Vocabulary instruction and its effects on writing quality

Denise Soileau Moseley

Follow this and additional works at: https://digitalcommons.latech.edu/dissertations

Recommended Citation
https://digitalcommons.latech.edu/dissertations/662

This Dissertation is brought to you for free and open access by the Graduate School at Louisiana Tech Digital Commons. It has been accepted for inclusion in Doctoral Dissertations by an authorized administrator of Louisiana Tech Digital Commons. For more information, please contact digitalcommons@latech.edu.
VOCABULARY INSTRUCTION AND ITS EFFECTS ON WRITING QUALITY

by

Denise Soileau Moseley, B.A., M.Ed.

A Dissertation Presented in Partial Fulfillment of the Requirements for the Degree Doctor of Education

COLLEGE OF EDUCATION
LOUISIANA TECH UNIVERSITY

November, 2003

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.
We hereby recommend that the dissertation prepared under our supervision
by Denise Soileau Moseley
entitled Vocabulary Instruction and Its Effects
on Writing Quality
be accepted in partial fulfillment of the requirements for the Degree of
Doctor of Education

Recommendation concurred in:

Advisory Committee

Approved:

Dean of the Graduate School

GS Form 13
(5/03)
ABSTRACT

The purpose of this study was to compare the quality of writing, specifically in terms of vocabulary use, of students in the 8th grade whose teacher used intensive vocabulary instruction only or intensive vocabulary instruction together with explicit writing instruction. The investigation sought to determine if a deep knowledge of pretaught words would have an effect on those words used in student writing. All students in the study had the same intensive vocabulary instruction, but one group had the added component of explicit instruction on how to use pretaught words in their writing.

Intact groups, consisting of 87 students in the 8th grade, participated in the study. The treatment period spanned twelve weeks of instruction that was divided into four cycles. Each cycle included three weeks of instruction with a repeated measure administered at the end of each cycle. The repeated measure was essays written to a picture prompt and was used to allow for further interpretation. The Test of Written Language 3rd edition (TOWL-3) was the instrument used as both the pretest and the posttest measure.

An analysis of covariance (ANCOVA) allowed for the adjustment of posttest means while linear regression indicated which independent variables most impacted the dependent variables. Pearson’s correlations were also employed to compare the students’ vocabulary and writing performance.
Results of the analyses indicated significant differences in the pretest to posttest gain in the number of target words learned for both groups of students. There were also significant differences in the pretest to posttest gain in the quality of written compositions for both groups of students. Findings indicated, however, no significant differences in the number of target words learned between groups and no significant differences in the quality of written compositions between groups.

Students in both groups showed initial improvement in the number of target words used in written compositions during the repeated measures. The group receiving explicit writing instruction, however, showed three times the number of students who increased in the continual usage of target words in their essays from the first to the last repeated measure.
APPROVAL FOR SCHOLARLY DISSEMINATION

The author grants to the Prescott Memorial Library of Louisiana Tech University the right to reproduce, by appropriate methods, upon request, any or all portions of this Dissertation. It is understood that "proper request" consists of the agreement, on the part of the requesting party, that said reproduction is for his personal use and that subsequent reproduction will not occur without written approval of the author of this Dissertation. Further, any portions of the Dissertation used in books, papers, and other works must be appropriately referenced to this Dissertation.

Finally, the author of this Dissertation reserves the right to publish freely, in the literature, at any time, any or all portions of this Dissertation.

Author: Denise Loréau Mosley

Date: 11/4/03

GS Form 16A (5/03)

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.
## TABLE OF CONTENTS

List of Tables............................................................................................................ ix

List of Figures........................................................................................................... xi

Acknowledgments.................................................................................................... xii

<table>
<thead>
<tr>
<th>CHAPTER</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. INTRODUCTION</td>
<td>1</td>
</tr>
<tr>
<td>Purpose of the Study</td>
<td>2</td>
</tr>
<tr>
<td>Justification of the Study</td>
<td>2</td>
</tr>
<tr>
<td>Theoretical Model</td>
<td>7</td>
</tr>
<tr>
<td>Hypotheses</td>
<td>8</td>
</tr>
<tr>
<td>Limitations</td>
<td>9</td>
</tr>
<tr>
<td>Definition of Terms</td>
<td>10</td>
</tr>
<tr>
<td>II. REVIEW OF RELATED LITERATURE</td>
<td>13</td>
</tr>
<tr>
<td>Early Research</td>
<td>13</td>
</tr>
<tr>
<td>Theoretical Model</td>
<td>14</td>
</tr>
<tr>
<td>Meaningful Learning</td>
<td>14</td>
</tr>
<tr>
<td>Vygotskian Theory</td>
<td>15</td>
</tr>
<tr>
<td>Vygotsky and Constructivism</td>
<td>16</td>
</tr>
<tr>
<td>Constructivism and Writing</td>
<td>18</td>
</tr>
<tr>
<td>The Importance of Semantic Categories</td>
<td>18</td>
</tr>
<tr>
<td>Word Knowledge</td>
<td>19</td>
</tr>
<tr>
<td>Determining the Levels of Word Knowledge</td>
<td>20</td>
</tr>
</tbody>
</table>

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.
LIST OF TABLES

1. Cell Structure of the Research Methodology ........................................... 47
2. Format of the TOWL-3 .................................................................................. 54
3. Teaching Protocol Components ..................................................................... 56
4. Outline of Teaching Protocol for Cycle One ................................................ 59
5. Writing Protocol Components for Group A .................................................. 61
6. Percentage of Students Within Treatment Groups ....................................... 67
7. Vocabulary and Writing Data: Pretest, Posttest, and Adjusted Posttest .......... 68
8. Paired Samples t-Test: Vocabulary Data ....................................................... 69
9. Paired Samples t-Test: Writing Data ............................................................. 70
10. Paired Samples Correlations: Vocabulary and Writing Data ....................... 71
11. Paired Differences: Vocabulary Data for Group A ....................................... 74
12. Paired Differences: Vocabulary Data for Group B ....................................... 74
13. Paired Differences: Writing Data for Group A ............................................ 75
14. Paired Differences: Writing Data for Group B ............................................ 76
15. Summary of Simultaneous Regression Analysis for Variables Predicting Vocabulary Gain ................................................... 77
16. Analysis of Variance Results for Variables Predicting Vocabulary Gain ........ 78
17. Number of Students Showing a Continual Increase in Number of Target Words Used in Repeated Measures ............................................................. 80
18. Pearson's Correlation of TOWL-3 Overall Writing and LEAP 21 for Group A................................................................. 89

19. Pearson's Correlation of TOWL-3 Overall Writing and LEAP 21 for Group B................................................................. 90
LIST OF FIGURES

1. Target Words Used by Group A................................................................. 81
2. Target Words Used by Group B................................................................. 82
ACKNOWLEDGMENTS

It is with much gratitude that I express sincere thanks to my many sources of encouragement and support throughout this educational pursuit with the Louisiana Education Consortium.

I would like to thank the following people for agreeing to serve as my advisory committee and for their assistance in helping to make this study a reality: Dr. Kimberly Kimbell-Lopez, Dr. Cathy Stockton, Dr. Olatunde Ogunyemi, and Dr. George Rice.

In addition to my committee members, I would especially like to thank Dr. Marshall Horton, who contributed his knowledge and time toward helping me understand the analysis of the data for this dissertation. The expertise and support of Dr. Bob Cage were just what I needed when putting my thoughts to paper was the most difficult. Dr. Kim Bloss, Dr. Dan Bernard, Dr. Kathryn Benson, and Dr. Bryan McCoy were colleagues who assisted in reading drafts and making editorial suggestions for this dissertation. Their help and encouragement were immeasurable.

I must also extend a special note of thanks to all the individuals who helped me carry out this project in the schools: the district superintendent, the school principal, the participating teacher, and especially the 8th grade students. Their assistance provided the professional conditions that allowed me to conduct this study.

I would also like to thank my boys, Billy, Daniel, and Matthew, for their encouragement and support during my studies. I encourage them now to continue to
work toward achieving their own goals in the same way they have enabled me to accomplish mine.

I express the most gratitude to my husband, Bill. His commitment to supporting me in this undertaking may have been more than he bargained for, but he never wavered in his encouragement for its completion. I appreciate his support more than I can say.

Finally, I would like to dedicate this work to my parents, Dr. and Mrs. Marvin Soileau, whose love of learning and respect for scholarship have inspired me to be the most effective and qualified educator that I can be.
CHAPTER ONE

Introduction

The recent implementation of high stakes testing in Louisiana public schools has raised awareness among administrators and teachers as to the skills areas in which students are lacking. Based on the test scores of Louisiana students on The Louisiana Educational Assessment Program for the 21st Century (LEAP 21), two areas of concern have been vocabulary knowledge and the quality of written compositions.

Students who are voracious readers are rewarded with an extensive vocabulary base. They encounter new words in context and can generally transfer the meanings of those new words to different situations. In addition, these avid readers are confident in experimenting with new words in conversations with others as well as in writing (Graves & Watts-Taffe, 2002). They show satisfactory performance on state assessment measures.

Conversely, students who are poor readers or who are disinterested readers have a narrower vocabulary base. Because they spend little time reading, they also reap few rewards in the way of increased word knowledge (Stahl, 1999). These are the students whose vocabulary usage is immature and unsophisticated. Although they possess adequate intelligence for learning new words, they are rarely exposed to them in the
classroom or in their home environments (Beck, McKeown, & Omanson, 1987). Consequently, they show unsatisfactory performance on state assessment measures.

The above factors prompted an interest in developing this study. There is a need to provide students with explicit instruction in learning new vocabulary. There is also a need to directly instruct students in how vocabulary can be used to enhance written composition. Students who are not readers, for whatever the reason, should not be deprived of the benefits of this type of instruction.

Purpose of the Study

The purpose of this study was to compare the quality of writing, specifically in terms of vocabulary use, of students in the 8th grade whose teacher used intensive vocabulary instruction only or intensive vocabulary instruction together with explicit writing instruction. The investigation sought to determine if a deep knowledge of pre-taught words would have an effect on whether those words were used in student writing. While all participants had the same intensive vocabulary instruction, others had the added component of explicit instruction in how to use taught words in their writing.

Justification for the Study

The effect of vocabulary knowledge on a student’s writing ability has been studied very little; therefore, the studies that were located proved to be dated. In fact, an investigation conducted by Duin and Graves (1987) provided the most applicable reporting of vocabulary instruction prior to writing. During Duin and Graves’ (1987) search, only two studies were found—Thibodeau (1963), who investigated the effect of instruction on elaborative thinking and vocabulary enrichment of sixth-graders’ compositions and Wolfe (1975), who examined the effect of teaching a reading
vocabulary on the vocabulary freshmen students used in their writing. Thibodeau's (1963) study showed that the experimental group scored significantly higher in measures of writing ability, elaborative thinking, and vocabulary knowledge whereas Wolfe's (1975) study resulted in no increased use of taught words or complexity of vocabulary in the students' writing. Although these two studies showed interesting and conflicting results, it seems that more recent studies were not prompted by them.

At the present time, concern for students' writing has called for improvements in the teaching of writing (Riley, 1996) while the assessment of students' writing ability is under siege by high stakes testing and accountability measures (Bridge, Compton-Hall, & Cantrell, 1997). Hence, any investigation into improving instructional practices would seem worthwhile. According to Duin and Graves (1987), when a student's writing incorporates mature word choice, judgment on the quality of the writing is elevated. The bulk of the research that is being conducted today continues to concentrate on vocabulary instruction's effect on reading in spite of knowing what constitutes elevated judgment of writing quality. These authors further reported, "Studies of vocabulary instruction and reading clearly abound, whereas studies investigating vocabulary instruction and writing are few" (Duin & Graves, 1987, p. 313).

Similarly, Baker, Kame'enui, and Simmons (1995) found little research on general vocabulary growth resulting from student writing opportunities. They believed that students might benefit from multiple exposures to words within the context of challenging writing assignments. In addition, they stated that deeper reflection on word
meanings are more likely to occur in writing assignments rather than in speaking or in reading assignments.

While reviewing the literature for this study, the lack of current vocabulary and writing studies became problematic. A common group of researchers continued to reappear in the vocabulary studies that addressed reading but not with vocabulary studies that were concerned with writing. Therefore, a number of these recognized educators were contacted for assistance in locating more recent investigations. The personal communications received from these professionals of published research confirmed the lack of current studies in vocabulary and writing. Without exception, they all supported studying the effects of vocabulary instruction and writing improvement.

Dr. Deborah Simmons, University of Oregon, is the director of a longitudinal research project dealing with reading and vocabulary development. In her response to research related to this study she stated, “You’ve certainly tapped a black hole. I am not aware of any studies that specifically look at the relation between vocabulary and writing through intervention.” (D. Simmons, personal communication, November, 11, 2001)

Dr. Peter Smagorinsky, Associate Professor in the College of Education at the University of Georgia, studies activity theory and its application to teaching and learning in English Language Arts classes. He commented, “I don’t know of anything offhand that treats this topic. Vocabulary studies are mainly taken up by reading people rather than writing.” (P. Smagorinsky, personal communication, November, 20, 2001)

The University of Minnesota’s Michael F. Graves researches vocabulary programs that develop both the breadth and depth of vocabulary. He positively
responded to the proposed study with, "I thoroughly agree on the potential of vocabulary to enhance writing, and I think that a dissertation investigating that potential would be very worthwhile." (M. F. Graves, personal communication, December 14, 2001)

As director of the Institute for the Development of Educational Achievement (IDEA) at the University of Oregon, as well as author of numerous research and journal articles on the topic of diverse learners, Dr. Edward Kame'enui regretfully noted, "Unfortunately, I think you've hit a 'blank spot' in the literature." (E. J. Kame'enui, personal communication, November, 11, 2001)

Vocabulary research serves as a major emphasis for Dr. Margaret G. McKeown's work as Research Scientist at the Learning Research and Development Center located at the University of Pittsburgh. Justification for the proposed study was clearly supported with the following comments:

I have not explicitly gone into writing in my vocabulary work, although that was done informally in the early classroom studies. But the link seems an obvious one, there for the making....definitely, you're headed in an interesting and important direction...it is such an important area, so I urge you to boldly go! (M. G. McKeown, personal communication, December 12, 2001)

The need for the proposed study is further strengthened by recommendations from The National Reading Panel, through work in the National Institute for Literacy (2000):
The need in vocabulary instruction research is great. Our knowledge of vocabulary acquisition exceeds our knowledge of pedagogy. That is, the Panel knows a great deal about the ways in which vocabulary increases under highly controlled conditions, but the Panel knows much less about the ways in which such growth can be fostered in instructional contexts. There is a great need for the conduct of research on these topics in authentic school contexts, with real teachers, under real conditions (p. 27).

Additional personal communications from Dr. James F. Baumann, professor of Reading Education at the University of Georgia and Dr. Steven A. Stahl, professor at the University of Georgia, can be found in Appendixes A-B. Baumann, whose vocabulary research is widely published and cited, and Stahl, presently serving as a principal investigator for the National Reading Research Center and director of the Reading Clinic at his university, both encouraged the pursuit of this dissertation. All of the aforementioned researchers were presented with a tentative outline of the proposed research investigation; however, none of the researchers reviewed the final teaching protocol as they were contacted before definite procedures were developed.

This study is one that was justified from sheer lack of research. With little published literature and strong recommendations for the undertaking of research in this area, it was hoped that the results of this study would contribute in a positive way to the body of knowledge in vocabulary and writing instruction. If the results of the study are generalized to other schools with similar demographic data, teachers with similar
experience, and 8th grade students with similar scores, there is the possibility for much to be gained.

Theoretical Model

This study was based on Vygotskian theory and constructivist learning (Abdullah, 1998; Alvarez & Risko, 1989; Brooks & Brooks, 1999; Dewey, 1900; Olsen, 1999; Scherer, 1999; Vygotsky, 1962). The best predictor of what students will learn is what they already know (Brooks & Brooks, 1999; Olsen, 1999). When teachers provide students with what they need to connect new knowledge with old knowledge, meaningful learning begins to take place (Gambrell & Mazzoni, 1999). Vygotsky (1962) asserted that learning is at its best when teachers ascertain their students' present level of understanding and present them with new information and skills at a level that is just above their independent level. Traditionally, the basic skills view held that a child must learn a word before using it (Dixon-Krauss, 1996). The Vygotskian idea is in direct opposition to that traditional view. From the Vygotskian perspective, the child learns new words by hearing them and using them (Vygotsky, 1962). Whereas the behaviorist view has been held in the past, the shift is now toward one's development, learning, and cognition (Dixon-Krauss, 1996). This is evidenced by constructivist learning, one of the most popular theoretical views in current literacy education (Abdullah, 1998; Alvarez & Risko, 1989; Brooks & Brooks, 1999; Olsen, 1999; Scherer, 1999). From the constructivist perspective, the teacher's role is one of facilitator, building the students' background knowledge (Dixon-Krauss, 1996). Teachers can better understand and apply the function of social interaction in the literacy classroom by using Vygotsky's ideas as their theoretical framework. When
applied to writing instruction, constructivist-oriented approaches focus learners’
attention on the importance of communication (Johnson, 2001). Building on a student’s
background knowledge through instruction in the zone of proximal development and
explicit instruction in written communication framed the interventions that were applied
in this study.

Hypotheses

Eight null hypotheses were tested in this study.

Hypothesis 1: At the end of a 12-week treatment period, there is no
significant difference in the number of target words learned by students taught
by intensive vocabulary instruction together with explicit writing instruction
(Group A) and students taught by intensive vocabulary alone (Group B).

Hypothesis 2: At the end of a 12-week treatment period, there is no
significant difference in the quality of spontaneously written compositions of
students taught by intensive vocabulary instruction together with explicit writing
instruction (Group A) and students taught by intensive vocabulary alone (Group
B).

Hypothesis 3: At the end of a 12-week treatment period, there is no
significant pretest to posttest gain in the number of target words learned for
Group A.

Hypothesis 4: At the end of a 12-week treatment period, there is no
significant pretest to posttest gain in the number of target words learned for
Group B.
Hypothesis 5: At the end of a 12-week treatment period, there is no significant pretest to posttest gain in the quality of spontaneously written compositions for Group A.

Hypothesis 6: At the end of a 12-week treatment period, there is no significant pretest to posttest gain in the quality of spontaneously written compositions for Group B.

Hypothesis 7: There are no significant relationships among the dependent variable, pretest to posttest gain in vocabulary, and the independent variables of gender, race, treatment group, and 7th grade ITBS composite scores.

Hypothesis 8: There are no significant relationships among the dependent variable, pretest to posttest gain in overall writing quotient, and the independent variables of gender, race, treatment group, and 7th grade ITBS composite scores.

Limitations

One limitation of this study is its generalizability. The study was conducted in only one school, and although interventions were conducted with different groups of students within the school, the teaching protocol was administered by only one teacher. Treatment limitations may include the teaching protocol itself, as well as the teaching style of the participating instructor, possible teacher bias toward one intervention over the other, and the time of day each group of students received instruction. As the participating instructor sought to meet the needs of the diversity in her classroom, the amount of time spent on interventions may have varied from one
class period to another. This variation in time may be considered another treatment limitation.

Definition of Terms

The following operational definitions were used in this study.

Spontaneous writing: A spontaneous writing product served as an indication of how well a student could integrate the smaller units of vocabulary, word usage, handwriting, spelling, capitalization, punctuation, and syntax into clearly communicated thoughts. A picture prompt was used to elicit these data. The spontaneous writing sample was taken and scored according to three subtests: contextual conventions, contextual language, and story construction. Raw scores from these subtests were converted to standard scores using the conversion tables provided in the examiner's manual (Hammill & Larsen, 1996).

Contrived writing: The contrived writing format is the technique utilized on typical standardized achievement batteries (Hammill & Larsen, 1996). Items in this type of format tested students on small isolated units of written communication. Evaluation of performance was concerned with separate elements of language rather than the overall written message. Contrived writing samples were taken and scored according to five subtests: vocabulary, spelling, style, logical sentences, and sentence combining. Raw scores from these subtests were converted to standard scores using the conversion tables provided in the examiner's manual (Hammill & Larsen, 1996).

Target words: Target words were preselected by the researcher and were included in the instructional program based on semantic categories (see Appendix I). They were measured through the Vocabulary subtest of the testing instrument.
Intensive vocabulary instruction: Intensive vocabulary instruction referred to instruction that went beyond definitional and contextual understanding by explicitly presenting vocabulary words for the purpose of independent use beyond the classroom. The protocol for this instruction is presented in Chapter Three.

Explicit writing instruction: Explicit writing instruction referred to instruction that emphasized all phases of the writing process as well as strategies for choosing appropriate words for writing and then utilizing those words according to their purpose. The procedures for this instruction are presented in Chapter Three.

Raw scores: Raw scores referred to the number of items scored correct on each subtest. As an example, if there were 20 items on a subtest and a student incorrectly answered seven of them, the raw score would be 13, the number scored correct.

Percentiles: Percentiles referred to the value on a scale of 100 that indicated the percentage of the distribution that was equal to or below the value. As an example, if a student’s raw score converted to the 65th percentile and that student was 13 years, 4 months of age, that would indicate that 65% of the standardized sample of the same age scored at or below that percentage.

Subtest standard scores: Raw scores from the subtests were converted into standard scores to establish a common subtest mean score and standard deviation. As part of the standardization process, the mean was set at 10 and the standard deviation was fixed at 3.

Composite quotients: The subtest standard scores were summed and converted into quotients to estimate a student’s overall ability. Quotients had a mean of 100 and a standard deviation of 15.
Vocabulary subtest: The vocabulary subtest, one of the components of the Contrived Writing format, was designed to measure knowledge of word meanings and classes through meaningful sentence construction. This subtest’s raw scores were converted to standard scores and included in determining the contrived writing quotient for each student.

Contextual language subtest: The contextual language subtest, one of the components of the Spontaneous Writing format, was designed to measure the ability to use mature words that represent a variety of parts of speech. This subtest’s raw scores were converted to standard scores and included in determining the spontaneous writing quotient for each student.
CHAPTER TWO

Review of Related Literature

The purpose of this chapter is to review the literature addressing word learning and vocabulary development in the school setting. A brief history will first be presented, followed by the necessity of a theoretical framework to support intensive vocabulary instruction. An additional literature review provides the reader with the knowledge of how an effective vocabulary program can enhance the writing performance of all students who are instructed through its tenets. Because of the current emphasis on statewide assessment of students' writing ability, this review will also investigate studies that pertain to increasing the quality of word selection in compositions. This summary of related studies supports the investigation proposed by this researcher.

Early Research

Research involving vocabulary has, historically, been for the purpose of determining vocabulary size and vocabulary growth for different ages and educational levels. In the early 1900s, not much research was conducted on the mental processes used by children to learn new words. The reason for this probably stemmed from the fact that research had no theoretical base for explaining the processes (Beck & McKeown, 1996).
The renewed interest in vocabulary research has been rooted in the rich theory provided by the information-processing model, which explains the relationship between words and ideas (Heimlich & Pittelman, 1986). Vocabulary acquisition is a complex task that must involve relationships. Learners must understand the relationship between concepts, how to organize those concepts, and how to refine and expand the words in the concepts (Blachowicz & Fisher, 2002). “The student must understand how new word knowledge will be used and be of academic and personal value if long term acquisition of vocabulary knowledge is to be achieved” (Ruddell, 1986, p. 587). Current researchers now know this; consequently, much has been added to our knowledge about the mental processes one goes through to acquire new vocabulary.

Theoretical Model

This study was grounded in the theoretical model of constructivism with a Vygotskian emphasis (Abdullah, 1998; Alvarez & Risko, 1989; Brooks & Brooks, 1999; Dewey, 1900; Olsen, 1999; Scherer, 1999; Vygotsky, 1962). While the theory of constructivism builds instruction based on students’ prior knowledge, Vygotskian theory explicitly supports the students by means of an adult or accomplished classmate (Vygotsky, 1962).

Meaningful Learning

Prior knowledge is what new meaning is built upon. Teachers plan vocabulary instruction based on what students already know about a concept (Allen, 1999). The best predictor of what students will learn is what they already know (Brooks & Brooks, 1999; Olsen, 1999). Thelen (1986) reported that rather than planning instruction based on how to get word meaning into the heads of students, teachers should plan instruction
based on anchor points that will allow students to access the concept to which the word relates. This directs instruction to the issue of ownership and where the word fits instead of to the issue of definition and what the word means.

Winters (2001) elaborated on how concept development is organized around schema. Winters suggested that schema is primarily a problem-solving process. Understanding of a new experience occurs by connecting that understanding to prior knowledge at the same time that a connection is made to the prior knowledge. The retrieval of prior experiences from memory is facilitated by “episodic information” (p. 2) which involves associations with place, context, and emotion. When informal social interaction is added to the combination, personal meaning of concepts is created.

It is the personal meaning described above that is often lacking in developing meaningful learning. As far back as 1990, John Dewey wrote in *The School and Society*, “From the standpoint of the child, the great waste in school comes from his inability to utilize the experiences he gets outside of school in any complete and free way; while, on the other hand, he is unable to apply to daily life what he is learning at school” (Dewey, 1990, p. 75). When teachers provide students with what they need to connect new knowledge with old knowledge, meaningful learning begins to occur.

**Vygotskian Theory**

The principle of meaningful learning is consistent with Vygotsky’s concept of the zone of proximal development (Vygotsky, 1962). Vygotsky asserted that learning is at its best when teachers ascertain their students’ present level of understanding and present them with new information and skills at a level that is just above their independent level (Gambrell & Mazzoni, 1999).
Vygotsky believed that the things one experiences externally and socially are the things that become internalized. It is from the interaction with the teacher and fellow classmates that students begin to negotiate a shared meaning that can then be turned inward. For Vygotsky, language was the essential tool for internalizing meaning (McGlynn-Stewart, 1996).

Dixon-Krauss (1996) provided strong support for the use of Vygotskian theory in the classroom. Her text elaborated on the social nature of vocabulary acquisition and how one uses language in an attempt to gain language. Before a behavior can exist internally, it must exist socially. Transferring social behaviors to internal behavior was at the core of Vygotsky’s concept of internalization. In using the concept of internalization, the major role Vygotskian theory plays in education becomes clear. From the Vygotskian perspective, the child learns new words by hearing them and using them rather than learning the words before using them, which has been the traditional basic skills view (Dixon-Krauss, 1996).

Vygotsky and Constructivism

Dixon-Krauss’s (1996) text provided research conducted in authentic classrooms by teacher educators who used the Vygotskian perspective. Those teacher educators found Vygotsky’s work especially useful to literacy development and instruction because of his emphasis on the role of language in development and learning. While the behaviorist view was readily accepted in the past, the current view has now been transferred toward one’s development, learning, and cognition.

The current view is evidenced by constructivist learning, one of the most popular theoretical views in current literacy education (Abdullah, 1998; Alvarez &
When using constructivist learning, the teacher facilitates the building of the students’ background knowledge. The constructivist model stands on the belief that students should actively participate in their learning. Rather than passively acquiring reading and composition skills, a constructivist learner takes an active role in gaining meaning. The constructivist view of the student as an active participant in learning is consistent with Vygotsky’s perspective. Vygotsky’s perspective actually adds to the constructivist perspective by way of the zone of proximal development and its social context of learning. According to Vygotsky (1962), “What the child can do in cooperation today he can do alone tomorrow. Therefore the only good kind of instruction is that which marches ahead of development and leads it; it must be aimed not so much at the ripe as at the ripening functions” (p. 104). Teachers can better understand and apply the function of social interaction in the literacy classroom by using Vygotsky’s ideas as their theoretical framework (Dixon-Krauss, 1996).

Borich (2000) added to the understanding of constructivist instruction by explaining that constructivist lessons are designed and sequenced in a way that encourages learners to use personal experiences to actively construct meaning. Through active involvement, learning begins to make sense. Learners pursue understanding rather than acquire it through exposure to a format organized by the teacher. Constructivists believe that knowledge is the result of the individual constructing reality from her or his own perspective, but learning occurs when the individual creates new rules and hypotheses to explain what is being observed (Borich, 2000; Brooks & Brooks, 1999; Olsen, 1999).
Constructivism and Writing

When applied to writing instruction, constructivist-oriented approaches focus learners’ attention on the importance of communication. Johnson (2001) explained that the reader decodes words into meanings, but the writer must encode ideas into words. Certainly, the writer must have a personal connection with words and their concepts in order to use them for effective communication.

Graves and Watts-Taffe (2002) used the term cognitive-constructivist to describe a slightly conservative cognitive approach. Defined as an awareness of and an interest in words and their meanings, the definition implies a sense of purpose in addition to interest and enjoyment. Students who begin to show awareness in the words they read, hear, write, and speak are said to be word conscious. While Graves and Watts-Taffe’s approach would satisfy cognitive psychologists, it also allowed for ample instruction. Additionally, their view of instruction included a balance between cognitive and affective elements.

The Importance of Semantic Categories

The balance between cognitive and affective elements is supported by Heimlich and Pittelman (1986) who stated that for vocabulary instruction to be effective, the instruction should not dwell on individual word meanings. Instead, attention must also be placed on the entire conceptual framework brought forth by the word’s meaning.

Although traditional approaches advocated the use of definitions and sentences, a concept development approach to vocabulary instruction has been validated by recent vocabulary research. In concept development approaches, vocabulary instruction is not limited to word meaning or sentence use. Although those concepts are still considered
important, the emphasis is more on where a word fits in a student’s semantic repertoire
(Heimlich & Pittelman, 1986). In Quotations on Education, a remark by John Dewey’s
summed it up when he said that children have traditionally been taught to just say the
things that they learned, but there is quite a difference between having something to say
and having to say something (Maggio, 1997).

Word Knowledge

Beck and McKeown (1996) reported that when word knowledge is discussed, it
is not a case of whether one knows or does not know a word. Rather, word knowledge
refers to the extent or the degree of knowledge a person possesses. For instructional
issues to be meaningful, one should first consider the goals of vocabulary acquisition, or
how deeply one wants the words to take hold (Beck & McKeown, 1996).

A beginning task might be to look critically at what it means to “know” a word.
Research findings by Blachowicz and Fisher (2002) suggested that there are degrees of
knowledge. Word learning is not an all-or-nothing proposition. Instead of viewing it
like a light switch that turns a light on or off, Blachowicz and Fisher (2002) suggested
that a better metaphor is one of a light dimmer switch that gradually produces an
increasingly richer supply of light. Learners move from not knowing a word, to a better
acquaintance with it, to arriving at a deeper, richer word knowledge that allows them to
use new words in many ways (Blachowicz & Fisher, 2002). Each time the learner
discovers a new word, another element of information is added to his or her conceptual
framework. Consequently, their knowledge is expanded and enlarged (Blachowicz &
Fisher, 2002).
Levels of word knowledge are described in a slightly different manner by Beck, McKeown, and Omanson (1987). Based on a repetitive program of vocabulary research, five different levels of word knowledge were delineated: (a) the learner has no knowledge of the word when it is seen in text, (b) the learner has a general knowledge of the word but that is all, (c) the learner has specific knowledge of the word but it is narrow and bound by the context, (d) the learner must momentarily pause to recall the word’s meaning, and (e) the learner has a rich, full, decontextualized knowledge of the word.

The same theoretical foundation that supports a more in-depth processing during vocabulary instruction also improves retention of new knowledge. Retention occurs because the learner has actively generated the information that connects new and prior information. A common thread running through this type of instruction is that students are required to use information by comparing it to, and combining it with, known information in their attempts at constructing new word meaning (Beck & McKeown, 1996).

Determining the Levels of Word Knowledge

According to Beck and McKeown (1996), the most widely used form of assessment is the multiple choice format. It gives reliable indications of the relative range of an individual’s vocabulary and correlates rather strongly with measures of reading comprehension and intelligence. It gives useful information on a student’s level of vocabulary development in relation to his or her peers. However, information needed by researchers and educators often goes well beyond what can be learned from multiple choice tests (Beck & McKeown, 1996).
Blachowicz and Fisher (2002) contended that when a teacher wants to know about students' ability to use a new term correctly, flexibly, and richly, assessment through use is the only answer. They suggested asking students to use vocabulary in meaningful ways in the context of larger activities. The most direct way to do this would be to ask students to use certain taught words in their responses to test questions and in their summaries and retellings of literature. According to Blachowicz and Fisher (2002), observing students' use of words in writing is the most authentic means of evaluating their vocabulary usage. These contentions offer much support to the proposed study.

Instruction through Context

Nagy (1988) indicated that one's vocabulary can grow from reading words in text, but he cautioned about context's lack of effectiveness in teaching new meanings. Context is helpful if one has a general notion of the word's meaning, but if one has no other knowledge of what the word means, context seldom supplies it. It seems that the role of context in vocabulary acquisition is prominent by default. Even though oral language continues to be a source for vocabulary acquisition, there are few, if any, investigations of it. According to Beck and McKeown (1996), there is a disparity in the research. Learning from context certainly does occur, but the extent of that learning, especially for struggling learners, has not been notable. Even if less-skilled students are motivated to read, they will continue to struggle in gaining the breadth and depth of word knowledge of their stronger-skilled classmates (Beck & McKeown, 1996).

The disparity between the number of words encountered by good and poor readers continues to grow as they progress through school (Stahl, 1999). The reason is
that poor readers typically read less than strong readers. The result is what has been termed the "Matthew effect." The "Matthew effect" speaks to the biblical verse in the gospel of Matthew which states that the rich get richer while the poor get poorer. The analogy to literacy instruction would be that those students who are good readers will become even better readers because of the difficulty of the text they read. At the same time, those students who are poor readers will become worse readers because of the amount and the level of difficulty of the text they read (Stahl, 1999).

Beck and McKeown (1996) believed the answer was not to discourage the practice of wide reading, but to question whether it should be the instructional strategy of choice for all students in the classroom. The use of reference materials in addition to context should be considered when word meaning can not be derived from the presented information.

Direct Instruction

In addition to doing those things that result in greater incidental learning, teachers also need to intentionally focus on vocabulary and make word learning a part of the everyday curriculum (Blachowicz & Fisher, 2002). Beck and McKeown (1996) suggested that direct instruction is taking place when word-meaning information is intentionally made available to the students. Although this information can be made available to students in any subject area, it is typically provided in reading and language classes. Of prime importance is determining the aim of the instruction. Beck and McKeown (1996) proposed, "Words that are the most appropriate targets of instruction for general vocabulary development are those of high frequency in a mature vocabulary and of broad utility across domains of knowledge" (p. 810).
Different methods of instruction serve different purposes, and no method has been proven superior over another (Beck & McKeown, 1996). Nevertheless, all methods produce better word learning than no specific method. There is an added edge to instruction that incorporates a variety of strategies, as well as the advantage of multiple exposures to the taught words. These suggestions require the direct instruction of vocabulary rather than incidental learning of the words. Beck and McKeown (1996) maintained that more attention should be given to what is taught because people are inclined to learn what they are taught.

**Intensive Vocabulary Programs**

Intensive vocabulary programs are prime examples of the attention being given to instruction of word meanings. Many of the researchers of vocabulary instruction cited below offered guidelines for effective word learning programs.

Stahl (1999) contended that instructors of vocabulary should use a variety of instructional delivery. Stahl's model of effective vocabulary instruction included word meaning gained from definitions and context, active involvement of the students during word learning, and multiple exposures to the meanings of the words being studied. Stahl indicated that students should be presented with more than just a definition of a word if they are to know the word's meaning. Active involvement in discussion of words allows students to construct a good idea of the meaning of a word by piecing together the partial knowledge of their classmates with their own knowledge.

**Characteristics of effective vocabulary teachers.** Four guidelines that characterize what effective vocabulary teachers do, as outlined by Blachowicz and Fisher (2002), are: (a) to build a word-rich environment where students are immersed in
both incidental and intentional learning, (b) to help students develop as independent word learners, (c) to use instructional strategies that model good word-learning behaviors, and (d) to use assessment that matches the goal of instruction. Incidental learning referred to words learned through reading and discussion in the classroom as well as at home. Intentional learning referred to focusing on vocabulary and making word learning a part of the school day. Both concepts are necessary in the effective vocabulary teacher’s classroom. Developing students into independent word learners requires explicit instruction in how to approach the meaning of the unknown words they encounter in their studies. Good word-learning behaviors include active processing of the words’ meanings, personalization of the words’ meanings, multiple uses for the words, and playfulness with the words. Assessment of word knowledge is dependent upon the goal of the instruction. If depth of word knowledge is the goal, students should be able to supply examples that illustrate the word’s meaning. If breadth of word knowledge is the goal, students should be able to demonstrate the relationships between words. Whatever the goal of instruction, Blachowicz and Fisher believed that assessment should complement the instruction.

*A four-part vocabulary program.* Graves and Watts-Taffe (2002) developed a four-part vocabulary program that included wide reading, teaching individual words, teaching word learning strategies, and fostering word consciousness. The authors opined that most of the words one knows are words learned from context. Additionally, they proposed that there is no question as to whether wide reading will increase one’s vocabulary. To require students to read as much and as widely as possible is a very important component of a vocabulary learning program. Although teachers can not
teach all words individually, teaching some words in this manner is very beneficial to students. Current research is beginning to support the authors' claim more often. Because students will undoubtedly encounter words which are not individually taught, strategies for independent word learning were a part of Graves and Watts-Taffe's program. It was the fourth part, fostering word consciousness, which the authors believed to be the most purposeful. They outlined four steps for providing intensive and expressive instruction in developing word consciousness. The first step was to select a small group of similar words. The central part of the instruction, the second step, was to have students work "extensively and intensively with the words" (p. 152). This involved dedicating up to thirty minutes a day and up to ten days with the selected words. Teaching the students to experiment with the taught words in their essays was the third step. The fourth step included direct discussion of the word choices the students made and why they made those choices. The authors provided directions in how skillful use of words makes for more exact, impressive, and exciting speech and writing.

*The use of gimmicks.* McKeown and colleagues (1985) offered a similar intermediate grade vocabulary program that included the introduction of words in a narrow way through the use of definitions and synonyms enhanced by rich instruction for a small set of words, and gimmicks to encourage the use of the words being taught outside of the classroom. The use of gimmicks was a very important component of this program as it proved very effective in stimulating the words used at home in addition to words used at school. The lack of a verbal environment in the home was often a factor found to influence children with slow vocabulary growth.

1. Numerous words are learned through rich oral language instruction and through wide reading.

2. The prewriting stage of the writing process is critical.

3. Encourage students to be active seekers of “just the right words” as they plan, compose, and especially as they revise.

4. Students should be helped to understand that words serve purposes; among these purposes are referential words, interpersonal words, and directive words.

5. Not every “just the right word” can be found in the writer’s mental lexicon. Students should be taught why, when, and how to use a thesaurus and encouraged to develop the habit of having one handy when writing.

6. When writing for an audience of readers, words should be precise if they are to be effective. Students should be encouraged to use words in their written work that they would not ordinarily use in their speech.

7. Help students develop the habit of revision.

8. Help budding writers develop a love of words. (p. 65-72)

The value in synthesis of programs. Yet another program for increasing word knowledge, reading comprehension, and independent learning strategies was developed by Carr and Wixson (1986). As in other studies, suggestions included relating new
vocabulary to prior background knowledge, developing in-depth knowledge of the vocabulary presented, active involvement of the students in learning the new vocabulary, and strategies to assist the students in learning new words independently. Carr and Wixson agreed that not all procedures for teaching vocabulary are as beneficial as others, but they were firm in their belief that a starting point for improving the instruction of both vocabulary and reading comprehension should come through the use of guidelines that are theoretically sound.

Perhaps the vocabulary program that best incorporates a synthesis of all the previously mentioned programs is one compiled by Laflamme (1997). Helpful to the planning and execution of successful vocabulary instruction is a teacher who can demonstrate a belief in the value of learning strategies and who can use direct instruction techniques to model those strategies. New information should be integrated with prior knowledge in conjunction with intensive practice in both context and definitions. The researcher maintained it is important to note that the intensive practice should be designed to give the students multiple exposures to the same words while allowing the students to become actively involved in developing deep understanding of the words. Finally, Laflamme insisted that vocabulary instruction will be most successful when there has been a long-term commitment to making it an integral part of the curriculum.

The Role of Rich Instruction

Beck, McKeown, and Omanson (1987) cautioned that although multiple exposures to words and rich activities that extend learning outside of the classroom are powerful ways to improve word learning, they are not necessarily appropriate for all
vocabulary learning situations. Likewise, the role of rich instruction is not necessarily suited to all types of words either. It is important, therefore, to clarify what is meant by “types of words.”

A mature, literate person’s vocabulary is composed of three different tiers (Beck, McKeown, & Omanson, 1987). The first tier contains the most basic of words. Examples would be words such as cat, mother, go, and red. Words of this type are so basic that rich instruction of them during the school day would be difficult to support. Similarly, the third tier contains words that are less frequently used or that are specific to certain learning domains. These words are better taught as the need arises for their use. An example would be the instruction of the word nebula during a lesson on the solar system rather than as part of an intensive vocabulary program. Rich instruction of third-tier words is seldom necessary for the majority of learners.

According to Beck, McKeown, and Omanson, it is toward the second tier of words that the most useful instructional efforts should be directed. The second tier consists of high frequency words that are of general utility for the mature language user. They are not specific to any one domain of learning. Some examples of second-tier words are unique, influence, procrastinate, and retort. Beck, McKeown, and Omanson (1987) explained, “Because of the role they play in a language user’s verbal repertoire, rich knowledge of words in this second tier can have a significant impact on verbal functioning” (p. 155).

It then becomes important to determine the percentage of one’s vocabulary range that would be included in the second tier of words. Beck, McKeown, and Omanson’s research revealed that teaching 400 words per year during the 3rd through 9th
grades would provide students with rich knowledge of 40% of the words that make up Tier Two. They conceded that this estimate was in no way precise; however, providing a conceptual framework for 40% of Tier Two words would appreciably contribute to an individual's verbal performance.

Knowledge of this instructional research is most relevant for teachers who guide children in the lower half of the distribution in both reading skill and socioeconomic status (SES) Beck, McKeown, and Omanson (1987). These students generally have a narrower concept of the words they know, and they do not read very extensively. Even when they do read, they are not especially adept at acquiring word meaning from context. The potential of increasing vocabulary through reading is significantly weakened for less able readers. As a result, it is unlikely that this type of child will have to gain Tier Two word knowledge independently.

Another way that rich knowledge of words is instilled in individuals is through the verbal environment in which they are exposed. To be most productive, the environment should contain extensive, sophisticated vocabulary that is used in thoughtful, playful, or unique ways. Although Beck, McKeown, and Omanson (1987) had no research to support the claim, their conjecture was that this kind of environment was not common for lower verbal learners, either at home or with their peers.

A similar stance to Beck, McKeown, and Omanson's presentation of Tier Two words was offered by Graves and Prenn (1986). They maintained that students face the task of learning words that they have a ready concept for but are not a part of their oral or reading vocabularies. Tier Two words included the type of words that students
continued to learn as they progressed through school and were the majority of words they would tackle in the middle and secondary grades.

Teacher Influence and Word Play

According to Blachowicz and Fisher (2002), teachers know that students are motivated through play. One retains enjoyable things and considers them sources of pleasure for years thereafter. In order to provide students with a positive environment for word learning, teachers must involve them in activities, materials, and resources that allow for word play.

The Importance of Modeling

Teachers should model how to play with words. Blachowicz and Fisher (2002) reminded their readers to reflect on the years when new words were learned in school through a teacher who was an avid punster, crossword puzzle enthusiast, or otherwise involved in word play. Fletcher (1993) agreed as he recalled admiring the teachers with the most remarkable vocabularies, who used exciting words in their lectures, and who inspired him to hurry home to learn the meanings of them. In speaking of having fun with language, Allen (1999) postulated that the question for many teachers is how to replicate excitement and active learning into more structured vocabulary time.

Fletcher (1993) contended that writers love words. While some writers get excited over a particular pen or a more powerful word processing program, words remain the writer’s most important writing tool. The writer’s fascination with words has roots in a child’s natural play with language.
Stimulating Interest with Active Involvement

According to Johnson (2001), children are born with a natural interest in language. When teachers use word play in the classroom or the home, that natural interest is stimulated. Ability to communicate is increased every time words are added to the mental lexicon and then retrieved when needed. Students can do this more capably when their interest in words is upheld, when they are exposed to many words, and when they hear words used in an enjoyable way. Teachers who help their students realize how much fun word play can be will see them grow into word lovers with a thorough knowledge of the English language (Johnson, 2001).

According to Graves (1987), active teaching was the key to developing students into word lovers. When instruction was both cognitively and affectively oriented, one could reinforce the other. Graves also asserted that teacher-directed instruction should utilize explicit teacher talk. In order to expect improved vocabulary from students, teachers themselves should love words, be well-informed about the language, use precise diction, and be expressive in their speech and writing. Graves shared, "...the task of getting students to actively use the words they learn, like that of honing word meanings, is one that is seldom directly attacked in schools. It is also a task on which there is very little research..." (p. 171-172).

The Role of Word Consciousness

Graves and Watts-Taffe (2002) defined word consciousness as an awareness of and an interest in words and their meanings. When there is a reference to motivation in word learning, the implication includes a sense of purpose in addition to interest and enjoyment. Students are said to be word conscious when they begin to show awareness
in the words they read, hear, write, and speak. They begin to appreciate the words as they understand their multiple meanings and uses. Gradually, students become more skillful and precise in the words they use.

Graves and Watts-Taffe included word consciousness in their vocabulary program because they believed motivation and affect to be equally important to cognition. They also recognized that a lack of vocabulary contributed significantly to disadvantaged students' failure in school. Word consciousness is so vital that the authors contended it should be promoted with preschoolers through high school students.

There were a number of strategies that Graves and Watts-Taffe recommended for fostering word consciousness. Some of the approaches were quite simple while others were more time-consuming. Teacher modeling is a necessary technique in any subject area, but it is absolutely essential in fostering interest and expertise in word usage. Students are quite curious to learn unfamiliar words for familiar concepts. Searching for new words outside of the classroom and then discussing those found words in class was shown to promote more thoughtful word choices in students' writing.

Graves and Watts-Taffe (2002) stated that although educators seek to help students understand that printed words are meant to convey meaning, students may also be taught to gain real pleasure from the way words sound and look. Words and phrases “...can simultaneously feel good on the tongue, sound good to the ear, and incite a riot of laughter in the belly” (p. 147-148).
Developing word consciousness in students is important if they ever intend to productively use new words in their speaking and writing. Graves and Watts-Taffe (2002) concluded by reiterating that word consciousness is both cognitive and affective. Word conscious students are interested in knowing many words well. They are also satisfied when they see others using them well.

Related Studies

There are a number of studies that are directly related to the research conducted in this study. The results of those studies described below support the contention that intensive vocabulary instruction can improve the quality of word choice in students' writing.

Examining the Effects of Intensive Vocabulary Instruction

In 1986, Duin and Graves conducted a study examining the effects of intensive vocabulary instruction on students' use of taught words in their writing and on the quality of their writing. There were a number of factors that served as motivations for the study. The only factor that correlated with the proposed study was the one contending that writing which used more mature vocabulary was repeatedly judged to be of superior quality than writing which incorporated less mature vocabulary. The study was designed to provide students with a depth of word knowledge sufficient to facilitate their use in their writing.

Duin and Graves' (1986) research questions sought to discover if the words taught would be used by the students in their writing, what percentage of words the students would learn, if the preteaching of the words would improve the quality of the students' writing, and how the students would respond to the instruction. A pilot study
was conducted to test the experimental treatment the researchers planned to use in the main study. Results showed improvement, and appropriate changes in instruction were made for the main study.

The participants in the main study were 4th and 6th graders in a rural Midwestern school. There were three groups consisting of low, middle, and high ability. The low and high ability groups served as the experimental groups; the middle group served as the control group. During treatment, all the classes were taught by their usual teachers.

Prior to beginning the treatment, the cooperating teachers administered a pretreatment writing assignment as well as a vocabulary pretest. The experimental treatment involved four days of activities. A variety of instructional strategies were used to allow students to manipulate the words in different ways. Some of those activities included association strategies, outside of class activities, pantomiming activities, and skeleton stories. The 4th grade control group studied public speaking; the 6th grade control group studied capitalization and a unit about Africa. On the fourth day of the study, both the experimental and the control groups took the vocabulary posttest. The writing posttest was administered on the fifth day. An attitude inventory was given to the experimental group on the sixth day.

Pretest and posttest writing narratives were typed and randomly ordered. The number of taught words used in the narratives by both the experimental and control groups were tallied. Two independent raters scored the quality of the narratives using a four descriptor analytic scale. There was an interrater agreement of 78% for the 4th grade writings and 84% for the 6th grade writings. Vocabulary tests were scored by one
researcher and checked by the other. The attitude inventory was tallied by the experimenters.

The results of the Duin and Graves (1986) study were very encouraging. None of the groups used the taught words in pretreatments; yet, all three experimental groups used the words in posttreatment. Vocabulary scores of the experimental group showed an increase in word knowledge while the control group showed no gain. Both 4th and 6th graders showed a large increase in writing quality scores; the control group again showed no gain. Additionally, the majority of students in the experimental group indicated an enjoyment of the instruction and attempted to use the vocabulary in their writing.

Duin and Graves (1986) concluded that, “Since the instruction was quite successful, future research in this area seems justified. In particular, we believe that extended treatments of the sort described here may generally improve students’ writing” (p. 13).

Preteaching Vocabulary Words

The findings from this 1986 study led Duin and Graves (1987) to a subsequent study. The results supported the advantage of preteaching a set of vocabulary words for the purpose of improving the quality of writing. The researchers informed that not only do mature vocabulary word choices increase the judgments of the quality of writing, they are also more predictive of an increased score than measures of maturity in sentence structure.

For this study, Duin and Graves (1987) secured subjects from three 7th grade language arts classes. Students were randomly assigned to treatments. The abilities of
the groups were determined through the verbal component of the *Cognitive Abilities Test* (1984) published by Riverside. Because students are more responsive to topics that are of interest to them, the researchers selected the words to be taught based on a central topic which they felt believed would appeal to students.

There were three experimental treatments utilized in this study. The first treatment used intensive vocabulary and writing, the second treatment used intensive vocabulary alone, and the third treatment used traditional vocabulary. Each treatment lasted for eight days. Intensive vocabulary and writing instruction was administered in much the same fashion as the previous study. Results showed that the intensive vocabulary groups learned more words, the quality of their writing was positively affected, and their enthusiasm for learning the vocabulary increased.

The effectiveness of the vocabulary instruction revolved around five factors: (a) the words were taught through a common topic, (b) out of class activities were incorporated, (c) both contextual and definitional information was presented, (d) there were multiple, rich, exposures to the words, and (e) teacher influence was emphasized. The two factors attributing to the effectiveness of the writing instruction were the requirement that students write ideas prior to writing and the presentation of the criteria by which their writing would be judged.

Duin and Graves (1987) also concluded that the overall quality of student essays could be improved by teaching a related set of words before the essay is written. The findings from both the 1986 and 1987 studies are indicative of the benefits of intensive, direct instruction of vocabulary as a prewriting strategy.
Strategies Used to Develop Vocabulary

Beck and McKeown (1983) conducted a number of vocabulary studies that also support the proposed study. In 1983, Beck and McKeown reported a project in which they studied two basal reading programs. The purpose of the project was for determining the types of strategies used to develop vocabulary. The researchers ascertained that the basal reading programs did not present an adequate number of encounters with the vocabulary words nor were there satisfactory instructional strategies for presenting the vocabulary words.

As a result of that project, Beck and McKeown developed an intensive vocabulary program. Implemented in three classrooms over an extensive two year period, the results were noteworthy. Children taught by their program, indeed, learned the taught words. In fact, the results suggested that the students from the experimental group learned words beyond the specific words taught. The finding that was most pertinent to this study was the finding that students in the experimental group used the taught words or noticed their use outside of class.

Beck and McKeown concluded, “The data from our vocabulary study indicate that specific vocabulary instruction can successfully teach word meanings, improve comprehension, get children to use the words outside of class, and perhaps improve general comprehension” (p. 625). They further stated the need for specific instruction for each of these purposes if the instruction was to be successful. According to Beck and McKeown, in order for students to use new vocabulary outside of class (e.g., in their writing), specific instruction must be given to that end.
Levels of Lexical Knowledge

In searching for related studies to support the effectiveness of levels of lexical knowledge in instruction, another project involving Beck and McKeown was discovered. Omanson, Beck, McKeown, and Perfetti (1984) investigated how the levels of lexical knowledge affect comprehension. Although the main emphasis of their investigation was not one of importance for the proposed study, there were some aspects that were worthy of consideration.

Of prime importance was the finding that direct instruction of specific words was beneficial to a student recalling the word and its meaning when encountering it in unrelated text. The authors gave the example of a child being very familiar with a certain word, for example, bird. Although the child knew the word, he or she probably could not recall when or where it was learned. Processing was not interrupted by encountering the word, but no additional processing was initiated either. Conversely, when direct instruction was used to teach a new word, additional processing often took place as the reader recalled the learning context by which he first learned the word. This implied the benefits of both contextual and direct instruction techniques. The authors suggested, “An important task for future research is to map out the ways in which different kinds of instruction affect use and other dimensions of word knowledge” (p. 1267).

Rich Extended Instruction

To follow up their suggestion, McKeown et al. (1985) investigated the effects of rich and extended instruction of vocabulary using a variety of instructional formats rather than a specific one. While past studies incorporated only a single instructional
procedure, the 1985 study compared three types of vocabulary interventions: (a) rich instruction, (b) both rich and extended instruction, and (c) traditional instruction. The researchers defined rich instruction as using techniques characterized by elaboration and discussion about words. When rich instruction was complemented with activities that had children notice and use the instructed words outside of the classroom, extended instruction took place. Traditional instruction required only word association and definitions. It was this type of instruction that was found in basal readers and was commonly practiced by teachers.

The purpose of the 1985 study was to identify how the nature of instruction, along with the number of encounters with the vocabulary, would change students' word knowledge ability. Subjects in the study were 4th grade students from a lower socioeconomic neighborhood. Investigations were conducted in four classrooms in three schools with a 70% Black population. Three of the classrooms were used as experimental groups with the fourth classroom serving as the control group. Of the three classrooms receiving instruction, one was given rich vocabulary instruction, the second was given rich/extended instruction, and the third was given traditional vocabulary instruction.

The results of this study were twofold. The traditional instruction was not powerful enough to change student word knowledge even with an increased number of exposures. Extended/rich instruction provided students with the tools to spontaneously use the taught words in natural contexts outside of the classroom.

The authors concluded the study with an important implication for vocabulary instruction. The supported implication was that extended/rich instruction with learning
activities that extended beyond the classroom is necessary if the goal for word learning is for the meanings to be readily accessible for use in other contexts.

**Word Meaning Acquisition**

In a 1985 study, McKeown investigated word meaning acquisition. Although she investigated several instructional issues, of particular interest was the question of how well an “acquainted” word could be applied in later encounters. McKeown’s goal in this study was to compare the performance of different levels of students. Therefore, she chose 5th grade students whose vocabulary subtest scores on the *Stanford Achievement Test* rendered them high or low ability. Those students who scored in the middle of the score distribution were not considered for the study.

Learning vocabulary through inference of context is a technique that has a common use. However, for lower ability children, this technique has never been particularly successful. Results from McKeown’s study pointed out that the low-ability group misunderstood the relationship between word and context. McKeown suggested that teacher modeling was a strategy that would be beneficial to this type of student. Direct instruction of vocabulary would allow the teacher to help the students understand stability and flexibility in word meanings and how to test the appropriateness of meaning in context. McKeown stated that the implication for low-ability children was that correct definitions and multiple exposures to context were not adequate for moving a word into their vocabulary base.

**Second-tier Words**

In a related study McKeown (1993) looked into the use of dictionaries as an option for students reaching the limits of their word knowledge. This study is included
herein because of its relevance to Beck, McKeown, and Omanson's (1987) "second-tier" words. Second-tier words are those of general utility, which appear across domains, and are indicative of a mature language user's vocabulary. They are the words that take over language development after a basic vocabulary has been gained, usually during the 3rd and 4th grade school years. Second-tier words are words that were used for targeted instruction in the subject study of this document.

McKeown's study suggested that these second-tier words are very difficult to learn through a definitional avenue; consequently, they are best presented as multiple encounters in varied contexts. Students should be engaged in active processing of the words' meanings and should have the added benefit of a more experienced language user restating the definition. The teacher's role should include teaching multiple meanings through interaction with the students instead of insisting that the dictionary be used.

Influence of Prewriting Treatments

A study by Brodney, Kazelskis, and Reeves (1999) investigated the influence of prewriting treatments on the quality of students' written compositions. Readers used background knowledge to construct meaning from an author's intended message. Similarly, writers chose words and language structures to construct meaning as they attempted to convey their intentions to their readers. Of all the stages of the writing process, the prewriting stage is the integral phase in creating written communication.

Participants in this study were five classrooms of 5th graders of which four classrooms were randomly assigned to treatment groups and one classroom was used in the pilot study. The treatment groups were given instruction in reading together with
prewriting strategies, reading instruction only, or prewriting instruction only. The fourth group served as the comparison group.

Scores from the Stanford Achievement Test (SAT), specifically the raw scores of the reading comprehension subtest, were used as the covariate in the analysis of the data. Three evaluation procedures were utilized to obtain data from the students' written compositions. The procedures included a T-Unit measure, a holistic measure, and an analytic measure. The T-Unit measure consisted of an independent clause and all of its modifiers as the standard unit of measurement. This procedure allowed for the sentence and punctuation errors that are common in the writing samples of beginning writers. The holistic measure looked at the composition in its entirety and produced a score while the analytic measure rated the composition based on ideas, organization, style, and mechanics.

Results of the Brodney, Kazelskis, and Reeves study (1999) supported the principle that the prewriting phase is a necessary component to the creation of a well-written composition. However, of importance to this document's subject study is the authors' conclusion that multiple assessments of students' written work provides the most comprehensive view of writing performance and achievement.

Effects of Vocabulary Instruction on Composition

The last of the related studies examined was Zarry's 1999 study. Zarry agreed that there are few studies that have investigated the effect of vocabulary instruction on composition. Therefore, his study sought to answer the question of whether or not direct instruction in vocabulary learning, due to greater access to a thesaurus, would be reflected through enriched vocabulary use in writing by students.
Participants in the study were eighty-eight 6th grade students; 44 were in the experimental groups and 44 were in the control groups. Four heterogeneous classrooms at four different schools provided the participants. The two experimental groups had personal thesauri and the classroom teachers were given ideas and suggestions for teaching vocabulary. The two control groups only had access to a classroom set of thesauri. All groups had 80 minutes of language arts per day and the treatment lasted approximately eight months.

Student compositions were scored using an instrument designed by the school district, but Zarry focused attention on the "Word Choice" subtest which used a holistic measurement of Superior, Proficient, Acceptable, Limited, or Rudimentary performance. A similar five point rating scale was paired to the measurement for scoring analysis using 5 for Superior, 4 for Proficient, 3 for Acceptable, 2 for Limited, and 1 for Rudimentary performance.

Results indicated that the control groups' performance was Limited (2.05) while the experimental groups' performance was very close to Acceptable (2.9). The difference in performance was virtually one whole level which would imply that extensive use of a thesaurus is beneficial to enriched vocabulary learning. Zarry conceded that his study employed a small sample of participants, so results could not be generalized beyond the classrooms included. His intention, however, was that the study would provide a "vehicle for thought and further study of the topic" (p. 5).

Summary

In summary, the review of related literature indicated that students learn what words mean if specific instruction is given for this to happen (Beck & McKeown,
Intensive vocabulary instruction as a prewriting strategy results in an increase of word knowledge and quality of written essays (Duin & Graves, 1986, 1987). In addition to the benefits of increased word knowledge, direct instruction of specific words benefits a child in recalling the words in unrelated text (Omanson, Beck, McKeown, & Perfetti, 1984). However, learning activities that extend beyond the classroom are necessary if the goal is for words to be accessible in other contexts (McKeown, Beck, Omanson, & Pople, 1985). Prewriting is a necessary component of well-written compositions and multiple assessments of written work provide the most comprehensive view of writing performance (Brodney, Kazelskis & Reeves, 1999). Teacher modeling of vocabulary usage especially benefits weak students (McKeown, 1985). Weak students require multiple teachings of vocabulary words with opportunities for actively processing the words (Beck, McKeown, & Omanson, 1987). It is appropriate to seek support for implementing a vocabulary program in schools, just as strong programs in other areas of the curriculum are supported (Graves, 1987).
CHAPTER THREE

Methodology and Procedures

This study focused on the comparison of the quality of 8th graders' written compositions, specifically in terms of vocabulary use. Both groups of students had the same intensive vocabulary instruction, but one group had the added component of explicit instruction in how to use pretaught words in their writing. The investigator sought to determine if an in-depth knowledge of pretaught words would have an effect on those words used in students' writing. In this chapter, the methods and procedures used to conduct the study are described.

Research Design

The research design applied in this study was a quasi-experimental design. Crowl (1996) described quasi-experiments as those that are often used in educational research at institutional settings where the researcher does not have the ability to individually assign subjects to various groups. To do so would upset the institutional routine as students would have to leave their classrooms to be regrouped for the experiment. Instead, intact groups that had already been assigned were used for this study. Within the quasi-experiment, the design used was termed a nonequivalent control group design (Crowl, 1996).
Campbell and Stanley (1963) hailed the nonequivalent control group design as one of the most prevalent experimental designs in educational research. The groups used in this design are to be as similar as can be pulled together but not so similar that the pretest can be done away with. Popham (1993) supports the use of this design because, although randomization of groups is not possible, the use of comparison groups is. He further suggested how this design can be strengthened. If the pretest indicates the two comparison groups are very different, with some very high as well as some very low scores, both groups can continue to receive treatment and be administered a posttest. At the completion of the study, the uncharacteristic learners' scores can simply be deleted from the analysis. Popham made this suggestion because, if the comparison groups are similar, the interpretation of the data from this design is more clear-cut.

Crowl (1996) suggested that students in both groups would participate in a pretest measure. One group would then receive an educational intervention that was withheld from the other group. At the completion of the experiment, both groups would participate in a posttest measure. The researcher could then compare the pretest scores of the two groups and use those scores to adjust any posttest differences through an analysis of covariance (ANCOVA). In this way, all the students' scores can be included in the analysis of the data.

Additionally, it is important to know whether an educational intervention will transfer to ordinary learning. Kuhn and Stahl (1998) warned that because it is difficult to find effects on measures of transfer, studies that speak to this issue are hard to find in educational research. To understand how an intervention treatment affects ordinary
learning, it is necessary to construct measures that allow one to collect data throughout the intervention period, rather than only at the onset and completion. This was an appropriate consideration because writing is a progressive skill that is best measured repeatedly over time.

In this study, a pretest measure was given first using the *Test of Written Language 3rd edition (TOWL-3)*. Thereafter, data were collected at the end of each three week cycle through students' written essays to use for further interpretation. At the completion of twelve weeks of instruction, a posttest measure was taken using the *Test of Written Language 3rd edition (TOWL-3)*.

The following table shows the cell structure of the research methodology used in the study.

Table 1

*Cell Structure of the Research Methodology*

<table>
<thead>
<tr>
<th>Group A-Intensive Vocabulary and Writing</th>
<th>Pretest</th>
<th>Posttest</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group B-Intensive Vocabulary Only</td>
<td>Pretest</td>
<td>Posttest</td>
</tr>
</tbody>
</table>

Sample

The sample for this study was the entire 8th grade student body enrolled in a rural public school located in northern Louisiana with the exclusion of special education students who were self-contained in a resource room or who were not mainstreamed into the regular language arts classroom. The school was selected because its poverty
rate qualified it as a Title 1 assisted school. The poverty rate is determined by the number of free and reduced lunches that are served at the school. Being a Title 1 school signifies that at least 40% of the student population comes from a low socioeconomic background. The school was indicative of schools in this area of the state as there were no urban schools within a 60 mile radius.

Eighth grade students were selected as the focus of this study because they are one of the groups of students who are targeted for high stakes assessment through the Louisiana State Department of Education. Within the high stakes assessment is a major writing component that is scored, in part, on variety and maturity of word choice. For this reason, Tier Two words, previously discussed in Chapter Two, were incorporated into the study. The Tier Two words used in the treatment were vocabulary words that students from lower socioeconomic environments, such as the students from this school, were less likely to acquire. Beck, McKeown, and Omanson (1987) called attention to the fact that children who are from lower socioeconomic environments and who score below the 50th percentile on standardized tests have difficulty using Tier Two words independently. Thus, students in the 8th grade from rural, lower socioeconomic status (SES) schools are prime candidates for interventions concerning vocabulary and writing measures.

At the beginning of the school year, all students had been assigned to classes by the principal. Class size was an average of 19 students per classroom. Intact classes used as treatment groups consisted of five 8th grade classes. Two intact classes received intensive vocabulary instruction only while three intact classes received intensive vocabulary instruction together with writing instruction. Each class was randomly
assigned to either of the experimental groups. Students who failed to return informed consent forms, were absent on the days that the writing measures were given, or were absent for more than three consecutive days of instruction were deleted from the sample. Those students who moved in and out of the system during the course of the study were also not included. These constraints only constituted the deletion of seven students from the original population.

A total of 87 students participated in the study and all were taught by the same teacher. Of this number, 55% were male and 45% were female; 53% were Black and 47% were Caucasian. Within the group of students receiving intensive vocabulary instruction together with explicit writing instruction, there were 23 students in 1st period, 10 students in 2nd period, and 16 students in 3rd period. Within the group of students receiving intensive vocabulary instruction only, there were 15 students in 4th period and 23 students in 6th period. It was coincidental that students in Group A were in the first, second, and third periods of the day, and students in Group B were in the fourth and sixth periods of the day because all class periods were randomly assigned to treatment groups.

The teacher in this study was fully licensed in accordance with requirements by the state of Louisiana, had five years of experience, and willingly agreed to participate. She had expressed an interest in developing the vocabularies of her students and regularly used written assessment in her classroom. Training was provided through teacher-researcher meetings. The training meetings were conducted outside of school time. They consisted of professional development activities that targeted how the teacher administers the pretest/posttest instrument and the interval writing measures as
well as how to instruct the vocabulary and writing lessons. The researcher designed the vocabulary lesson plans, the worksheets, the teacher's guide, and all filing materials. Because the lessons were predetermined, scripted, and packaged for the teacher, she was not required to dedicate an unreasonable amount of time to preparation of the lessons. Additionally, the teacher was given directives for journaling anecdotal comments concerning the instruction and progress of the students as well as how to collect samples of students' work. An agreement between the teacher and researcher determined the days and times when unobtrusive observations might be conducted during the course of the investigation.

Instrumentation

The *Test of Written Language 3rd edition (TOWL-3)* was the instrument used to measure the quality of student writing in the study (see Appendix C). The *TOWL-3* consisted of two major components: Contrived Writing and Spontaneous Writing. The Contrived Writing component was further broken down into five subtests; the Spontaneous Writing component was broken down into three subtests. Composites of the eight subtests were then computed for an Overall Writing score.

The *TOWL-3* generated five types of scores: raw scores, age and grade equivalents, percentiles, subtest standard scores, and composite quotients. According to the authors, Hammill and Larsen (1996), the standard scores of the subtests provide the clearest indication of a student's performance. For each of the subtests, the mean score was set at 10 and the standard deviation was set at 3 as part of the standardization process. Standard scores were comparable thereby allowing the researcher to determine a student's strengths and weaknesses within a certain skill area. The *TOWL-3* also
allowed the researcher to estimate a student’s overall writing competence, as well as the
student’s preference for contrived or spontaneous testing formats, through quotients.
This instrument was constructed so that the quotients had a mean of 100 and a standard
deviation of 15.

The TOWL-3, the third edition of the test, had all new normative data. This new
normative sample represented characteristics that were keyed to the 1990 United States
census information—gender, residence, geographic region, race, handicapping condition,
income of parents, and education of parents. Evidence from the studies conducted
during the last revision of the test indicated that there was an absence of gender, ethnic,
and racial bias.

Administration of the TOWL-3 may be directed toward individuals or groups
and takes approximately 1 1/2 hours. There was a 15 minute time constraint on the story
writing subtest but the remaining portions of the test had no time limits. The
administrator of the test began the testing with the spontaneous story writing
component. Following this portion of the test, the five subtests using the contrived
format were administered. The remaining three subtests were used to analyze the
quality of the written story. There were two forms of the TOWL-3; administration of
both forms was the same.

Hammill and Larsen (1996) apprised that there are three sources of error
variance that might affect the TOWL-3’s reliability: content sampling, time sampling,
and interscorer differences. Using .80 as the minimal reliability coefficient and .90 or
above as most desirable, the authors of the TOWL-3 maintained reliability across all
three sources.
Because content validity determines how well the content of the test items covers what the author says it covers, it must be built into the test when the subtests are designed and the items are created. Hammill and Larsen (1996) defended the content validity of the subtests on the TOWL-3 through their rationale for the content and format of each subtest, the results of classical item analysis procedures, and differential item functioning analyses. With the authors choosing .3 as the minimum value of an acceptable item-test coefficient, almost all the coefficients reached or exceeded the .3 criterion.

Of particular interest to the study was the content validity of the Vocabulary subtest in the Contrived Writing component of the TOWL-3. This subtest asked the examinee to write a sentence that incorporated a stimulus word. Selection of the stimulus words were based on "...words that were used in school, that included all parts of speech, and that did not represent specific vocabularies such as science and social studies" (Hammill & Larsen, 1996, p. 66). The criteria for the word selection in the Vocabulary subtest of the TOWL-3 was closely associated with the definition of the aforementioned Tier Two words. Tier Two words are also high frequency, of general utility for the mature language user, and not specific to any one domain. These reasons justify the testing of Tier Two words in the study.

Procedural Details

During the first weeks preceding the 2002-2003 school year, the superintendent of education and the principal from the selected school were contacted for the purpose of describing the study and receiving permission to carry out the investigation. With that permission granted, the researcher met with the teacher who had volunteered to
participate in the study as soon as the school year commenced and beginning-of-the-year procedures were in place. During these meetings, the researcher once again explained the nature and purpose of the investigation, the time sequence and lesson construction of the experimental treatments, the pretest and posttest procedures, the interval writing measures, and confidentiality issues. Written consent forms from the parents of the participants were also collected (see Appendixes D-H for permission letters).

Upon the completion of these tasks, the TOWL-3 was administered to all participating students as a pretest measure. As prescribed in the examiner's manual (Hammill & Larsen, 1996), two measures of performance were taken before treatment began: contrived writing performance and spontaneous writing performance. Initial scores were treated as identical by converting the raw scores of the subtests into standard scores. Standard scores provided a common subtest mean score, which was set at 10, and a common standard deviation, which was set at 3. With equivalent indices, the subtest scores were then comparable. Appendix A of the examiner's manual (Hammill & Larsen, 1996) provided tables to convert the raw scores of both Form A and Form B into standard scores. Interpretation of the standard scores was useful in charting the progress of the students' writing as interventions were administered. The examiner's manual (Hammill & Larsen, 1996) provided a table to assist in determining student performance.

Quotients were another way of accessing information about student performance. The subtest standard scores were summed and converted to provide three different quotients. Two of the quotients provided insight to performance on contrived
and spontaneous writing test formats. The third quotient provided a picture of overall writing proficiency because it encompassed all eight TOWL-3 subtests. Appendix B of the examiner's manual (Hammill & Larsen, 1996) provided tables to convert the sums of standard scores into quotients. A mean of 100 and a standard deviation of 15 were set into the interpretation of these quotients. The examiner's manual (Hammill & Larsen, 1996) provided a table for ease in analyzing student performance based on the quotients.

Table 2 shows the format and function of each subtest on the TOWL-3. The contrived subtests were used to determine the quotients for contrived writing ability, and the spontaneous subtests were used to determine the quotients for spontaneous writing ability. Although the results from all eight subtests were not analyzed individually, it was necessary to administer all of the subtests in order to determine an overall writing ability.

Table 2

<table>
<thead>
<tr>
<th>Format of the TOWL-3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contrived Subtests</td>
</tr>
<tr>
<td>Vocabulary</td>
</tr>
<tr>
<td>Spelling</td>
</tr>
<tr>
<td>Style</td>
</tr>
<tr>
<td>Logical Sentences</td>
</tr>
<tr>
<td>Sentence Combining</td>
</tr>
<tr>
<td>Spontaneous Subtests</td>
</tr>
<tr>
<td>Contextual Conventions</td>
</tr>
<tr>
<td>Contextual Language</td>
</tr>
<tr>
<td>Story Construction</td>
</tr>
</tbody>
</table>
Administration and scoring of the *TOWL-3* were followed exactly as specified in the examiner’s manual with the exception of the Vocabulary subtest. The items on this subtest were substituted with grade appropriate Tier Two words which were later incorporated into the experimental treatments. It was necessary to substitute the words in this subtest to allow for a comparison of pretest and posttest knowledge of these target words. Although the vocabulary words in the *TOWL-3* were general utility words, they were listed in the subtest in order of difficulty. This required the use of ceilings to score the subtest. With the substitution of the Tier Two words, which were not ordered by difficulty, the use of ceilings was not necessary.

All groups received instruction for a period of approximately 20 minutes per day, 4 days a week, for a total of 12 weeks. The 12-week period was not a consecutive period of weeks because of scheduled school holidays and the break between semesters. Two experimental groups received intensive vocabulary instruction with no writing component. The other three experimental groups received the same vocabulary instruction with the inclusion of an explicit writing component. During the intervention period, a writing sample using the picture prompts from the *TOWL-3* was taken every three weeks. Picture prompts from Form A and Form B were alternated at each interval measuring period. This allowed a variety of use for both prompts but kept the prompts identical to the pretest for all students. Taking a writing sample as the interventions were being presented allowed for analysis of the degree to which the target words were being used in students’ work.

The teaching protocol was derived from a compilation of research-based instructional strategies (Table 3). Components of the protocol emphasized, in part,
informal social interaction, explicit teacher modeling, the use of word associations through mnemonic devices, higher order thinking skills through justification of word choice, the relationships between words and concepts, multiple exposures to the target words, and the importance of written communication.

Table 3

*Teaching Protocol Components*

<table>
<thead>
<tr>
<th>Components</th>
<th>Research Base</th>
</tr>
</thead>
<tbody>
<tr>
<td>Justification of word choice</td>
<td></td>
</tr>
<tr>
<td>Relationships between words and concepts;</td>
<td>Based upon the research of Blachowicz &amp; Fisher (2002); Heimlich &amp; Pittelman (1986).</td>
</tr>
<tr>
<td>Organization of concepts through graphic organizers</td>
<td></td>
</tr>
<tr>
<td>Informal social interaction; Active participation;</td>
<td>Based upon the research of Borich (2000); Brooks &amp; Brooks (1999); Carr &amp; Wixson (1986); Dewey (1900); Dixon-Krauss (1996); Graves &amp; Watts-Taffe (2002); Johnson (2001); McGlynn-Stewart (1996); Olsen (1999); Ruddell (1986); Stahl (1999); Vygotsky (1962); Winters (2001).</td>
</tr>
<tr>
<td>Personal value of words</td>
<td></td>
</tr>
<tr>
<td>Teacher modeling; Explicit instruction</td>
<td>Based upon the research of Beck &amp; McKeown (1983); Blachowicz &amp; Fisher (2002); Fletcher (1993); Graves (1987); Graves &amp; Watts-Taffe (2002); Laflamme (1997); McKeown (1985).</td>
</tr>
<tr>
<td>Prior knowledge; Personal experience</td>
<td>Based upon the research of Allen (1999); Borich (2000); Dewey (1900); Fletcher (1993); Gambrell &amp; Mazzoni (1999); Heimlich &amp; Pittelman (1986).</td>
</tr>
<tr>
<td>Writing communication</td>
<td>Based upon the research of Blachowicz &amp; Fisher (2002); Graves &amp; Watts-Taffe (2002); Johnson (2001).</td>
</tr>
</tbody>
</table>
Table 3 (continued)

*Teaching Protocol Components*

<table>
<thead>
<tr>
<th>Components</th>
<th>Research Base</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multiple exposures to words</td>
<td>Based upon the research of Beck &amp; McKeown (1985); Beck, McKeown, &amp; Omanson (1987); Blachowicz &amp; Fisher (2002); Duin &amp; Graves (1986, 1987); Johnson (2001); Laflamme (1997); Stahl (1999).</td>
</tr>
<tr>
<td>Variety of strategies</td>
<td>Based upon the research of Beck &amp; McKeown (1996); Duin &amp; Graves (1986, 1987); Stahl (1999).</td>
</tr>
<tr>
<td>Use of word play</td>
<td>Based upon the research of Allen (1999); Blachowicz &amp; Fisher (2002); Graves (1987); Johnson (2001).</td>
</tr>
<tr>
<td>Multiple assessment</td>
<td>Based upon the research of Allen (1999); Blachowicz &amp; Fisher (2002); Brodney, Kazelskis, &amp; Reeves (1999).</td>
</tr>
</tbody>
</table>

Instruction took place in four cycles lasting 12 days each. Each cycle contained 15 target words around which the instruction was emphasized. The target words were comprised of words from semantic categories (see Appendix I for listing of target words). Students in Group A and Group B learned the same sets of vocabulary words. Although the teaching protocol was designed for a length of approximately 20 minutes per class period, allowances were made for additional time when the teacher felt that students needed it.

In each of the teaching cycles, Week One was set aside as the week to introduce seven of the fifteen vocabulary words and their matching vocabulary cartoons (Burchers, et al. 1997, 1998, 2000). The cartoons were used as a mnemonic strategy to
assist in memory of the words. The word associations and visual images that the
cartoons provided were intended to make learning the words easy and entertaining.
Although vocabulary cartoons were not designed to replace other means of vocabulary
instruction, they did serve as a “building block adjunct to the overall vocabulary

After the words were introduced, word associations were formed to help the
students remember the definitions. Higher order thinking skills were utilized as the
students gave justifications for why the word associations were appropriate. The verbal
justification also reinforced the definitions of the words. In addition, students were
encouraged to openly discuss the words and attach personal connections to them.

The remaining eight words and their matching vocabulary cartoons were
introduced during Week Two of each cycle. Instruction similar to the first week took
place during the second week of the cycle. An example of a word association
worksheet, a sentence justification worksheet, and a vocabulary cartoon can be found in
Appendix J. All fifteen of the vocabulary words and cartoons were reviewed during the
third week of each cycle. Opportunities for independent practice were provided
throughout each week of the cycles.

Strategies for developing more descriptive prose were incorporated into the
lessons for the vocabulary/writing groups (Beck & McKeown, 1983; Blachowitz &
Fisher, 2002; Carr & Wixon, 1986; Graves & Prenn, 1986; Johnson, 2001; Thelen,
1986). The writing protocol was typically administered on the fourth day of instruction.
While Group B participated in traditional drill and practice types of activities (ie.
matching, definitions, flashcards, etc.), students in Group A were exposed to explicit
instruction in how to use the target words in written communication. The informal social interaction that was a vital part of these activities allowed the students to experiment with using the target words in speaking, listening, and writing contexts. A sample of the teaching protocol for one of the cycles is provided in the visual outline in Table 4. The additional writing instruction provided to Group A is noted with asterisks within the visual outline. A more detailed description and purpose of the writing protocol for Group A are provided in Table 5.

Table 4

*Outline of Teaching Protocol for Cycle One*

<table>
<thead>
<tr>
<th>Week One</th>
<th>Group A</th>
<th>Group B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Day 1</td>
<td>Introduce words 1-7</td>
<td>Introduce words 1-7</td>
</tr>
<tr>
<td></td>
<td>Introduce vocabulary cartoons</td>
<td>Introduce vocabulary cartoons</td>
</tr>
<tr>
<td>Day 2</td>
<td>Review words and cartoons</td>
<td>Review words and cartoons</td>
</tr>
<tr>
<td></td>
<td>“Word Association” and justification sentences</td>
<td>“Word Association” and justification sentences</td>
</tr>
<tr>
<td>Day 3</td>
<td>Review words and cartoons</td>
<td>Review words and cartoons</td>
</tr>
<tr>
<td></td>
<td>Write sentences in answer to the situational questions</td>
<td>Write sentences in answer to the situational questions</td>
</tr>
<tr>
<td></td>
<td>using the first seven target words</td>
<td>using the first seven target words</td>
</tr>
<tr>
<td>Day 4</td>
<td>Review all words and cartoons</td>
<td>Review all words and cartoons</td>
</tr>
<tr>
<td></td>
<td>Introduce the “Word of the Week”</td>
<td>Introduce the “Word of the Week”</td>
</tr>
<tr>
<td></td>
<td>* Model how to write a short memo using the “Secret Word”</td>
<td>Model how to fill out a card using the “Secret Word”</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Week Two</th>
<th>Group A</th>
<th>Group B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Day 1</td>
<td>Introduce words 8-15</td>
<td>Introduce words 8-15</td>
</tr>
<tr>
<td></td>
<td>Introduce vocabulary cartoons</td>
<td>Introduce vocabulary cartoons</td>
</tr>
<tr>
<td></td>
<td>Give “Word of the Week” hints</td>
<td>Give “Word of the Week” hints</td>
</tr>
<tr>
<td>Day 2</td>
<td>Review words and cartoons</td>
<td>Review words and cartoons</td>
</tr>
<tr>
<td></td>
<td>“Word Association” and justification sentences</td>
<td>“Word Association” and justification sentences</td>
</tr>
<tr>
<td></td>
<td>Model “Three Minute Meeting” activity; Give “Word of the Week” hints</td>
<td>Model “Three Minute Meeting” activity; Give “Word of the Week” hints</td>
</tr>
</tbody>
</table>
Table 4 (continued)

Outline of Teaching Protocol for Cycle One

<table>
<thead>
<tr>
<th>Week Two</th>
<th>Group A</th>
<th>Group B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Day 3</td>
<td>Review words and cartoons</td>
<td>Review words and cartoons</td>
</tr>
<tr>
<td></td>
<td>Write sentences in answer to the situational questions using</td>
<td></td>
</tr>
<tr>
<td></td>
<td>the full set of target words</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Conduct “Three Minute Meeting” during independent worksheet time.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Give “Word of the Week” hints</td>
<td></td>
</tr>
<tr>
<td>Day 4</td>
<td>Review all words and cartoons</td>
<td>Review all words and cartoons</td>
</tr>
<tr>
<td></td>
<td>* Model “Story Impressions” activity</td>
<td>“Yea/Nay” activity</td>
</tr>
<tr>
<td></td>
<td>* “Word of the Week” memo</td>
<td>“Word of the Week” card</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Week Three</th>
<th>Group A</th>
<th>Group B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Day 1</td>
<td>Review all words and cartoons</td>
<td>Review all words and cartoons</td>
</tr>
<tr>
<td></td>
<td>* “Story Impressions” activity</td>
<td>Matching Worksheet #1</td>
</tr>
<tr>
<td>Day 2</td>
<td>Review all words and cartoons</td>
<td>Review all words and cartoons</td>
</tr>
<tr>
<td></td>
<td>* “Story Impressions” activity</td>
<td>Matching Worksheet #2</td>
</tr>
<tr>
<td>Day 3</td>
<td>Review all words and cartoons</td>
<td>Review all words and cartoons</td>
</tr>
<tr>
<td></td>
<td>* “Story Impressions” activity</td>
<td>“Yea/Nay” activity</td>
</tr>
<tr>
<td>Day 4</td>
<td>Review all words and cartoons</td>
<td>Review all words and cartoons</td>
</tr>
<tr>
<td></td>
<td>* “Word of the Week” memo</td>
<td>“Word of the Week” card</td>
</tr>
<tr>
<td></td>
<td>Repeated Measure</td>
<td>Repeated Measure</td>
</tr>
</tbody>
</table>

Note. * Denotes additional writing instruction
Table 5

*Writing Protocol Components for Group A*

<table>
<thead>
<tr>
<th>Components</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>Memo for “Secret Word of the Week”</td>
<td>To encourage students to become keen listeners and begin to justify the appropriateness of word choice.</td>
</tr>
<tr>
<td>Three Minute Meeting</td>
<td>To require students to verbalize and demonstrate ways in which target words could be used in their writing.</td>
</tr>
<tr>
<td>Story Impressions</td>
<td>To survey a list of target words for the purpose of determining how they could fit into a story (ie. setting, characters, problem, actions, resolution, and feelings).</td>
</tr>
<tr>
<td>Word Plays</td>
<td>To promote social interaction in small groups for the purpose of writing and performing a short skit utilizing target words.</td>
</tr>
<tr>
<td>Fifty-Five Fiction</td>
<td>To provide students with practice in using precise word choice and an opportunity to speak before a group.</td>
</tr>
<tr>
<td>Email to the researcher</td>
<td>To incorporate the use of technology and allow students to use target words in personal communications.</td>
</tr>
</tbody>
</table>

An explicit set of instructions (see Appendix K for Cycle One Teacher’s Guide) assisted the classroom teacher in conducting the lessons and provided details about collecting and filing the worksheets. Anecdotal comments were encouraged and may possibly be included in future reporting of this study.
Upon completion of the investigation period, the same measures taken for the pretest were given as a posttest and scored according to TOWL-3 procedures. Scoring of both the pretest/posttest measures and the interval writing measures was done solely by the researcher.

Statistical Analysis

Eight null hypotheses were tested in this study.

Hypothesis 1: At the end of a 12-week treatment period, there is no significant difference in the number of target words learned by students taught by intensive vocabulary instruction together with explicit writing instruction (Group A) and students taught by intensive vocabulary alone (Group B).

Hypothesis 2: At the end of a 12-week treatment period, there is no significant difference in the quality of spontaneously written compositions of students taught by intensive vocabulary instruction together with explicit writing instruction (Group A) and students taught by intensive vocabulary alone (Group B).

Hypothesis 3: At the end of a 12-week treatment period, there is no significant pretest to posttest gain in the number of target words learned for Group A.

Hypothesis 4: At the end of a 12-week treatment period, there is no significant pretest to posttest gain in the number of target words learned for Group B.
Hypothesis 5: At the end of a 12-week treatment period, there is no significant pretest to posttest gain in the quality of spontaneously written compositions for Group A.

Hypothesis 6: At the end of a 12-week treatment period, there is no significant pretest to posttest gain in the quality of spontaneously written compositions for Group B.

Hypothesis 7: There are no significant relationships among the dependent variable, pretest to posttest gain in vocabulary, and the independent variables of gender, race, treatment group, and 7th grade ITBS composite scores.

Hypothesis 8: There are no significant relationships among the dependent variable, pre to post gain in overall writing quotient, and the independent variables of gender, race, treatment group, and 7th grade ITBS composite scores.

One of the statistical methods used in analyzing the data was a one-way analysis of covariance (ANCOVA). It was the most appropriate analysis because the study sought to determine if the students performed better as a result of the educational intervention to which they were exposed. As the students to be compared were in intact groups, their scores needed to be adjusted statistically to control for predifferences. The ANCOVA then determined if there was a significant difference between the adjusted posttest means of the two groups. Because the study sought to determine posttest differences in vocabulary scores (Hypothesis 1) and posttest differences in writing scores (Hypothesis 2), a one-way analysis of covariance was the most appropriate procedure to use (Crowl, 1996).
A paired sample *t-test* was used to determine if there was a significant difference in pretest to posttest vocabulary gains for both Group A (Hypothesis 3) and Group B (Hypothesis 4), as well as to determine pretest to posttest writing gains for Group A (Hypothesis 5) and Group B (Hypothesis 6). The pairing of the pretest and posttest scores for the same group of students allowed the differences between the two scores to be attributed more easily to the intervention. To examine if vocabulary and writing scores were significantly better at the end of the intervention period than they were at the beginning, the paired sample *t-test* was the most appropriate procedure to use (Crowl, 1996).

A linear regression analysis was also used to analyze the data in the study. Vidal (1977) stated that regression can provide greater understanding of the data and can allow greater flexibility concerning the type of variables to be analyzed. This is advantageous as it allowed for the input of categorical variables or intervally scaled variables. Linear regression can provide a researcher with the exact same information as a *t-test* or ANOVA; however, regression can more clearly inform a researcher how two variables are different from one another in relation to the dependent variable. Additionally, with regression, a determination can be made as to how much of the dependent variable is explained or unexplained by the independent variables.

Hypothesis 7 was analyzed using regression in order to determine if there was a relationship between the dependent variable of vocabulary gain and the independent variables of gender, race, treatment group and *ITBS* scores. The independent variables of gender, race, and treatment group were entered as
categorical data, and as such, were dummy-coded. Vocabulary gain scores and
*ITBS* scores stood as interval data. Because statistical significance was found for
the predictor variable of race, the following predicting equation was formed for
pretest to posttest vocabulary gain using the unstandardized coefficients of the
regression data:

\[ Y = 8.05 - 1.01X_1 + 2.23X_2 - 1.41X_3 - 0.26X_4 \]

where \( Y \) was the estimated value of vocabulary gain,
\( X_1 \) was the value of the predictor variable of gender,
\( X_2 \) was the value of the predictor variable of race
\( X_3 \) was the value of the predictor variable of treatment group, and
\( X_4 \) was the value of the predictor variable of *ITBS* scores.

Likewise, Hypothesis 8 was analyzed using regression with the dependent
variable of writing gain and the independent variables of gender, race, treatment group,
and *ITBS* scores. Because none of the predictor variables proved to correlate to writing
gain, a predicting equation could not be formed from the unstandardized coefficients of
the regression data.

The .05 level of significance was used for all analyses. By using this level of
significance, the probability of a change in student performance being a chance
occurrence was less than five times in 100. Statistical computations were run using the
*Statistical Package for the Social Sciences (SPSS) for Windows.*
CHAPTER FOUR

Data Presentation

The purpose of this study was to investigate whether students would show gains in vocabulary knowledge through intensive vocabulary instruction and, if so, whether the students would then use the pretaught words in their compositions. Additionally, the study investigated whether students provided with the added component of explicit writing instruction would use more pretaught words in their compositions than students with vocabulary instruction alone.

Descriptive Analysis

A total of 87 students participated in the study. Of this number, 55% were male and 45% were female; 53% were Black and 47% were Caucasian. Within the group of students receiving intensive vocabulary instruction together with explicit writing instruction (Group A), 53% were male and 47% were female; 53% were Black and 47% were Caucasian. Within the group of students receiving intensive vocabulary instruction only (Group B), 58% were male and 42% were female; 53% were Black and 47% were Caucasian. Although there were more diverse percentages in individual class periods, the overall consistency of male/female and Black/Caucasian students was remarkable considering the sample size. Table 6 displays the demographic data associated with the five classes of students at the school selected for participation in this study.
Table 6

*Percentage of Students Within Treatment Groups*

<table>
<thead>
<tr>
<th></th>
<th>Gender</th>
<th></th>
<th>Race</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
<td>Black</td>
</tr>
<tr>
<td>Total Students</td>
<td>55%</td>
<td>45%</td>
<td>53%</td>
</tr>
<tr>
<td>Group A-Intensive Vocabulary and Writing</td>
<td>53%</td>
<td>47%</td>
<td>53%</td>
</tr>
<tr>
<td>1st Period</td>
<td>43%</td>
<td>57%</td>
<td>43%</td>
</tr>
<tr>
<td>2nd Period</td>
<td>80%</td>
<td>20%</td>
<td>50%</td>
</tr>
<tr>
<td>3rd Period</td>
<td>50%</td>
<td>50%</td>
<td>69%</td>
</tr>
<tr>
<td>Group B-Intensive Vocabulary Only</td>
<td>58%</td>
<td>42%</td>
<td>53%</td>
</tr>
<tr>
<td>4th Period</td>
<td>60%</td>
<td>40%</td>
<td>47%</td>
</tr>
<tr>
<td>6th Period</td>
<td>57%</td>
<td>43%</td>
<td>57%</td>
</tr>
</tbody>
</table>

Vocabulary posttest means for both Group A and Group B were adjusted to allow for pretest differences. There were 49 participants in Group A with a pretest mean of 2.31 and the posttest mean of 11.22. When adjusted, Group A posttest mean was calculated to be 11.04. There were 38 participants in Group B with a pretest mean of 1.97 and a posttest mean of 11.92. Group B adjusted posttest mean was calculated to be 12.16.

Writing posttest means for both Group A and Group B were also adjusted to allow for pretest differences. The pretest mean for the participants in Group A was 92.57 and the posttest mean was 103.14. The adjusted posttest mean for Group A was 103.01. The pretest mean for the participants in Group B was 92.24 and the posttest mean was 102.63. Group B adjusted posttest mean was 102.80. Vocabulary and writing data for both groups are presented in Table 7.
Table 7

*Vocabulary and Writing Data: Pretest, Posttest, and Adjusted Posttest*

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Pretest Means</th>
<th>Posttest Means</th>
<th>Adjusted Posttest Means</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Vocabulary</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Group A</td>
<td>49</td>
<td>2.31</td>
<td>11.22</td>
<td>11.04</td>
</tr>
<tr>
<td>Group B</td>
<td>38</td>
<td>1.97</td>
<td>11.92</td>
<td>12.16</td>
</tr>
<tr>
<td><strong>Writing</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Group A</td>
<td>49</td>
<td>92.57</td>
<td>103.14</td>
<td>103.01</td>
</tr>
<tr>
<td>Group B</td>
<td>38</td>
<td>92.24</td>
<td>102.63</td>
<td>102.80</td>
</tr>
</tbody>
</table>

The means of the vocabulary pretest and posttest for Group A were compared to compute the differences between the two variables. Participants in Group A showed a vocabulary pretest mean of 2.31 with a standard deviation of 1.50. The participants showed a vocabulary posttest mean of 11.22 with a standard deviation of 2.82. The difference in mean scores showed an increase of 8.91. Variability in the standard deviations for Group A was 1.32.

Likewise, the means of the vocabulary pretest and posttest for Group B were compared to compute the variables’ differences. Group B participants showed a vocabulary pretest mean of 1.97 with a standard deviation of 1.46. They showed a vocabulary posttest mean of 11.92 with a standard deviation of 3.68. The difference in mean scores showed an increase of 9.95. Variability in the standard deviations for
Group B was 2.22. This indicated that Group A vocabulary mean scores were less variable than Group B participants' mean scores. The vocabulary data for both groups are presented in Table 8.

Table 8

*Paired Samples t-Test: Vocabulary Data*

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>N</th>
<th>SD</th>
<th>SEM</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Group A</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pretest Vocabulary</td>
<td>2.31</td>
<td>49</td>
<td>1.50</td>
<td>.22</td>
</tr>
<tr>
<td>Posttest Vocabulary</td>
<td>11.22</td>
<td>49</td>
<td>2.82</td>
<td>.40</td>
</tr>
<tr>
<td><strong>Group B</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pretest Vocabulary</td>
<td>1.97</td>
<td>38</td>
<td>1.46</td>
<td>.24</td>
</tr>
<tr>
<td>Posttest Vocabulary</td>
<td>11.92</td>
<td>38</td>
<td>3.68</td>
<td>.60</td>
</tr>
</tbody>
</table>

The means of the writing pretest and posttest for Group A were compared to compute the differences between the two variables. Participants in Group A showed a writing pretest mean of 92.57 with a standard deviation of 15.14. Group A participants showed a writing posttest mean of 103.14 with a standard deviation of 15.52. The difference in mean scores indicated an increase of 10.57. Variability in the standard deviations for Group A was .38.

The means of the writing pretest and posttest for Group B were compared to compute the variables' differences. Group B participants showed a writing pretest mean of 92.24 with a standard deviation of 14.44. Group B showed a writing posttest mean of 102.63 with a standard deviation of 16.30. The difference in mean scores indicated an
increase of 10.39. Variability in the standard deviations for Group B was 1.86. This indicated that Group A writing mean scores were less variable than Group B participants' mean scores. The writing data for both groups are presented in Table 9.

Table 9

Paired Samples t-Test: Writing Data

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>N</th>
<th>SD</th>
<th>SEM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group A</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pretest Writing</td>
<td>92.57</td>
<td>49</td>
<td>15.14</td>
<td>2.16</td>
</tr>
<tr>
<td>Posttest Writing</td>
<td>103.14</td>
<td>49</td>
<td>15.52</td>
<td>2.22</td>
</tr>
<tr>
<td>Group B</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pretest Writing</td>
<td>92.24</td>
<td>38</td>
<td>14.44</td>
<td>2.34</td>
</tr>
<tr>
<td>Posttest Writing</td>
<td>102.63</td>
<td>38</td>
<td>16.30</td>
<td>2.64</td>
</tr>
</tbody>
</table>

Pearson correlation between the pretest vocabulary scores and the posttest vocabulary scores for Group A showed a correlation of .62. The correlation for pretest and posttest vocabulary measures for Group B also showed a correlation at .55. When the pretest and posttest writing measures for Group A and Group B were correlated, results also showed a strong correlation at .78 and .90 respectively. According to Crowl (1996), if two variables are correlated and the degree of relationship is significant, the associated margin of error is smaller. All four of the correlations proved to be statistically significant and are presented in Table 10.
Table 10

*Paired Samples Correlations: Vocabulary and Writing Data*

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Correlation</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Vocabulary</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Group A</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pretest Vocabulary &amp;</td>
<td>49</td>
<td>.62</td>
<td>.00**</td>
</tr>
<tr>
<td>Posttest Vocabulary</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Group B</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pretest Vocabulary &amp;</td>
<td>38</td>
<td>.55</td>
<td>.00**</td>
</tr>
<tr>
<td>Posttest Vocabulary</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Writing</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Group A</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pretest Writing &amp;</td>
<td>49</td>
<td>.78</td>
<td>.00**</td>
</tr>
<tr>
<td>Posttest Writing</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Group B</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pretest Writing &amp;</td>
<td>38</td>
<td>.90</td>
<td>.00**</td>
</tr>
<tr>
<td>Posttest Writing</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**p < .01**
Analysis of Quantitative Data

A one-way analysis of covariance (ANCOVA) was used to determine if there was a significant difference between the posttest means of Group A and Group B vocabulary acquisition and writing performance. A paired sample t-test was used to compare pretest to posttest performance in vocabulary and writing scores for both Group A and Group B. Regression analysis was used to determine if gender, race, and ITBS composite scores may have affected the difference in pretest and posttest scores for vocabulary and writing quality.

Eight null hypotheses were tested in this study.

Hypothesis 1: At the end of a 12-week treatment period, there is no significant difference in the number of target words learned by students taught by intensive vocabulary instruction together with explicit writing instruction (Group A) and students taught by intensive vocabulary alone (Group B).

In order to determine whether there was a significant difference in the number of target words learned by the students in Group A and the students in Group B, the adjusted posttest means of the TOWL-3 vocabulary subtest were tested for significant difference through a one-way analysis of covariance. There proved to be no significant difference in the adjusted vocabulary posttest means between Group A and Group B. Therefore, Hypothesis 1 was accepted.

Hypothesis 2: At the end of a 12-week treatment period, there is no significant difference in the quality of spontaneously written compositions of students taught by intensive vocabulary instruction together with explicit writing
instruction (Group A) and students taught by intensive vocabulary alone (Group B).

In order to determine whether there was a significant difference in the gains in writing quality by the students in Group A and the students in Group B, the adjusted posttest means of the TOWL-3 overall writing measure were also tested for significant difference using a one-way analysis of covariance. As with the adjusted vocabulary posttest means, no significant difference was shown in the adjusted writing posttest means between Group A and Group B. Therefore, Hypothesis 2 was accepted.

Hypothesis 3: At the end of a 12-week treatment period, there is no significant pretest to postest gain in the number of target words learned for Group A.

In order to determine if there was a significant difference in pre to post gain in the number of target words learned for Group A, a paired sample t-test was used to compare the scores. An increase of 8.92 in pretest to posttest vocabulary performance was found for Group A and is presented in Table 11. This increase was statistically significant ($p < .01$); therefore, Hypothesis 3 was rejected.
**Hypothesis 4:** At the end of a 12-week treatment period, there is no significant pretest to posttest gain in the number of target words learned for Group B.

In order to determine if there was a significant difference in pretest to posttest gain in the number of target words learned for Group B, a paired sample t-test was used to compare the scores. Table 12 shows an increase of 9.95 in pretest to posttest writing performance for Group B. Because there was a significant difference in pretest to posttest performance ($p < .01$), Hypothesis 4 was rejected.
Hypothesis 5: At the end of a 12-week treatment period, there is no significant pretest to posttest gain in the quality of spontaneously written compositions for Group A.

In order to determine if there was a significant difference in pretest to posttest gain in the quality of spontaneously written compositions for Group A, a paired sample t-test was used to compare the scores. An increase of 10.57 in pretest to posttest writing performance was found for Group A and is presented in Table 13. This increase was statistically significant \((p < .01)\); therefore, Hypothesis 5 was rejected.

Table 13

*Paired Differences: Writing Data for Group A*

<table>
<thead>
<tr>
<th></th>
<th>Mean Differences</th>
<th>SD</th>
<th>df</th>
<th>t</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pretest Vocabulary</td>
<td>-10.57</td>
<td>10.14</td>
<td>48</td>
<td>-7.30</td>
<td>.00**</td>
</tr>
<tr>
<td>Posttest Vocabulary</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\*\*\* \(p < .01\)

Hypothesis 6: At the end of a 12-week treatment period, there is no significant pretest to posttest gain in the quality of spontaneously written compositions for Group B.

In order to determine if there was a significant difference in pretest to posttest gain in the quality of spontaneously written compositions for Group B, a paired sample t-test was again used to compare the scores. Table 14 shows an increase of 10.39 in pretest to posttest writing performance for Group B.
Because there was a significant difference in pretest to posttest performance

\((p < .01)\), Hypothesis 6 was rejected.

Table 14

*Paired Differences: Writing Data for Group B*

<table>
<thead>
<tr>
<th></th>
<th>Mean Differences</th>
<th>SD</th>
<th>df</th>
<th>t</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pretest Vocabulary</td>
<td>-10.39</td>
<td>7.17</td>
<td>37</td>
<td>-8.94</td>
<td>.00**</td>
</tr>
<tr>
<td>Posttest Vocabulary</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**p < .01

Hypothesis 7: There are no significant relationships among the
dependent variable, pretest to posttest gain in vocabulary, and the independent
variables of gender, race, treatment group, and 7th grade ITBS composite scores.

Regression analysis was used in order to determine if there were significant
relationships between the dependent variable, vocabulary pretest to posttest gain, and
the independent variables of gender, race, treatment group, and/or ITBS scores.
The data depicted in Table 15 allowed the researcher to determine if each
independent variable was a significant predictor of vocabulary gain. Since
gender, race, and treatment group were all categorical data, these variables were
dummy coded. Female gender was coded as 1; male gender was coded as 2.
Black students were coded as 1; Caucasian students were coded as 2. Group A
was coded as 1; Group B was coded as 2. Scores from ITBS were interval data
and displayed equal units of measurement; therefore, no coding was necessary.
The standardized coefficients indicated that the independent variable of race was
the only variable with any positive strength of relation to vocabulary gain. Race
remained statistically significant \((p < .01)\) when controlling for the effects of the other variables.

Table 15

*Summary of Simultaneous Regression Analysis for Variables Predicting Vocabulary Gain (\(N = 87\))*

<table>
<thead>
<tr>
<th>Variables</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(B)</td>
<td>(SE B)</td>
</tr>
<tr>
<td>Constant</td>
<td>8.05</td>
<td>1.18</td>
</tr>
<tr>
<td>Gender</td>
<td>-1.01</td>
<td>.73</td>
</tr>
<tr>
<td>Race</td>
<td>2.23</td>
<td>.76</td>
</tr>
<tr>
<td>Treatment Group</td>
<td>-1.41</td>
<td>.73</td>
</tr>
<tr>
<td>ITBS Scores</td>
<td>-03.26</td>
<td>.02</td>
</tr>
</tbody>
</table>

*Note. \(R^2 = .230\) (** \(p < .01\))*

Table 16 presents the significance of the overall regression model. When the predictor variables of race, gender, treatment group, and *ITBS* scores were combined to determine if they could explain a statistically significant portion of the variance in vocabulary gain, results showed significance at \(< .01\). Because the relationship between vocabulary gain and the combined independent variables of race, gender, treatment group, and *ITBS* scores is statistically significant, Hypothesis 7 was rejected.
Table 16

Analysis of Variance Results for Variables Predicting Vocabulary Gain

<table>
<thead>
<tr>
<th>Model</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>272.32</td>
<td>4</td>
<td>68.08</td>
<td>6.12</td>
<td>.00**</td>
</tr>
<tr>
<td>Residual</td>
<td>911.60</td>
<td>82</td>
<td>11.18</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>1183.92</td>
<td>86</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**p < .01

Hypothesis 8: There are no significant relationships among the dependent variable, pretest to posttest gain in overall writing quotient, and the independent variables of gender, race, treatment group, and 7th grade ITBS composite scores.

Regression analysis was also used to determine if there were significant relationships between the dependent variable, writing pretest to posttest gain, and the independent variables of gender, race, treatment group, and/or ITBS scores. Analysis revealed that none of the predictor variables of gender, race, treatment group, or ITBS scores were correlated to writing gain. An analysis of each independent variable was studied to determine if any were a significant predictor of writing gain; none were indicated. When the predictor variables of race, gender, treatment group, and ITBS scores were combined to determine if they could explain a statistically significant portion of the variance in writing gain, no statistical significance was shown. This indicated that the overall
regression model was not statistically significant; therefore, Hypothesis 8 was accepted.

Further Interpretation

Although statistical analysis showed no significant differences in the adjusted posttest means between the students in Group A and Group B, further interpretation showed some interesting results. One of the advantages of collecting data at five different intervals was for the opportunity to track the number of target words the students integrated in their writing. The researcher hoped that the students would show a steady increase in the number of target words used and that the students in the group with explicit writing instruction (Group A) would show more of an increase in the number of target words used than the students in the group with vocabulary instruction only (Group B).

The acceptance of Hypothesis 1 indicated that students increased their new knowledge of target words regardless of the instruction group to which they belonged. Both groups made gains in new word knowledge. The acceptance of Hypothesis 2 also indicated that there was no significant difference in the gains in writing quality regardless of which instruction group the students were in; the quality of students' writing compositions improved in both groups. However, the number of students who showed a continual increase in the number of target words used for each repeated measure confirmed different results.

Initially, the number of students showing the greatest increase in the number of target words used from the first to the second repeated measure was in Group B. Of the 38 students in this group, 30 of them increased the number of target words used in their
essays while only 28 of the 49 students in Group A showed an increase the number of target words used in their essays. Thereafter, both groups had a similar number of students who increased the number of target words used in their essays from the second to the third repeated measure and from the third to the fourth repeated measure. Group A, however, showed three times the number of students who increased in the continual usage of target words in their essays from the first to the last repeated measure. These results are depicted in Table 17.

Table 17

*Number of Students Showing a Continual Increase in Number of Target Words Used in Repeated Measures*

<table>
<thead>
<tr>
<th></th>
<th>Group A</th>
<th>Group B</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$N = 49$</td>
<td>$N = 38$</td>
</tr>
<tr>
<td>Students Showing an Increase in Words Used from 1st to 2nd Measure</td>
<td>28 (57%)</td>
<td>30 (79%)</td>
</tr>
<tr>
<td>Students Showing an Increase in Words Used from 2nd to 3rd Measure</td>
<td>28 (57%)</td>
<td>21 (55%)</td>
</tr>
<tr>
<td>Students Showing an Increase in Words Used from 3rd to 4th Measure</td>
<td>30 (61%)</td>
<td>26 (68%)</td>
</tr>
<tr>
<td>Students Showing a Continual Increase in Words Used from 1st to 4th Measure</td>
<td>12 (24%)</td>
<td>4 (11%)</td>
</tr>
</tbody>
</table>

The overall number of words used by students in Group A for each of the repeated measures is shown in Figure 1. Students in Group A used none of the targeted words in the pretest measure. Thereafter, they used 164 of the target words in the first measure, 202 of the targeted words in the second measure, 224 of the target words in the third measure, and 229 of the targeted words in the fourth (posttest) measure.
The overall number of words used by students in Group B for each of the repeated measures is shown in Figure 2. Students in Group B also used none of the targeted words in the pretest measure. These students used 96 of the targeted words in the first measure, and 156 of the targeted words in the second measure. The third measure showed a decline to 146 of the targeted words used, but students used 164 of the targeted words in the fourth (posttest) measure.

Figure 1. Target Words Used by Group A
Figure 2. Target Words Used by Group B
CHAPTER FIVE

Findings, Conclusions, and Recommendations

The purposes of this study were to investigate (a) whether students would show gains in vocabulary knowledge through intensive vocabulary instruction, (b) whether students would use the newly learned words in their written compositions, (c) whether students with explicit writing instruction would use more target words in their writing than students with vocabulary instruction alone, and (d) whether students with explicit writing instruction would show more gains in the quality of spontaneously written compositions, based upon student performance on the Test of Written Language (TOWL-3).

The sample for this study was drawn from a rural public school located in northern Louisiana. Eighth grade students were the focus of this study because of their required participation in the Louisiana State Department of Education's high stakes testing. This testing includes a major writing component that strongly influences whether 8th grade students are promoted to the next grade or are retained in the current grade.

Five intact groups were used to conduct the study. All five classes in the study were provided with the same intensive vocabulary instruction, but three of the classes
received additional writing instruction (Group A) while the other two classes received vocabulary instruction alone (Group B). The treatment period spanned twelve weeks of instruction which was divided into four cycles. As described in Chapter Four and depicted in Table 3 of that chapter, each cycle included three weeks of instruction with a repeated measure administered at the end of each cycle to allow for further interpretations. The TOWL-3 was used as both the pretest and the posttest instrument.

The null hypotheses for this study were tested at the .05 level of significance. Analyses were performed for any statistically significant differences found using ANCOVA, Pearson correlations, paired sample *t-tests*, and linear regression.

Findings

As a result of the data analysis, the following is a summary of the findings:

1. Students in Group A, who were taught vocabulary together with explicit writing instruction, showed no significant difference in the number of target words learned than students in Group B, who received vocabulary instruction alone.

2. Students in Group A, who were taught vocabulary together with explicit writing instruction, showed no significant difference in the quality of spontaneously written compositions than students in Group B, who received no explicit writing instruction.

3. Students in both Group A and Group B showed significant differences in pretest to posttest gain in the number of target words learned during the intervention period.
4. Students in both Group A and Group B showed significant differences in pretest to posttest gain in the quality of spontaneously written compositions during the intervention period.

5. Race was the only variable to show a significant relationship to vocabulary gain in this study.

6. The variables of gender, race, treatment group and ITBS composite scores had no significant relationship to the pretest to posttest gain in the quality of spontaneously written compositions.

As a result of further interpretations, the following is a summary of the findings:

1. Students in both Group A and Group B showed initial improvement in the number of target words used in their written compositions during the repeated measures.

2. Students in Group A continued to show improvement in the number of target words used during the repeated measures while students in Group B did not.

3. Group A contained three times the number of students who increased in the continual usage of target words in their essays from the first to the last repeated measure than Group B.

Discussion

In Chapter Two, a review of the literature pertaining to word learning and vocabulary development in the school setting was presented. The review also examined how writing performance can be enhanced through an effective vocabulary program.

The literature tells that even if students who are less-skilled in reading are motivated to read, they will continue to struggle in gaining the breadth and depth of
word knowledge of their stronger-skilled classmates (Beck & McKeown, 1996).
Because the potential of increasing vocabulary through reading is significantly
weakened for less able readers, it is unlikely that these children will gain Tier Two word
knowledge independently. As reported in both Chapters Two and Three, Tier Two
words consist of high frequency words that are of general utility for the mature
language user. They are not specific to any one domain of learning. Beck, McKeown,
and Omanson (1987) contended that it is toward the second tier of words that the most
useful instructional efforts should be directed. Therefore, one of the reasons this study
was conducted was to investigate the results of specifically teaching Tier Two words to
determine if significant gains in word knowledge would be revealed.

Beck, McKeown, and Omanson (1987) also believed that providing a conceptual
framework for just 40% of Tier Two words would appreciably contribute to an
individual’s verbal performance. They indicated that students will learn what words
mean if specific instruction is given for this to happen (Beck & McKeown, 1983).

Additionally, Stahl (1999) contended that instructors of vocabulary should use a
variety of deliveries. Stahl’s model of effective vocabulary instruction included the
active involvement of the students during word learning, and multiple exposures to the
meanings of the words being studied. Stahl stated that students should be presented with
more than just a definition of a word if they are to know the word’s meaning.

In terms of increased vocabulary knowledge, it was encouraging to find that the
teaching strategies used in this study, (i.e., contextual and direct instruction of
vocabulary as a prewriting strategy, multiple exposures to the vocabulary, opportunities
to use vocabulary outside of the classroom, mnemonic devices, etc.) as well as the
results, were consistent with the literature. The data revealed students in both groups showed significant gains in pretest to posttest vocabulary knowledge as a result of the vocabulary intervention.

Another finding supported by the literature was that intensive vocabulary instruction as a prewriting strategy would result in an increase of word knowledge and quality of written essays. Duin and Graves (1986, 1987) informed that not only do mature vocabulary word choices increase the judgments of the quality of writing; they are also more predictive of an increased score than measures of maturity in sentence structure. In terms of writing performance, the data confirmed that students in both groups showed significant gains in pretest to posttest performance in writing quality.

Additional findings from the data analysis show that there were no significant differences in the number of taught words learned by students between groups nor were there any significant differences in the quality of written compositions between groups. Although these findings were contrary to what might have been expected, they support the literature and offer support for the premise that no method has been proven superior over another. Even so, there is an added edge to instruction that incorporates a variety of strategies, as well as an advantage to multiple exposures to the taught words (Beck & McKeown, 1996).

Findings from regression analysis of the data showed the variable of race to have a significant relationship to vocabulary pretest to posttest gain. None of the other independent variables showed significance. Even when controlling for the effects of the other independent variables, race remained statistically significant. The positive
correlation of race to posttest vocabulary scores indicates that race may have an implication for students' performance in vocabulary gain.

Interpretations of the data gathered from the use of the repeated measures revealed several findings that were supported by the literature. Blachowicz and Fisher (2002) contended that when one wants to know about students' ability to use a new term correctly, flexibly, and richly, assessment through use is the only answer. The act of repeatedly measuring writing performance at the end of each teaching cycle allowed the researcher to collect data concerning whether the students could correctly use the taught words in their writing as well as to what extent the words were used. Although there were no significant differences in the quality of written compositions between students in Group A and Group B, there were differences in the number of taught words used in writing. This suggests that the students who received explicit writing instruction in how to use target words in their compositions did so more consistently than did the students who received vocabulary instruction without the added component of writing instruction.

Students in Group A showed a great initial improvement with slightly less dramatic improvement between the second to third and third to fourth measures. Likewise, students in Group B showed a great initial use of words; however, Group B declined from the second to the third measure before showing a final increase on the last repeated measure. Anecdotal journal comments from the teacher administering the interventions indicated that students from Group B became very bored with the process of the vocabulary lessons. This "fatigue factor" may account for the decline in words
used. Students from Group A, who had the added writing instruction, did not complain about boredom, which may account for the steady increase in words used.

Other data that were of interest in this study were the correlation between the students' overall writing quotient on the TOWL-3 testing instrument and the English Language Arts portion of the LEAP 21 (Louisiana Educational Assessment Program for the 21st Century). Findings showed a correlation of .698 for students in Group A (Table 18) and a correlation of .731 for students in Group B (Table 19). This confirms that the researcher's scoring of the instrument used in this study was in keeping with the state of Louisiana's scoring of the LEAP 21. This means that a student's overall writing quotient on the TOWL-3 could be indicative of how that student might score on the LEAP 21. Such knowledge could prove to be valuable as teachers prepare their students for high stakes testing in Louisiana schools.

Table 18

*Pearson's Correlation of TOWL-3 Overall Writing and LEAP 21 for Group A*

<table>
<thead>
<tr>
<th></th>
<th>TOWL-3 (Overall Writing)</th>
<th>LEAP 21 (ELA)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>TOWL-3</strong></td>
<td>Pearson Correlation 1</td>
<td>.70**</td>
</tr>
<tr>
<td>(Overall Writing)</td>
<td>Sig. (2-tailed) .00</td>
<td>.00</td>
</tr>
<tr>
<td></td>
<td>N 49</td>
<td>49</td>
</tr>
</tbody>
</table>

| **LEAP 21**  | Pearson Correlation .70** | 1             |
| (ELA)        | Sig. (2-tailed) .00        | 49            |
|              | N 49                     | 49            |

**p < .01**
Table 19

*Pearson’s Correlation of TOWL-3 Overall Writing and LEAP 21 for Group B*

<table>
<thead>
<tr>
<th></th>
<th>TOWL-3 (Overall Writing)</th>
<th>LEAP 21 (ELA)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>TOWL-3</strong> (Overall Writing)</td>
<td>Pearson Correlation 1</td>
<td>.73**</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.00</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>38</td>
</tr>
<tr>
<td><strong>LEAP 21</strong> (ELA)</td>
<td>Pearson Correlation .73**</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.00</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>38</td>
</tr>
</tbody>
</table>

**p < .01**

**Conclusions**

The basic assumption that guided this research project was that students who had explicit writing instruction in addition to intensive vocabulary instruction would show a significant difference in performance, as measured by the *TOWL-3*, than those students who received vocabulary instruction alone. Few conclusions can be made on the basis of this study alone due to the lack of significant differences found in the results between the two groups. However, some conclusions seem apparent and are as follows:

1. When intensive vocabulary instruction is provided for students and that instruction includes active processing through class discussion, conceptual development, and multiple exposures, students will show an increase in the number of words they learn.

2. When students are explicitly taught ways to use new vocabulary words in their writing, they will show a continual increase in the number of words they use. In addition, students will use the words correctly in context.
Recommendations

The following recommendations are presented to be considered for further research or future practice:

1. This study should be repeated with other grades that are also included in Louisiana's high stakes testing years.

2. Because of mixed correlational results, this study should be repeated using criteria other than gender, race, treatment group, and ITBS scores.

3. If this study is replicated, it is recommended that the picture prompt be changed at each repeated measure.

4. Broadening the writing component to include technology and online communication could improve the results.

5. Extending the activities of the out-of-classroom component could improve the results.

6. This study should be repeated in other states to determine if the correlation between the testing instrument and the state instrument show similar results to the correlation in this study.

7. Based on the findings of this study, it is recommended that schools consider implementing an intensive vocabulary program with explicit writing instruction into the curriculum.

This study has contributed to the body of knowledge in vocabulary and writing instruction by confirming many of the studies that have been conducted in the past, but also by proving that students can and will learn vocabulary words when they are taught through a structured vocabulary program. Using the targeted vocabulary as the words of
choice may be evident in students' writing as quickly as the first assessment if they are taught explicitly how to use the words in context. More profound than this, students will continue to use the targeted words in their writing if instruction is maintained on a regular basis.
REFERENCES


Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

Vidal, S. (1977, January). *Regression is a univariate general linear model subsuming other parametric methods as special cases*. Presented at the Southwest Educational Research Association, Austin, TX: Texas A & M.


APPENDIX A

Baumann Personal Communication
In a personal communication from November 21, 2001, Dr. James F. Baumann, professor of Reading Education at the University of Georgia, acknowledged:

You are pursuing an intriguing topic for your dissertation, and I, like Ed [referring to Edward Kame'enui], am unaware of any studies that have looked directly at links between vocabulary instruction and writing performance. Sorry I can't be more help, but sometimes it's a good sign if one is not finding much extant research, for it opens the door for a highly significant and needed dissertation.
APPENDIX B

Stahl Personal Communication
In a personal communication from November 12, 2001, Dr. Steven A. Stahl, a principal investigator for the National Reading Research Center and director of the Reading Clinic at the University of Georgia, reflected:

I have been wracking my brain. I think that there are maybe one or two studies with a writing dependent measure, but, if so, they are obscure or fairly old. I think that you are in virgin territory. I also think that your hypothesis, that vocabulary knowledge will improve writing is a good one. I think you need some sensitive measures of writing. Holistic assessments may not work (although I would still use one) because they are too rough. You need to do a bit of thinking about the measures.
APPENDIX C

Test of Written Language 3rd Edition (TOWL-3)

and Permission for Use
SUBTEST 1. Vocabulary

Example: ran

Score

1. buffoon

2. lambaste

3. lackadaisical

4. plethora

5. generalize

6. balm

7. carnivore

8. obtuse

9. glutton
10. lament

11. tenacious

12. panache

13. veer

14. accolades

15. patriarch

16. callous

17. despot

18. procrastinate

19. ubiquitous

20. abyss
21. incite

22. brouhaha

23. egalitarian

24. alienate

25. debacle

26. shoddy

27. pacifist

28. fickle

Raw Score
### SUBTEST 4. Logical Sentences

<table>
<thead>
<tr>
<th>Examples</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>The cow barked.</td>
<td>1. I see lots of stars in the sky during the day.</td>
</tr>
<tr>
<td>The TV said it would rain.</td>
<td>2. Roy drank his popcorn.</td>
</tr>
<tr>
<td>They ran across the lake.</td>
<td>3. Tammy was sad, so she laughed.</td>
</tr>
<tr>
<td>______________________</td>
<td>______________________</td>
</tr>
<tr>
<td>______________________</td>
<td>______________________</td>
</tr>
<tr>
<td>______________________</td>
<td>______________________</td>
</tr>
<tr>
<td>______________________</td>
<td>______________________</td>
</tr>
<tr>
<td>______________________</td>
<td>______________________</td>
</tr>
<tr>
<td>______________________</td>
<td>______________________</td>
</tr>
<tr>
<td>______________________</td>
<td>______________________</td>
</tr>
<tr>
<td>______________________</td>
<td>______________________</td>
</tr>
<tr>
<td>______________________</td>
<td>______________________</td>
</tr>
<tr>
<td>______________________</td>
<td>______________________</td>
</tr>
</tbody>
</table>

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.
<table>
<thead>
<tr>
<th>Example</th>
<th>Tom is big. Tom is a man.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Score</td>
<td></td>
</tr>
<tr>
<td>1.</td>
<td>She jumped. She ran.</td>
</tr>
<tr>
<td>2.</td>
<td>His tie is brown. His tie is yellow.</td>
</tr>
<tr>
<td>3.</td>
<td>Canada is a country. It is in the northern hemisphere.</td>
</tr>
<tr>
<td>4.</td>
<td>Bill had a penny. He put it in a bank.</td>
</tr>
<tr>
<td>5.</td>
<td>Tim drives fast. He has a red car.</td>
</tr>
<tr>
<td>6.</td>
<td>The cat is small. The cat is white.</td>
</tr>
<tr>
<td>7.</td>
<td>The leaves fell off the tree. It was autumn.</td>
</tr>
<tr>
<td>8.</td>
<td>The boys are older. The boys are playing.</td>
</tr>
<tr>
<td>9.</td>
<td>The dogs were angry. They began to bark.</td>
</tr>
<tr>
<td>10.</td>
<td>Kathy has a hat. It is blue. She wears it at night.</td>
</tr>
<tr>
<td>11.</td>
<td>The girls are tall. The girls play ball.</td>
</tr>
<tr>
<td>12.</td>
<td>I saw the fence. It was painted white. The fence went around the yard.</td>
</tr>
</tbody>
</table>
August 20, 2002

Denise Moseley
2273 Columbia 21
Taylor, AR 71861

Dear Ms. Moseley:

We received your request concerning the TOWL-3 and permission to reprint portions for the sole purpose of including in your dissertation and to be made available to the scholarly public. PRO-ED, Inc. is allowing you to copy the following:


Please contact me with any questions or further requests at 800-897-3202, extension 668 or by e-mail at awaldrop@proedinc.com.

Sincerely,

Amber Waldrop
Data and Materials Manager
Test Development
APPENDIX D

Study Information for Human Use Review Committee
Title:
"The Effects of Vocabulary Instruction on Writing Quality"

Researcher:
Denise Moseley

Department:
Louisiana Education Consortium/Dissertation Proposal

Purpose of the Study:
The proposed study seeks to determine how the effects of direct vocabulary instruction prior to writing will influence word choice in students' writing performance.

Participants:
Eighth grade students enrolled in ________ Junior High School in ________, Louisiana.

Procedure:
Data for this study will be collected during the first 6-8 weeks of the 2002-2003 calendar school year. The participating teacher will be in-serviced in how to administer the pretest and posttest as well as how to instruct the vocabulary lessons. Steps for the process include the following:

- In-service for participating teacher to explain the nature and purpose of the investigation, the time sequence and lesson construction, pretest and posttest procedures, and confidentiality issues.
- Researcher will collect previous testing data from school records for student profiles.
- Teacher will administer the pretest instrument.
- Teacher will instruct students in vocabulary and writing lessons during the intervention period.
- Teacher will maintain a journal documenting thoughts and reflections.
- Teacher will compile samples of student work in individual, coded portfolios. The samples will consist of work completed as a result of the intervention activities.
- At the conclusion of the intervention period, the teacher will administer the posttest instrument.
- The researcher will periodically visit in the classroom and meet with the teacher outside of school time to discuss the study.
- Once data collection is completed, the researcher will examine and analyze the results.

NOTE: Permission for all data collection and analysis will be requested from the ________ Parish School Board Office, the principal of the ________ Junior High School, the participating teacher at ________ High School as well as the parents of the eighth grade students.

Instruments and Measures to Insure Protection of Confidentiality, Anonymity:
All students will participate in the activities planned for the classrooms; however, only the data from those students who have returned signed consent forms will be used in data analysis. Any reflections or responses of the participants or teacher will be analyzed and reported without disclosing names. Participants' names will be coded with a number that will be used on all reports of the results of this study.

Risks/Alternatives Treatments:
There are no risks associated with participation in this study.
Benefits/Compensations:
None

Safeguards of Physical and Emotional Well-Being:
Data will not be collected until the dissertation proposal is approved by the Doctoral Committee and permission is secured from the Human Use Committee of Louisiana Tech University. Any individual who has questions about the study will have the opportunity to pose them to the researcher or to the Human Use Review Committee. No penalty will be imposed for any participant who wishes to withdraw from the investigation.
APPENDIX E

Permission from the Superintendent
Dear Mr. _________,

I am requesting permission to collect data from eighth grade students at _________ Junior High School. Your signature is separate from the signatures that must also be obtained from the principal, teacher, and parents who wish to let their children participate in the study. Information pertaining to the study is listed below:

**Title:**
“The Effects of Vocabulary Instruction on Writing Quality”

**Researcher:**
Denise Moseley

**Department:**
Louisiana Education Consortium/Dissertation Proposal

**Purpose of the Study:**
The proposed study seeks to determine how the effects of direct vocabulary instruction prior to writing will influence word choice in students’ writing performance.

**Participants:**
eighth grade students enrolled in _________ Junior High School in _________, Louisiana.

**Procedure:**
Data for this study will be collected during the first 6-8 weeks of the 2002-2003 calendar school year. The participating teacher will be in-serviced in how to administer the pretest and posttest as well as how to instruct the vocabulary lessons. Steps for the process include the following:

- In-service for participating teacher to explain the nature and purpose of the investigation, the time sequence and lesson construction, pretest and posttest procedures, and confidentiality issues.
- Researcher will collect previous testing data from school records for student profiles.
- Teacher will administer the pretest instrument.
- Teacher will instruct students in vocabulary and writing lessons during the intervention period.
- Teacher will maintain a journal documenting thoughts and reflections.
- Teacher will compile samples of student work in individual, coded portfolios. The samples will consist of work completed as a result of the intervention activities.
- At the conclusion of the intervention period, the teacher will administer the posttest instrument.
- The researcher will periodically visit in the classroom and meet with the teacher outside of school time to discuss the study.
- Once data collection is completed, the researcher will examine and analyze the results.
- Results will be published in the researcher’s doctoral dissertation.

**Instruments and Measures to Insure Protection of Confidentiality, Anonymity:**
All students will participate in the activities planned for the classrooms; however, only the data from those students who have returned signed consent forms will be used in data analysis. Any reflections or responses of the participants or teacher will be analyzed and reported without disclosing names. Participants' names will be coded with a number that will be used on all reports of the results of this study.
Risks/Alternatives Treatments:
There are no risks associated with participation in this study.

Benefits/Compensations:
None

Safeguards of Physical and Emotional Well-Being:
Data will not be collected until the dissertation proposal is approved by the Doctoral Committee and permission is secured from the Human Use Committee of Louisiana Tech University. Any individual who has questions about the study will have the opportunity to pose them to the researcher or to the Human Use Review Committee. No penalty will be imposed for any participant who wishes to withdraw from the investigation.

Contact: The principal investigator listed below may be reached to answer any questions you may have about the research, participants’ rights, or related matters.

Denise Soileau Moseley 870-235-4152

The Human Use Committee may also be contacted if a problem cannot be discussed with the researcher.

Dr. Mary Livingston 318-257-4315
Dr. Terry McConathy 318-257-2924
Mrs. Margaret Nolan 318-257-5075

I, _______________________________, attest with my signature that I have read and understood the description of this study and its purposes and methods. I understand that my parish’s participation in this research is strictly voluntary. Further, I understand that we may withdraw our participation at any time or refuse to answer questions without penalty. Upon completion of the study, I understand that the results will be freely accessible only to the principal investigator, a legally appointed representative, or myself. I have not been requested to waive, nor do I waive any of my rights related to participating in this study. I also understand that this agreement is separate from the written agreement that must also be obtained from the teacher who agrees to participate in the study as well as the parental consent forms that must be obtained.

__________________________________________  __________________________
Superintendent’s Signature                  Date
APPENDIX F

Permission from the Principal
Dear ________,

I am requesting permission to collect data from eighth grade students at your school. Your signature is separate from the signatures that must also be obtained from the superintendent, teacher, and parents who wish to let their children participate in the study. Information pertaining to the study is listed below:

**Title:**
"The Effects of Vocabulary Instruction on Writing Quality"

**Researcher:**
Denise Moseley

**Department:**
Louisiana Education Consortium/Dissertation Proposal

**Purpose of the Study:**
The proposed study seeks to determine how the effects of direct vocabulary instruction prior to writing will influence word choice in students’ writing performance.

**Participants:**
Eighth grade students enrolled in ________ Junior High School in ________, Louisiana.

**Procedure:**
Data for this study will be collected during the first 6-8 weeks of the 2002-2003 calendar school year. The participating teacher will be in-serviced in how to administer the pretest and posttest as well as how to instruct the vocabulary lessons. Steps for the process include the following:

- In-service for participating teacher to explain the nature and purpose of the investigation, the time sequence and lesson construction, pretest and posttest procedures, and confidentiality issues.
- Researcher will collect previous testing data from school records for student profiles.
- Teacher will administer the pretest instrument.
- Teacher will instruct students in vocabulary and writing lessons during the intervention period.
- Teacher will maintain a journal documenting thoughts and reflections.
- Teacher will compile samples of student work in individual, coded portfolios. The samples will consist of work completed as a result of the intervention activities.
- At the conclusion of the intervention period, the teacher will administer the posttest instrument.
- The researcher will periodically visit in the classroom and meet with the teacher outside of school time to discuss the study.
- Once data collection is completed, the researcher will examine and analyze the results.
- Results will be published in the researcher’s doctoral dissertation.

**Instruments and Measures to Insure Protection of Confidentiality, Anonymity:**
All students will participate in the activities planned for the classrooms; however, only the data from those students who have returned signed consent forms will be used in data analysis. Any reflections or responses of the participants or teacher will be analyzed and reported without disclosing names. Participants’ names will be coded with a number that will be used on all reports of the results of this study.
Risks/Alternatives Treatments:
There are no risks associated with participation in this study.

Benefits/Compensations:
None

Safeguards of Physical and Emotional Well-Being:
Data will not be collected until the dissertation proposal is approved by the Doctoral Committee and permission is secured from the Human Use Committee of Louisiana Tech University. Any individual who has questions about the study will have the opportunity to pose them to the researcher or to the Human Use Review Committee. No penalty will be imposed for any participant who wishes to withdraw from the investigation.

Contact: The principal investigator listed below may be reached to answer any questions you may have about the research, participants’ rights, or related matters.

Denise Soileau Moseley 870-235-4152

The Human Use Committee may also be contacted if a problem cannot be discussed with the researcher.

Dr. Mary Livingston 318-257-4315
Dr. Terry McConathy 318-257-2924
Mrs. Margaret Nolan 318-257-5075

I, ____________________________________________, attest with my signature that I have read and understood the description of this study and its purposes and methods. I understand that my school’s participation in this research is strictly voluntary. Further, I understand that we may withdraw our participation at any time or refuse to answer questions without penalty. Upon completion of the study, I understand that the results will be freely accessible only to the principal investigator, a legally appointed representative, or myself. I have not been requested to waive, nor do I waive any of my rights related to participating in this study. I also understand that this agreement is separate from the written agreement that must also be obtained from the teacher who agrees to participate in the study as well as the parental consent forms that must be obtained.

__________________________________________  ____________________________
Principal’s Signature                      Date
APPENDIX G

Permission from the Teacher
Dear Mrs. __________,

I am requesting permission to collect data from the eighth grade students in your classroom. Your signature is separate from the signatures that must also be obtained from the superintendent, principal, and parents who wish to let their children participate in the study. You will be provided with a summary of this experiment at the end of the study. If you agree to this proposal, please sign below acknowledging your wish to participate. Information pertaining to the study is listed below:

**Title:**
"The Effects of Vocabulary Instruction on Writing Quality"

**Researcher:**
Denise Moseley

**Department:**
Louisiana Education Consortium/Dissertation Proposal

**Purpose of the Study:**
The proposed study seeks to determine how the effects of direct vocabulary instruction prior to writing will influence word choice in students' writing performance.

**Participants:**
Eighth grade students enrolled in __________ Junior High School in __________, Louisiana.

**Procedure:**
Data for this study will be collected during the first 6-8 weeks of the 2002-2003 calendar school year. The participating teacher will be in-serviced in how to administer the pretest and posttest as well as how to instruct the vocabulary lessons. Steps for the process include the following:
- In-service for participating teacher to explain the nature and purpose of the investigation, the time sequence and lesson construction, pretest and posttest procedures, and confidentiality issues.
- Researcher will collect previous testing data from school records for student profiles.
- Teacher will administer the pretest instrument.
- Teacher will instruct students in vocabulary and writing lessons during the intervention period.
- Teacher will maintain a journal documenting thoughts and reflections.
- Teacher will compile samples of student work in individual, coded portfolios. The samples will consist of work completed as a result of the intervention activities.
- At the conclusion of the intervention period, the teacher will administer the posttest instrument.
- The researcher will periodically visit in the classroom and meet with the teacher outside of school time to discuss the study.
- Once data collection is completed, the researcher will examine and analyze the results.
- Results will be published in the researcher's doctoral dissertation.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.
Instruments and Measures to Insure Protection of Confidentiality, Anonymity:
All students will participate in the activities planned for the classrooms; however, only the data from those students who have returned signed consent forms will be used in data analysis. Any reflections or responses of the participants or teacher will be analyzed and reported without disclosing names. Participants' names will be coded with a number that will be used on all reports of the results of this study.

Risks/Alternatives Treatments:
There are no risks associated with participation in this study.

Benefits/Compensations:
None

Safeguards of Physical and Emotional Well-Being:
Data will not be collected until the dissertation proposal is approved by the Doctoral Committee and permission is secured from the Human Use Committee of Louisiana Tech University. Any individual who has questions about the study will have the opportunity to pose them to the researcher or to the Human Use Review Committee. No penalty will be imposed for any participant who wishes to withdraw from the investigation.

Contact: The principal investigator listed below may be reached to answer any questions you may have about the research, participants' rights, or related matters.

Denise Soileau Moseley 870-235-4152

The Human Use Committee may also be contacted if a problem cannot be discussed with the researcher.

Dr. Mary Livingston 318-257-4315
Dr. Terry McConathy 318-257-2924
Mrs. Margaret Nolan 318-257-5075

I, ________________________________, attest with my signature that I have read and understood the description of this study and its purposes and methods. I understand that my participation in this research is strictly voluntary. Further, I understand that I may withdraw my participation at any time or refuse to answer questions without penalty. Upon completion of the study, I understand that the results will be freely accessible only to the principal investigator, a legally appointed representative, or myself. I have not been requested to waive, nor do I waive any of my rights related to participating in this study.

______________________________  __________________________
Teacher's Signature                Date
APPENDIX H

Permission from the Parent
The following is a brief summary of the research study in which your child is asked to participate. Please read this information before signing the statement below.

**Title:**
"The Effects of Vocabulary Instruction on Writing Quality"

**Researcher:**
Denise Moseley

**Department:**
Louisiana Education Consortium/Dissertation Proposal

**Purpose of the Study:**
The proposed study seeks to determine how the effects of direct vocabulary instruction prior to writing will influence word choice in students' writing performance.

**Participants:**
Eighth grade students enrolled in _______ Junior High School in _________, Louisiana.

**Procedure:**
Data for this study will be collected during the first 6-8 weeks of the 2002-2003 calendar school year. The participating teacher will be in-serviced in how to administer the pretest and posttest as well as how to instruct the vocabulary lessons. Steps for the process include the following:

- In-service for participating teacher to explain the nature and purpose of the investigation, the time sequence and lesson construction, pretest and posttest procedures, and confidentiality issues.
- Researcher will collect previous testing data from school records for student profiles.
- Teacher will administer the pretest instrument.
- Teacher will instruct students in vocabulary and writing lessons during the intervention period.
- Teacher will maintain a journal documenting thoughts and reflections.
- Teacher will compile samples of student work in individual, coded portfolios. The samples will consist of work completed as a result of the intervention activities.
- At the conclusion of the intervention period, the teacher will administer the posttest instrument.
- The researcher will periodically visit in the classroom and meet with the teacher outside of school time to discuss the study.
- Once data collection is completed, the researcher will examine and analyze the results.
- Results will be published in the researcher's doctoral dissertation.

**Instruments and Measures to Insure Protection of Confidentiality, Anonymity:**
All students will participate in the activities planned for the classrooms; however, only the data from those students who have returned signed consent forms will be used in data analysis. Any reflections or responses of the participants or teacher will be analyzed and reported without disclosing names. Participants' names will be coded with a number that will be used on all reports of the results of this study.

**Risks/Alternatives Treatments:**
There are no risks associated with participation in this study.
Benefits/Compensations:
None

Safeguards of Physical and Emotional Well-Being:
Data will not be collected until the dissertation proposal is approved by the Doctoral Committee and permission is secured from the Human Use Committee of Louisiana Tech University. Any individual who has questions about the study will have the opportunity to pose them to the researcher or to the Human Use Review Committee. No penalty will be imposed for any participant who wishes to withdraw from the investigation.

Contact: The principal investigator listed below may be reached to answer any questions you may have about the research, participants’ rights, or related matters.

Denise Soileau Moseley 870-235-4152

The Human Use Committee may also be contacted if a problem cannot be discussed with the researcher.

Dr. Mary Livingston 318-257-4315
Dr. Terry McConathy 318-257-2924
Mrs. Margaret Nolan 318-257-5075

I, ______________________________, attest with my signature that I have read and understood the description of this study and its purposes and methods. I understand that my child’s participation in this research is strictly voluntary. Further, I understand that I may withdraw my child’s participation at any time or refuse to answer questions without penalty. Upon completion of the study, I understand that the results will be freely accessible only to the principal investigator, a legally appointed representative, or myself. I have not been requested to waive, nor do I waive any of my rights related to participating in this study.

Parent’s Signature Date

Student’s Signature Date
APPENDIX I

List of Target Words
<table>
<thead>
<tr>
<th>PEOPLE</th>
<th>VERBS</th>
<th>DESCRIPTION</th>
<th>THINGS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cycle 1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>buffoon</td>
<td>cower</td>
<td>lackadasical</td>
<td>fiasco</td>
</tr>
<tr>
<td>dolt</td>
<td>lambaste</td>
<td>inept</td>
<td>plethora</td>
</tr>
<tr>
<td>scapegoat</td>
<td>wince</td>
<td>obtuse</td>
<td>chattel</td>
</tr>
<tr>
<td>underdog</td>
<td>procrastinate</td>
<td>taut</td>
<td></td>
</tr>
<tr>
<td>Cycle 2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>carnivore</td>
<td>embellish</td>
<td>voracious</td>
<td>cache</td>
</tr>
<tr>
<td>connoisseur</td>
<td>generalize</td>
<td>delectable</td>
<td>balm</td>
</tr>
<tr>
<td>glutton</td>
<td>behoove</td>
<td>gregarious</td>
<td>quandary</td>
</tr>
<tr>
<td></td>
<td></td>
<td>incessant</td>
<td>abyss</td>
</tr>
<tr>
<td></td>
<td></td>
<td>fickle</td>
<td></td>
</tr>
<tr>
<td>Cycle 3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>patriarch</td>
<td>abate</td>
<td>tenacious</td>
<td>enmity</td>
</tr>
<tr>
<td>magnate</td>
<td>lament</td>
<td>arduous</td>
<td>panache</td>
</tr>
<tr>
<td>despot</td>
<td>confiscate</td>
<td>callous</td>
<td>hierarchy</td>
</tr>
<tr>
<td>marauder</td>
<td>incite</td>
<td></td>
<td>brouhaha</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cycle 4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>egalitarian</td>
<td>reminisce</td>
<td>ubiquitous</td>
<td>adage</td>
</tr>
<tr>
<td>nemesis</td>
<td>veer</td>
<td>prudent</td>
<td>accolades</td>
</tr>
<tr>
<td>pacifist</td>
<td>fathom</td>
<td>shoddy</td>
<td>saga</td>
</tr>
<tr>
<td>crony</td>
<td>alienate</td>
<td></td>
<td>debacle</td>
</tr>
</tbody>
</table>
APPENDIX J

Sample of Worksheets, Vocabulary Cartoons, and Permission for Use
Worksheet for Cycle 1 Words

1. **buffoon** ______________________: a joker who amuses with jokes and tricks; a bumbling or ridiculous person; a fool.
   
   *Robin is a buffoon. At the party he stood on his head and sang ‘Jingle Bells.’*

2. **underdog** ______________________: a loser or predicted loser in a struggle or contest.
   
   *Some people find it more fun to root for the underdog in every sporting event.*

3. **chattel** ______________________: an item of personal, movable property; a slave.
   
   *Please do not order me around, Lady Boswell; I am neither your servant nor your chattel.*

4. **wince** ______________________: to flinch; to shrink back or start aside, as from a blow or pain.
   
   *Certain sounds, like the scratching of fingernails on chalk boards, seem to make most people wince.*

5. **lackadaisical** ______________________: showing lack of interest; listless.
   
   *Margaret’s lackadaisical attitude will hurt her chances of getting into college.*
Worksheet for Cycle 1 Words

1. Why might a person wince?

2. Why might a person act like a buffoon?

3. Why might someone be considered an underdog?

4. Why might one become lackadaisical?

5. Why might someone possess chattel?

6. Why might a person behave like a dolt?

7. Why might something turn into a fiasco?
BUFFOON
(buh FOON)
a joker who amuses with jokes and tricks; a bumbling or ridiculous person; a fool
Sounds like: BABOON

"A BUFFOON of a BABOON."

- Robin is a BUFFOON. At the party he stood on his head and sang *Jingle Bells*.
- A little BUFFOONERY sometimes is a welcome thing at a dull gathering.
- Uncle Jed warned his nephew that his BUFFOONISH behavior did not belong at the dinner table.
September 6, 2002

Sam or Bryan Burchers
314-C Tamiami Trail
Punta Gorda, FL 33950

Dear Bryan,

As per our phone conversation on September 6, 2002, I am sending you this letter for your signature of approval for copyright permission of your vocabulary cartoons.

My plans are to incorporate your cartoons as one component of my experimental study on vocabulary and writing in my doctoral dissertation. The study is to last for 12 weeks and I will be using approximately 90 cartoons (15 per 3 week cycle).

Results of the study will be published in my doctoral dissertation. I will be more than happy to share the results with you.

Please return this letter with your signed permission and what conditions, if any, apply.

Sincerely,

Denise Moseley

Permission Granted:  
Signature: [Signature]  
Date: 9/6/02

Conditions, if any:

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
APPENDIX K

Cycle One Teacher’s Guide
I. **WEEK ONE: DAY 1—Cycle 1 Words**

**Word Introduction:**

- Tell the class that this week they’re going to begin to learn some new words that will significantly increase their vocabulary base.
- Pass out worksheets.
- Tell the students that these sheets will go into vocabulary folders at the end of class. *“First we’ll go over the definitions of the words and then I’ll ask some questions about the words. We won’t be working with the sentences written in cursive. Those are for tomorrow.”*
- Read *buffoon* out loud.
- Ask students to pronounce the word after you.
- Read (or have a strong reader read) the definition for *buffoon*.
- Ask students to write *buffoon* on the blank line next to the word on the worksheet.
- Repeat the same procedure for *underdog, chattel, wince, lackadaisical, dolt,* and *fiasco*.
- Collect worksheets and put in them in the appropriate folder.

**Vocabulary Cartoon Activity:**

- “The next thing we’ll do with these new words is to view a cartoon and matching ‘link’ to help us remember their meanings.”
- Show each vocabulary cartoon on the overhead projector. Enjoy with the students the ridiculous nature of the cartoons.
- Read the sentences at the bottom of the cartoon and discuss the variations of the key word.
- Make anecdotal notes as appropriate in the Teacher Journal.

**WEEK ONE: DAY 2—Cycle 1 Words**

**Word Association Activity:**

- Redistribute the worksheets from yesterday’s lesson.
- “Today we’ll take a couple of minutes to review the new words that were introduced yesterday. While you look at the new words and their definitions, I’ll say a word or group of words. You think of the first ‘new word’ that comes to your mind. Raise your hand if you’d like to tell me the word.”
- Give the following associations, one at a time; then ask the student to justify *WHY* that answer was given. (You will be verbally reinforcing the definition when the student gives a justification.)

- “pain” (student will likely say *wince*)
- Say something like…, “Good, *WHY* do you say that wince goes with pain?”
• “a silly person” (student will likely say buffoon)
  Say something like…, “Good, WHY do you say buffoon goes with silly person?”

• “my stuff” (student will likely say chattel)
  Say something like…, “Good, WHY do you say chattel goes with my stuff?”

• “don’t really care” (student will likely say lackadaisical)
  Say something like…, “Good, WHY do you say lackadaisical goes with don’t really care?”

• “a long shot” (student will likely say underdog)
  Say something like…, “Good, WHY do you say underdog goes with long shot?”

• “stupid” (student will likely say dolt)
  Say something like…, “Good, WHY do you say dolt goes with stupid?”

• “failure” (student will likely say fiasco)
  Say something like…, “Good, WHY do you say failure goes with fiasco?”

**Sentence Writing Activity:**

• As a class, read the sentences written under each target word definition. Discuss what makes the word suitable for use in the sentence. Decide on a “class answer” and write it on the lines under the sentence. The answer does not have to necessarily restate the definition and different classes may come up with different answers. Choose whatever the class can agree upon as long as it is a plausible answer.

• For example, you will have a student read the sentence, “Robin is a buffoon. At the party he stood on his head and sang ‘Jingle Bells.”’ Then you might say something like…,”Why would you say ‘buffoon’ is a good word choice in this sentence?”

• Student will likely say something similar to the fact that only a ridiculous or foolish person would stand on his head and sing. Have students write on their worksheets the agreed upon answer to your question.

• Repeat the same procedure with the rest of the words.

• Collect the students' work and put it in the appropriate folder.

• Make anecdotal notes as appropriate in the Teacher Journal.
WEEK ONE: DAY 3—Cycle 1 Words

- "Let’s take a few minutes to review this week’s words and cartoons.” Go back over the words, definitions, and cartoons/links.
- Pass out copies of the vocabulary worksheets. Begin the worksheet with the class in the following way:
- Say, “Let’s do the first one together. Look at Question 1. Why might a person wince?”
- Continue with, “Wince means to flinch or to shrink back from a blow or pain, so why might a person wince? Maybe if they were being hit or if they were hurting or in pain.”
- Agree on an acceptable answer to this question, write it on the board, and have students copy it onto their worksheets.
- Ascertain that all students understand the task; then have them complete the worksheet independently.
- Collect the students’ work and put in the appropriate folder.

WEEK ONE: DAY 4—Cycle 1 Words

- “Let’s take a few minutes to review this week’s words and cartoons.” Go back over the words, definitions, and cartoons/links.
- Introduce the “Word of the Day” activity.
- This activity is used in a guessing game format. You will use the “secret word” in context sometime during the class period. For example, you might say, “Oh, I heard some kids using such poor grammar in the hall this morning that it made me wince.” Later in the period, you might say, “Don’t touch the things on my desk. You know that is my chattel!” In this way, the students are not sure which of the words you use is the “secret word.”

Vocabulary and Writing Classes (Group A):

- At the end of the period, students write a memo to you appropriately using the word they think is the answer within the memo.
- For example, a student may write a memo that looks like the following:

```
To: Mrs. Moseley
From: Jane Doe
RE: Word of the Day

This memo is to inform you that I believe the word of the day is chattel. You used the word when you told us not to touch the chattel on your desk. You said that because the things on your desk are your personal property.
```
Vocabulary Only Classes (Group B):

- At the end of the period, students write the week’s words on a card, correctly spelling them.
- The students then circle the word they think is the “secret word” and turn in their card as they leave the classroom.
- For example, a student’s card may look like the following:

<table>
<thead>
<tr>
<th>Name: Jane Doe</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Word of the Day Activity</td>
<td></td>
</tr>
<tr>
<td>1. buffoon</td>
<td>5. underdog</td>
</tr>
<tr>
<td>2. chattel</td>
<td>6. wince</td>
</tr>
<tr>
<td>3. lackadaisical</td>
<td>7. dolt</td>
</tr>
<tr>
<td>4. fiasco</td>
<td></td>
</tr>
</tbody>
</table>

- The “Word of the Week” approach trains students to be keen listeners.
- Today’s activity will simply be to model the approach for the students. The approach will be put into place during the following weeks’ instruction.
- Make anecdotal notes as appropriate in the Teacher Journal.

II. WEEK TWO: DAY 1—Cycle 1 Words

Word Introduction:

- Tell the class that this week they’re going to add some new words to last week’s list.
- Pass out worksheets.
- Tell the students that these sheets will go into vocabulary folders at the end of class. “First we’ll go over the definitions of the words and then I’ll ask some questions about the words. We won’t be working with the sentences written in cursive. Those are for tomorrow.”
- Read cower out loud.
- Ask students to pronounce the word after you.
- Read (or have a strong reader read) the definition for cower.
- Ask students to write cower on the blank line next to the word on the worksheet.
- Repeat the same procedure for procrastinate, obtuse, scapegoat, plethora, lambaste, inept, and taut.
- Collect worksheets and put in the appropriate folder.

Vocabulary Cartoon Activity:

- “The next thing we’ll do with these new words is to view a cartoon and matching ‘link’ to help us remember their meanings.”
- Show each vocabulary cartoon on the overhead projector. Enjoy with the
students the ridiculous nature of the cartoons.

- Read the sentences at the bottom of the cartoon and discuss the variations of the keyword.

**Word of the Week Hints:**

- Remember to drop “hints” using the week’s words in anticipation of Day Four’s memo/card submission.
- Make anecdotal notes as appropriate in the Teacher Journal.

**WEEK TWO: DAY 2—Cycle 1 Words**

**Word Association Activity:**

- Redistribute the worksheets from yesterday’s lesson.
- “Today we’ll take a couple of minutes to review the new words that were introduced yesterday. While you look at the new words and their definitions, I’ll say a word or group of words. You think of the first ‘new word’ that comes to your mind. Raise your hand if you’d like to tell me the word.”
- Give the following associations, one at a time; then ask the student to justify WHY that answer was given. (You will be verbally reinforcing the definition when the student gives a justification.)

- “slow thinker” (student will likely say obtuse)
- Say something like…, “Good, WHY do you say that obtuse goes with slow thinker?”

- “shrink up” (student will likely say cower)
- Say something like…, “Good, WHY do you say cower goes with shrink up?”

- “lots and lots” (student will likely say plethora)
- Say something like…, “Good, WHY do you say plethora goes with lots & lots?”

- “later” (student will likely say procrastinate)
- Say something like…, “Good, WHY do you say procrastinate goes with later?”

- “tight” (student will likely say taut)
- Say something like…, “Good, WHY do you say taut goes with tight?”

- “blame” (student will likely say scapegoat)
- Say something like…, “Good, WHY do you say scapegoat goes with blame?”

- “incompetent” (student will likely say inept)
- Say something like…, “Good, WHY do you say inept goes with incompetent?”
• "chew out" (student will likely say lambaste)
• Say something like..., "Good, WHY do you say lambaste goes with chew out?"

Sentence Writing Activity:
• As a class, read the sentences written under each target word definition. Discuss what makes the word suitable for use in the sentence. Decide on a "class answer" and write it on the lines under the sentence. The answer does not have to necessarily restate the definition and different classes may come up with different answers. Choose whatever the class can agree upon as long as it is a plausible answer.
• For example, you will have a student read the sentence, "The sound of the rusty door opening in the middle of the night made Sue cower behind her bed." Then you might say something like..., "Why would you say 'cower' is a good word choice in this sentence?"
• Student will likely say something similar to the fact that squeaky sounds in the night are usually frightening to a girl and they tend to huddle up and cry. Have students write on their worksheets the agreed upon answer to your question.
• Repeat the same procedures with the rest of the words then collect the students' work and put it in the appropriate folder.

Vocabulary and Writing Classes (Group A):
• Introduce the "Three Minute Meeting" activity.
• You will give the students a "3-Minute Meeting" out of class assignment card. On the card are the words you've selected for students to use in meaningful ways. Randomly choose a few students for meetings each day so that none are sure when they will be called.
• An example of the card might look like:

<table>
<thead>
<tr>
<th>Words</th>
<th>Comments and Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. buffoon</td>
<td></td>
</tr>
<tr>
<td>2. lackadaisical</td>
<td></td>
</tr>
<tr>
<td>3. procrastinate</td>
<td></td>
</tr>
<tr>
<td>4. plethora</td>
<td></td>
</tr>
<tr>
<td>5. inept</td>
<td></td>
</tr>
</tbody>
</table>
Vocabulary Only Classes (Group B):

- Introduce the “Three Minute Meeting” activity.
- You will give the students a “3-Minute Meeting” out of class assignment card. On the card are the words you’ve selected for students to use in meaningful ways. Randomly choose a few students for meetings each day so that none are sure when they will be called.
- The difference in these meetings and the ones for Group A is that these students will only discuss the words, their meanings, and situations where they may encounter the words. These students will not be required to provide you an example of the words in writing; however, they should still be encouraged to make notes on their cards to assist them in the discussion with you.

Word of the Week Hints:

- Remember to drop “hints” using the week’s words in anticipation of Day Four’s memo/card submission.
- Make anecdotal notes as appropriate in the Teacher Journal.

WEEK TWO: DAY 3—Cycle 1 Words

- “Let’s take a few minutes to review this week’s words and cartoons.” Go back over the words, definitions, and cartoons/links.
- Pass out copies of the vocabulary worksheets. Begin the worksheet with the class in the following way:
  - Say, “Let’s do the first one together. Look at Question 8. Why might one become a scapegoat?”
  - Continue with, “A scapegoat means that you are made the object of blame for others, so why might a person become a scapegoat? Maybe if they were being blamed for something they didn’t do so that others could get away with it.”
- Agree on an acceptable answer to this question, write it on the board, and have students copy it onto their worksheets.
- Ascertain that all students understand the task, and then have them complete the worksheet independently.
- Collect the students’ work and put in the appropriate folder.
- While students are completing the situational questions worksheet, conduct random 3-Minute Meetings. Collect cards and make anecdotal notes as appropriate.

WEEK TWO: DAY 4—Cycle 1 Words

- “Let’s take a few minutes to review this week’s words and cartoons.” Go back over the words, definitions, and cartoons/links.
**Vocabulary and Writing Classes (Group A):**

- Introduce the “Story Impressions” activity.
- “Story Impressions” is a technique that calls on students to survey a set of target words and get some general impressions about how they could fit into setting, characters, problem/goal, actions, resolution, and feeling.
- Put students into small groups and have them write a group paragraph explaining how each of the words could be incorporated into a story.
- Compare and contrast the stories to look for similarities and differences.
- After the groups read their paragraphs, refer back to the worksheets with the words and definitions to clarify meanings if necessary.
- An example of a paragraph using some target words follow. Target words are in italics:
  
  “We think the author could write a story that takes place in the past and is a famous **legend**. A **noble knight** could have to fight a **dragon**. A small **hermit crab** could sit on his shoulder and act as his **patron saint**. The knight could fall because he was stabbed by an **ancient spring** with poison on it and the dragon could be **victorious**.”

- In this example, the words “**ancient spring**” are used incorrectly so the meaning needs to be refined.

**Vocabulary Only Classes (Group B):**

- Introduce the “Yea/Nay” activity.
- This game-like activity is used for quick review.
- Randomly call a group of students to the front of the room rather than having the entire class participate.
- Students will have two different cards, one that says “yes” and one that says “no”
- Words are presented in pairs and rapid questions are asked by the teacher.
- After asking the question, the teacher gives the students 15 seconds to think and then asks, “**Yea or nay? 1, 2, 3**.”
- On the count of 3, students put up their choices and hold them up while the teacher calls on students to explain their choices.
- Try to get the students to repeat the target words in their answers.
- Another student can keep “score” but the point is the make the review an enjoyable time of classroom discussion rather than a boring drill!
- Example of a possible question: “**Could a buffoon be lackadaisical?**”
- Example of a possible answer: “**Yes, a buffoon could be lackadaisical because any person can show a lack of interest in something.**”
- Complete “**Word of the Week**” memo/card before class dismisses.
- Make anecdotal notes as appropriate in the Teacher Journal.
III. WEEK THREE: DAY 1—Cycle 1 Words

• “Let’s take a few minutes to review all of our words and cartoons.” Go back over the words, definitions, and cartoons/links.

**Vocabulary and Writing Classes (Group A):**

• Put in small groups for an independent writing using the “Story Impressions” technique. (Vary words for each of the class periods.)

**Vocabulary Only Classes (Group B):**

• Have students independently complete Matching Worksheet #1.

**Word of the Week Hints:**

• Remember to drop “hints” using the week’s words in anticipation of Day Four’s memo/card submission.
• Make anecdotal notes as appropriate in the Teacher Journal.

WEEK THREE: DAY 2—Cycle 1 Words

• “Let’s take a few minutes to review all of our words and cartoons.” Go back over the words, definitions, and cartoons/links.

**Vocabulary and Writing Classes (Group A):**

• Have small groups “report out” with their stories from yesterday.

**Vocabulary Only Classes (Group B):**

• Have students independently complete Matching Worksheet #2.

**Word of the Week Hints:**

• Remember to drop “hints” using the week’s words in anticipation of Day Four’s memo/card submission.
• Make anecdotal notes as appropriate in the Teacher Journal.

WEEK THREE: DAY 3—Cycle 1 Words

• “Let’s take a few minutes to review all of our words and cartoons.” Go back over the words, definitions, and cartoons/links.
**Vocabulary and Writing Classes (Group A):**

- Have group discussion concerning the similarities and differences of group stories. Use a Venn Diagram on the board or overhead. Share ideas within the class periods receiving this instruction.

**Vocabulary Only Classes (Group B):**

- Play “Yea/Nay” as another review before tomorrow’s testing.

**Word of the Week Hints:**

- Remember to drop “hints” using the week’s words in anticipation of Day Four’s memo/card submission.
- Make anecdotal notes as appropriate in the Teacher Journal.

**WEEK THREE: DAY 4—Cycle 1 Words**

- Have students complete writing essay incorporating as many words as possible! (*This is the first repeated measure.*)
- Complete “Word of the Week” memo/card before class dismisses.
VITA

Denise Moseley is currently an Assistant Professor of Curriculum and Instruction at Southern Arkansas University. Prior to teaching on the university level, she taught both elementary and junior high students for twenty one years. She received a Bachelor of Arts in Elementary Education from McNeese State University in 1981 and a Master of Education from Southern Arkansas University in 1991. She received her Doctorate of Education in Curriculum and Instruction from the Louisiana Education Consortium (Grambling State University, Louisiana Tech University, and the University of Louisiana at Monroe) in 2003.