHAPTER I

THE PROBLEM

Statement of the Problem

Educators know that words and vocabulary strongly impact learners' lives. In fact, educated individuals are often identified by their written and spoken vocabularies (Blachowicz & Fisher, 2004). Beck, McKeown and Kucan (2002) in their book, *Bringing Words to Life: Robust Vocabulary Instruction*, introduce the first chapter with a reminder that vocabulary plays a "critical role…in people's lives and future possibilities. A large vocabulary repertoire facilitates becoming an educated person to the extent that vocabulary knowledge is strongly related to reading proficiency" (p. 1). In addition, a strong vocabulary can make a significant difference for students and their comprehension of reading materials (National Reading Panel, 2000). This makes sense; to get meaning from what they read, students need a great many words in their vocabularies. How important is vocabulary size? According to Krashen (1989), estimates of a mature vocabulary range from 39,000 words to 156,000 words. Nagy, Anderson, and Herman (1987) estimate that elementary-aged children pick up about eight words a day. However, students in middle and high school are expected to read more material faster while reading denser, more complicated texts. The fact is that "adolescents today are expected to plow through difficult material in a short time…" (Tovani, 2000, p. 13). Access to a wide range of vocabulary words is of special importance for adolescents.

In order to be aware of the full importance vocabulary plays in the lives of adolescents, it is necessary to first have a comprehensive definition of vocabulary. According to Lehr, Osborn, and Hiebert (2004), vocabulary is knowledge of words and

their meanings. For vocabulary and word knowledge, Cronbach (1942) describes several qualitative dimensions, defined as the kind of knowledge one has about a word and the uses to which that knowledge can be put:

Generalization: The ability to define a word.

Application: The ability to select or recognize situations appropriate to a word.

Breadth: Knowledge of multiple meanings.

Precision: The ability to apply a term correctly to all situations and to recognize appropriate use.

Availability: The actual use of a word in thinking and discourse.

In addition, every person has a *receptive* vocabulary and an *expressive* vocabulary. Receptive vocabulary refers to words that can be heard and understood in spoken context or read and comprehended in print. Expressive vocabulary refers to lexical items which a person can use properly when speaking or writing (Readence, Bean, & Baldwin, 2004).

There is evidence indicating that oral language plays a critical role in laying the foundation for literacy with print (Metsala, 1999). According to Nelson (2007)

> The apparent assumption in most word learning research is that infants come to language with a supply of categories and concepts of objects, organized in accordance with innately specified conceptual structures. In this way, words may be mapped to objects, which unproblematically map to internal concepts. (pp. 133-134)

Early word learning occurs in oral contexts and environments (Beck, 2002). Infants and preschoolers begin to learn language by exposure to oral language, and they become participants in their surrounding linguistic environments. Reading in the home and

preschool as well as exposure to adults talking around them has been related to children's subsequent reading proficiency (Dickinson & Tabors, 2001). These rich oral language experiences in the early years play an important part in ensuring vocabulary development in the future.

This oral context for vocabulary learning is supported by brain research. According to Jensen (2005) parents and caregivers of infants and young children should read to them often because

> Without exposure to new words, a youngster will never develop the cells in the auditory cortex to discriminate both between and among sounds well…before puberty, most children will learn any language…the supply of cells and connections in the brain are ready and available to be used for it. (p. 34)

This is consistent with the comparative ease with which young children acquire a second language as opposed to older students or adults who tend to struggle with foreign language study. In addition, young children who speak more than one language tend to do so without accent, whereas adults tend to have a heavy accent influenced by their first or native language (Collier, 1987).

There is a neurological explanation for this phenomenon. As children get older, their brains are not as open to the acquisition of language:

> …after puberty, the connections have almost disappeared, and the potential cells for language have been usurped by other more aggressive cells for other functions…neuronal loss and synaptic pruning make the

> acquisition of second languages more difficult with each passing year. (Jensen, 2005, p. 34)

This helps to explain why many adolescents struggle with learning vocabulary; it also raises questions about how vocabulary is built beyond that of everyday conversation.

The building of word knowledge "cannot just rely on students spontaneously engaging with words on their own, as it simply will not occur in many cases. Rather these facets [of word learning] must be the direct focus of instructional conditions" (Beck, McKeown, & Kucan, 2002, p. 13). Students who are not already avid readers will obviously have fewer opportunities to encounter new word knowledge; in addition, more complex vocabulary will be increasingly deficient in their daily conversation. Learning the progressively more challenging vocabulary commonly found in the secondary curricula requires more focused techniques and strategies. "Once students reach the point where words that are not part of their oral vocabularies become prominent in school texts, numerous issues…arise" (Hiebert & Kamil, 2005, p. 5).

Some of these issues and problems are because of a lack of acquired meaning for vocabulary words. According to Levelt, Roelofs, and Meyer (1999), vocabulary storage involves lexical representations of the stored phonology or sound patterns of words within the lexicon, along with semantic representations of word meaning. Defined as such, the lexicon is envisioned as an organized store of (phonological) word forms, distinct from—yet connected to—semantic representations or meaning. Meaning depends on the use of the word by those around us—"language grows in the brain in response to the uses of language as the child experiences them…Understanding symbolic

relations requires moving to an abstract level, a level that is not directly connected to real-world objects or relations" (Nelson, 2007, p. 163).

Acquisition of vocabulary for word meanings has been studied for many years. In fact, even as early as 1938, a classic study by Gray and Holmes questioned which was more effective with regard to vocabulary development—a wide reading program or direct vocabulary instruction (McKeown & Curtis, 1987). The authors of this study found significant gains with direct vocabulary instruction; later research found that no single direct instructional approach was better than the others. More recently, the consensus is stronger for natural, meaningful/contextual learning, although there appears to be a renewed interest in direct teaching of vocabulary (Beck, Perfetti, & McKeown, 1982). Furthermore, Beck, McKeown, and Kucan (2002) state that "words are learned from context, but…the problem is that it is not so easy to learn from written context" (p. 3). Students sometimes find themselves reading the words around the unknown word only to find that their understanding of the meanings of the surrounding words is also limited. This is a particular obstacle for English language learners, especially if their first language vocabulary is not that strong either (Jalongo & Sobolak, 2010).

When introducing vocabulary, Beck, McKeown, and Kucan (2002) suggest offering initial word meaning instruction through definitions, offering word meaning information through instructional contexts, offering meanings as students encounter words, and engaging students in dealing with the meanings of words. But relying on definitions for the knowledge of vocabulary words is impractical. "Not only are there too many words to teach them to all students one by one; there is too much to learn about

each word to be covered by anything but exceptionally rich and multifaceted instruction" (Nagy & Scott, 2000, p. 273).

The intensive vocabulary programs of Beck and her colleagues which succeeded in increasing students' comprehension of texts containing the taught words were founded on techniques aimed at: 1) developing a network of semantic relationships, and 2) linking prior knowledge to vocabulary (Beck, Perfetti, & McKeown, 1982; McKeown, Beck, Omanson, & Perfetti, 1983).

Even though some vocabulary programs have shown promise, more focus on this crucial area of literacy is necessary. And, although research on literacy and reading comprehension continues to grow, there is still a sense of urgency to increase student access to vocabulary and literacy in general. With the advent of the No Child Left Behind Act of 2001 (NCLB), educators who can provide high-quality literacy instruction, especially in the areas of vocabulary and reading instruction, are essential to continuous school improvement (Snow, 2002).

Engaging adolescents through stimulating instruction is one of the keys to learning, and one way to hold students' attention is to incorporate visual prompts and examples. According to Rushton and Larkin (2001), some concepts are better learned if strategies that connect or link vivid visual images such as pictures to ideas are used. If the brain responds strongly to visual images, what is the best way for educators to convey information? Neuroscience suggests that "90 percent of the brain's sensory input is from visual sources, and the brain has an immediate and primitive response to symbols, icons, and other simple images" (Jensen, 2008, p. 56). By focusing on visually engaging methods of teaching vocabulary to high school students, this research will have a

significant impact on the study of teacher and adolescent perceptions of vocabulary instruction and learning.

Because this is a study of vocabulary learning, the literature review will focus on 1) vocabulary research, 2) student motivation and engagement, 3) visual approaches to learning, and 4) the influences of student and teacher perceptions on learning.

Statement of the Study's Purpose

The purpose of this study is to identify teacher and student perceptions of engagement and learning as influenced by the addition of three visual approaches to vocabulary instruction. These visual approaches are: 1) student-created vocabulary visuals, 2) commercially-made still vocabulary graphics, and 3) vocabulary-based DVDs containing motion graphics.

This in-depth case study aims to contribute to the field of adolescent literacy by going beyond the traditional vocabulary instructional strategies for adolescent learners. Through the various visual approaches offered, students will study vocabulary through dual channels (auditory and visual). These three instructional strategies employ dual-coding, a theory which postulates that learning is enhanced by the combination of related verbal (vocabulary) and nonverbal (image) input (Paivio, 1991). Theoretically, the use of Paivio's Dual-Coding Method will increase students' engagement and recall of new vocabulary. In addition, by activating present schema and providing additional background knowledge through visuals, it is hoped that students will more fully engage in the vocabulary lessons.

Need for the Study

"Over 8 million students in grades 4-12 read below grade level, and 3,000 students with limited literacy skills drop out of high school every day" (National Council of Teachers of English, 2006, p. 2). As one high school teacher put it, "…we have a problem: Many students do not seem to realize the impact or importance that words have on their daily lives" (Bisig, 2005, p. 8). It also appears as though teachers fail to reflect on the importance of vocabulary in their approach to teaching such an imperative piece of the reading comprehension puzzle. Rhoder and Huerster (2002) affirm that "an extensive vocabulary and the ability to know, understand, produce, and use a large number and variety of words are critical to reading and listening comprehension and to school success, especially for middle and secondary students" (p. 730).

Furthermore, according to Lehr, Osborn, and Hiebert (2004):

> The strong and established relationship between students' vocabulary knowledge and their ability to successfully comprehend what they read places a heavy demand on classroom teachers, curriculum planners, program developers, organizers of staff development plans, reading researchers, and on parent outreach programs. The demand is that significant attention be given to the development of students' vocabulary knowledge. (p. 37)

But 'assign, define, and test' has been the default strategy for teaching vocabulary in many classrooms (Fisher & Frey, 2008). All too often at the middle and high school levels, students are subjected to the same basic scenario: receive the vocabulary list on Monday, look up the definitions in the dictionary, complete the quiz on Friday, repeat.

Although there may be some variation, this practice has remained largely unchanged and unchallenged in secondary classrooms. "If anything, most people remember those definitions for the quiz and then purge them from their minds as quickly as possible" (Bisig, 2005, p. 8).

In the scenario described above, the interaction between the student and the dictionary seems to be the crucial link. But, according to Rhoder and Huerster (2002) there are potential problems with dictionary word learning. The authors state that:

> there are several important reasons why dictionary work alone may be the least effective means of acquiring new vocabulary. First, students must be motivated…to look up the word; dictionaries can be intimidating in the way information is presented; [and] definitions are short, abstract generalizations often written in dense, embedded text…(p. 730)

The authors continue by stating that "isolated word learning is cognitively disruptive" (2002, p. 731). Nagy (1988) cautions teachers to be distrustful of definitions because they do not actually tell the reader how to use or understand the words in context. Furthermore, dictionary definitions of multiple-meaning words are additionally confounding for students. The word *track,* for example, could be defined as a verb meaning *to follow*. It could also be defined as a noun to mean *a mark left by a person, animal, or thing that has passed. Track,* as a noun, could also be *a path or circuit laid out for running, etc*. Furthermore, *track* could be defined as *any of the bands on a record, compact disc, etc.* (Neufeldt, 1988). It is plain to see that multiple-meaning words can pose a genuine obstacle for students learning new vocabulary. "For most commonly used words, polysemy (multiple meanings) is the norm. Examination of any dictionary of

substantial size reveals that words with just one meaning, though plentiful, are almost always low-frequency technical terms...multiple meanings can pose a serious problem for learners" (Scott, Nagy, & Flinspach, 2008, p. 191).

Who are the students most likely to suffer from this all-too-common process of isolated and often confusing dictionary use? The students who already struggle with reading are the ones who are apt to be daunted when presented with a list of vocabulary words. Learning vocabulary necessitates more than typical dictionary assignments. Instruction in vocabulary involves far more than looking up words in a dictionary and using the words in a sentence. This task, nevertheless, is a traditional vocabulary instructional requirement. There is general agreement that vocabulary instruction should include definitions or rules; however, supplying the dictionary definitions or even having students look up the definitions does not ensure a deep understanding of the words or how they are used in sentences.

Stahl (2005) and Nagy and Scott (1997) have different opinions on the concept of vocabulary. As Stahl (2005) puts it, "Vocabulary knowledge *is* knowledge; the knowledge of a word not only implies a definition, but also implies how that word fits into the world." (p. 95). Depending solely upon a dictionary definition and, consequently, the student's interpretation of that definition has been considered an ineffective approach (Nagy & Scott, 1997). In completing their original sentences, students often opt for vague sentence structures that require little word knowledge, for example, "It was very _____."

In a study conducted by Miller and Gildea (1987) using dictionary definitions to promote vocabulary was investigated. The researchers studied the utility of dictionaries

in enabling students to successfully transfer the provided definition to new context. Their findings, in part, showed that students who were assigned the task of looking up a word in the dictionary and writing a sentence incorporating that word predominantly produce "curious sentences" reflecting misconceptions about the meanings of words (e.g. My family *erodes* a lot. A sentence that substitutes the word *erode* for *eat out* or *eat away*). In this and many of the study's student examples, the children use a literal interpretation of the definition. This common phenomenon led Miller and Gildea to conclude that the exercise of asking students to write a sentence from the [dictionary] definition of a new vocabulary word is pedagogically ineffectual and a "waste of time" (p. 97).

These traditional methods of teaching vocabulary are familiar–copying dictionary definitions, memorizing words, using vocabulary words in complete sentences, using words in cloze exercises, and/or weekly vocabulary quizzes or tests in which students match words to their synonyms or definitions–and are all too common. The research has pointed out that memorization alone will not foster vocabulary growth and comprehension, yet teachers continue to focus on this strategy, and there is not adequate vocabulary reinforcement (Misulis, 1999).

Although many of today's high schools abound with current technology, most vocabulary instruction of the 21st century is indiscernible from that of years past. In addition, the traditional practices ignore current advances which show promise for enhancing students' understanding of new words, particularly those innovations that use technology.

Research on vocabulary flourished during the 1980s, along with a general interest in classroom exploration of various content-area reading strategies (Hopkins & Bean,

1999). However, despite nearly two decades of emphasis on vocabulary and content-area reading, instructional materials did not reflect the significance attributed to these two facets of reading. Blachowicz and Fisher (2004) cite the following:

> We worked with a group of school curriculum directors who were looking for teacher information materials on research-based best practices for their upcoming professional development activities. Vocabulary development was on the front burner in many of their districts. But when the curriculum directors searched for information on this topic in new books on literacy, they were shocked to find the average space devoted to vocabulary instruction in more than 20 books published since 2000 was two pages; many books had no index entry at all for this crucial topic. (p. 66)

Additionally, Harmon, Hedrick, and Fox (2000) affirm that "while textbook publishers may think vocabulary instruction is important, they do little to provide teachers with activities to develop vocabulary beyond word puzzles" (as cited in Readence, Bean, & Baldwin, 2004, p. 148). Manzo, Manzo, and Thomas (2006) state that in the 1990s, action research on vocabulary learning in content classrooms dwindled despite a declining trend in students' vocabulary learning on national assessments. Kitajima (2001) maintains that "classroom research on vocabulary learning is still limited" (p. 470). However, despite the recent lack of published research regarding adolescent vocabulary instruction, educators still agree it is an important piece of the literacy curriculum.

While adolescent vocabulary may be somewhat marginalized, early literacy experiences that help to shape school achievement have been given considerable attention recently. "In the past 15 years, increased attention has been paid to the preschool years as a critical time for developing skills that are needed to succeed in school" (Wasik, Bond, & Hindman, 2006, p. 63). More consideration has been given to preliteracy skills, including specific interventions which impact oral language skills. This is logical given that early literacy experiences are seen as critical to preventing reading failure; they are also viewed as the key to achieving high levels of literacy as adults. Since these developmentally significant practices influence mastery of reading and vocabulary, it is reasonable to have a sizeable collection of research on this topic.

Since vocabulary refers to students' understanding of the meanings of the words they encounter while reading, part of the complexity of this process may be explained by realizing that many aspects of language converge during literacy experiences. According to Jalongo (2010) young children's literacy acquisition is dependent on the complex interaction of the following four foundational components of language: phonology, semantics, syntax, and pragmatics (See Appendix A). Knowledge of these components influences the student's ability to understand what a word means (Wren, 2000).

Oral language skills, which consist of word knowledge, expressive and receptive vocabulary, knowledge of syntax, and conceptual knowledge, are significant in providing a solid groundwork for literacy (Metsala, 1999; Vellutino, Scanlon, & Spearing, 1995). Having young children engage in frequent conversations and exchanges of communication with their caregivers can increase their vocabulary development significantly (Hart & Risely, 1995). When parents and caregivers of young children

substitute more elaborate talk for brief responses, young children seem to benefit from this communication. But is an elaborated verbal code an effective and efficient method for adolescent learners? Will it have the same significant advantages for adolescent students?

According to Hayes and Ahrens (1988) the volume of books read is a primary contributing factor to differences in students' vocabularies. The simple method of having students read more recreationally has also been studied. Will having adolescents simply spend more time reading provide access to more vocabulary and, perhaps, to richer vocabulary development? Krashen (2006) considers free voluntary reading or FVR to be an effective technique necessary to advance student language and literacy skills. Free voluntary reading is just that—reading recreationally what one wants to read. According to Krashen, "…research strongly suggests that free reading is the source of our reading prowess and much of our vocabulary and spelling development, as well as our ability to understand sophisticated phrases and write coherent prose" (p. 43). Unfortunately, the problem with free voluntary (pleasure) reading is that its popularity with teachers in the classroom has declined which furthers deleterious effects on the adolescent vocabulary situation. This practice, most often referred to as sustained silent reading (SSR) or drop everything and read (DEAR) time, has even been marginalized, ironically, by the federal government's National Reading Panel which "devoted only about six of its 600 pages to recreational reading" (Krashen, 2002, p. 44). Other frequent teacher objections to free voluntary reading include the following: "'Poor readers don't read well enough to read on their own', 'Poor readers don't like to read', and 'If readers read whatever they like to read, they will read only junk'" (Krashen & McQuillan, 2007, p. 71).

While a student's reading volume is positively linked to amassing new vocabulary, the manner in which that quantity of reading is attained remains controversial. Yet, although some debates on the value of vocabulary instruction continue into the present, there are areas of agreement. Generally, educators reach consensus on the two "vocabularies" that may be acquired– recognition vocabulary and meaning vocabulary. "For most children, at about Grade 4 or 5, a shift begins to take place. The kind of vocabulary that becomes the greater hurdle is word meaning, or semantics. Although some children in these grades may still be struggling with the medium (the recognition of words), most begin to struggle more with the message (the meanings of the words and ideas)" (McKeown & Curtis, 1987, p. 8). Since this study focuses on high school students, the acquisition of meaning vocabulary will be the focus.

Another area of agreement in the literature suggests that multi-modal approaches to learning are advantageous. In other words, when a student's eyes, ears, and mind are all engaged simultaneously, retention increases (Grace-Martin, 2001). "Written or oral descriptions require students to process information in linguistic ways. Pictures, symbols, and graphic representations require students to process information in nonlinguistic ways" (Marzano & Pickering, 2005, p. 21). According to Ellery (2009) "These various modes of text representations (e.g., digital media, artistic designs, symbols) support the learners' meaning making process" (p. 9). Additionally, Marzano and Pickering (2005) suggest that teachers can aid students in their understanding of vocabulary terminology in several different ways, including using "video or computer images as the stimulus for understanding the information" and finding or creating "pictures that exemplify the term" (p. 15).

Dyson (2003) calls for further research on pedagogies that use multimodal approaches because "literacy development seldom includes any substantive consideration of such practices" (p. 330). By incorporating multiple modes of expression, the meaning-making process can be enhanced far beyond decoration or illustration. Similarly, Davies (2006) argues that literacy curriculum barely connects adolescents' literacy practices to the contemporary multimodal character of important text types in their lives. Students need to experience the curriculum more aesthetically, for they learn through the experiences that they have with their senses. According to Heid (2005)

> Although language may contribute to learning, learning is not limited to language. Given what we now know about how our sensory system nonverbally contributes to thinking through feeling, we can say that cognition is formed by both linguistic symbolic manipulation and nonlinguistic experience. (p. 52)

Some multimodal ways of learning and knowing include art, drama, and movement. Furthermore, it is through sensory perception that we are prompted to reflect and think (Csikszentmihalyi, 1996). Finally, Jewitt (2005) suggests that school literacy curricula only promote a "linguistic view of literacy" (p. 330). Missing in the traditional middle and high school level curricula are the sensory experiences that could lead many more students to linguistic proficiency.

It is true that the intricacies of our language make it somewhat difficult to access. Vygotsky (1962) explained the innate, complexity of our language: "The primary word is not a straightforward symbol for a concept but rather an image, a picture, a mental sketch of a concept, a short tale about it—indeed, a small work of art" (p. 75). An

understanding of a word is often the learner's background knowledge combined with a mental interaction between linguistic and nonlinguistic forms. Perhaps the use of multiple modes of instruction can help unlock the meanings of vocabulary words and have a facilitative effect on adolescents' learning.

Vocabulary--clearly a necessary, but somewhat neglected facet of the adolescent curriculum--demands educators' attention. The tired approaches to vocabulary instruction, while common and perhaps comfortable, necessitate a transformation that engages, motivates, and supports the learning of diverse groups of adolescent learners. Therefore, the research of effective and efficient procedures to teach adolescents vocabulary is critical.

Questions to be Researched

The specific research questions to be addressed in this study are the following:

Question 1. To what degree is student engagement evident when students are provided with various visual approaches to vocabulary instruction?

Question 2. What are students' perceptions of their learning when provided with visual approaches to vocabulary instruction?

Question 3. What are the classroom teacher's perceptions of student engagement and learning when visual approaches to vocabulary instruction are used?

Definition of Terms

Content-Area Literacy

Content-area literacy is defined as the level of reading and writing skill necessary to read, comprehend, and react to appropriate instructional materials in a given subject area (Readence, Bean, & Baldwin, 2004). Content-area reading is reading done by

students enrolled in the various content-area classes such as social studies and science. The textbook provides the basic knowledge of the subject and remains the central reading material in the classroom. Students read the chapters using special strategies that guide them in how to handle the densely written style often representative of textbook writing (Carter & Klotz, 1991).

Imagery

The art of making mental images--vivid representations or descriptions; mental pictures or conceptions.

Reading Comprehension

The degree to which an individual understands a text. There are many layers to reading comprehension including decoding skills, understanding the vocabulary, and relating the content to prior knowledge (Vaughn & Edmonds, 2006).

Vocabulary Media

Educational media used for vocabulary instruction. An example would be a collection of video clips which offer vivid demonstrations aimed at helping children grasp sophisticated concepts (Wood, 2001). The form of vocabulary media that will be used in this study is a collection of vocabulary DVDs titled "Vocab Success for the New SAT" that include SAT vocabulary words paired with analogous real-world images and movie clips. These DVDs are distributed commercially by Teacher's Discovery. Other computer-based vocabulary programs that incorporate audio and visual support, such as *Wordly Wise 3000,* 2nd Edition, are available commercially.

Limitations

One limitation of the study is that it includes only one teacher from one school district. Because of the small size of the school district and schools within the district, only one teacher is customarily assigned to each grade level. The purpose of this study is to describe, in detail, the vocabulary learning processes of a group of students rather than to generalize. However, it is anticipated that what is learned through this study will inform pedagogical practices with regard to vocabulary for teachers of similar groups of students.

CHAPTER II

REVIEW OF RELATED LITERATURE

Introduction

This chapter is a review of the literature as it relates to student motivation and engagement, schema theory, imagery and visual approaches to learning, vocabulary significance, and the influences of student and teacher perceptions on methods of vocabulary instruction.

Student Motivation and Engagement

Students' lack of motivation and engagement is one common educational topic that causes widespread teacher distress and anxiety. Educators at all levels, from primary teachers to college professors, are concerned about their students' engagement and attention to lessons and learning activities. Evidently, educators' cause for concern is well founded (Hidi & Harackiewicz, 2000; Jalongo, 2007; Jensen, 2005).

The consequences of a lack of student motivation and engagement are widely documented. According to Harris (2008), "Internationally, educational stakeholders are concerned with the high levels of student disengagement, evidenced by early school leaving, poor student behaviour, and low levels of academic achievement" (p. 57). In fact, Swanson (2008) found that dropout rates are approaching 50% in many urban school districts.

Some youths' criticisms of school and their disengagement from traditional pedagogies suggest there is a certain emptiness in the traditional high school curriculum which many students already perceive as unrelated to their lives (Bridgeland, Dilulio, & Morison, 2006). If adolescent learners want their schoolwork to have personal

significance, a logical motivator and mode of engagement would be a connection between the content and the students' lives. Caine and Caine (1994) state that "the inner concerns and personal objectives of learners must be engaged because they are the key to invoking their curiosity…" (p. 55). Of course, secondary teachers hope that their students would be innately inspired by the subject matter they are being taught.

> Ideally, all learners would be eager about and receptive to learning the things that adults consider to be important. Yet much of the time, teachers find themselves operating under a very different set of circumstances in which one or more children are disaffected, reluctant, or even resistant toward a particular learning task. (Jalongo, 2007, p. 395)

It is obvious that a lack of student motivation and engagement are road blocks to learning, and research shows that these obstacles tend to pervade in secondary classrooms. It is not surprising that nearly all teachers, especially those at the high school level, must deal with the issues of student motivation and engagement, especially when adolescent students frequently lament that school is boring.

> Educators generally agree that virtually all children are curious and eager to learn at an early age. The needs to explore, discover, and understand are said to be inherent to a child's nature…However, as children grow older, they become less curious about many tasks in classrooms. (Hootstein, 1994, p. 475).

Why is it that young children are extraordinarily curious and eager to learn--that they have desire to discover and understand? And, perhaps more importantly, why is it that, after students have been schooled, they generally tend to lose this desire to learn? A

number of students have become completely disengaged from academics by the time they reach middle and high school. More than just new approaches to curriculum and instruction—overcoming a legacy of previous negative experiences—is necessary in order to reengage them (Torgesen et al., 2007).

Applebee (2002) questions "In an era of MTV, video games, and the Internet, how do we keep students engaged in the disciplines of English—literature, composition, and language study? At one level, we clearly do not; the signs of disengagement are everywhere" (p. 30). Unfortunately, as students arrive at middle and high school, their past experiences that have proven to diminish their levels of motivation and engagement often persist. It is not surprising that, as the content students are expected to learn becomes increasingly technical and dense, their engagement levels often decrease. Coupled with these increased demands are well-meaning secondary teachers who push to cover the content that will be part of the next exam. Paradoxically, as teachers rush to teach more, their students frequently end up learning less.

This phenomenon is what Bain (2004) coined as the following:

> bulimic education – [A teacher] force-feeds the learner with a feast of 'facts' which are to be memorized and used for certain narrowly defined tasks, each leading to a single 'right answer' already decided by teacher or textbook. After this use, the facts are 'purged' to make room for the next feeding. 'Bulimic education' thus enforces an intensely local or short-range focus, irrespective of any long-range benefits that might arise from the succession of feed-purge cycles. (p. 41)

This all-too-common occurrence not only impedes, but decreases meaningful student learning. If a bulimic style of education is repeatedly employed, hopes for sustained student engagement remain out of reach.

> As anyone who has spent time with middle and high school students can attest, attempting to build the skills of disengaged adolescents is a futile enterprise. Whether expressed as defiant noncompliance or passive 'checking out,' the student who refuses to learn will succeed in that effort. (NCREL, 2005, p. 6)

An analysis by Marks (2000) investigated whether patterns exist in the engagement of students in instructional activity. In order to determine whether the patterns were consistent at several levels of education, students in elementary, middle, and high schools were studied. The study sample consisted of 3,669 students representing 143 social studies and science classrooms. According to the researcher "Engagement is an important facet of students' school experience because of its logical relationship to achievement and to optimal human development" (p. 155). Marks concluded that engagement was enhanced for all students who experienced forms of social support and who also perceived class work to be authentic.

Zenkov and Harmon (2009) attest that

> as veteran urban English teachers, we have been troubled by the apparent limited value many of our high school students see for our curricula and for school in general. We have heard more than a few students complain about the insignificance of the books we use, and the literacy tasks we assign…(p. 575)

It is the assignment of certain tasks that should be cautiously scrutinized. Could it be that an emphasis on rote memorization, drill and practice, and 'assigning' tasks that are dependent upon rewards or punishment have drained our students' initial motivation to learn for learning's sake? Students need to feel that learning is connected and valuable to their lives.

Perceptions regarding the authenticity of the task are a valuable facet of engagement. Likewise, student engagement is crucial for making the connections necessary for learning. When students are unable to find a connection between class content and their own lives, they become bored, inattentive, and even disruptive. If teachers want to prepare their students for life in the 21st century, they must try to reconcile the disconnect between the real world the students experience and the contrived and dated practices that are alive and well within their classrooms.

In a continuing longitudinal study by Oldfather (1993), students' perceptions of their learning and motivation in classroom settings were examined. The subjects, fifth and sixth grade students, were interviewed in-depth regarding their learning activities. The researchers found that

> A key connection between motivation for literacy and students' self-expression is this: In using literacy activities for self-expression, students experience a direct connection between their learning activities and *who* they are, *how* they think, and *what* they care about. These expressive activities are, therefore, powerfully motivating experiences. (p. 4)

The key is knowing what motivates students to learn. Specific suggestions for enhancing student motivation include moving away from "rote learning and

memorization, over-use of worksheets and textbooks, and decontextualized facts to providing challenging, complex work to students, giving homework that is enriching, and encouraging problem solving and comprehension" (Midgley & Urdan, 1992, p. 12).

Jalongo (2007) states the following:

> Effective teaching transcends merely imparting knowledge and relies, to a considerable extent, on educators' ability to motivate students to learn. Any characterization of learning that disregards the role of motivation and interest is shortsighted at best and destructive at worst. (p. 395)

If a teacher's practice, no matter how innocent or well-meaning his or her intentions, creates a phenomenon that decreases meaningful student learning, changes must be instituted.

According to McKeachie and Svinicki (2006), "Knowing more about how students are motivated and what you can do to structure a class that positively affects student motivation can make a significant difference in student engagement and learning" (pp. 140-141). It is incumbent on teachers to discover what inspires their students and to, subsequently, use those motivating materials, approaches, or techniques as part of their teaching repertoires. This takes continual planning and effort: "Engagement is an art worthy of a lifetime of reflection and study. It comes neither easily or cheaply, but rather with a personal commitment and a willingness to practice" (Middlecamp, 2005, p. 20).

One way to motivate students is to make learning activities enjoyable. "By helping students find the pleasure in learning, we can make that learning infinitely more successful" (Wolk, 2008, p. 10). According to Csikszentmihalyi (1990) finding joy in learning is an example of *flow*, which he defines as "the state in which people are so

involved in an activity that nothing else seems to matter; the experience itself is so enjoyable that people will do it at great cost, for the sheer sake of doing it" (p. 4). This theme is reiterated by Mathers (2008) who applied definitions of fun to literacy activities. According to Mathers (2008), when certain "conditions are met, students do not regard reading and writing as work to be avoided, but rather, work to be embraced" (p. 71).

The researcher noted that educators can learn a great deal from students about how to construct motivating classrooms. "For example, Abigail, a fifth grader, provided insight into the importance of choice to her motivation for literacy when she explained that 'What you *want* to know is usually funner stuff'" (p. 1).

Engagement is obviously central to teaching and learning, for "students who are focused and engaged will learn" (Boldt & Brooks, 2006, p. 224). Cambourne (1995, 2001) outlines eight distinct conditions for learning: immersion, demonstration, engagement, expectation, responsibility, use, approximations, and response. With regard to literacy learning, Cambourne's (1995) theory and research found engagement to be an essential condition: "Engagement was the key. It didn't matter how much immersion in text and language we provided; it didn't matter how riveting...our demonstrations were; if students didn't engage with language, no learning could occur" (p. 186).

Consequently, educators are faced with the important task of providing a clear message about the magnitude of literacy learning. In order to improve literacy, educators need to create a climate that fosters sustained cognitive and intellectual student engagement with academic content (Applebee, 1993). With regard to literacy, Ryan and Deci (2002) state that engagement involves the interdependent operation of motivation,

prior knowledge, and effective and efficient strategy use in a literacy activity. When instruction does not address adolescents' literacy needs, motivation and engagement are diminished; without a curriculum that fosters literacy needs, adolescents are at risk of failing to acquire the requisite literacy skills to survive and thrive academically.

The need for engagement in adolescent education is clear, and an obvious avenue for increasing student interest is relevancy. One origin for relevancy is prior knowledge or schema. If students can connect to something they already know or recognize, they are said to have a relevant schema for new knowledge to be acquired.

Schema Theory

The original concept of schema was proposed by Barlett (1932) who was a follower of Gestalt psychology. He used this schema concept to account for how information is reconfigured in memory for further recall.

Schema theory is often referred to as research in the area of prior knowledge or background knowledge. The theory seeks to explain how new information acquired while reading needs to be linked with old information (prior knowledge) already stored in the head (Rumelhart, 1980). Some terminology associated with schema that is frequently used in research articles includes existing knowledge, topic knowledge, previous knowledge, and prior knowledge (Gaffney & Anderson, 2000).

Schema theory is a construct used for understanding reading processes. According to McVee, Dunsmore, and Gavelek (2005) schema theory is relied upon heavily in the field of literacy:

> In a review of 25 reading/language arts texts published between 1989 and 2004, we found that all of the texts introduced schema theory to help

> explain the reading process, especially comprehension. The widespread reliance on schema theory indicates that educators still believe schema theory is a valuable tool in helping…understand cognitive and individual aspects of reading. (p. 534)

Having applicable schema allows students multiple ways to access and unlock text meaning. "Knowledge of relevant schemes is obviously essential if we are to read any kind of text with comprehension" (Smith, 2004, p. 22). Schemata influence reading comprehension in multiple ways. Schema makes available the foundation for learning that permits readers to find and gather information that is relevant to their reading purposes. Schema also assists readers in organizing text information. Moreover, schema helps readers build on and add to information (Vacca & Vacca, 1999, p. 16). This prior knowledge is organized and stored in the brain, so that readers can, as needed, seek, select, organize, and use information.

With regard to vocabulary, schema theory suggests that an individual who knows a word well knows other words and ideas that are related or connected to it. It is this network of ideas that enable this individual to comprehend. Acquisition of new word knowledge is based, in part, on the premise that comprehension is building bridges between the new and the known (Pittelman & Johnson, 1985). Thus, one facet of word knowledge and vocabulary acquisition is that it is an interactive process that focuses on the contributions of the students' prior knowledge to the new word to be learned (Johnson, 1984). Knowledge is organized in the mind according to a person's current understanding. These mental models or schema are accessed when the students make connections, and they are modified when they bring in new word knowledge. According

to Porter and Herczog (2008) to improve students' vocabulary, strategies to engage students include activating schema: "Taking the time to help students activate prior knowledge…helps them generate interest, validate past learning, and make cognitive connections to new information" (p. 53).

It is true that much of traditional vocabulary instruction causes students to be virtually inactive participants—the students have little feeling that the vocabulary words are being made their own. Therefore, much consideration should be give to schema theory in order for students to feel engaged and part of the process of learning new vocabulary words. If schema theory posits that the individual must make connections between new information and prior knowledge (Pressley, 2000), it is extremely appropriate that vocabulary instruction that engages students as active participants to activate schema be considered.

According to Fountas and Pinnell (2001) "A *schema* can be a diagram, an outline, or a mental image…Visual or sensory images may be incorporated into the reader's schematic structures, and emotions may be connected with the ideas in the mental model" (p. 357).

Furthermore, research indicates that knowledge of words, the ability to efficiently gain access to that knowledge, and the ability to integrate new concepts in to existing schemata are key factors in reading comprehension, especially for adolescents (Rupley, Logan, & Nichols, 1999). When reading new information, students are more likely to understand it if they see connections that make it relevant. According to Bulgren, Deshler, Schumaker, and Lenz (2000) by adolescence, the conceptual knowledge readers have about topics has an increasingly greater influence on how well they understand and

acquire new concepts from what they read. Sousa (2001) notes that "past experiences always influence new learning. What we know acts as a filter, helping us attend to those things that have meaning and discard those that don't" (p. 49). Prior knowledge can help elucidate meaning.

One problem some students have with reading and vocabulary knowledge is that they bring schema deficiencies to the text. What happens when students lack the prior knowledge to make sense of a word or of connected text? When students have limited schema, or existing networks of interrelated concepts, they may, therefore, have difficulties connecting unfamiliar words and concepts to what they already know. It is the task of teachers to help their students relate new knowledge to previously learned or prior knowledge. "As any effective teacher can attest, one recommended way to promote learning is to make connections to prior learning" (Jalongo, 2007, p. 398).

Educators can help provide necessary schema and access to prior knowledge. According to Jensen (2005) "teachers can see themes, connections, and relevancies that a student cannot because the adult's prior accumulated knowledge ties it all together" (p. 96). As school-related content-area reading tasks increase, background knowledge assumes an increasingly important role in the ability to understand the link between vocabulary and comprehension. Students simply need to be offered various meaning-making supports. This will provide the cognitive hooks needed for new learning to occur.

One significant way to link what students already know to new knowledge is through visualization. Since much of what we remember is stored in our minds as

visuals, images often provide the necessary reminders students need for attaching new concepts to prior knowledge.

Imagery and Visual Approaches

Mental imagery has also had a long history in the cognitive sciences as a critical factor in cognition. In his contemplations on the ability to reason, Aristotle theorized that human beings cannot think without the tool of mental imagery. Furthermore, Thomas Aquinas, in the 12th century, stated, "man's mind cannot understand thoughts without images of them." Similarly, William James (1890) suggested that the static meaning of concrete words consist of "sensory images awakened" (Bell, 2002, p. 7).

Moreover, Piaget (1936) wrote that "…over time schemata become internalized in the form of imaged thought." It is true that visualization by a reader is anchored in prior knowledge. Normally, readers form images and these are then adapted as a result of additional information. Visualization is what many good readers do—they engage in the reading by forming mental imagery. The psychologist Edward Titchener (1909) wrote, "My mind, in its ordinary operations, is a fairly complete picture gallery" (p. 28). Finally, Albert Einstein made his thinking concrete with the sensory-cognitive function of mental imagery. "If I can't picture it, I can't understand it," he said (as cited in Lindamood-Bell, 2002, p. 8).

Obviously, internal visualization can be very valuable in the educational realm. More specifically, visualization and imagery can be beneficial in learning new concepts, for visual connections can spur new learning. Furthermore, research demonstrates that learning vocabulary can be more effective when students are able to visually represent a word and its related terms (Smith, 1997).

Effective strategies for vocabulary instruction should provide students with the following experiences:

> Multiple exposures to words through conversation, visual displays, readings, etc; authentic opportunities to use words in classrooms and to make appropriate connections for use in other contexts; rich discussions that focus on academic terminology; rigorous word analysis that allows students to study the structural features of language; and diverse texts, including literary and factual pieces, poetry, and visual materials… (Luthy, 2005, pp. 11-12)

The importance of visual knowledge has even been recognized by distinguished national educational associations: The International Reading Association (IRA) and the National Council of Teachers of English (NCTE) announced that teachers should "challenge students to analyze critically the texts they view and to integrate their visual knowledge with other forms of literacy" (IRA & NCTE, 1996, p. 6). Also, according to Powell (1980) one of the best ways to learn a new word is to associate it with an image. This, however, rarely happens when students are simply independently assigned a list of words and tasks in a vocabulary or Scholastic Aptitude Test [SAT] workbook. Interestingly, Marquez-Zenkov and Harmon (2007) posit that youths' experience with visual texts might give adolescents personal links to education. These experiences may also provide teachers with pedagogical supports that aid in adolescents' enjoyment of literacy tasks.

Clearly, the use and relevance of imagery and visual approaches have been studied widely. This power of visuals as they relate to comprehension has been studied

for many years, and researchers have written extensively about the role of imagery in cognition. Paivio proposed as early as 1971 that the extent to which imagery and language are incorporated is proportional to one's level of cognition.

Dual-Coding Theory

Paivio is referred to as the father of the dual-coding theory (DCT). The dual-coding model proposes the existence of separate verbal and nonverbal memory channels that merge to create singular mental models. Basically, the theory postulates that learning is enhanced by the combination of related verbal (vocabulary) and nonverbal (image) input. The combination of verbal and nonverbal memories is evidence of referential processing which is at the heart of the dual-coding theory (Igo, Kiewra, & Bruning, 2004).

> It is safe to say that vocabulary researchers and theorists have traditionally addressed the nature of vocabulary from a predominately linguistic perspective. That is, the assumption has been that word knowledge involves meaning expressed in language form. At first glance it might appear that such a perspective is the only viable one possible…While these linguistic structures are certainly a critical aspect of vocabulary knowledge, so too is another form of representation, a nonlinguistic form that is referred to as dual coding theory. (Marzano, 2004, p. 104)

Additionally, Paivio's (1990) dual-coding theory "posits two separate symbolic systems: one system is attuned to verbal information, including auditory processing and language, while the other system is attuned to visual and spatial processing" (p. 55).

Dual-coding theory further suggests that

> there is little competition for resources when presenting visual and auditory information together, so that multimedia representations have important educational affordances. Even though these systems are functionally and structurally different, they are interconnected in a way that an event in one system can initiate activity in the other. (Koehler, Yadav, Phillips, & Cavazos-Kottke, 2005, p. 249)

From this perspective, "video, with its visual and verbal codes, might be a more effective and powerful medium for delivery of instructional material than a single representation of just pictorial or verbal code" (Paivio, 1990, p. 55).

In a study entitled "Pictures, High-Imagery News Language and News Recall," researchers David and Kang (1998), used the dual coding theory to explain their hypotheses. Their first hypothesis stated that "the addition of pictures to low-imagery copy will improve recall" (p. 22) and could be explained using the dual-coding theory. They theorized that when the activation from the visual and verbal subsystems was pooled, the additive effect would produce better recall than in the copy-only condition. The second hypothesis stated that "High-imagery copy will be recalled better than low-imagery copy" (p. 22). The results of the study suggested that there was a "significant gain in recall from the addition of either visual imagery through pictures or verbal imagery through high-imagery language" (p. 24). The authors noted that the purpose of this study was not to "test the validity of the DCT model, but to apply the model to new learning and offer a theoretical explanation for the underlying phenomena" (p. 22).

It is obvious that humans are typically visually oriented and the retention of information offered in visual form normally exceeds the retention of verbally presented

information (Levie & Lentz, 1982; Rushton & Larkin, 2001). In fact, Sadoski (2005) cites paired verbal and imagery contexts as highly effective combinations for acquiring vocabulary. Visuals, in addition to the developmental changes that automatically occur in the adolescent brain, can be a powerful memory combination. One of the most significant changes the adolescent brain experiences is a:

> major increase in the myelination, or insulation, of the nerve fibers going into and out of the frontal lobes…the more information the executive center can gather in various modes—visual signals…the more nuanced and appropriate the brain's responses can be. (Bloom, Beal, & Kupfer, 2006, p. 105)

Additionally, imagery can be a valuable avenue for creating and adding to existing schema. According to Pitler, Hubbell, Kuhn, and Malenoski (2007) "nonlinguistic representation enhances students' ability to use mental images to represent and elaborate on knowledge" (p. 86). This is increasingly relevant as students get older; according to Hampton and Resnick (2009) "Graphic literacy – the ability to interpret and create visual messages accurately – becomes increasingly important as students move up through the grades" (p. 42).

It is true, according to David and Kang (1998), that pictures can make word learning easier and vocabulary instruction better. This, of course, is especially true for words that are representations of concrete concepts; words that represent concrete concepts (for example, *apple*) are easy to learn. They can be easily represented in picture form, allowing students to see defining features of the words (Tennyson & Cochiarella, 1986). In a study where concrete concepts were presented as just words, as just pictures,

or as words *and* pictures, recall was much higher in the combined instance (words and pictures paired together) (Paivio, 1971).

However, according to Paivio (1991), it is not always possible to include picture components in vocabulary because not all words are concrete and seemingly cannot be represented in picture form. Consequently, some words are much easier to teach and learn than others. In other words, vocabulary that lacks concreteness (more elusive concepts) can be more difficult to learn. Paivio further states that one of the key predictors of imagery-evoking potential is concreteness. According to David and Kang (1998) imagery and concreteness are so highly correlated that researchers often use the two terms interchangeably. Concreteness and imagery-evoking potential have been found to be very good indicators of recall. For example, concrete nouns like *flag* or *map* are recalled better than abstract nouns such as *justice* or *freedom* (1998).

Vocabulary Significance

The importance of vocabulary has been studied extensively. Even in preschool and the primary grades, educators recognize the value of the acquisition of new words when they witness the deleterious effects a dearth of vocabulary can initiate. Researcher Louisa Moats (2001) studied the gap in vocabulary knowledge between advantaged and disadvantaged children. In her study of the language abilities of kindergarten students in a large city district, she found that many children were unable to name pictures that showed the meanings of words such as *sewing* or *parachute.* She termed this disparity word poverty. These same children who have experienced "word poverty" often have trouble learning to read, and as they progress through school, they remain at risk for reading and learning problems.

With regard to language and communication, Hart and Risley (1995) found that children of well-educated, middle-class parents have two to three times as many opportunities to talk with their parents as children from low-income backgrounds. In comparison, by age 3, children of poverty were already far behind in both the acquisition of vocabulary and in oral language skills than their peers who were more affluent. Similarly, Hart and Risley (2003) found that three-year-olds in higher socioeconomic status (SES) families had vocabularies as much as five times larger than children in lower SES families. It is the kind and extent of these early oral language experiences that profoundly affect children's later reading and school success.

It is true that young students who have very limited vocabularies often struggle to achieve reading comprehension. Thus begins a dangerous cycle -- because these students read very little, they then do not have the opportunity to see and learn very many new words. This trend has been termed the "Matthew Effect" which is a reference to the Biblical passage in Matthew 25:29 (New Revised Standard Version): "For to all those who have, more will be given, and they will have an abundance; but from those who have nothing, even what they have will be taken away." Stated simply, it means the rich get richer and the poor get poorer (Stanovich, 1985). According to Elleman, Lindo, Morphy, and Compton (2009) vocabulary instruction is particularly critical for students with reading difficulties, for their improvements in comprehension as a result of vocabulary instruction are even greater for students without those difficulties in reading. Unless vocabulary becomes an integral and vital part of literacy instruction, the gap among groups will continue to widen, and low-performing groups will have more struggles catching up to their peers.

This vocabulary gap among groups is also related to the concept of cultural capital. Cultural capital is defined as "high cultural knowledge that ultimately redounds to the owner's financial and social advantage" (Bourdieu, 1979, p. 10). Since "literacy is undeniably linked to power" (McCarty, 2005, p.6), a dearth of vocabulary knowledge is an obvious strain on students' cultural capital.

It is not surprising that the National Reading Panel (2000), in its extensive review of reading research, named vocabulary as one of the five essential elements of effective reading instruction along with phonics, phonemic awareness, fluency and comprehension. In fact, the NRP concluded that comprehension development cannot be understood without a critical examination of the role played by vocabulary knowledge. It is obviously very difficult to refute the many compelling reasons for providing students with instruction to build vocabulary. Indeed, perhaps educators should feel a certain urgency to provide this instruction since it is this vocabulary that plays a major role in reading comprehension.

Research shows that there seems to be a slump in reading achievement when students reach about fourth or fifth grade. According to Chall and Jacobs (2003) between third and fourth grade, kids go from "learning to read" to "reading to learn" (p. 14). This is also when textbooks get more difficult. Now, students not only have to be able to decode words, but also comprehend sentences and make inferences about what paragraphs mean.

Not unexpectedly, Biemiller (2003) "found that by third grade, 95 percent of children could read aloud more words than they could understand" and that "vocabulary, in addition to word identification, is a major factor that limits reading comprehension" (p.

324). In other words, if teachers equate a student's ability to decode words with comprehension, the student could be at risk of not receiving direct vocabulary instruction for those words. This confusion could also be found in the assumption that simple dictionary instruction equates to the full understanding of a word (Lehr, Osborn, Hiebert, 2004).

Deficits in vocabulary often persist and worsen despite the traditional instructional efforts at remediation. Interestingly, one middle school principal explained that his teachers were spending vast amounts of time on vocabulary, but "our poorest readers, who are getting the strongest dose of vocabulary instruction, are still our poorest readers" (Beers, 2003, p. 179). The practices that are being used in many classrooms, albeit time-honored and customary, need to be abandoned and replaced by instructional practices that impact student learning. According to Beck, McKeown, and Kucan (2002) the largely economical and boring vocabulary instruction students typically experience does little to engage students' interest in words.

Regrettably, "Unless they receive ongoing support, students who enter the fourth grade behind in reading will never catch up to their peers. And many of those who do read well going into the fourth grade will lose momentum, becoming eighth or twelfth graders who struggle to interpret a novel, follow instructions in the chemistry lab, understand important historical documents, or even get through the daily newspaper" (Alliance for Excellent Education, 2007, p. 2). This vocabulary deficiency affects students' reading in all realms, for to understand spoken or written speech, a person needs to know about 90-95 percent of the words (Cooper, 2000; Hirsch, 2003).

Additionally,

> While a small percentage of struggling adolescent readers have difficulty with basic decoding, most adolescent struggling readers' difficulties can be traced to vocabulary, prior knowledge, knowledge of syntax at the level of sentences, as well as syntactic markers of logical relations and coherence. (Torgesen et al., 2007, p. 132)

Researchers agree on the critical value of vocabulary in the reading and comprehension puzzle.

The effectiveness of varied vocabulary instruction has been studied. Diverse studies on vocabulary consider prior knowledge as an associated variable and use teaching strategies that tap prior knowledge. According to Nagy (1988) "The first property of powerful vocabulary instruction is that it integrates instructed word with other knowledge" (p. 10). The prominence of this first property is a development of schema theory. One classroom vocabulary activity that has reflected this is semantic mapping, whereby teachers and students brainstorm a graphic map listing words and concepts related to the target vocabulary word.

Researchers have explored the value of this particular vocabulary teaching strategy for general vocabulary development and for pre-teaching before reading assignments. In a study by Johnson, Pittelman, Toms-Bronowski, and Levin (1984) the effectiveness of two prior knowledge based strategies (semantic mapping and semantic feature analysis) as methods of vocabulary pre-reading strategies to increase reading comprehension was investigated. Fourth grade students across thirteen classrooms participated in the study. The study compared semantic mapping and semantic feature analysis with a basal approach for reading comprehension efficacy. The researchers

found that when the students were grouped by prior knowledge level, the comprehension scores for those in the semantic feature analysis and the semantic mapping groups were higher than those in the more traditional basal vocabulary pre-reading instruction group.

There have been many specific suggestions for vocabulary instruction; research has revealed a great deal about what kinds of vocabulary instruction are most effective for helping students to comprehend what they read. The National Reading Panel (2000) concluded that no one single instructional method is sufficient for optimal vocabulary learning; therefore, effective instruction must include a variety of methods and strategies to aid students in acquiring new words and increasing their depth of word knowledge over time.

This is no easy task. In fact, according to American lyric poet Hart Crane (1899-1932) "One must be drenched in words, literally soaked with them to have the right ones form themselves into the proper pattern at the right moment" (as cited in Fisher, 2002, pp. 136-137).

Vocabulary instruction must be made available along with activities that encourage students to process these word meanings in dynamic and generative ways; students must be provided with multiple occasions to learn new word meanings (Torgesen et al., 2007).

Student-Created Graphics

Ellery (2009) recommends visual imaging as one of the vocabulary strategies that makes up a comprehensive literacy classroom: "A student creates an image that represents the definition of the word and calls up this image whenever encountering the word" (p. 148). Levie and Lentz (1982) reviewed the results of 55 experiments which

compared learning from illustrated texts with learning from text only. They also conducted more in-depth research on related fields including nonrepresentational pictures, graphic organizers, and learner-produced drawings. Levie and Lentz found that in order to help learners recall what they have read, some researchers asked students to create their own drawings that represent what they believe is the content of the text. As a result, "in four experiments, college students who were instructed to draw pictures illustrating aspects of a text passage learned significantly more than students who only read the passage…On the average, students who drew pictures learned 30% more" (p. 215).

One caveat to having students produce their own visuals is that the practice may not be advantageous with all age groups. Peeck (1980) found that children often omit information that is necessary and create drawings that are often not relevant to the content of the text. According to Levie and Lentz (1982) if the learners are able to create images that are content-relevant, learning is consequently augmented by this process.

According to Van Horn (2008) adolescents are motivated to participate in reading and writing tasks when visuals are an integral part of the learning activity; students are additionally engaged when they have the opportunity to produce their own visual texts. As educators, we should "encourage or invite all students, but especially those kids who are discouraged with words, to use the visual arts (sketching, drawing, cartoons, comics) to show what they learn or think or see as they read" (Reif, 2003, p. 51). When students use visual imaging, they think of a word that looks like, or even sounds like, the word they are learning. The more vivid the imagery, the more likely students will be able to

connect and mentally recall the vocabulary word to its meaning. Different types of art activate different parts of the brain (Jensen, 2005).

In a study by Oldfather (1993), literacy activities that were paired with art activities were found to increase student motivation toward those literacy tasks. This eight-month longitudinal study involved 14 fifth and sixth grade students and examined their learning and motivation in connection to literacy lessons. A key to students' motivation was revealed as the "power of self-expression" (p. 4). One of the study's findings was that "through experiences that integrated the arts with literacy activities, the students found additional pathways for self-expression that introduced affective and aesthetic qualities into their literacy engagement, and enhanced motivation for literacy learning" (p. 7). Eisner (2002) suggests the following:

> Although the arts function as paradigms through which aesthetic experience can be secured, aesthetic experience is in no way restricted to what we refer to as the fine arts…Aesthetic experience, therefore, is potential in any encounter an individual has with the world. (p. 231)

These aesthetic experiences can help students to reflect on their own encounters with their world and can, therefore, extend learning (Heid, 2005). Recognizing visual qualitative relationships is a form of rational inquiry in which we use our senses, imagination, and appraisal (Eisner, 2002).

When students are given the time for generating their own nonlinguistic representations of vocabulary words, they have opportunities to incorporate emotions and sensory feelings through them. They, concurrently, have more opportunities to create personal associations with those words:

> Perhaps it's because in the act of drawing I can find meaning for myself and in myself, and then come more easily to words. In the feverish pace of our middle school classrooms where we move the students from class to class every 45 minutes, drawing allows students time to think, spaces in which to look at the world more deeply, and ways into words. (Reif, 2003, p. 50)

Additionally, Bitz (2004) has taken student-created visuals to an even deeper level through the construction of comic books as a strategy for engaging students as readers. As the founder of The Comic Book Project, Bitz started an arts-based literacy initiative. During this two-month long project, 733 urban youth from 33 after-school sites in New York City brainstormed, outlined, sketched, wrote, and designed original comic books about their own lives. At the close of the project, the instructors were surveyed and reported that the project helped the students meet the reading and writing components of the state standards in "untraditional and unexpected ways" (p. 584). Teachers also responded that students had "a better understanding of the writing process" and that "the children's understanding of and involvement in the process fostered motivational benefits" (p. 585).

Furthermore, Paquette, Fello, and Jalongo (2007) suggest that the "talking" drawings strategy can aid students in enhancing their reading and listening comprehension. This strategy used by primary-grade children, associates text passages with diagrams and then with student drawings they create based on prior knowledge.

Still-Life Graphics

This use of cartoons, comics, and other still graphics has been previously studied with relation to adolescent literacy. For instance, Lawrence, NcNeal, and Yildiz (2009) studied the impact of technology, comics, and graphic novels on the engagement of adolescents' reading and writing activities. In this study, four college faculty members immersed their students in a three-week lesson on contemporary social issues. The participants were 12 high-school students who were part of an urban, school-community partnership with the university. The research focused on the impact of the combination of technology, comics, and graphic novels with reading and writing activities. The researchers found that "students who previously had little knowledge of graphic novels became more interested in reading graphic novels and comics about different people and topics because of the visual composition of these texts" (p. 492). Although some teachers may be hesitant to incorporate the use of comics and graphic novels in their classrooms, this study found that "by incorporating new literacies into our curriculum we effectively created activities for students to read and write for enjoyment…" (p. 493).

In the past, comics only entered classrooms clandestinely—hidden in backpacks or secretly slipped inside the cover of a textbook. Now, the visual component of comics is being credited as a valuable learning tool. Janet Allen promotes the Sam, Max, and Bryan Burchers publication that she discovered at an International Reading Association conference (Allen, 2006, p. 80). In the book entitled *Vocabulary Cartoons* by Burchers, Burchers, & Burchers (1997), hundreds of vocabulary words are introduced with a mnemonic. According to the author, "Practically all memory books ask the reader to create his or her own visual mnemonic images…[this is] not so with vocabulary

cartoons" (p. x). The reader is *provided* with the word associations and visual images. The authors conclude that "the effectiveness of vocabulary mnemonics has been established in six independent school tests in Southwest Florida. These tests took place in 1995 and 1996 and involved hundreds of students at differing grade levels" (p. xiv).

Says Burchers about the vocabulary cartoons: "At Cape Coral High School,…a tenth grade class scored 105% higher, and had six times more 'As' than did the control tenth grade class without Vocabulary Cartoon books…[for] ninth grade English classes at North Fort Myers High, mnemonics helped E.S.E. [English as a Second Language] students achieve test results that equaled those of non-E.S.E. students. Altogether, students with Vocabulary Cartoons scored an average 72% higher marks than did the control students that used rote memory study books" (1997, p. xiv).

Pressley, Levin, and McDaniel (1987) developed the procedure known as the "keyword method" used for introducing new vocabulary words. This method consists of two stages. During the first stage, the students are supplied with an acoustic link--a keyword that sounds similar to a part of the unfamiliar word.

During the second stage, students are given an imagery link—an image that associates the keyword with the definition of the unfamiliar word. For example, the new vocabulary word might be the word *predator*. The acoustic link might be the word *tore* and the imagery link might be a picture of a large, carnivorous dinosaur tearing the meat of its prey. Ideally, the next time the students see the word *predator*, they should think of the word *tore*, recall the image of the meat-eating dinosaur tearing the meat of its prey, and link the image to the word's definition. (See Appendix Q).

Troutt-Ervin (1990) conducted a study in a college classroom of this “keyword method” and its application to college students in the learning of medical terminology. The study was done over two lessons and at three different time periods with replication over a second semester. In this research study, sound-alikes (keywords) and visual images were presented to students to enhance learning and retention. Troutt-Ervin defined this keyword method as being based on a dual code theory that is described as the following:

> …a two-stage process for memorizing definitions of words. The first stage (verbal) involves association of an unfamiliar word with a familiar word, called a keyword or audionym, which sounds like some part or all of the unfamiliar vocabulary word. The next stage (visual) involves forming or being presented with a mental image interaction of the keyword with the unfamiliar word. (p. 31)

The results of this study indicated that the participants scored significantly higher with the keyword method than with a traditional method in both initial learning and retention of medical definitions.

Some may argue that the primary contribution of pictures to students' enhanced learning from text comes from pictures' motivating or attention-getting properties; that learning benefits result not from the pictures' specific content per se but from their tendency to increase students' general level of motivation or interest (Levin & Pressley, 1985). However, in a study by Mastropieri, Scruggs, and Levin (1987) on the use of mnemonic and nonmnemonic pictures on students’ recall, that was not the case. The subjects in this study were 67 learning-disabled seventh, eighth, and ninth grade students.

In this particular study, two different types of pictures were provided. The results were as follows:

> (a) content-related pictures with embedded number links (mnemonic pictures) facilitated students' recall of both ordered and unordered pictured content (numbered recall and free recall, respectively); (b) content-related pictures without any number links (nonmnemonic pictures) facilitated students' recall of unordered, but not ordered, picture content; and (c) neither type of picture facilitated students' recall of information that was not present in the illustration (additional recall)…. If pictures function as general motivators, then facilitated performance on all learning-related outcome measures might have been expected from both types of pictures…the facilitation was observed on only those measures for which there was a direct correspondence between the cognitive processes evoked by the pictures and the cognitive outcome being assessed. (p. 514)

Literature clearly supports the assertion that both good and poor reading comprehenders profit from content-relevant pictures in prose (Levie & Lentz, 1982). “Indeed, illustrations facilitate recall of orally presented prose even for students with inadequate basic reading skills” (Mastropieri, Scruggs, & Levin, 1987, p. 514). With regard to instructional strategies for topic-specific vocabulary, Lattimer states that “hearing about the meaning of a new term can be helpful. Seeing the visual representation of the term can be even more helpful” (2010, p. 94).

In a related study by Igo, Kiewra, and Bruning (2004) graduate students were tested on their knowledge of confusing word pairs such as *in/into, accept/except,*

bring/take, and affect/effect. Students were randomly given tests of either usage with verbal rules only or tests with verbal rules and visuals. The major result of this study was consistent with previous research on picture learning – the groups that were given pictures in addition to verbal information performed better on the tests of concept and skill than the groups that received only verbal information. This 2004 study is quite important because it helps to confirm that visuals can aid not only in the comprehension of concrete words, but also in the learning of non-concrete vocabulary and concepts.

Video Supported Methods of Vocabulary Instruction

Research has shown that effective readers and listeners construct mental models using background knowledge or schema that contain information about the situations and scenes that a narrative describes; these mental models in many ways are similar to images, pictures, or movies (McNamara, Miller, & Bransford, 1991). What happens when readers cannot effectively form these mental models for words and text? Video may be the avenue students need to help learners build the schema necessary to build new knowledge.

In a study by Boster, Meyer, Roberto, and Inge (2002) digital video clips were used to help build background knowledge for students. In this study, the video segments were selected from a commercially available library to align with particular standards in science and social studies addressed by all participating schools in the third and eighth grades. The researchers found that the use of digital video clips to supplement instruction resulted in increased student achievement.

According to Koehler, Yadav, Phillips, and Cavazos-Kottke (2005), "Video, with its visual and verbal codes, might be a more effective and powerful medium for delivery

of instructional material than a single representation of just pictorial or verbal code." The participants in this study were 84 undergraduate students in a college of education. Students viewed four different types of text in either narrative or video formats. In this study which focused on the "affordances of text and video interacting with different types of content and story-types," the researchers concluded that "Video appears to be good for promoting certain affective responses to information that could have more long-term impacts on students' orientation toward a given domain than are measurable on simple assessments of short-term information recall" (Koehler, Yadav, Phillips, & Cavazos-Kottke, 2005, p. 270).

In vocabulary teaching, providing a natural context is often essential in teaching students how a word is used (Nagy, 1988). Video can be effective in providing the real-world context students may need in the classroom. According to Bransford, Sherwood, and Hasselbring (1988) there are many advantages to using video in the classroom: videos provide a rich source of information with opportunities to notice sensory images. They also enable students to perceive dynamic, moving events and to more easily form mental models. Word acquisition was also studied by Xin and Rieth (2001) who found that short, documentary-type videos may help students learn new concepts and terms because they provide a vivid picture of how the object looks in the context of its environment or specialized use.

Moreover, Merchant (2001) notes that many adolescents are drawn to technology, and incorporating technology into instruction can increase motivation at the same time that it enhances adolescent literacy by fostering student engagement. According to Gee and Levine (2009) there is a "stark contrast between squirmy bodies and glazed stares

brought on by textbook-based lessons and the palpable energy brought on by artfully-designed technology-infused lessons" (p. 51). This sentiment is reiterated by Roblyer and Doering (2006) who outlined what practitioners say about how technology can motivate students: He states that technology gains students' attention and "teachers say that technology's visual and interactive qualities can direct students' attention toward learning tasks" (p. 15). Finally, video allows students to develop skills of pattern recognition which are related to visual and auditory cues (Bransford, Sherwood, & Hasselbring, 1988).

The literature shows that multimedia improves learning performance if it is used appropriately. Macaulay and Pantazi (2006) note that "appropriate use…has been described as including (a) using multimedia in a way that supports the dual coding theory, that is using a media combination that engages both the verbal and the non-verbal channels, (b) using media to support each other, and (c) using multimedia when learners have low prior knowledge or aptitude in the domain being learned" (p. 187).

Perceptions of Vocabulary Instruction

The view or perception teachers and students have regarding an experience or activity often has an impact on the level of willingness they have to engage in that activity. In a study by Kaufman and Dodge (2009) the researchers investigated the motivational goals of 222 undergraduate students enrolled in an introductory psychology course. The results showed that "mastery goals are positively and significantly associated with feelings of relatedness to…the value of the course" (p. 109). There are myriad factors that impact engaged time. If students perceive the lesson to be dull or unrelated to their lives, student attention dwindles. If students are to engage in a learning

situation, their positive or negative perceptions of that task or circumstance come into play. Additionally, the perceptions that teachers have of the value of the instruction can influence the perceptions of their students.

Student Perceptions of Instructional Methods

According to Anderman and Midgley (1998) "…students' perceptions of their educational experiences generally influence their motivation more than the actual, objective reality of those experiences" (p. 2). In a study by Stodolosky, Salk, and Glaessner (1991) the researchers found that students' perceptions of the subject matter may affect student motivation to learn. The participants in this study were 60 fifth grade pupils from eleven classrooms. In their comparisons of students' views about learning social studies and mathematics, the researchers used interviews to explore the students' attitudes and conceptions. The researchers found that student evaluation of mathematics experiences were judged by the likelihood of success, whereas social studies experiences were judged by how interesting they were.

If students perceive a topic or lesson to be interesting, their diligence in learning increases. Hidi (1990) concluded that "interest is central to determining how we select and persist in processing certain types of information in preference to others… both individual and text-based interest have a profound effect on cognitive functioning and the facilitation of learning" (p. 565). Moreover, if students value the learning activity, they perceive it to be worthwhile and important; those who perceive importance or personal meaning in engaging in a behavior will be more apt to internalize it (Deci, Eghrari, Patrick, & Leone, 1994).

"We have found that an important complement to explicit strategies instruction is encouraging students' self exploration of strategies" (Brabham & Villaume, 2002, p. 266). Unfortunately, teachers seldom actually request student perceptions of lessons and pedagogical approaches; however, listening to students' reactions and gauging their perceptions would obviously allow educators to adjust approaches and materials to better meet the needs of students (Stewart, Paradis, Ross, & Lewis, 1996).

Teacher Perceptions of Instructional Methods

The teacher's perception, in addition to students' perceptions of an activity, strategy, or lesson approach, can also influence student engagement. The effect of different levels of instructor enthusiasm on students' motivations and learning behaviors has been investigated. Teachers who value the learning material or express their own interest in the matter seem to foster active learning and student engagement. In other words, if teachers display high levels of enthusiasm, they seem to exert a positive effect on students' own motivation to learn the material (Brigham, Scruggs, & Mastropieri, 1992).

Similarly, in a study by Kunter, Tsai, Klusmann, Brunner, Krauss, and Baumert (2008) teachers' enthusiasm for teaching mathematics was investigated. A total of 323 teachers and their ninth grade classes participated in the study. The researchers employed the use of questionnaires to determine teachers' enthusiasm and instructional behaviors from the perspectives of both the teachers and the students. The study revealed that "teachers who were more enthusiastic about teaching showed higher quality instructional behavior—both self-reported and student-rated" (p. 468).

Sweet, Guthrie, and Ng (1996) studied teachers' perceptions and students' literacy motivations to assist teachers in encouraging students literacy competence. Subjects were 374 students and 68 teachers in grades three through six. The researchers found that "There is a complex web of relationships that surround teacher perceptions and student engagement. Teachers' perceptions and students' perceptions have been found to mutually influence one another in a reciprocal way" (p. 6). This is an effect sometimes labeled "emotional contagion" (Hsee, Hatfield, & Carlson, 1990).

Studies have shown that teacher beliefs have a direct relationship with their instructional practices. A study by Kit-Ling (2007) investigated Hong Kong language teachers' perceptions, under the implementation of a new curriculum, on reading instruction and their instructional practices in senior secondary grades. The findings of this study indicated that after a new curriculum had been implemented, teachers showed a high level of acceptance, and, furthermore, put great importance on the development of student ability and improved students' participation in the teachers' instructional pedagogy.

Summary

Student motivation and engagement, especially at the secondary level, are matters of serious concern. If students are disengaged, little to no learning will occur. Many avenues are available for teachers to promote and increase student engagement in the classroom. Some key motivational factors for adolescent learners include using literacy activities for self-expression, creating connections, drawing on prior knowledge, and doing authentic work that relates the learning to students' own lives.

It is especially important for students to be engaged in vocabulary learning, for vocabulary is key in facilitating students' comprehension of what they read. Although increasing adolescents' word knowledge is of great importance, the processes educators are inclined to use for vocabulary instruction do little to motivate students.

Some critical factors in cognition are background knowledge and mental imagery. Schema theory posits that prior knowledge facilitates retrieval of text information from memory and permits the learning of new information. The dual-coding theory suggests that integrating language and visuals serves to enhance learning. Some visual approaches to learning vocabulary may unlock avenues to student motivation by permitting self-expression, creating connections, and activating prior knowledge.

Therefore, a study on the perceptions of adolescent learners on the effects of visual approaches to vocabulary instruction may aid in determining avenues for engaging students with regard to this crucial aspect of literacy.

CHAPTER III

PROCEDURES

Introduction

Qualitative methods were used to study the pedagogical approaches to vocabulary instruction; this provided richer, deeper information than quantitative methods alone might allow. Although quantitative study and tests of achievement have obvious value, "not everything can be said in a test score" (Eisner, 1998, p. 23). Additionally, Lincoln and Guba (2000) purport that qualitative research can serve to illuminate findings gained in educational research, thereby making the qualitative method of much value in educational research.

By examining teacher and student perceptions of engagement and learning related to the vocabulary approaches, more attention may be paid to nuances and detail. According to Eisner (1998) the curricular content is important, but so are the activities employed to engage students in that content. These qualitative methods will allow the researcher to examine the means through which the content is encountered, the engagement of students with relation to each approach, and whether the ways in which the vocabulary is taught enables students to perceive its relevance. Since human perceptions make a difference in how events are regarded (Rosenthal, 1986) the students' perceptions of these vocabulary approaches play a significant role in their learning.

This chapter describes the procedures used in the study including the setting of the study, the study sample, and the methods used for obtaining data. It relates these procedures using detail explicit enough to enable replication by other interested educators.

Setting for the Study

The study was conducted at one of the three high schools in the Southern Tioga School District. Liberty Junior-Senior High School is located in rural, north central Pennsylvania. One eleventh grade English classroom at Liberty Junior-Senior High School was the specific study site. As the literacy coach in both Liberty and North Penn High Schools, the researcher acts as an ongoing professional development provider and literacy resource for the teachers in these schools. The literacy coach position was part of a literacy initiative instituted in Southern Tioga School District in fall of 2005 with the following areas of focus: one-on-one interaction with teachers, classroom observations, demonstrations of strategies, team teaching, collaboration, implementation of Adopt an Anchor – Pennsylvania Department of Education website training information and toolkit, faculty meeting presentations, ongoing direction and support, compilation of proven (research based) literacy and teaching strategies, and organization of a teacher resource library.

According to Moxley and Taylor (2006)

> An important part of the literacy coach's role is to offer up-to-date, research-based, professional development. The cornerstone of this is follow-up…the literacy coach is really coaching when following up with individual observations, modeling, conversations, feedback to the teacher, and so on. (p. 9)

Although the literacy coach may model literacy lessons and collaborate with teachers, the coach is not responsible for direct student instruction, student assessment, or teacher

evaluation. The literacy coaching position in Southern Tioga School District was a grant-funded position.

Study Sample

Subjects were students attending Liberty Junior-Senior High School. The school served a population representing an ethnicity ratio of approximately .5% Hispanic, 1% African-American, 1.5% Indian/Alaska Native, and 97% White. While the total number of eleventh graders at Liberty was forty-three, the sample for this study consisted of twelve eleventh grade students. All of the students were enrolled in the academic section of eleventh grade English. This academic section had twenty-five students on the roster. None of the students received special education services.

Prior to the start of the study, the researcher gained site approval to work at Liberty Junior-Senior High from the Principal of the school, Mr. Francis Jaquish. After the study was approved, the researcher sought site approval from the eleventh grade English teacher, Mrs. Cindy Lisowski, to work with her eleventh grade academic students. Upon gaining approval for the study, the researcher acquired a list of all the students in the eleventh grade academic class for spring 2009.

Data Collection

All students in the class had their vocabulary terms presented to them via three visually represented instructional methods: student-created vocabulary visuals, commercially-made still vocabulary graphics, and vocabulary-based DVDs containing motion graphics. Since the study lasted 18 weeks, each type of visual instructional method was utilized for six weeks (three bi-weekly vocabulary units for each visual representation). Each vocabulary unit contained twenty new vocabulary terms. Although

this study included students from one eleventh grade class, these instructional materials were made available to all teachers in this high school for use in their English classrooms.

Although all students were taught using these instructional methods, only those students who chose to be a part of the study and submitted the required student and parent/guardian permissions were invited to keep individual voluntary electronic journals. In addition, they were invited to participate in three focus group sessions with the researcher.

As described previously, three visually-enhanced methods of studying vocabulary were implemented: 1) student-created vocabulary visuals, 2) still vocabulary graphics, and 3) vocabulary DVDs. The sections that follow explain each type.

Method 1: Student-Created Vocabulary Visuals

The student-created vocabulary visuals that were used for three vocabulary units were based on the criteria recommended by Marzano and Pickering (2005). Student-created pictures, symbols, or graphic representations were incorporated into three vocabulary units. For an example of the student-created vocabulary visual template, see Appendix O. Students were asked to depict the vocabulary term by drawing their own interpretation of the term, drawing a symbol to represent the term, drawing an example of the term, representing the term with graphics, or dramatizing the term (pp. 23-26). The vocabulary terms for these lessons were acquired from the Sadlier-Oxford Vocabulary Workshop materials, level F.

Method 2: Still Vocabulary Graphics

The still vocabulary graphics that were employed for three vocabulary units were commercially-made images from Burchers' (1997) *Vocabulary Cartoons.* This resource employs a keyword method; "the most common version of the keyword method involves construction of interactive visual images. The learner generates an image of the definition referent interacting with a keyword, which is simply a familiar concrete word that resembles a salient part of the unfamiliar vocabulary word" (McKeown & Curtis, 1987, p. 109). The vocabulary terminology in this book is suitable for academic eleventh grade students and focuses on SAT word knowledge preparation. The book *Vocabulary Cartoons* was purchased by the Liberty High School guidance office in 2006-07, and is part of the school's guidance department student resource collection. Overhead transparencies of the still visual images from *Vocabulary Cartoons* provided students an initial visual introduction to the vocabulary terminology. The visuals were shown one other time during each unit. This still graphic connection was used for three vocabulary units (six weeks).

Method 3: Vocabulary DVDs

The vocabulary DVDs that were utilized for three vocabulary units are commercially-made and focus on vocabulary preparation for the SAT. They are suitable for academic eleventh grade students and were purchased for the start of the 2008-09 school year by the Supervisor of Curriculum and Development at STSD. Students were provided with an initial introduction to their vocabulary terminology using the vocabulary DVDs which provide a short motion graphic representation of the word along with the word and definition in text form on the screen; in essence, each word and

definition is shown with a visual correlation. As with the still graphics, students viewed the vocabulary DVD one additional time during the vocabulary unit. As with the other visual vocabulary approaches, students were given a list of 20 vocabulary words every two weeks, so this time frame was maintained while using the vocabulary DVDs.

Throughout the 18 weeks of the study, the written vocabulary lists for all of the vocabulary units included the part(s) of speech for each word, definition(s), synonyms for each word, and antonyms for each word (See Appendix N). All students benefited from the different types of instruction. No new material or additional vocabulary terminology was covered or required as a part of this study, and the educational objectives for the course remained consistent with the required curriculum.

Throughout the analysis of the student data, the researcher noted individual topics for each participant. Using this list of topics, the researcher revisited the data, with the topics abbreviated as codes, and recorded the codes next to the appropriate segments of the text. This coding process was used to generate a small number of themes. Triangulation was used to analyze the data gathered and to enhance the internal validity of the study. Triangulation is the "verification or extension of information from other sources" (Hatch, 2002, p. 92). Creswell (2003) states that the triangulation strategy is best used when a researcher "uses two different methods in an attempt to confirm, cross-validate or corroborate findings within a single study" (p. 217). Eisner (1998) uses the term "structural corroboration" to describe a process of collecting multiple types of related data to build confidence in the evidence and arguments presented (p. 110). This will allow for the examination of evidence from the sources in order to identify common

perceptions and patterns and "to build a coherent justification for themes" (Creswell, 2003, p. 196).

Method of Obtaining Data

Four different qualitative methodological procedures were used for data collection. These data sets included 1) researcher observations of the classroom, 2) student journals, 3) classroom teacher interviews, and 4) student focus groups.

Researcher Observations of the Classroom

The first type of data collection was in the form of observations. The researcher conducted classroom observations, which according to Merriam (2009) provide the researcher with an immediate, direct view of the events. The observations focused specifically on student reactions and engagement with regard to the three types of visual components related to the vocabulary instruction. The researcher observed the vocabulary instructional approach and recorded her perceptions of the students' responses to these activities. These observations were conducted by the researcher three times per week for 18 weeks. The class that was observed was taught in a 42-minute block of time. The instructional space was of medium size with large windows on one side. Classroom observations began in January of 2009 which coincided with the beginning of a new student semester.

During the observations in the classrooms, the researcher attempted to collect as much student and teacher conversation, description, and atmosphere as possible. The Reynolds and Kamphaus (2004) Student Observation System (SOS), a portion of the Behavior Assessment System for Children, Second Edition (BASC-2) was used as the basis for an engaged behavior checklist used by the researcher in this study (See

Appendices H & I). During the observations, the researcher sat on the side of the room, so as not to interfere with the class. Occasionally, the researcher would ask students to explain or elaborate on something. In general, the researcher attempted to be as non-intrusive as possible. The researcher kept on-going notes related to the observations which detailed the researcher's thoughts, feelings, experiences, and perceptions of each observation session (Creswell, 2003).

Student Journals

In addition to researcher observations of the vocabulary lessons, the second type of data the researcher collected was in the form of student journals. Students were asked to keep individual voluntary electronic journals regarding their perceptions of the three different visual approaches--student-created, still graphic representations, and vocabulary DVDs containing motion graphics--to vocabulary instruction.

> The most obvious strength of [participant] journals as data is that they can provide a direct path into the insights of participants. Some individuals are comfortable expressing their feelings, ideas, and insights in writing, and these can be powerful data that reveal how they are understanding the phenomena under investigation. (Hatch, 2002, p. 141)

At the end of each six week period (three vocabulary units), students participating in the study were asked to reflect upon their thinking and perceptions related to the visual vocabulary connections. The students were asked to respond to a brief list of questions, and they used computers to type and send their responses to the researcher via email. For a sample of some of the electronic student journal prompts, see Appendix J.

In order to analyze this qualitative component of this study, the electronic student journals were collected at the end of each six-week session and at the end of the eighteen weeks. In following with the recommendations for participant journaling data analysis from Hatch (2002), journal data were processed by the researcher in an ongoing way. Every six weeks an analysis of the journals was done (See Appendix K). All of the journal entries were read carefully in order for the researcher to "get a sense of the whole" (Creswell, 2003, p. 192). As the entries were being read, the researcher's thoughts were recorded. The data collection through journals revealed how the students reflected on the classroom vocabulary strategies and how the differing approaches were perceived. It also showed how the students' perceptions of the strategies changed in comparison with the others over time.

The researcher noted her overall reaction as well as individual topics for each participant journal. A list of topics was created, and similar topics were grouped together. Using this list of topics, the researcher revisited the journals, with the topics abbreviated as codes, and recorded the codes next to the appropriate segments of the text. This coding process was used to generate a small number of themes (Creswell, 2003).

Classroom Teacher Interviews

The third form of data collection was in the form of interviews. The researcher conducted face-to-face interviews with the classroom teacher. Personal interviews are one method of collecting data and are especially useful for the collection of perceptual data. Merriam (2009) says, "Interviewing is necessary when we cannot observe behavior, feelings, or how people interpret the world around them. It is also necessary to interview when we are interested in past events that are impossible to replicate" (p. 72).

In this study, the researcher observed the classroom teacher three days a week; these interviews were also a way to gather additional information about teacher perceptions that were not obvious and about events that happened in additional class sessions the researcher was not able to observe. The classroom teacher was interviewed initially (prior to the inclusion of any of the visual components) regarding her perceptions of the components and their forthcoming inclusion in the vocabulary units. Follow-up interviews with the classroom teacher were conducted after each six-week period (following the use of each different visual component). Interviews were conducted either before the school day began, during the teacher's planning period, or at the end of the school day, according to the teacher's preference. Interviews were conducted in the teacher's classroom unless she requested a specific venue. Each of the interviews lasted approximately 40-45 minutes. Interviews were audio-taped. A sample of the teacher interview questions is included in Appendix L. Questions in the interview protocol were used to gather more in-depth information regarding the classroom teacher's beliefs about the three visual approaches to vocabulary with regard to her students' engagement.

In order to qualitatively analyze the teacher interviews, the interviews were transcribed verbatim, reviewed repeatedly, and analyzed. To ensure internal validity, member checking was employed. Member checking gives "participants opportunities to react to tentative findings generated by the researcher" (Hatch, 2002, p. 101).

Student Focus Groups

The final type of data collection was in the form of focus groups. Student focus groups were conducted to further collect data regarding students' perceptions of the instructional methods. The focus groups were conducted at the end of each six-week

session. Student focus groups were held in the school library during a 20 minute segment of activity period, and snacks were provided. Every effort was made to schedule focus group sessions during an activity period segment that was convenient for all student participants. The questions utilized for the student electronic journals were the basis for the focus group discussions (See Appendix J). Because of the unpredictability of student journal input, the student focus groups were used to further clarify student perceptions of each of the visual vocabulary components. The focus group sessions were audio taped and then transcribed by the researcher. As with the electronic journals, the focus group transcriptions were read and coded.

Summary

This chapter provided a description of the study's setting, the sample, the procedures for gathering data, and the process used for analyzing the data. The following chapter reports the study's findings.

CHAPTER IV

DATA AND ANALYSIS

Introduction

The purpose of this study was to identify teacher and student perceptions of engagement and learning as influenced by the addition of three visual approaches to vocabulary instruction. These visual approaches used were student-created vocabulary visuals, commercially-made still vocabulary graphics, and vocabulary-based DVDs containing motion graphics.

This study examined the degree to which student engagement was evident when students were provided with various visual approaches to vocabulary instruction. The study also examined students' perceptions of their learning when provided with visual approaches to vocabulary instruction. Lastly, the study examined the classroom teacher's perceptions of student engagement and learning when visual approaches to vocabulary instruction were used.

Description of Participants

Twelve students and their English teacher participated in the study which lasted a total of 18 weeks. The students were all eleventh graders who were enrolled in one of two English classes at Liberty Junior-Senior High School. Of the 25 students who were enrolled in the course and were invited to participate, 15 students returned their student consent forms. Of these 15, parents/guardians of twelve students returned parent consent forms. Table 1 shows the gender breakdown of the participants. Although a few of the participants were unavailable for a specific journal submission or focus group session, there was no complete participant mortality. Sporadic lack of data from a few

participants was evident due to periodic student absenteeism. This academic English course was taught in the spring of 2009, and the class met each morning for 42 minutes.

Table 1

Participants

Gender	Frequency n
Male	6
Female	6
Total	12

Note. Among the participants, (n=6) males and (n=6) females consented to participate in this study.

Consent to conduct the study was obtained from the superintendent, school board, building principal and classroom teacher of the Liberty Junior-Senior High School in the Southern Tioga School District. Parent/guardian and student consent were also obtained. The parental consent forms were sent home with students and returned to the researcher. Copies of consent forms are included in Appendices B, C, D, and E.

The classroom teacher, Mrs. Cindy Lisowski, reported in the initial personal interview that she has been a full-time English teacher for the last 12 years in the Southern Tioga School District. This teacher was selected since she was already teaching the grade level of interest for this study. She taught at North Penn High School, also in the Southern Tioga School District, for seven years before she started teaching at Liberty Junior-Senior High School. Prior to that, she was a substitute English teacher. Mrs.

Lisowski stated that she has been teaching vocabulary to grades seven through eleven for the full 12 years as a classroom teacher.

Demographic Information

The setting of the study was Liberty Junior-Senior High School, Routes 15 and 414, Liberty, PA 16930. Liberty Junior-Senior High School is one of three high schools in the Southern Tioga School District. Liberty Junior-Senior High School is very small, with a total enrollment of approximately 300 students in grades seven through twelve. This study was conducted in one eleventh grade English classroom.

The Analysis

The analyses are presented in four sections—the first section presents the analysis of the researcher's classroom observations. The second section gives the analysis of the student electronic journals following the use of student-created vocabulary visuals in instruction, after the commercially-made still vocabulary graphics were utilized, and after the vocabulary-based DVDs were used in instruction. Section three analyzes the student focus group sessions following each visual vocabulary approach. The final section offers an analysis of the classroom teacher interviews.

Classroom Observations

The researcher conducted fifty-four 42 minute observations of the classroom; however, no data from those students who did wish not to participate were recorded in the researcher's observational notes. In order to maintain observational notes for only those students giving consent, the observational tool was pre-typed with only consenting participants' names.

Stiggins (2001) posits that when using synthesis, researchers generate new

understanding by using reasoning. In that way, key ideas are blended so that the result is the whole being more than the sum of all of its parts. In order to synthesize the information gained during this study, results from the classroom observation will be discussed first in detail.

The researcher recorded student behaviors and completed a classroom observation checklist for each class session. Twenty of the 54 classroom observation checklists were selected for analysis. The observation checklists selected were from across the 18 weeks and represent each of the three vocabulary approaches. The checklist categories were based on engaged behavior.

For each new vocabulary lesson, the classroom teacher introduced the new terminology in the same way: the teacher pronounced the words and read their definitions, and the students read the parts of speech and synonyms and antonyms for the words aloud. This procedure was used as a baseline for student behaviors for every lesson in each six-week period. The varying vocabulary approaches were then employed following this initial introduction to the new vocabulary words. The students' behaviors during the utilization of the student-created graphics, the still vocabulary graphics, and the vocabulary DVDs were noted for every lesson in each six-week period.

Student-created vocabulary visuals. The observational checklist annotations, in addition to the researcher's accompanying two-column observational comments and reflections following the first visual vocabulary approach (student-created vocabulary visuals), are outlined in the following table in which student behavior(s) during the first six-week period are noted.

Table 2

Reporting of Classroom Observational Notes of Student Behavior

Classroom Activity	Student Behaviors Noted
Introduction to lesson, reading words, parts of speech, definitions, synonyms/antonyms	Doodling Head on desk Head propped Yawning Arms crossed
Student four square completion	Sitting up Talking Laughing Attentive Smiling

It was observed that students became lively and excited during the completion of the student-created vocabulary graphics. One student asked, "We get to color?" and another inquired if the teacher could put their completed cards up around the room. Students began helping one another with ideas for drawings; for instance, when one student was creating a drawing for the vocabulary word "simulator," he was not sure what to do. Another student recommended drawing a driver's education simulator, and said, "Draw somebody sideways in a car hitting a tree." One student held up his newly created visual to show a classmate asking, "Do you like this?" The process became a social and productive experience.

The researcher also observed that students tended to share their connections to the drawings they created during this first visual approach. One student drew a character from *Harry Potter* for the vocabulary word "umbrage." She remarked, "That reminds me

of the character in *Harry Potter*--Professor Umbrage. She was annoying." Sample student four square creations are included in Appendix P.

Students made their own personal connections to the word they were assigned, and they also made connections to other students' drawings/visuals. Overall, the room was lively and largely social, but not chaotic. On several occasions, it was observed that all students were working while responding vocally to those around them. Students were engaged and on-task while communicating with those around them about the words, their meanings, and the connections they made though visuals.

Still vocabulary graphics. The observational checklist annotations, in addition to the researcher's accompanying two-column observational comments and reflections following the second visual vocabulary approach (still vocabulary graphics), are outlined in the following table in which student behavior(s) during the second six-week period are noted.

Table 3

Reporting of Classroom Observational Notes of Student Behavior

Classroom Activity	Student Behaviors Noted
Introduction to lesson, reading words, parts of speech, definitions, synonyms/antonyms	Head propped Yawning Signed out to get a drink Drawing on arm Inattentive Head down
Still graphic (cartoon) introduction	Leaning forward Attentive Laughing Making connections

The researcher observed that students were vocal and attentive with the presentation of the vocabulary cartoons. Although, students did not have the opportunity to be as social with their peers as they did while completing the student-created graphics or four square vocabulary cards.

Some students made comments regarding the vocabulary cartoons, the mnemonic link, and also demonstrated enjoyment of the humor they provided. It was observed that many of the students laughed when the cartoons were initially presented.

Students also made connections to the cartoons such as "Bulls will protect the herd" for the term *bulwark*. Another student commented on the exaggerated visuals the vocabulary cartoons often employed such as the enormous head of the boy who was described as *cerebral*: "That one's funny—look at his head!" The cartoon depicted a child with an usually large head that was supposedly full of facts. Another favorite was the vocabulary cartoon for candor—it depicted a bird (condor) chasing a smaller bird and declaring (with all honesty) "I am going to eat you right now!" The students could readily recall the condor with candor.

It was observed that, when the classroom teacher would review the vocabulary words, students were able to recall the words when provided with a definition. They were often reminded of the word by recalling the mnemonic link provided with the vocabulary cartoon. The word harrowing, for instance, included the mnemonic "hare rowing" with a cartoon of a scared rabbit in a row boat attempting to elude a hungry shark.

In other classroom discussions, one student even connected the word *histrionic* to their teacher for another class. Another used several words from the vocabulary lesson to

describe a reading about Frederick Douglass: “Many would *lament* Frederick Douglass’s *harrowing* situation because he had such an *irascible* master.” It was evident in numerous cases that the students had a deeper processing of the vocabulary words as evidenced by some of the original sentences they composed: “The loudspeaker’s malfunction made a *cacophony*,” and “Sometimes *grandiose* ideas cannot be turned into realities because of lack of funding.”

Vocabulary DVDs. The observational checklist annotations, in addition to the researcher’s accompanying two-column observational comments and reflections following the third visual vocabulary approach (vocabulary DVDs), are outlined in the following table in which student behavior(s) during the third six-week period are noted.

Table 4

Reporting of Classroom Observational Notes of Student Behavior

Classroom Activity	Student Behaviors Noted
Introduction to lesson, reading words, parts of speech, definitions, synonyms/antonyms	Head down Playing with hair Making connections Head propped Yawning
Viewing vocabulary DVD	Leaning forward Smiling Laughing Making connections Attentive

It was noted in the researcher's two column notes that students were extremely attentive during the DVD videos. None of the students attempted to work on seat work or other tasks during the viewing of the vocabulary videos, but were engaged and interested. Some laughter and much smiling were common during each video viewing session. Students leaned forward in their seats and watched the video clips intently.

Some of the students recognized the clips from movies they had seen previously, and those students indicated that they were able to make connections that way. The movie *Space Balls* and *Indiana Jones* clips were popular with the students. One of the students was able to connect a word with a show he watched on television: "I heard the word perfunctory on *2½ Men* last night!"

Some of the clips utilized older and even some black and white excerpts from television and movies. The students were noticeably less interested in these clips. The more recent video segments lent themselves more readily to student connections.

Student Electronic Journals

The participating students were asked to keep individual voluntary electronic journals regarding their perceptions of the three different visual approaches--student-created, still graphic representations, and vocabulary DVDs containing motion graphics--to vocabulary instruction. The journals allowed the students to evaluate and even criticize the curriculum experiences; journals also acted as introspective accounts of students' personal experiences, thoughts, and feelings.

At the conclusion of each visual approach to vocabulary (every six weeks) students were asked to respond fully and honestly to seven questions and submit these responses via school email to the researcher. The same set of questions was used to prompt student responses after each visual approach. These questions were again used to elicit student interaction and discussion during the focus group sessions (see Appendix L).

Participation in this study was voluntary, but in order to encourage students to complete the electronic journals, their names were entered in a drawing for a $25.00 iTunes gift card that was awarded at the completion of the study. For each electronic journal entry submitted, students were given a ticket for the iTunes gift card drawing.

The data from the electronic journals were collected and analyzed at the end of each six-week session using the vocabulary analysis tool (See Appendix J). The electronic journals were reflective accounts of the students' own interpretations of the

approaches to vocabulary instruction. The students were asked to reflect upon their experiences with the vocabulary approach and describe their reactions to the specific classroom instruction and activities. The first analysis was done in February 2009.

Student-created vocabulary visuals. One of the questions posed by the researcher included the following: What aspect(s) of the vocabulary instruction in this class has appealed to you the most and why? Evidence was shown that students found benefit from the process of using student-created, still graphic representations or "four squares" as they referred to them (see Appendix O). It was noted that several factors influenced their reactions. The data from the February 2009 student electronic journals were analyzed. Table 5 illustrates student responses to the student electronic journal question "What is the aspect of vocabulary that appealed to you the most?"

Table 5

Qualitative Reporting of February 27, 2009 Student Electronic Journals

Participant	Student Electronic Journal Comment
Student #1	"The aspect that appealed to me the most are the four square note cards, because I learned to connect with the words."
Student #2	"The note cards we created help me a lot with the vocabulary. I really like the pictures."
Student #3	"The vocabulary instruction that appealed to me the most is the four square note cards…it lets us be creative in showing the class what it means and helps me to remember what the words mean."
Student #4	"I think the vocabulary four squares are very helpful to remember new vocabulary words. Seeing how the words relate to me and my classmates is probably the most helpful to me."
Student #5	"Every time we have to do these cards on one word and from the person saying the word and what it is and the picture they draw I can picture it in my mind so that when I need to know the words then I just think of the person and the picture and I remember."

Of the twelve student participants, one student failed to submit this initial electronic journal. Nine students' journal entries included positive comments regarding the student-created visual approach to vocabulary instruction also referred to as the "four square" vocabulary approach.

Still vocabulary graphics. The second analysis of the student electronic journals was conducted in April 2009. These comments were in response to the question "What is the aspect of vocabulary instruction that appealed to you the most?" Through an analysis of the data, it was found that the reactions to this second approach were more disparate, so the data from this second analysis are described in the following two tables of student excerpts. Table 6 contains the positive reactions to the still vocabulary graphics:

Table 6

Qualitative Reporting of April 8, 2009 Student Electronic Journals

Participant	Electronic Journal Comment
Student #3:	"…what has appealed to me the most is the cartoons that are given after we go over the word and definition because it allows me to see what can be done and linked to the word."
Student #4:	"I have enjoyed seeing the cartoons. Some of them really stick with me and help me remember the definitions for the vocab. words."
Student #7:	"We are also given picture connections to all the words to help us remember them...The aspect of the vocabulary instruction that appeals to me the most is being able to make personal connections to all the words along with having picture connections that were provided."
Student #8:	"The recent vocabulary in this class has appealed to me more than any other. I get to see other people's point of views along with having my own personal view to the word. I seem to get more out of it and understand the words and definitions so much better…I feel I have improved dramatically, I actually feel like I am learning the whole meaning of the word."
Student #9:	"Aspects of the vocabulary instruction in this class that have appealed to me the most are how we are taking more time to learn the words, like going over the vocabulary cartoons."
Student #12:	"The cartoons have appealed to me the most because I am tending to remember the words better."

Table 7 contains the negative reactions to the still vocabulary graphics that were elicited in response to the question "What is the aspect of vocabulary instruction that appealed to you the least?"

Table 7

Qualitative Reporting of April 8, 2009 Student Electronic Journals

Participant	Electronic Journal Comment
Student #2:	"The part that has appealed to me the least is the cartoons being given to us. I like the words that you are giving us but I dislike the cartoons. I like when class created its own cards much better they are much easier for me to comprehend."
Student #6:	"Honestly I don't think the cartoons is that helpful for me."
Student #10:	"The aspect of the vocabulary instruction in this class that has appealed to me the least are the vocabulary cartoons…When it comes to learning the vocabulary words themselves, I believe that I learn better through review than through cartoons that seem juvenile to me."
Student #11:	"I think that I was learning better with reviewing and doing individual cards than with the cartoons we are doing now."

Of the twelve participants, two students did not submit the second electronic journal entry.

Vocabulary DVDs. The final electronic student journal analysis was conducted in May 2009. Through an analysis of the data, it was found that the reactions to this third approach were mixed, so the data from this third analysis is described in the following two tables of student excerpts. Table 8 contains positive reactions to the vocabulary DVDs based on the question "What is the aspect of vocabulary instruction that appealed to you the most?"

Table 8

Qualitative Reporting of May 26, 2009 Student Electronic Journals

Participant	Electronic Journal Comment
Student #1	"The aspect that appealed to me was the different videos of each of the vocabulary words and how they were mixed in with some of the other words."
Student #5	"I like the DVDs cause they are sometimes funny and they help me see the word used in a real word problem or situation."
Student #9	"Aspects of the recent vocabulary instruction that has appealed to me the most is the DVD vocab. I feel most students are visual learners, including myself, and seeing examples of the vocab. word really does help."
Student #11	"The aspects that appeal to me most are that it links moving pictures to the word to help me understand."

Table 9 contains the negative reactions to the vocabulary DVDs that were elicited in response to the question "What is the aspect of vocabulary instruction that appealed to you the least?"

Table 9

Qualitative Reporting of May 26, 2009 Student Electronic Journals

Participant	Electronic Journal Question
Student #2	"The videos really didn't appeal to me because that didn't really help me to remember the vocabulary more effectively."
Student #3	"The aspect of the vocabulary instructions that appealed to me the least was the DVDs. Everything goes by really fast and it's hard to remember the words when the personal connections aren't made in the DVD time period."
Student #4	"Some of the DVDs were very helpful, but I did not always make a good connection to the word."
Student #7	"The least appealing instruction for me is the DVD vocabulary words because most of the cartoons are kind of childish and I don't remember them as well."
Student #8	"I think the DVD appealed to me the least because I think it's a waste of time and a bit corny."
Student #10	"The DVDs appealed to me the least because I thought many of the clips shown for the vocabulary were juvenile and strange. They did not help me to remember the words at all"
Student #11	"The aspects that appeal to me the least are that all the videos are old and nothing modern is added to the videos."

Of the twelve participants, one student did not submit the third electronic journal entry.

Throughout the analysis of the student electronic journals, the researcher noted individual topics for each participant. Using this list of topics, the researcher revisited the journals, with the topics abbreviated as codes, and recorded the codes next to the appropriate segments of the text. This coding process was used to generate a small

number of themes (Creswell, 2003). As a result of this process, the following themes emerged:

Theme #1: Engagement versus rote memorization. Student expressions repeatedly occurring in the student electronic journals led to the researcher's identification of the theme "engagement versus rote memorization." Terminology frequently appearing in the student electronic journals included the following: "fun," hands on," "monotonous," "interactive," "funny," and "routine."

Table 10

Theme #1 Sampling across Three Vocabulary Approaches

Vocabulary Approach	Theme #1 "Engagement versus Rote Memorization" Comments
Still Vocabulary Graphics	"The vocabulary instruction this year is much different than that of last year or any years before. I think it is a very good change. It is much more interactive than it ever was and it really helps me learn the words. I like the involvement of everybody in the class it keeps people interested." "We are learning the words with a variety of techniques, versus the monotonous way of copying the words into a notebook, completing a packet, and taking a test." "With the new instruction of the vocabulary, my understanding in vocabulary has increased significantly. Sometimes vocabulary is like a routine, and these new activities broke the routine and renewed my interest in this."
Vocabulary DVDs	"The vocabulary instruction in this class differs from that in previous years in which we are being taught the words through various approaches versus one monotonous way." "I like the DVDs cause they are sometimes funny…" "It was more interactive and involved both hands on and drilling activities." "…the worksheets. I feel that when I do them, I am just trying to get them done instead of really focusing on the word. I don't think I am the only one who feels this way." "The vocabulary instruction in this class is different this year because this year I feel we did a bit more interactive stuff with the words."

Data from student electronic journal entries revealed that altering the traditional vocabulary instruction was viewed positively across all three visual approaches to the

vocabulary instruction. All three visual approaches were perceived by the participants as more interactive, fun, and hands-on. "A better term for 'hands-on' might be 'minds-on,' because such learning goes beyond physical interaction with materials to build the learners' confidence and skill in advancing their understandings" (Jalongo, 2007, p. 398). These interactive approaches seemed to increase student motivation and spark interest in the subject matter.

Theme #2: Making connections. Topics repeatedly occurring in the student electronic journals led to the recognition of another theme the researcher identified as "making connections." Terminology that was included in the coding process included the following: "real life", "connect", "our lives", "remember," "personal connections," and "real world."

Table 11

Theme #2 Sampling across Three Vocabulary Approaches

Vocabulary Approach	Theme #2 "Making Connections" Comments
Student-Created Vocabulary Visuals	"This year we are using flash cards and that helps show how the words can connect to our lives."
	"I also like the four squares because I have to come up with my own connections."
	"This year we are using flash cards and that is helping me connect each of the words to a situation."
	"The most appealing instruction for me is the vocabulary flash cards because I like being creative and making personal connections."
	"I liked the four square cards the best because it gave me a creative visual of the word, and also a personal connection. It really allowed me to delve into the meaning of the word, and therefore remember it."
	"The thing that appealed to me most had to of been doing the note cards. We got to see how others viewed it and how we connected with that certain word."
	"I can learn other people's connections to the vocabulary."
	"I like creating vocabulary note cards, and then presenting them. The pictures my classmates make sometimes help me remember a hard word."
Still Vocabulary Graphics	"We are also given picture connections to all the words to help us remember them...The aspect of the vocabulary instruction that appeals to me the most is being able to make personal connections to all the words along with having picture connections that were provided."
	"What appealed to me most is the cartoons that are given after we go over the word and definition because it allows me to see what can be done and linked to the word."

Vocabulary DVDs	"Our vocabulary instruction in this class differs from previous years because we now go over the words with visual aids and have the chance to make our own connections with what we are seeing and hearing with the DVDs."
	"I feel that my understanding of the recent vocabulary words has increased because the DVDs have made it easier for me to connect to the words and know the words better."
	"I like the DVDs cause…they help me see the word used in a real world problem or situation."
	"It was hard for me to connect my memory to any of the videos shown in class."
	"The vocab. in this is different because it is not only helping us hear the word but we can see it being used in real life."
	"I feel as though my understanding of the vocabulary material has increased due to the visual aids and the personal connections the activities have provided."
	"I am sure that I will forget some of the words, but some of the good connections will never be forgotten."

Theme #3: Perceived support. Words such as "instructor" and "teacher," were found paired with "learn" and "know" to support the additional theme of perceived support. Although this third theme was not as pervasive as the others, the researcher found it moving and powerful. Perceived support alludes to the positive student-teacher relationships in the classroom. This perceived support was evidenced in several of the students' journal comments.

The student electronic journal entries including the following: "I feel like the teachers actually want us to know the words instead of just another grade." "…this year our instructors are actually trying to help us learn the words. Other years they've just given out vocabulary packets and then just moved on to the next thing." "Since our instructors are spending more time helping us learn, I feel I'm getting more out of it." "…this year our instructors are trying different things to help us learn, instead of the packet." When students perceived that their teacher actually cared about their level of learning and their academic success, it enhanced the overall teacher-student relationships.

Student Focus Groups

The analysis of the student focus group sessions will again be organized by vocabulary visual approach type. Several themes were evident in the focus group dialogue. Since the identical questions utilized for the student electronic journals were those used as the basis for the focus group discussions, it is not surprising that the same themes which emerged following the student electronic journal analyses were also evident in the student focus group session transcriptions.

Session #1: Student-created vocabulary visuals. The first student focus group session was held following the completion of the first visual vocabulary approach—student-created vocabulary visuals. The additional student comments during the sessions support the initial themes delineated within the student electronic journal analyses. This: further support for these themes from the first six-week period is outlined in the following table

Table 12

Reporting of Previously Established Theme: Support—Focus Group Session #1

Theme	Student-Created Vocabulary Visuals
Theme #1 "Engagement Versus Rote Memorization"	"With the 4-squares you get to be creative because it's like drawing." "I liked the 4-square cards because when other people and myself got up in front of the class and presented, I would feel rude if I was not paying attention. I don't know; maybe it's just me. I made sure that I was absolutely looking at them and paying attention."
Theme #2 "Making Connections"	"Flash cards because it gives you the chance to like think of your own connection to it and then you're – it's basically like that's your word to learn like it's yours, you know, you're responsible for it." "I liked the four-square cards because you really had to connect to the word yourself. Every aspect of the word. You had to have a picture, a personal connection, a definition, and a sentence. It really helped me to delve into the word."
Theme #3 "Perceived Support"	No support for this theme from focus group session #1.

Additionally, in the researcher's transcripts of the student focus group sessions, it was also noted that some additional themes were generated as a result of the analyses.

Theme #4: Memory through visual supports. The following student dialogue during the first focus group session is an example of how visual supports seemed to have supported student learning of the vocabulary words:

Student #12: "I remember the pictures; I remember some of the pictures."

Student #2: "The picture is how I do it."

Researcher: "You picture the picture?"

Student #5: "Yeah, cause I just remember [student #8's]—she had two mountains and path going up through. And hers was like circuitous…"

Researcher: "Do you remember what circuitous means?"

Student #12: "Roundabout?"

Student #5: "She said she rides her own path through the woods—that's what she said for her sentence—on a horse."

Session #2: Still vocabulary graphics. The second student focus group session was held in April of 2009 following the completion of the second visual vocabulary approach—still vocabulary graphics. The additional student comments during the sessions from this second six-week period support some of the initial themes delineated within the student electronic journal analyses. Further support for these themes is outlined in the following table:

Table 13

Reporting of Previously Established Theme: Support—Focus Group Session #2

Theme	Still Vocabulary Graphics
Theme #1 "Engagement versus Rote Memorization"	"Yeah. It's usually just bad– we went over the words, and then we would write them down in our vocab. journal, and then study them had two spelling tests and a vocab. test." "Just synonyms and antonyms, choosing the right word, and completing the sentence—the packets. We didn't really use the words at all.
Theme #2 "Making Connections"	"Um, I think that like when we have to make our own personal connections to the cartoons—like why we think the cartoon goes along with the word--I think that's helpful." "Because it's like you're making your own personal connection along with the cartoon to have two ways to remember it." "I like having different connections that people can choose instead of just having one that is the only one you can use. So you have more of a chance of remembering it." "I liked the cartoons. They were my favorite. You had the connections and then we were like put in pairs and you had to make your own connections, too. So you had to go off of it." "I would choose this one because at the same time you're getting the picture, like there was a picture involved, but yet you're getting the picture and then making your own personal connection, too. "
Theme #3 "Perceived Support"	No support for this theme from focus group session #2.
Theme #4 "Memory through Visual Supports"	"Um, I think that—I really like the cartoons cause I think about them and think about like the "incite" "fight" the words and then I can really remember the graphic sometimes." "Yeah. It's just easier to remember them—I don't have to study as much." "I usually remember the picture." "When they're [the pictures] provided for you, they seem to stick in my head better…" "But this (cartoons) helps me more to know the words."

As with the initial focus group session, in the researcher's transcripts of the second student focus group session, it was also noted that one additional theme was generated as a result of the analyses.

Theme #5: Perceptions of learning. Students commented on their feelings of "knowing" a word, and were able to relate some of their experiences to retention. The following segment from this second focus group session supports this theme:

Researcher: OK, based on this new approach—visual approach to vocabulary, do you think your overall understanding of vocabulary has increased, decreased, or stayed the same?

Student #3: It seems to increase because the words now like stay in my mind. And I was reading—the book I was reading had them in it, so I actually knew what they were and like last years' words—I don't remember any of them.

Student #7: I think it has increased. Just because um like at night I don't have to sit down and I don't have to be like "What's this word? What's this word?" Like, I feel I know them.

Researcher: And when did you have to go through and study like that—when you did the student-created graphics?

Student #7: No, previous years.

Session #3: Vocabulary DVDs. The third student focus group session was held in June of 2009 following the completion of the final visual vocabulary approach--vocabulary DVDs. The additional student comments during the sessions support some of the initial themes delineated within the student electronic journal analyses. This further support for these themes is outlined for the third six-week period in the following table:

Table 14

Reporting of Previously Established Theme: Support—Focus Group Session #3

Theme	Vocabulary DVDs
Theme #1 "Engagement versus Rote Memorization"	"If you do the same thing over and over…it gets tedious and you want something different."
	"Just mix it up."
	"It's probably because I don't have TV at home—I'm just sucked into the DVDs."
	"I found anything extra that was different was helpful. Not like last year."
	"I think the DVDs catch my attention more…"
	"…the change helped—it was nice. It kept you thinking."
Theme #2 "Making Connections"	"I think it's easier—well sometimes—if it's something you know or if they show you something you've seen before. If you have seen some the media that they've shown you're like 'Oh, I've seen that before' and then it's easier. But, if you haven't, it's like starting from scratch."
Theme #3 "Perceived Support"	No support for this theme from focus group session #3.
Theme #4 "Memory through Visual Supports"	"I remember "uncouth" like when the lady like dumped her wine on the guy."
	"I remember "masticate" when the guy just kept chewing and chewing. It was so gross."
	"I remember 'discreet' because it had ninjas in it."
Theme #5 "Perceptions of Learning"	No support for this theme from focus group session #3.

The focus group sessions were held in a small, carpeted room adjacent to the library. Because of the tight quarters, students sat around the perimeter of the room on the floor. Snacks were provided, so the atmosphere was quite relaxed and casual. Because the researcher was not the classroom teacher, the emotional tone was rather uninhibited and students revealed their candid thoughts regarding previous, traditional vocabulary practices and their thoughts about each visual approach.

Teacher Interviews

The final type of data collection was in the form of teacher interviews. In-depth teacher interviews were completed following classroom observations to obtain the teacher's beliefs regarding the three varying approaches to vocabulary instruction. Following the initial interview, the same basic set of questions was used after each six-week period (See Appendix I). Several themes were supported by the comments gathered via the teacher interviews throughout this study. These themes were (1) engagement versus rote memorization, (2) making connections, (3) perceived support, (4) memory through visual supports, and (5) perceptions of learning.

Initial interview: Student-created vocabulary visuals. After the introduction of this first visual approach, the classroom teacher was interviewed regarding her perceptions. She was asked her thoughts regarding this visual approach to vocabulary. More specifically, she was asked to describe how her students had responded to this approach. The first approach was student-created vocabulary visuals or 4-square vocabulary cards (see Appendix P). The theme of "Engagement Versus Rote Memorization" was strong in the teacher comments during this initial interview session. Additionally, support for the themes "Making Connections," "Perceived Support,"

“Memory through Visual Supports,” and “Perceptions of Learning,” was also evident. The following table exemplifies the relevant comments from the initial teacher interview session:

Table 15

Initial Teacher Interview, Visual Approach #1

Theme	Teacher Comments
Theme #1 "Engagement versus Rote Memorization"	"Oh, during the creation there's a lot of energy. You see kids 'What should I draw, what should I draw?' You know, 'What would you draw? How can I make this?'"
	"But, yeah, there usually is a lot of energy, and it's a little louder, but not too loud. And I think it's a comfortable – I think it's a comfortable break from just the teacher talking; I think it's a nice transition."
	"Giving them the opportunity to create something that is meaningful for them and helpful to their peers is a plus."
Theme #2 "Making Connections"	"'How can I make that?' and a lot the connections -- like the personal connection piece. Some of them need help with that."
	"I think that having the personal connection in the picture – the visual piece – I think that's important."
Theme #3 "Perceived Support"	"I know myself that I can remember the pictures that were drawn with the word, and I'm often telling them 'Remember the picture that you drew?'"
	"And so I reinforce what they do on those cards…"
Theme #4 "Memory through Visual Supports"	"I think that it's very pleasurable for the kids. Um, I think for visual learners, that it is very helpful. And actually for tactile learners, if you think about it, they're making the card – they're *making* it."
	"And I know for myself, that I can actually remember the pictures kids drew on their cards, and I remember the words that they did. I constantly, it's a nice instructional piece because I constantly refer back to 'Remember so-and-so's card – remember the picture on that card,' so it's a nice -- I don't know if anchor is the right word – maybe. It's just a nice point for the kids to be able to go back to that."
Theme #5 "Perceptions of Learning"	"I've had feedback from my students saying, 'You know, this really helps.'"

Following the six-week introduction to the first vocabulary approach, student-created graphics, the classroom teacher was interviewed to determine her perceptions of the value in the approach to vocabulary instruction. Teacher comments reinforced the value of this approach across all five previously established themes.

Follow-up interview: Still vocabulary graphics. Following this second visual approach, a follow-up interview was conducted with the classroom teacher. The researcher inquired about the classroom teacher's perceptions of the still vocabulary graphics also known as vocabulary cartoons. The teacher was also asked her perceptions of her students' responses to this second visual approach. Once again, the themes "Making Connections," "Perceived Support," and "Memory through Visual Supports" were clearly evident in the following teacher comments as delineated in the subsequent table:

Table 16

Follow-up Teacher Interview, Visual Approach #2

Theme	Teacher Comments
Theme #1: "Engagement versus Rote Memorization"	No support for this theme was evident following the visual #2 interview.
Theme #2 "Making Connections"	"And I think to help with connections—it was important to have connections to share with them to give them something to think about to base their own thoughts and connections." "…ones that were especially funny—[were] the ones that you could make a real strong personal connection." "But you can't guarantee that you're going to have a strong connection to every word and every cartoon. You know, all the cartoons might not be equally as funny--just to different individuals. But, some of them are so well done."
Theme #3 "Perceived Support"	"I think the teacher definitely had to—it would be helpful if the teacher understood the cartoon well because for some of the kids it might be difficult to make the connection and, um, I think it's good for the teacher to be enthused." "I think a lot of the cartoons were really well done and fun. And so I think that modeling that it's okay to laugh at those because that's what cartoons are—funny."
Theme #4 "Memory through Visual Supports"	"I think for people who are visual learners it may have been easier to put a picture in their mind and connect it with the word…"
Theme #5 "Perceptions of Learning"	No support for this theme was evident following the visual #2 interview.

Teacher perceptions of this second visual approach were not as strong or positive as those following the previous visual approach. Specifically, the teacher related the need to offer additional scaffolding and supports for students who were unable to identify with the connections offered by the vocabulary cartoons. If students found difficulty immediately connecting with the examples offered, the classroom teacher felt it necessary to offer additional support through her own personal connections, modeling, and enthusiasm.

Follow-up interview: Vocabulary DVDs. Following this third visual approach, an additional follow-up interview was conducted with the classroom teacher. The theme of "Engagement versus Rote Memorization" was loosely supported by her comments.

Table 17

Follow-up Teacher Interview, Visual Approach #3

Theme	Teacher Comments
Theme #1: "Engagement versus Rote Memorization"	"Because it was a new approach, I think the initial examples were interesting and fun to the students.
Theme #2 "Making Connections"	No support for this theme was evident following visual approach #3.
Theme #3 "Perceived Support"	"The teacher's role in this approach was to show the DVDs several times to reinforce the content. It would have been nice to have this approach set up on the computer so students could access it as often as they felt they needed it." "It was also necessary in some instances to explain the DVD's interpretation of the term. So, the teacher needed to provide students the viewing opportunities and in some cases, provide students with a thorough explanation of the way the example worked."
Theme #4 "Memory through Visual Supports"	No support for this theme was evident following visual approach #3.
Theme #5 "Perceptions of Learning"	No support for this theme was evident following visual approach #3.

The classroom teacher relayed her enjoyment of the DVD segments, but she also noted that her students did not seem to find them as interesting or amusing. In the teacher's eyes, this visual approach was personally fun and engaging, although her comments regarding her students' reactions seemed to least support the established themes.

Summary

This chapter analyzed the four data sets, and several themes emerged. The themes were: (1) Engagement versus Rote Memorization, (2) Making Connections, (3) Perceived Support, (4) Memory through Visual Supports, and (5) Perceptions of Learning.

Chapter V will provide a synthesis of the data and literature. Conclusions will be drawn and implications and recommendations for further research will be discussed.

CHAPTER V

SUMMARY, CONCLUSIONS, RECOMMMENDATIONS

Introduction

This chapter begins with a brief review of the study's purpose, design, participants, research questions, data collection tools, and data analysis. Following this initial review, the results are summarized. This summary of results is followed by a section on conclusions; this segment elaborates on the reasons affecting the results and the researcher's culminating interpretations. The chapter concludes with implications for the educational community and recommendations for further research.

Summary and Discussion

The purpose of this in-depth case study was to determine how teacher and student perceptions of engagement and learning were influenced by the addition of three visual approaches to vocabulary instruction. The units of participants were twelve students and their classroom teacher. The student subjects were eleventh grade students from a small, rural high school in north central Pennsylvania.

During this study, the researcher sought to answer three questions regarding the facilitative effect visual approaches to vocabulary may have on both student engagement and student and teacher perceptions of learning. The specific questions that framed this research project were (1) To what degree is student engagement evident when students are provided with various visual approaches to vocabulary instruction?, (2) What are students' perceptions of their learning when provided with visual approaches to

vocabulary instruction? and (3) What are the classroom teacher's perceptions of student engagement and learning when visual approaches to vocabulary instruction are used?

Data collection included classroom observations, student electronic journals, student focus groups, and personal interviews with the classroom teacher. The various forms of data were collected to determine the perceptions of engagement and student learning as influenced by the three visual vocabulary approaches—student-created vocabulary visuals, still vocabulary graphics, and vocabulary DVDs. Data were analyzed according to procedures recommended in Merriam (2009) for qualitative data: The multiple types of data sets in the form of classroom observations, student journals, student focus groups, and teacher interviews made it possible for the researcher to triangulate data. Additionally, the researcher analyzed the data in an ongoing fashion. The following section summarizes the qualitative results.

Results

Five themes emerged from the data analysis conducted during this study. Each theme is linked specifically to a research question and will be discussed accordingly. These themes were: (1) Engagement versus Rote Memorization, (2) Making Connections, (3) Perceived Support, (4) Memory through Visual Supports, and (5) Perceptions of Learning.

The first research question—To what degree is student engagement evident when students are provided with various visual approaches to vocabulary instruction?—was addressed through all four data sets (classroom observations, student electronic journals, student focus groups, and teacher interviews).

One of the themes that emerged and communicated degrees of student engagement was, not surprisingly, "engagement versus rote memorization." This theme appeared in all four data sets and across all three visual approaches. Overwhelmingly so, the students and teacher displayed through their physical behaviors or expressed in written or spoken comments that engagement increased as a result of visual additives in the vocabulary instruction. The traditional forms of vocabulary instruction were also referred to as "monotonous" whereas the visual approaches were referred to as "fun." This theme is supported by Mathers who states that students are apt to engage in learning when teachers have "conversations with their students in an effort to make better use of the motivating power of 'hard fun' in literacy learning" (1998, p. 71). The engagement levels were somewhat less in the DVD approach as some students viewed several video clips as juvenile.

A second theme that illuminated the answer to the first research question is the "making connections" theme. In order for students to make personal connections, there is a need for prior knowledge. The visual prompts utilized in this study aided in supplying the background necessary for students to connect and therefore engage in the material to be learned. This theme is strongly supported in research; educational psychologists use the word *schema* to describe the internal map in our brains that helps us make sense of new data by looking for connected information or ideas (Jensen, 2005).

This theme of making connections was also evident in all four data sets. During the classroom observations, students were most often engaged in making connections during the construction of the student-created vocabulary visuals or 4-square cards. The student electronic journals, student focus group sessions, and teacher interviews also

showed, however, that students were not only connecting more often while using visuals, but also making strong connections that helped later with recall.

The second research question--What are students' perceptions of their learning when provided with visual approaches to vocabulary instruction?—was addressed through the student electronic journals and the student focus groups.

Obvious themes that address this second research question are "memory through visual supports" and "perceptions of learning." According to Lattimer, seeing a visual representation of the word is very effective, and "visual connections spur new learning and increase retention" (2010, p. 95). Students consistently expressed that they saw themselves as being able to understand and remember vocabulary with the visual approaches. Many commented on the ease with which they could do so. They believed they were being given the support necessary to make connections to prior knowledge. Although the DVDs were least helpful, they still provided some participants with the background they needed. Therefore, this researcher concludes that all of the visual approaches added in some way to the students' increased learning perceptions.

Another theme that relate to this second research question is "perceived support." This refers to relationships between teachers and students that likely make students feel capable or cared for (Vaux & Harrison, 1985). This theme was not as pervasive as the others in the study. It appeared only in the student electronic journals, but adds to the students' overall perceptions of learning by supporting the notion that students feel they are capable of learning more when their teachers and instructors care enough to provide support.

The third research question--What are the classroom teacher's perceptions of student engagement and learning when visual approaches to vocabulary instruction are used?—was answered utilizing multiple teacher interviews. All five themes aided in addressing this third question.

The themes of "engagement versus rote memorization" and "making connections" were most relevant with regard to the teacher's perceptions of her students' engagement. While the teacher still saw value in the drill and practice aspects of vocabulary instruction, she also spoke of the interesting and meaningful visual pieces that were added. Research maintains these perceptions--Nagy (1988) notes that to be effective, vocabulary instruction needs to be meaningful. The overwhelming advantage, in the teacher's perception, was the ability for her students to make connections. She perceived great value in the ease in which they could meaningfully connect words with their lives and contexts by using visuals.

The themes that related to the teacher's perceptions of her students' learning were "perceived support," "memory through visual supports," and "perceived learning." "Perceived support is embodied in the positive relationships that learners form with trustworthy and admirable teachers…many of the most significant and enduring learning experiences are accomplished when the learner is inspired to do his or her best and not disappoint" (Jalongo, 2007, p. 397). According to Vaux and Harrison, support facets involve relationships and interactions that lead an individual to feel "cared for, esteemed, involved, [and] capable" (2010, p. 246). Students' perceptions of the learning seemed more positive, important, and enjoyable because it was perceived that the teacher cared whether the students were learning. "When children…see that they are at the center of

the curriculum rather than at the margins, this builds motivation and interest" (Jalongo, 2007, p. 397). Conversely, when students are simply handed assignments, such as being given a vocabulary packet at the beginning of each lesson, the teacher is perceived as disconnected and unsupportive.

Overall, the classroom teacher expressed increased perceptions of student learning. She felt that the strong connections that students were able to make helped "guarantee" that they would remember them. Although she felt that additional teacher support was necessary to help explain some of the DVD clips, she maintained that, overall, the visual supports increased her students' knowledge and degrees of comfort with the vocabulary words.

A somewhat similar study was conducted by Smith (1987) in which the utility of imagery in a classroom setting was investigated. The researcher explored whether the use of a visual had a positive effect of the recall of the definitions of vocabulary terms. Participants were 142 college students who were enrolled in a developmental reading course at Georgia State University. The control group was given the word and its definition whereas the experimental group was supplied with the word, a definition, and a relevant visual. Immediately following the lesson, the first posttest was administered. There were no significant differences among the treatments groups; however, the delayed test that was given two weeks later revealed dissimilar results: The group which was supplied with the definition, sentence, and a visual image performed significantly better than the control group. The researcher concluded that visual imagery can be used successfully as part of a vocabulary instructional technique for college students.

Reflections

This section is divided into segments representing the researcher's interpretation of the elements that impacted the perceptions of the students and teacher in this study. These elements include environment, modeling, and depth of processing. Following this section, implications for the educational community and recommendations for future research will be discussed.

Environment

The researcher concludes that the classroom environment that was created with the addition of the visual approaches facilitated the overall engagement of students in the lessons. The visual practices increased the level of social interaction in the classroom and stimulated conversation among students. Vygotsky (1978) viewed intelligence as being shaped by social rather than solely by innate forces. Additionally, Gee (1996) suggested that literacy is deeply related to social practices and cannot be separated from them.

With the introduction of the three visual approaches to vocabulary learning, a social environment of laughter, fun, and ease was established. This was a stark contrast to the preceding vocabulary instruction which routinely consisted of independent seat work. This social environment facilitated students' active engagement.

The social interaction was especially evident during the creation of the four square cards in which students shared their drawings and ideas with others in the classroom. The dialogue that took place seemed integral to an increase in student engagement and motivation. This student conversation also appeared quite important to

mediating students' understanding. According to Lattimer teachers who effectively engage students are those who "provide opportunities for student talk" (2010, p. 115).

Students tuned in because they were actively engaged in the dialogue. This particular approach helped ameliorate the anxiety some students equate with vocabulary learning. When interaction was involved, fun was more often associated with the learning task.

Students responded more favorably to collaboration and discourse as avenues for building vocabulary. In addition, the social environment created through the inclusion of the visual approaches positively impacted the students' engagement in the lessons.

Teacher Modeling

In addition to realizing the importance of a positive classroom environment marked by student interaction on students' perceptions and motivation, the researcher also concluded that the teacher's modeling of interest in the lesson greatly impacted engagement and student perceptions. Because the classroom teacher found the visual approaches to be useful, humorous, and fun, her interest in the lessons was conveyed to her students. According to Pintrich (2003) "The nature of the discourse in the classroom concerning how interesting the content and activities are should foster the development of interest as well" (p. 674).

Because of the renewed excitement exhibited by the classroom teacher with each introduction of a new visual approach, it is apparent that students' perceptions of the lessons and their subsequent engagement in those lessons were more positive than with the traditional vocabulary routines.

In this study, the classroom teacher perceived the addition of visual approaches in vocabulary lessons to be a better way of learning. Although not every student could always identify personally with each visual prompt, the teacher's perception of the validity of the lessons and their motivating potential seemed to positively transfer to her students. The researcher concluded that the classroom teacher's positive perceptions served to augment the perceptions of her students.

Depth of Processing

The researcher concludes from the analysis of the data in this study that visual approaches to vocabulary learning increase student interest as well as their ability and opportunity to make necessary connections for deeper processing and learning. One of the overall reactions by the researcher is that students seemed to be able to create bridges between ideas and acquire a deeper understanding of new vocabulary terminology when utilizing the student-created still graphic or "four square" approach. For students who had little to no prior knowledge, the vocabulary cartoons and DVDs were more helpful; they provided an initial exposure that was necessary as a basis.

According to Nagy and Scott (2000) it is the

> quality of vocabulary instruction [that] must therefore be judged, not on whether it produces immediate gains in students' understanding of specific words, but also on whether it communicates an accurate picture of the nature of the word knowledge and reasonable expectations about the word learning process. (p. 281)

This "deep processing" (Craik & Lockhart, 1972) of the words in this study made it more likely for students to remember them and use them correctly in sentences and in speech

not only in the short-term but long-term as well. Students in this study commented that they were able to perform well on the vocabulary quizzes without additional studying and review. More impressively, some students even remarked that they were able to use the vocabulary words more often in real conversations, an indication of depth of learning.

Implications for Educational Community

Based on the insights gained through the results of this study, many suggestions can be made for the educational community:

First, creators, publishers, and manufacturers of educational materials dealing with vocabulary instruction for adolescents should consider the impact a visual approach would have on students' perceptions of the lesson and on their overall motivation and engagement. New materials might include graphic examples and organizers conducive to student creation of their own images and connections.

Also, teachers, administrators, and curriculum specialists might reflect on the results of this study when selecting, purchasing, and using educational materials for adolescent students.

Additionally, professional development aligning with a focus on student engagement should be considered for educators of adolescents. Teachers need to be made aware of the whole realm of student engagement and be able to discern when students are motivated and actively engaged. To this end, educators should be made aware of the effective use of visual methods that aid students in accessing prior knowledge and making the connections necessary to promote student interest and learning.

Recommendations for Further Research

This study focused on adolescent students' and teachers' beliefs about visual approaches to vocabulary study. It is recommended that further research in this area be conducted. Based on the results of this study, the following four recommendations are made.

First, it is recommended that a wider sample of participants be chosen. This study focused on a very small number of students from only one class in one school district. Although this classroom was chosen for this study because it represented the type of adolescent students available in the school district, choosing a larger school district or a geographic area where more schools are available would provide a larger sample. Providing a larger sample would increase the generalizability of findings. This was an exploratory qualitative study, and further large-scale studies of this nature are warranted.

A second recommendation is that future researchers consider offering greater incentives for participating in the study. This researcher encountered a few obstacles and difficulties when requesting student completion of the electronic journal responses for this study. Offering more incentives may increase the likelihood of consistent submissions.

Third, it is recommended that future researchers examine the extent to which teacher education affects teachers' beliefs about visual approaches to vocabulary instruction and their classroom practices. In-depth study of this question was beyond the scope of this study; however, future research in this area can determine whether teacher education level offers an explanation for discrepancies between teacher beliefs and their classroom practices.

Fourth, it also is recommended that future research be conducted to determine what effect, if any, onsite training in the area of adolescent vocabulary development would have on teaching practices in middle and high school classrooms. That is, future researchers could offer adolescent literacy/vocabulary training to instructors based on initial responses of interview questions and observations. Additional observations and interviews would follow training to determine if and how teachers' responses changed following training.

Finally, it is recommended that a similar study be conducted using quantitative measures. Future researchers could use pre-test and posttest data to indicate an increase, if any, in vocabulary scores following the inclusion of visual approaches. It is also recommended that future researchers consider a study that investigates the use of visual strategies that extend student learning to other situations. For example, a follow-up study that includes SAT scores and whether the students taking the SAT utilized any visual strategies to prepare for the SAT is suggested.

Conclusions

The purpose of this study was to identify teacher and student perceptions of engagement and learning as influenced by the addition of three visual approaches to vocabulary instruction. These visual approaches were student-created vocabulary visuals, commercially-made still vocabulary graphics, and vocabulary-based DVDs containing motion graphics.

Vocabulary development is important to the academic success of adolescents. In order to provide adolescent students with the appropriate literacy instruction they need to become academically successful, instructors should have a firm understanding of

vocabulary development and its importance in the student's long-term academic career. It is concluded that approaching vocabulary instruction utilizing various visual methods increased not only student levels of engagement, but also student and teacher perceptions of vocabulary learning.

The literature review has identified the fact that there is a lack of effective literacy and vocabulary instruction at the middle and high school levels. In fact, only thirty-two percent of America's eighth graders meet grade-level proficiency for reading in 2009 (National Center for Educational Statistics, 2009). It is well known that vocabulary knowledge is closely linked to reading proficiency, and that the size of one's vocabulary in a controlling factor in developing reading skills. In fact, "the richer the vocabulary, the more students are encouraged to become readers" (Duffy, 2003, p. 7).

Unfortunately, in myriad middle and high school classrooms, an overwhelming emphasis is on recitation activities, leading to a single expected response, rather than on authentic activities that would lead to deeper understanding. It is true that reference texts and dictionaries are important tools, but they are unreliable as a routine response to vocabulary lists (Ogle, Klemp, & McBride, 2007). This is not a context for exploring ideas and comprehending through alternative understandings. Rote memorization and other "assign, define, and test" practices fail to motive most learners, perhaps even more so adolescent learners. Hence, student engagement suffers, and students' desire to learn is diminished.

If the education of children consists of questions and reflection about what they see, hear, feel, and experience, they will learn to answer questions with insight, sensitivity, and intelligence (Eisner, 1997). A richness and depth of learning facilitates

more sophisticated reading and thinking skills. "Effective teaching transcends merely imparting knowledge and relies, to a considerable extent, on educators' ability to motivate students to learn" (Jalongo, 2007, p. 395).

Middle and high school educators can support literacy and vocabulary development by providing literacy experiences that stimulate students' interests and incorporate a variety of strategies that will help students build on prior knowledge. These literacy experiences should also help motivate adolescents by aiding them in connecting what they learn in school to experiences outside the classroom. The hope is that if educators make vocabulary more approachable and relevant, students will see it as important.

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APPENDICES

Appendix A

The Four Foundational Components of Language

Phonology	The study of speech structure within a language, including both the patterns of basic speech units and the accepted rules of pronunciation
Semantics	The ways in which a language conveys meaning.
Syntax	The study of how individual words and their most basic meaningful units are combined to create sentences.
Pragmatics	The ways the members of the speech community achieve their goals using language.

Appendix B

Mr. Francis Jaquish, Principal

Liberty Junior Senior High School

Liberty, PA 16930

December 26, 2008

Dear Mr. Jaquish, Principal of Liberty Jr. Sr. High School:

As you already know, I am currently pursuing a Doctor of Education Degree in Curriculum and Instruction through Indiana University of Pennsylvania. I am now in the process of having my dissertation proposal approved by the Institutional Review Board at IUP. I have also sent a synopsis of my study to the Board of Education for the Southern Tioga School District. I am hopeful that, by the beginning of January 2009, I will be able to begin my original research for my dissertation.

My research will utilize a qualitative approach, and the title of my proposal is "Visual Approaches to Vocabulary Instruction: Teacher and Adolescent Learner Perceptions." A copy of my proposal is attached. The students in the eleventh grade class are the proposed participants in my study. They have English class with Mrs. Lisowski in the spring of 2009, and it is in this class that my vocabulary study will take place.

Students' vocabulary terms will be presented to them via three visually represented instructional methods: student-created vocabulary visuals, commercially-made still vocabulary graphics, and vocabulary-based DVDs containing motion graphics. Since the study will last eighteen weeks, each type of visual instructional method will be utilized for six weeks (three bi-weekly vocabulary units for each visual representation). If students choose to be a part of the study, and permission from their parent/guardian is received, they will be asked to keep individual voluntary electronic journals and participate in focus groups regarding their perceptions of the three visual approaches.

I would like to officially request your permission to work with Mrs. Lisowski's eleventh grade college-bound class at Liberty High School during the spring of 2009. I feel that this study will prove beneficial for our teachers and the Southern Tioga School District.

Thank you for your support of education at Liberty Jr. Sr. High School and for your encouragement of my personal educational goals.

Sincerely,

Dana L. Delker

I give permission for Dana L. Delker to conduct educational research at Liberty High School during the spring of 2009 as stated in her dissertation proposal.

_____Signature _____Date

_____Name (please print)

Appendix C

Visual Approaches to Vocabulary Instruction: Teacher and Learner Perceptions

Informed Consent Form

January 2009

Dear Student:

You are invited to participate in a research study on vocabulary. The following information is provided in order to help you to make an informed decision about whether or not to participate. If you have any questions, please do not hesitate to ask. You are eligible to participate because you are a student in an eleventh grade academic English course at Liberty High School.

The purpose of this study is to identify teacher and student opinions about different uses of visuals during vocabulary instruction. Participation or non-participation will not affect the evaluation of your performance in this class. The vocabulary units for eleventh grade English will include a different visual component for every three vocabulary units. Visuals will include student-created vocabulary visuals, commercially-made still vocabulary graphics, and vocabulary-based DVDs containing motion graphics. No new material will be covered as a part of this study, and the educational objectives for the course will remain the same. If you choose to be a part of the study, you will be asked to participate in three audio taped focus group discussions as well as keep a voluntary electronic journal regarding your perceptions of the visual vocabulary components.

There are no known risks associated with this research.

You may find the learning experience enjoyable and the information may be helpful to you in learning and retaining your vocabulary words. The information gained from this study may help us to better understand the use of visual aids in vocabulary instruction.

Your participation in this study is voluntary. You are free to decide not to participate in this study or to withdraw at any time without adversely affecting your grade in English 11. If you choose to participate, you may withdraw at any time by notifying the Project Director (Mrs. Delker) or your classroom teacher for English 11 (Mrs. Lisowski). Mrs. Delker may be contacted personally, by telephone at (570) 324-2071, or via email at ddelker@southerntioga.org. Upon your request to withdraw, all information pertaining to you will be destroyed. If you choose to participate, all information will be held in strict confidence and will have no bearing on your academic standing. The information obtained in the study may be published in a dissertation or educational journals, but your identity will be kept strictly confidential.

If you are willing to participate in this study, please sign the statement below. Place all informed consent forms (signed and unsigned) in the collection box in the back of Mrs. Lisowski's classroom. Take the extra copy with you.

Thank you,

Dana L. Delker, Doctoral Candidate
Curriculum and Instruction
Indiana University of Pennsylvania
Indiana, PA 15705
(570) 324-2071

Dr. Mary R. Jalongo, Faculty Advisor
122 Davis Hall
Indiana University of Pennsylvania
Indiana, PA 15705
(724) 357-2417

This project has been approved by the Indiana University of Pennsylvania Institutional Review Board for the Protection of Human Subjects (Phone: 724/357-7730).

I have read and understand the information on the form, and I consent to volunteer to be a subject in this study. I understand that I will be observed and audio taped by the researcher, that my responses are completely confidential, and that I have the right to withdraw at any time. I have received an unsigned copy of this informed Consent Form to keep in my possession.

Name (PLEASE PRINT):_____

Signature:_____

Date:_____

I certify that I have explained to the above individual the nature and purpose, the potential benefits, and possible risks associated with participating in this research study, have answered any questions that have been raised, and have witnessed the above signature.

_____ _____

Date Investigator's Signature

Appendix D

Informed Consent Form

January 2009

Dear Eleventh Grade Parent/Guardian:

The following information is provided in order to help you decide and make an informed decision regarding your son/daughter's participation in a research study.

The purpose of this study is to identify teacher and student perceptions of three visual approaches to vocabulary instruction. I will be observing the eleventh grade English classroom vocabulary lessons during the spring 2009 semester. The students' vocabulary instruction will include a different visual component for every three vocabulary units. Visuals will include student-created vocabulary visuals, commercially-made still vocabulary graphics, and vocabulary-based DVDs containing motion graphics. These three vocabulary approaches are a part of the regular, approved curriculum. No new material will be covered as a part of this study, and the educational objectives for the course will remain the same. If your child is a participant in the study, he or she will be asked to take part in three audio taped focus group discussions as well as keep a voluntary electronic journal regarding his or her perceptions of the visual components utilized in this research.

The Indiana University of Pennsylvania supports the practice of protection for human subjects participating in research. There are no known risks related to this research study. Participation or non-participation in this study will **not** affect your child's grade in English class. In addition, your child's name will never be divulged nor associated with the findings in any way. All information obtained will be kept strictly confidential. While your child's participation is critical to the collection of data, his or her participation remains voluntary. If your child participates in the study, he or she may withdraw at any time.

If you are willing to have your child participate, please complete and return one copy of this voluntary consent form to Mrs. Delker at Liberty High School, Rtes. 414 and 15, Liberty, PA 16930. A summary of the findings of the study will be made available to you upon request. Please feel free to contact me at (570)324-2071 if you have any questions.

Sincerely,

Dana L. Delker, Doctoral Candidate
Curriculum and Instruction
Indiana University of Pennsylvania
Indiana, PA 15705
(570) 324-2071

Dr. Mary R. Jalongo, Faculty Advisor
122 Davis Hall
Indiana University of Pennsylvania
Indiana, PA 15705
(724) 357-2417

VOLUNTARY CONSENT FORM

I have read and understood the information in the consent letter, and I give consent for my son/daughter, _____, to be a participant in the vocabulary study in Mrs. Lisowski's class. I am aware that my son or daughter will be asked to participate in no more than three audio taped focus group sessions. I am also aware that the data collected in the study will remain confidential and that my child has the right to withdraw by notifying the secretary in the main office. If my child decides to withdraw from this study, he/she may do so at any time.

PARENT NAME: _____

SIGNATURE: _____

PHONE NUMBER: _____

E-MAIL: _____

Appendix E

Informed Consent Form

January 2009

Dear Mrs. Cindy Lisowski:

The following information is provided in order to help you decide and make an informed decision regarding your participation in a research study.

The purpose of this study is to identify teacher and student perceptions of three visual approaches to vocabulary instruction. The researcher would like to observe your eleventh grade English classroom vocabulary lessons during the spring 2009 semester. These observations would take place three times a week for eighteen weeks.

If you decide to participate in this study, you will be asked to take part in several audio taped face-to-face interviews with the researcher. These interviews will also be a way for the researcher to gather additional information about your perceptions that may not be initially obvious and about events that happened in additional class sessions that the researcher will not be able to observe.

You will be interviewed initially (prior to the inclusion of any of the visual components) regarding your perceptions of the components and their forthcoming inclusion in the vocabulary units. The researcher will conduct follow-up interviews after each six-week period (following the use of each different visual component).

Sincerely,

Dana L. Delker, Doctoral Candidate
Curriculum and Instruction
Indiana University of Pennsylvania
Indiana, PA 15705

I have read and understand the information above, and I consent to volunteer to participate in this study. I understand that I will be observed, interviewed, and audio taped by the researcher. I understand that my responses are for data collection only and will not be shared with the Southern Tioga School District. I have received an unsigned copy of this informed Consent Form to keep in my possession.

Name (PLEASE PRINT):_____

Signature: _____

Date: _____

Appendix F

November 5, 2008

Pearson

5601 Green Valley Drive

Bloomington, MN 55437

To Whom It May Concern:

I am completing a doctoral dissertation at Indiana University of Pennsylvania entitled "Visual Approaches to Vocabulary Instruction: Teacher and Adolescent Learner Perceptions." I would like your permission to reprint in my dissertation excerpts of the following: BASC-2 Student Observation System.

The excerpts to be reproduced are detailed in the attached checklist.

The requested permission extends to any future revisions and editions of my dissertation.

If these arrangements meet with your approval, please sign this letter where indicated below and return it to me in the enclosed return envelope. Thank you very much.

Sincerely,

Dana L. Delker

PERMISSION GRANTED FOR THE USE REQUESTED ABOVE:

_____

Date: _____

Appendix G

Permission Letter

PEARSON

Pearson

19500 Bulverde Road
San Antonio, TX 78259
Tel: 210 339 5345
Fax: 210 339 5601

January 8, 2009

Mrs. Dana L. Delker
C/o Indiana University of Pennsylvania
252 Beech Ridge Road
Trout Run, PA 17771

Re: Behavior Assessment System for Children, Second Edition (BASC™-2) (the *"Product")*

Dear Mrs. Delker:

Thank you for your correspondence dated November 5, 2008 requesting permission to adapt and reproduce five (5) selected excerpts from the Student Observation System (SOS) Checklist from the Product for inclusion in your doctoral dissertation research results (the "Use").

We have no objection to the use of this material for the purpose as stated above subject to the following Terms and Conditions:

1. You have permission to reproduce the five (5) adapted items from the SOS Checklist from the Product in your dissertation, and in future revisions and editions of your dissertation.

2. Please use the following copyright and trademark notice(s):

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   "BASC" is a trademark, in the US and/or other countries, of Pearson Education, Inc. or its affiliate(s).

Thank you for your interest in our materials. If you need additional assistance, please contact me directly at 210 -339-5345, or toll free at 800-228-0752 ext. 5345.

Sincerely,

William H. Schryver

Permissions Specialist
Clinical Assessment
Pearson
pas.licensing@pearson.com

Appendix H

Classroom Observational Checklist

This checklist has been adapted from the BASC-2 Student Observation System (Reynolds & Kamphaus, 2004).

The following list will be used as a reference during classroom observation.

_____1. Response to teacher/lesson
- Listening to teacher or following directions.
- Interacting with teacher in class/group
- Working with teacher one-on-one

_____2. Work on school subjects
- Doing seat work
- Working at blackboard
- Working with partner/group

_____3. Attention
- Maintaining eye contact with teacher
- Focusing on instructional presentation (video, overhead, etc.)

_____4. Appropriate movement
- Sitting up
- Head up
- Gesturing (hand-raising or other gestures that indicate engagement)

_____5. Appropriate vocalization
- Responding to teacher and/or peers
- Laughing/vocalizing appropriately

Appendix I

Classroom Observation Form

In addition to the observational table below, the researcher will also use a two-column note format to record any additional observations and reflections.

Date: _____

Student Name:	Resp. 1	Work 1	Attn. 1	Move 1	Vocal 1	Resp. 2	Work 2	Attn. 2	Move 2	Vocal 2

Appendix J

Focus Group Questions

1. What types of learning activities tend to motivate you?

2. Give me an example of something you might associate with learning.

3. How does your vocabulary instruction in this class differ from that in previous years?

4. What aspect(s) of the vocabulary instruction in this class has appealed to you the most and why?

5. What aspect(s) of the vocabulary instruction in this class appealed to you the least and why?

6. Based on the presentation and activities related to your previous three vocabulary units, do you feel your understanding of the vocabulary material has increased or decreased?

7. What suggestions do you have to improve the vocabulary instruction for students your age?

Appendix K

Vocabulary Journal Analysis Tool

Student Name _____

Collection #1 (after 6 weeks) Date _____

_____

Overall reaction:

Individual topics noted:

Collection #2 (after 12 weeks) Date _____

Overall reaction:

Individual topics noted:

Collection #3 (after 18 weeks) Date _____

Overall reaction:

Individual topics noted:

Appendix L

Classroom Teacher Interview Questions

Framing Questions:

1. How long have you been teaching?
2. What grade levels do you teach?
3. How long have you been teaching vocabulary?
4. What are some of the different vocabulary teaching methods you have used in the past?
5. What are the factors that influence your decisions when it comes to the vocabulary approaches you use with your students?

Follow-up Questions:

1. Please describe your thoughts regarding your implementation of the student-created visual approach to vocabulary. What did you see as the teacher's role in this activity?

    a. What do you feel are the benefits and/or shortcomings of this first visual approach?

    b. Describe your perception of the level of student engagement with regard to this first visual approach.

    c. Do you think students experienced a deeper learning of vocabulary as a result of using this method?

    d. Would you recommend this first vocabulary approach for students in other English classes? Why or why not?

2. Please describe your thoughts regarding the implementation of the still graphic visual approach to vocabulary. What did you see as the teacher's role in this approach?

    a. What do you feel are the benefits and/or shortcomings or this second visual approach?

    b. Describe your perception of the level of student engagement with regard to this second visual approach.

    c. Do you think students experienced a deeper learning of vocabulary as a result of using this method?

    d. Would you recommend this second vocabulary approach for students in other English classes? Why or why not?

3. Please describe your thoughts regarding your implementation of the vocabulary DVD visual approach to vocabulary. What did you see as the teacher's role in this approach?

    a. What do you feel are the benefits and/or shortcomings or this third visual approach?

    b. Describe your perception of the level of student engagement with regard to this third visual approach.

    c. Do you think students experienced a deeper learning of vocabulary as a result of using this method?

    d. Would you recommend this third vocabulary approach for students in other English classes? Why or why not?

Appendix M

Comprehensive Vocabulary List – Alphabetized

1. abash
2. abominate
3. abridge
4. abstruse
5. acculturation
6. admonish
7. adventitious
8. aloof
9. ambiance
10. ameliorate
11. anarchy
12. anterior
13. apex
14. aphorism
15. aplomb
16. approbation
17. arduous
18. ascribe
19. askew
20. assuage
21. atrophy
22. austere
23. baneful
24. belabor
25. beleaguer
26. bombastic
27. bucolic
28. bulwark
29. cache
30. cacophony
31. cajole
32. callous
33. callow
34. candor
35. capacious
36. capitulate
37. castigate

38. cerebral
39. chattel
40. circuitous
41. circumspect
42. citadel
43. coalition
44. commiserate
45. conflagration
46. confute
47. connoisseur
48. convivial
49. cower
50. craven
51. dearth
52. debase
53. decadence
54. dexterous
55. discreet
56. discrete
57. disseminate
58. docile
59. drivel
60. efface
61. egregious
62. elicit
63. emaciated
64. enjoin
65. entice
66. epitome
67. erudite
68. evade
69. ex officio
70. exact
71. exhort
72. expedite
73. expiate
74. expostulate
75. expunge
76. fabricate
77. facilitate

78. ferment
79. fetish
80. foible
81. fortuitous
82. fraught
83. gesticulate
84. girth
85. gloat
86. grandiloquent
87. grandiose
88. gullible
89. hackneyed
90. harangue
91. harrowing
92. hiatus
93. histrionic
94. impede
95. inadvertent
96. incite
97. incongruous
98. indolent
99. induce
100. infringe
101. ingratiate
102. innuendo
103. insouciant
104. intercede
105. interloper
106. intrinsic
107. inveigh
108. irascible
109. jaded
110. lacerate
111. laconic
112. lament
113. languish
114. lassitude
115. laud
116. lethargy
117. ludicrous
118. lurid

119. malevolent
120. malleable
121. masticate
122. meander
123. meritorious
124. milieu
125. millennium
126. nadir
127. neologism
128. nominal
129. nonchalant
130. noncommittal
131. occult
132. opportune
133. optimum
134. peculate
135. penitent
136. perfunctory
137. permeate
138. petulant
139. phobia
140. pillage
141. precarious
142. precipitate
143. prerogative
144. pretentious
145. proclivity
146. procrastinate
147. provincial
148. prowess
149. puissant
150. quandary
151. queue
152. quixotic
153. reiterate
154. respite
155. sangfroid
156. seditious
157. serpentine
158. simulate

159. slovenly
160. soporific
161. stolid
162. strident
163. stringent
164. surfeit
165. surmise
166. taciturn
167. tact
168. tantamount
169. tenuous
170. transcend
171. trenchant
172. truculent
173. truncate
174. umbrage
175. uncouth
176. unctuous
177. vapid
178. visage
179. vitriolic
180. wheedle

Appendix N

Sample Student Vocabulary List

11th Vocabulary Name:

Vocabulary Cartoons

Lesson #1

1. **aloof**
(uh LOOF)
(adj.) distant, reserved in manner; uninvolved

She had an _____ manner and hardly spoke to anyone.
SYNONYMS: distant, detached, unfriendly, cold, unapproachable
ANTONYMS: friendly; sociable

2. **arduous**
(AHR joo us)
(adj.) demanding; hard to achieve; strenuous; difficult

For my friend Rob, writing an essay is an _____ job.
SYNONYMS: hard, laborious, grueling, demanding, strenuous
ANTONYMS: easy

3. **austere**
(aw STEER)
(adj.) stern, as in manner: without excess, unadorned, severely plain and simple

The _____ clothing and conduct of the Puritans expressed their religious humility.
SYNONYMS: forbidding, rigorous, puritanical, ascetic, unadorned
ANTONYMS: mild, indulgent, luxurious, flamboyant

4. **bulwark**
structure for
(BULL wurk)
(n.) a strong defense or protection; a solid wall-like

defense; (v.) to provide such defense or protection

The only remaining evidence of a once thriving civilization is this _____ against the encroachments of the sea.

His staff had to _____ him against fans who wanted to get near him.

SYNONYMS: stronghold, citadel, bastion, rampart
ANTONYMS: breach, weak point in the defense

5. cacophony
(kuh KAFH uh nee)

(n.) displeasing, harsh sound; horrible noise

Parents and kids have different ideas about sound -- our parents call our music _____ when it is absolutely harmonious to us.
SYNONYMS: dissonance, discord
ANTONYMS: euphony, pleasing sound, melodiousness

6. cerebral
(suh REE brul)

(adj.) of or relating to the brain; an intellectual person

He sustained a _____ hemorrhage in the accident.

She prefers the _____ joys of the literary world.
SYNONYMS: intellectual, brainy, rational, clever
ANTONYMS: backward, crude, naive, uncultivated

7. chattel
(chatel)

(n.) an item of personal, moveable property; slave

Please do not order me around; I'm not your _____.
SYNONYMS: servant, belonging
ANTONYMS: real estate

8. connoisseur
judgments,
(kahn uh SUR)

(n.) an expert; one who is well qualified to pass critical

especially in one of the fine arts

She was a _____ of both music and film.
SYNONYMS: authority, savant, pundit
ANTONYMS: ignoramus, philistine, yahoo

9. expunge
(ex PUNGE)

(v.) to erase; to remove completely

The jurors were instructed to _____ the derogatory remarks from their memories.
SYNONYMS: blot out, obliterate, purge, erase, delete
ANTONYMS: insert

10. grandiose
(GRAN dee ohs)

(adj.) grand and impressive, especially flashy and showy

Our coach had a _____ plan to beat the opposition.

The climber had _____ ideas of being the first to scale the as yet unclimbed peak.

SYNONYMS: flamboyant, pretentious
ANTONYMS: calm, moderate, small, unpretentious

11. harrowing
(HARE roe ing)

(adj.) extremely distressing; disturbing or frightening

Eddie had a _____ experience when his parachute didn't open -- his emergency chute saved him at the last minute.
SYNONYMS: agonizing, anguishing, tormenting
ANTONYMS: pleasing, safe, calming

12. incongruous
fitting in
(in KAHN grew us)

(adj.) not appropriate; unsuited to the surroundings; not

Ed appeared _____ wearing his tuxedo on an old-fashioned hayride.
SYNONYMS: strange, out of place, incompatible, inappropriate
ANTONYMS: consistent; appropriate

13. irascible
(i RAS uh bul)

(adj.) easily angered, irritable

The school principal became so _____, even his teachers avoided speaking to him.
SYNONYMS: cross, bad-tempered, crabby
ANTONYMS: cheerful, happy

14. lament
(la MINT)

(v.) to express sorrow or regret; to mourn

The store owner _____ (ed) that sales were down forty percent since Christmas.
SYNONYMS: mourn, grieve, regret, bewail
ANTONYMS: celebrate, compliment, laud, praise, rejoice

15. opportune
(AHP ur tune)

(adj.) suitable or convenient for a particular purpose; occurring at an appropriate time.

If you intend to give that dog a bath, you had better pick an _____ moment, and then pounce!

SYNONYMS: timely, appropriate, felicitous
ANTONYMS: untimely, inconvenient, inappropriate

16. procrastinate (v.) to delay; to put off until later
(pro KRAS tuh nate)

We all want to _____ when a task is no fun, but some people make delaying a way of life.
SYNONYMS: stall, temporize, dillydally
ANTONYMS: take action

17. quixotic (adj.) extravagantly idealistic; unpredictable; totally impractical
(kwik SAHT ik)

The word _____ comes from the character Don Quixote, a wacky old fellow who imagines he is a knight.
SYNONYMS: unrealistic, romantic, impractical, dreamy
ANTONYMS: down-to-earth, practical

18. queue (v.) to form a line or get in line
(Q)

We had to _____ to get into the movie.
SYNONYMS: wait in line, line up
ANTONYMS: to wait in a disorganized manner

19. serpentine (adj.) snakelike in shape or movement; winding as a snake
(sur pun TEEN)

Mountain roads _____,winding around one mountain to the next.

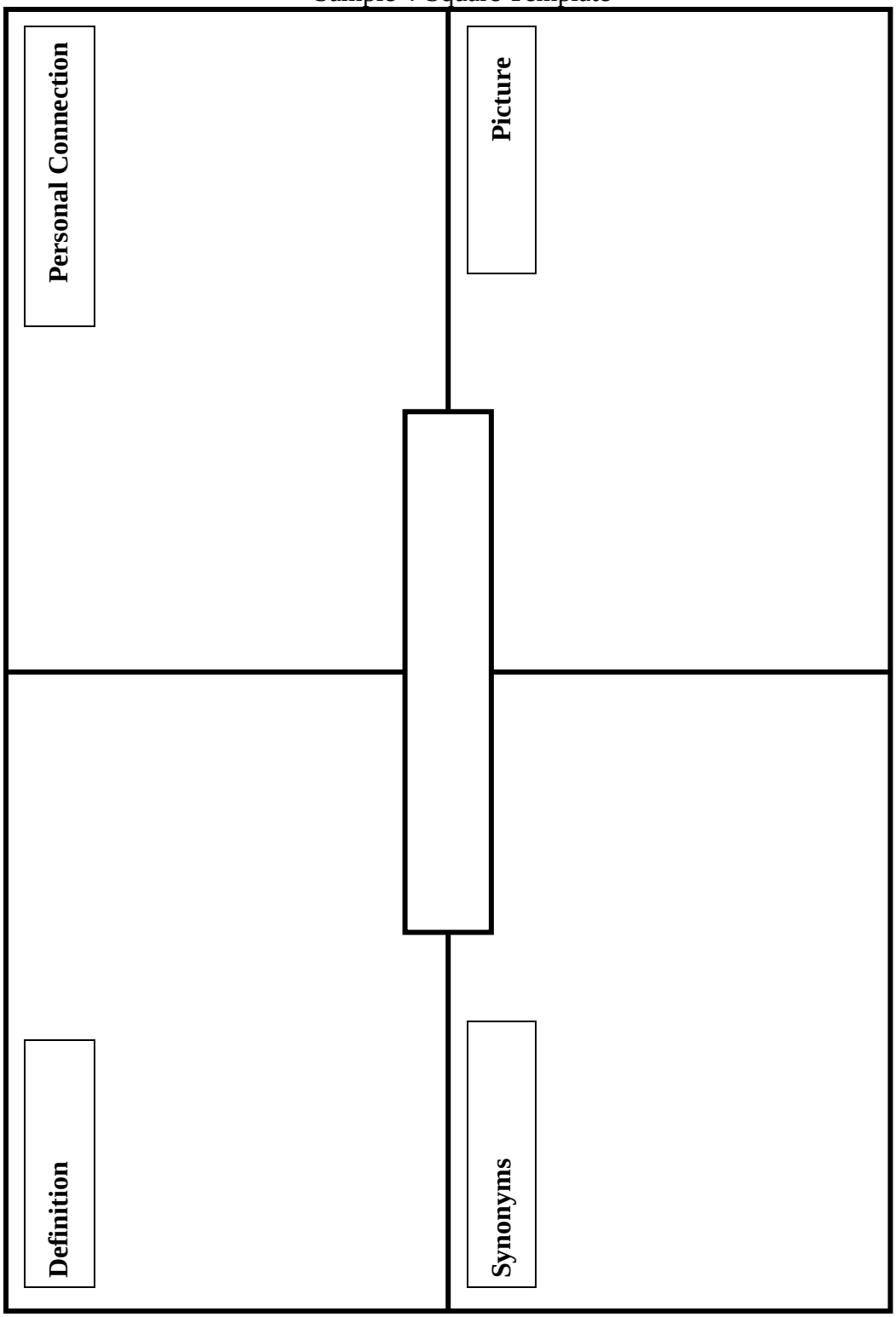
SYNONYMS: flexuous, meandrous, sinuous, snaky, tortuous
ANTONYMS: straight, direct

20. trenchant (adj.) cutting, incisive, having a sharp point; caustic, sarcastic
(TREN chunt)

She had a _____ tongue and was always putting her friends down behind their backs.
SYNONYMS: sarcastic, scathing
ANONYMS: frivolous, gentle, kind, nice, weak

Appendix O

Sample 4-Square Template



Appendix P

Sample Student-Created Vocabulary Cards

(adj.) peevish, annoyed by trifles, easily irritated and upset.

I feel petulant when I am really tired.

Petulant

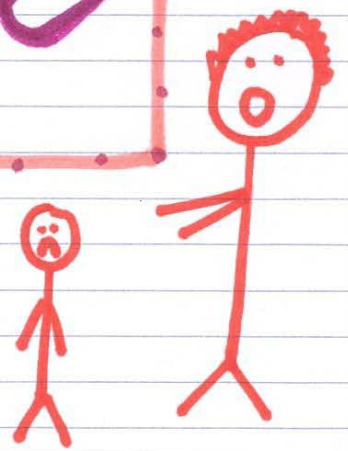
petulance, irritable

(n.) an overshadowing influence or power; shade cast by trees

Professor Umbridge in Harry Potter.

Umbrage

irritation



Appendix Q

Sample Vocabulary Cartoons

AMBIANCE
(AM bee uns)
mood, feeling, general atmosphere
Link: **AMBULANCE**

"George did not enjoy the AMBIANCE in the AMBULANCE."

- The AMBIANCE of the locker room after the team lost the championship was depressing.
- For their daughter's birthday party, the Jeffersons' created an AMBIANCE of gaiety, decorating the garden with bright balloons and ribbons.
- The AMBIANCE in the Italian restaurant was delightful, there was soft music, candlelight and singing waiters.

ANTERIOR
(an TIR ee ur)
situated in front
Link: **ANTLERS**

"The ANTERIOR position of a deer's ANTLERS come in very handy."

- There is the ANTERIOR up front, the interior inside, the exterior outside, and the posterior bringing up the rear.
- The ANTERIOR of a stage is not as interesting as what takes place behind the scenes.
- The ANTERIOR of a ship is called the bow.

ASKEW
(uh SKEW)
to one side; crooked; awry; a sidelong look of contempt
Link: **CUE**

"Curly's pool CUE had become ASKEW."

- After the flood receded, the bridge was found to be ASKEW of the road which connected to it.
- The tire wouldn't fit on the car because in the accident the axle had been bent ASKEW.
- The speaker looked ASKEW at the heckler at every interruption.

BELEAGUER
(be LEE gur)
to besiege; beset, surround, harass
Link: **BIG LEAGUER**

"The little leaguers BELEAGUERED the BIG LEAGUERS."

- In World War II, the Russian city of Stalingrad was BELEAGUERED by the German Army for five months before it fell to the Germans.
- During his last year in office, Richard Nixon was a BELEAGUERED president, struggling to fight off the Watergate scandal.
- In the midst of important negotiations, the union official asked his staff not to BELEAGUER him with insignificant details.

38

CANDOR
(CAN dur)
truthfulness, sincere honesty
Link: CONDOR

"A CONDOR with CANDOR."

- Speaking with CANDOR, the governor called for police reforms throughout the state.
- Without regard to feelings, our teacher said she would criticize our term papers with absolute CANDOR.
- The coach told his team that CANDOR means to speak honestly, and to speak CANDIDLY, the team stunk. (CANDID is showing CANDOR.

COWER
(KOW ur)
cringe from fear; to shrink away
Link: COW

"Bessie, the COWERING COW, never could stand the sight of her own milk."

- When Sheriff Wild Bill Hickok entered the Last Chance Saloon, the villains COWERED in fear.
- The sound of the rusty door opening in the middle of the night made Sue COWER behind her bed.
- Jack COWERED in frustration just to think about coming home from vacation and finding all the homework he had to catch up on.

CRAVEN
(KRA ven)
cowardly
Link: RAVEN

"A CRAVEN RAVEN on the run."

- The soldier was full of bluster about how bravely he would fight, but his comrades later found him to be CRAVEN once the battle started.
- To let his wife do his fighting for him was the act of a CRAVEN husband with no backbone.
- The CRAVENLY act of the assassin, John Wilkes Booth, led to the death of President Lincoln.

DOCILE
(DAHS ul)
easily taught or controlled; obedient, easy to handle
Link: FOSSIL

"A DOCILE FOSSIL."

- A desirable quality of basset hounds is that they are DOCILE, and that is why they are sought as house pets.
- Cameron was a fierce competitor on the football field, but his wife said he was a sweet, DOCILE husband.
- The baby lion's DOCILITY fooled the zoo handler into believing she wouldn't scratch or bite until she proved otherwise by chewing off part of his ear.