12-2007

The Virginia SOL Eighth Grade Writing Test in Relationship to the National Commission on Writing Recommendations, Grade Configuration, Region, and Socioeconomic Status.

Jeffrey R. Comer
East Tennessee State University

Follow this and additional works at: http://dc.etsu.edu/etd

Recommended Citation
Comer, Jeffrey R., "The Virginia SOL Eighth Grade Writing Test in Relationship to the National Commission on Writing Recommendations, Grade Configuration, Region, and Socioeconomic Status." (2007). Electronic Theses and Dissertations. Paper 2133.
http://dc.etsu.edu/etd/2133

This Dissertation - Open Access is brought to you for free and open access by Digital Commons @ East Tennessee State University. It has been accepted for inclusion in Electronic Theses and Dissertations by an authorized administrator of Digital Commons @ East Tennessee State University. For more information, please contact dadmin@etsu.edu.
The Virginia SOL Eighth Grade Writing Test in Relationship to the National Commission on Writing Recommendations, Grade Configuration, Region, and Socioeconomic Status

A dissertation
presented to
the faculty of the Department of Educational Leadership and Policy Analysis

East Tennessee State University

In partial fulfillment
of the requirements for the degree
Doctor of Education

by
Jeffrey R. Comer
December 2007

Dr. Terry Tollefson, Chair
Dr. Kathy Franklin
Dr. James Lampley
Dr. Lee Daniels

Keywords: Writing to Learn, Writing Process, Standards of Learning, Technology, National Commission on Writing, Writing Across the Curriculum
ABSTRACT

The Virginia SOL Eighth Grade Writing Test in Relationship to the National Commission on Writing Recommendations, Grade Configuration, Region, and Socioeconomic Status

by

Jeffrey R. Comer

The purpose of this quantitative study was to examine Virginia Standards of Learning 8th grade writing assessments to determine if there was any association between school passing rates and the recommendations suggested by the 2003 National Commission on Writing to improve writing proficiency. This study further examined the possible differences in school passing rates that may exist due to the grade configuration of a school, the location of a school, the availability of a comprehensive writing plan, and the student percentage on free and reduced-price lunch. Data collection consisted of a self-administered survey sent to all 364 schools in Virginia that administered SOL writing assessments during the 2006-2007 school year.

This study showed no significant differences in 8th grade writing passing rates between schools with a comprehensive writing plan and those that do not. However, there was a significant difference in 8th grade teacher support for writing, division-administrative support for writing, and the understanding of writing scoring criteria in those schools with a comprehensive plan. There was little association between SOL writing scores and the implementation level of the 7 dimensions related to the National Commission on Writing recommendations. When controlling for socioeconomic status, there was no significant difference in writing scores.

The addition of 4 multiple-choice questions to the SOL test two years ago without a change in the cut score necessary for a student to pass appears to have had a larger impact on the passing rates of schools than the variables included in this study.
DEDICATION

This study is dedicated to the numerous individuals who have had a profound influence on my life as well as providing me the foundation I needed to accomplish this educational pursuit. First and foremost, I dedicate this work to my lovely wife, Kristie, who has always stood by my side and provided me the extra encouragement I needed during the “tough” times in order to complete this project. My love for you grows stronger by the day. I also dedicate this work to my sons, Ryan, Zak, and K. J. (who was born during the course of this study). It is my hope that the efforts to continue my education will be a positive influence for you one day.

I further dedicate this study to my mother, father, and two sisters. Without question, I know my mother, Lois, is very proud from her viewpoint in heaven. Your role as a mother will never be forgotten. It is so uplifting to know you had such a wonderful and influential career in education, but more importantly, lived a Christian life that will truly serve as an example for years to come. My Dad, Ralph, who may not be considered well-educated as far as books and educational degrees are concerned, but has more insight and common “horse” sense than any person I know. Your wish and hope that your children would always have the desire to further their education has become a reality. My “big” sister Debbi provided me the model and motivation I needed to pursue this degree by the fact she also recently completed her Ed. D. And, my twin sister, Jennifer, who has become my confidant and chief ally as we both have grown older.

I also dedicate this study to my recently deceased in-laws, Craig and Helen Barbrow. Both were career educators who touched the lives of numerous students by their commitment and dedication. Your influence on my life will never be forgotten.

Finally, I dedicate this study to my former high school English teachers, Mary Francis Campbell, Joritta Roberts, and Sandy Osborne, each of whom instilled in me a love for writing and laid the groundwork for me to purse and accomplish this dissertation process.
ACKNOWLEDGEMENTS

I would like to acknowledge the many individuals who assisted me in completing this dissertation. I was grateful to have committee members who were not only supportive, but motivating due to their kind words and encouraging remarks. My chair, Dr. Terry Tollefson, challenged me in subtle ways to work hard to accomplish my goals, which were set at a high level by his guidance and expectations. My other committee members, Dr. James Lampley, Dr. Kathy Franklin, and Dr. Lee Daniels, were equally encouraging and helpful.

I would like to sincerely thank the faculty and staff of Northwood Middle School for your unwavering support during this process. Thanks for taking up the slack when I could not attend Parent/Teacher Conferences and other scheduled activities due to my class commitments. I will always be grateful to each faculty member for your willingness to understand that the demands of this degree program would sometimes alter my abilities to be the productive and energetic leader that you deserved.

I would also like to acknowledge my fellow ELPA cohort members. We all began the same journey, which was made possible by the efforts of Dr. Russ West and Dr. Hal Knight to bring, for the first time, our degree program to ETSU Bristol. Both were willing to take a chance on a group with varied interests, talents, and backgrounds. The majority of us have now completed the journey.

Finally, I would like to extend a special acknowledgement to Dr. Susan Twaddle. A lady willing to speak her mind, you consistently made me think “outside the box.” More importantly, your expertise in data analysis helped make Chapter 4 a much easier task to accomplish.

Finally, I would like to acknowledge my Lord and Savior. Without your hand of comfort and guidance, I may have never completed this project.
## CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABSTRACT</td>
<td>2</td>
</tr>
<tr>
<td>DEDICATION</td>
<td>3</td>
</tr>
<tr>
<td>ACKNOWLEDGMENTS</td>
<td>4</td>
</tr>
<tr>
<td>LIST OF TABLES</td>
<td>8</td>
</tr>
<tr>
<td>LIST OF FIGURES</td>
<td>9</td>
</tr>
<tr>
<td>Chapter 1. INTRODUCTION</td>
<td>10</td>
</tr>
<tr>
<td>Statement of the Problem</td>
<td>14</td>
</tr>
<tr>
<td>Research Questions</td>
<td>14</td>
</tr>
<tr>
<td>Significance of the Study</td>
<td>19</td>
</tr>
<tr>
<td>Scope of the Study</td>
<td>21</td>
</tr>
<tr>
<td>Limitations</td>
<td>21</td>
</tr>
<tr>
<td>Delimitations</td>
<td>22</td>
</tr>
<tr>
<td>Assumptions</td>
<td>22</td>
</tr>
<tr>
<td>Definitions of Terms</td>
<td>22</td>
</tr>
<tr>
<td>Overview of the Study</td>
<td>23</td>
</tr>
<tr>
<td>Chapter 2. LITERATURE REVIEW</td>
<td>25</td>
</tr>
<tr>
<td>Introduction</td>
<td>25</td>
</tr>
<tr>
<td>Writing to Learn</td>
<td>25</td>
</tr>
<tr>
<td>The Writing Process</td>
<td>33</td>
</tr>
<tr>
<td>Time Spent on Writing</td>
<td>44</td>
</tr>
<tr>
<td>Writing Assessment</td>
<td>52</td>
</tr>
</tbody>
</table>
Recommendations for Improved Practice .................................................. 128
Recommendations for Further Research...................................................... 131
REFERENCES ...................................................................................................................... 133
APPENDICES ....................................................................................................................... 143
  Appendix B: Sample Eighth Grade Direct Writing Prompt ............................ 144
  Appendix C: Virginia Superintendent Regional Study Groups ...................... 145
  Appendix D: Sample Principal Letter ................................................................. 146
  Appendix E: Sample Teacher Letter ................................................................. 147
  Appendix F: Survey Questionnaire ................................................................. 149
  Appendix G: Open Ended Survey Question Responses ............................... 154
VITA ..................................................................................................................................... 162
## LIST OF TABLES

<table>
<thead>
<tr>
<th>Table</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Descriptive Statistics for Survey Return Rate According to Regional Study Group.</td>
<td>91</td>
</tr>
</tbody>
</table>
# LIST OF FIGURES

<table>
<thead>
<tr>
<th>Figure</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Boxplot for Mean 8&lt;sup&gt;th&lt;/sup&gt; Grade SOL Writing Passing Rates by Grade Configuration.</td>
<td>94</td>
</tr>
<tr>
<td>2.</td>
<td>Boxplot for Mean 8&lt;sup&gt;th&lt;/sup&gt; Grade SOL Writing Passing Rates by Comprehensive Writing Plan.</td>
<td>95</td>
</tr>
<tr>
<td>3.</td>
<td>Boxplot for Mean 8&lt;sup&gt;th&lt;/sup&gt; Grade SOL Writing Passing Rates by Region.</td>
<td>96</td>
</tr>
<tr>
<td>4.</td>
<td>Boxplot for Mean 8&lt;sup&gt;th&lt;/sup&gt; Grade Core Curriculum Teacher Support by Region.</td>
<td>100</td>
</tr>
<tr>
<td>5.</td>
<td>Boxplot for Mean Division-Administrative Support by Region.</td>
<td>101</td>
</tr>
<tr>
<td>6.</td>
<td>Boxplot for Mean Supplemental Writing Activities by Region.</td>
<td>102</td>
</tr>
<tr>
<td>7.</td>
<td>Boxplot for Mean Time Students Spend on Writing Assignments by Region.</td>
<td>103</td>
</tr>
<tr>
<td>8.</td>
<td>Boxplot for Mean Activities that Promote Writing Development by Region.</td>
<td>104</td>
</tr>
<tr>
<td>9.</td>
<td>Boxplot for Mean Understanding of Writing Scoring Criteria by Region.</td>
<td>105</td>
</tr>
<tr>
<td>10.</td>
<td>Boxplot for Mean Use of Technology to Assist in Writing Instruction by Region.</td>
<td>106</td>
</tr>
<tr>
<td>11.</td>
<td>Boxplot for Mean 8&lt;sup&gt;th&lt;/sup&gt; Grade Core Curriculum Teacher Support by Availability of a Comprehensive Writing Plan.</td>
<td>107</td>
</tr>
<tr>
<td>12.</td>
<td>Boxplot for Mean Division-Administrative Support by Availability of a Comprehensive Writing Plan.</td>
<td>108</td>
</tr>
<tr>
<td>13.</td>
<td>Boxplot for Mean Supplemental Writing Activities by the Availability of a Comprehensive Writing Plan.</td>
<td>109</td>
</tr>
<tr>
<td>14.</td>
<td>Boxplot for Mean Time Students Spend on Writing Assignments by the Availability of a Comprehensive Writing Plan.</td>
<td>110</td>
</tr>
<tr>
<td>15.</td>
<td>Boxplot for Mean Activities that Promote Writing Development by the Availability of a Comprehensive Writing Plan.</td>
<td>111</td>
</tr>
<tr>
<td>16.</td>
<td>Boxplot for Mean Understanding of Writing Scoring Criteria by the Availability of a Comprehensive Writing Plan.</td>
<td>113</td>
</tr>
<tr>
<td>17.</td>
<td>Boxplot for Mean Use of Technology to Assist in Writing Instruction by the Availability of a Comprehensive Writing Plan.</td>
<td>114</td>
</tr>
</tbody>
</table>
CHAPTER 1

INTRODUCTION

Writing is sometimes referred to as an art. To many students at the middle, secondary, and even collegiate level, writing may better be referred to as a lost art. With the publication of *A Nation at Risk* more than 20 years ago, state academic content standards have emerged as the dominant theme of the school reform movement (O'Shea, 2005). A school's accountability is now measured by students' success on content-specific tests. In turn, these high-stakes tests have encouraged many teachers to turn to extensive low-level drill and practice sessions as a common instructional approach for test preparation (Jenkinson, 1998; Shosh & Zales, 2005; Strickland et al., 2001). Critics of “teaching to the test” believe such instructional practices reduce the range of academic activities in which students participate and limit their opportunities for higher-order thinking exercises (Ketter & Pool, 2001). With the added pressure accountability entails, many teachers are also digressing from teaching concepts or activities they perceive as not directly connected to their core academic standards, such as writing. A report from the National Commission on Writing in America’s Schools and Colleges (2003) confirms this statement:

> Although many models of effective writing instruction exist . . . both the teaching and practice of writing are increasingly shortchanged throughout the school and college years. Writing, always time-consuming for students and teachers, is today hard-pressed in the American classroom. And, of the three “R’s,” writing is clearly the most neglected. (p. 3)

Teaching the craft of writing is a challenge. This challenge is further compounded by those teachers who use inappropriate approaches to teach writing mechanics. Many teachers, because of their own lack of training concerning the writing process, will often only assign and evaluate, rather than use sound educational practices shown to positively improve writing achievement (Fisher, Frey, Fearn, Farnan, & Peterson, 2004, Reed, 2006). The research paper is a classic example of a writing assignment required by many secondary level teachers, with the underlying opinion that such a lengthy assignment will strengthen student writing by merely
requiring students to write. However, research has shown that simply assigning papers will not teach students to learn the craft or discipline of writing (Fleischer, 2004).

In spite of such obstacles as not spending a proportionate amount of time on writing and inadequate teacher training related to the writing process, students are still demonstrating they can write, but not well. A general or basic level of writing performance is not the concern. The fear is not writing well enough to meet the demands students will face in higher education as well as the increasing role of written communication in our global society (Hooey & Bailey, 2005). In 2002, the National Assessment of Educational Progress (NAEP) writing assessment found that average scores for both 4th and 8th grade students had increased significantly between 1998 and 2002 (Persky, Daane, & Jin, 2003). However, there was no significant change during this period at the 12th grade level. Even though there was improvement, the 2002 assessment found that more than two thirds of the students assessed were still performing below proficient levels, the level of writing indicating a coherent response with clear language and supporting detail (Persky et al.). Even more alarming was the finding that only 1 in 100 students completing the assessment were considered to be at the advanced level of writing (Persky et al.). According to Urquhart (2005),

“The difference between the basic level and the proficient or advanced levels is the difference in students being able to write and correctly punctuate a minimally readable composition and those who can write with an understanding of audience and tone and express a coherent idea supported through clear, organized, and easily understandable language” (p. 45).

These differences become even more transparent when students leave our high schools and universities and enter a highly technological and knowledge-based society that is becoming more and more reliant upon written communication.

According to a national survey comprised of 1,000 adults in addition to focus group interviews involving both parents and students, writing is viewed as a subject that should be taught early and often in our schools. This survey, conducted in 2005 for the National Writing Project by Belden Russonello and Stewart (2005), indicated that 69% of Americans reported
writing should be taught across all grade levels and throughout many disciplines. Findings from this survey further indicated that 80% of the public said learning to write well should be a required skill for graduation from high school. Similarly, 70% of Americans agreed that a person needed to write well in order to advance in almost any career or job and 67% of Americans would support providing more resources to assist writing teachers in their efforts to ensure proficient writers. These survey results support the public viewpoint that writing is important and should serve in relative importance to other subject areas, such as mathematics and reading.

The College Board Entrance Examination, a nonprofit membership organization consisting of more than 4,300 schools and colleges, established the National Commission on Writing in America’s Schools and Colleges in September 2002. The formation of this commission stemmed from the concerns of those in education as well as the business community who held the belief that the level of writing in the United States was substandard (National Commission on Writing in America’s Schools and Colleges, 2003). The eventual writing component of the SAT was initiated by the College Board in direct relationship to this concern and the belief that the quality of writing must improve if students are to be successful in both college and life. Proponents of adding this new writing section to the SAT, which began in the spring of 2005, contend that it will lead to a greater emphasis on writing instruction at the secondary level (MacGowan, 2005). The Commission's findings validated the need for a “writing revolution” at both the state and local levels, with the primary recommendation directed toward the nation’s leaders to place writing squarely in the center of each school’s agenda (National Commission on Writing in America’s Schools and Colleges, 2003). By acknowledging the fact students need to achieve a certain level of writing competency, the College Board is at least responding to the Commission’s mandate to make writing instruction a bigger priority in our schools.

Almost all states (48) include some form of writing assessment as part of their state testing and accountability program. These mandatory assessments are requiring “states to invest millions of dollars, thousands of teacher hours, and hundreds of thousands of student classroom
hours” (Hillocks, 2002, p. 17). Hillocks (2003) examined 5 state writing assessments in detail, plus a general analysis and overview of 32 other state assessments. He concluded that writing assessments were driving the type of writing instruction taught in these states. In other words, the kinds of writing emphasized, what constitutes good writing, and the circumstances in which students must demonstrate writing proficiency were all defined by the type of state writing assessment administered (Hillocks, 2003). Hillocks further concluded that state writing assessments did not help teachers teach writing more effectively, and, in some instances, these assessments may have actually worked against the teacher in helping them become more capable writing instructors. With the variety of writing assessments used nationally, many based upon different writing theories and scoring criteria, it is only natural to assume the writing abilities of our students will vary accordingly (Hillocks, 2003). These writing abilities vary not only by state, but also by school and grade level.

This has proven to be especially true in the state of Virginia, where students are tested in writing at three different grade levels. The Commonwealth of Virginia requires students in grades 5, 8, and 11 to take the Virginia Standards of Learning (SOL) Writing Assessments. The assessments include both a direct writing assessment prompt and a multiple-choice assessment of students’ abilities to recognize focusing, revision, and editing needs (Virginia Department of Education, 1999). The purposes of these assessments are to inform the public about the strength of students’ writing skills, as well as to inform teachers about what is working or needs more attention in the classroom concerning the nature of classroom writing instruction (Virginia Department of Education, 1999). These tests are given annually in early March and later combined with reading tests taken in May in order to establish a total English score for each student. This English score is used in conjunction with the other subject area tests of math, social studies, and science to determine state accreditation ratings in addition to Adequate Yearly Progress (AYP) measures mandated by the No Child Left Behind Act. Since the initial SOL testing year in 1998, students in the 8th grade have performed lower on the SOL writing test than their counterparts in the 5th and 11th grade. Fifth graders had an overall pass rate of 65% in 1998,
which has steadily improved to an overall pass rate of 91% in 2005, an increase of 26 percentage points. Eleventh graders had an overall pass rate of 71% in 1998, which has improved to 88% in 2005, an increase of 17 percentage points. Students in grade eight have only improved 7% over this time frame, with an initial pass rate of 67% in 1998, increasing to only 74% in 2005 (see Appendix A). However, there was a significant improvement in 8th grade writing scores the past two testing years, with an overall state-wide passing percentage of 91% in 2006 and 86% in 2007. These gains in state-wide writing performance at the 8th grade level were comparable to scores at the 5th and 11th grade levels, resulting in a dramatic shift toward improved writing proficiency from previous testing years.

**Statement of the Problem**

Due to this significant two-year increase in 8th grade writing achievement, I will try to ascertain if these gains can be attributed to the implementation of recommendations to improve writing proficiency suggested by The 2003 National Commission on Writing in America’s Schools and Colleges. In addition, I determined if there are differences in writing achievement among the Southwest Virginia geographic region, as compared to other geographic regions of the Commonwealth of Virginia. This study further determined if there are differences in writing scores among middle schools with a high or low free-and-reduced price lunch percentage as well as those schools that test writing at multiple grade levels due to the configuration of their school, such as grades K-8 or grades 5-8. Finally, this study will determine if there are differences in writing proficiency among those schools that have developed a comprehensive writing plan and those that have not.

**Research Questions**

Research Question 1: Are there differences in Virginia Standards of Learning 2006-2007 8th grade writing passing rates based on (a) grade configuration (single writing testing grade versus multiple writing grade testing), (b) whether or not schools have implemented a
comprehensive writing plan, (c) region (Southwest Virginia versus other regions in the state) and (d) the percent of students who participate in the free and reduced-price lunch program? The following null hypotheses for Research Question 1 are:

Ho1<sub>1</sub>: There is no difference in the Virginia Standards of Learning 2006-2007 8<sup>th</sup> grade writing passing rates between schools with a single testing grade and schools with multiple testing grades.

Ho1<sub>2</sub>: There is no difference in the Virginia Standards of Learning 2006-2007 8<sup>th</sup> grade writing passing rates between schools that have implemented a comprehensive writing plan and those that have not.

Ho1<sub>3</sub>: There is no difference in the 2006-2007 8<sup>th</sup> grade writing passing rates of schools in the Southwest Region and those in schools in other regions of the state.

Ho1<sub>4</sub>: There is no association between the percent of students who participate in the free or reduced-price lunch program and the 2006-2007 Virginia SOL 8<sup>th</sup> grade writing passing rates.

Research Question 2: After controlling for the percent of the student population who participate in the free or reduced-price lunch program, is there a difference in the 2006-2007 SOL 8<sup>th</sup> grade writing passing rates between schools with a single writing testing grade and schools with multiple writing testing grades, schools with and without a comprehensive writing plan, and region (schools in the Southwest Region compared to other regions in the state of Virginia? The following null hypotheses for Research Question 2 are:

Ho2<sub>1</sub>: After controlling for the schools’ percent of students who participate in the free or reduced-price lunch program there is no difference in the 2006-2007 8<sup>th</sup> grade writing passing rates between schools with a single testing grade and those with multiple writing testing grades.
Ho2: After controlling for the schools’ percent of students who participate in the free or reduced-price lunch program, there is no difference in the 2006-2007 8th grade writing passing rates between schools with a comprehensive writing plan and those that do not.

Ho23: After controlling for the schools’ percent of students who participate in the free or reduced-price lunch program, there is no difference in the 2006-2007 8th grade writing passing rates between schools in the Southwest Region and other regions in Virginia.

Research Question 3: Are there differences in eighth-grade core curriculum teacher support for writing, division-administrative support for writing, supplemental writing activities, time students spend on writing assignments, activities that promote writing development, the understanding of writing assessment scoring criteria, and the use of technology to assist in writing instruction in the Southwest Region compared to other regions in Virginia? The following null hypotheses for Research Question 3 are:

Ho31: There is no difference between schools in the Southwest Region and those schools in other regions of the state regarding 8th grade core curriculum teacher support for writing.

Ho32: There is no difference between schools in the Southwest Region and those schools in other regions of the state regarding the division-administrative support for writing.

Ho33: There is no difference between schools in the Southwest Region and those schools in other regions of the regarding the use of supplemental writing activities.

Ho34: There is no difference in the Southwest Region and those schools in other regions of the state regarding the time students spend on writing assignments.

Ho35: There is no difference between schools in the Southwest Region and those schools in other regions of the state regarding the use of activities that promote writing development.
Ho3$_6$: There is no difference between schools in the Southwest Region and those schools in other regions of the state regarding the understanding of writing assessment scoring criteria.

Ho3$_7$: There is no difference between schools in the Southwest Region and those schools in other regions of the state regarding the use of technology to assist in writing instruction.

Research Question 4: Is there a difference between schools that have implemented a comprehensive writing plan and those that have not and the 8$^{th}$ grade core curriculum teacher support for writing, division-administrative support for writing, use of supplemental writing activities, time students spend on writing assignments, activities that promote writing development, the understanding of writing scoring criteria, and the use of technology to assist in writing instruction? The following null hypotheses for Research Question 4 are:

Ho4$_1$: There is no difference in the 8$^{th}$ grade core curriculum teacher support for writing between schools that have a comprehensive writing plan and those that do not.

Ho4$_2$: There is no difference in division-administrative support between schools that have a comprehensive writing plan and those that do not.

Ho4$_3$: There is no difference in the use of supplemental writing activities between schools that have a comprehensive writing plan and those that do not.

Ho4$_4$: There is no difference in the time students spend on writing assignments between schools that have a comprehensive writing plan and those that do not.

Ho4$_5$: There is no difference in the use of activities that promote writing development between schools that have a comprehensive writing plan and those that do not.

Ho4$_6$: There is no difference in the understanding of writing scoring criteria between schools that have a comprehensive writing plan and those that do not.
Ho4: There is no difference in the use of technology to assist in writing instruction between schools that have a comprehensive writing plan and those that to no

Research Question 5: To what extent, if any, is there an association between the 2006-2007 eighth grade SOL writing passing rates and (a) 8th grade core curriculum teacher support for writing, (b) division-administrative support for writing (c) the use of supplemental writing activities (d) time students spend on writing assignments (e) activities that promote writing development, (f) understanding of writing scoring criteria, and (g) the use of technology to assist in writing instruction? The following null hypotheses for Research Question 5 are:

Ho51: There is no association between 8th grade core curriculum teacher support for writing and the 2006-2007 8th grade SOL writing passing rates.

Ho52: There is no association between division-administrative support for writing and the 2006-2007 8th grade SOL writing passing rates.

Ho53: There is no association between the use of supplemental writing activities and the 2006-2007 8th grade SOL writing passing rates.

Ho54: There is no association between the time students spend on writing assignments and the 2006-2007 8th grade SOL writing passing rates.

Ho55: There is no association between the use of activities that promote writing development and the 2006-2007 8th grade SOL writing passing rates.

Ho56: There is no association between the understanding of writing scoring criteria and the 2006-2007 8th grade SOL writing passing rates.

Ho57: There is no association between the use of technology to assist in writing instruction and the 2006-2007 SOL writing passing rates.
Significance of the Study

Writing plays a prevalent role in our society. From serving as a primary form of communication to helping expand upon the learning process, writing, much like reading, is a fundamental academic component of our educational system. Writing can enhance learning by providing a sense of meaning beyond factual information and help students make the connection between what is taught and what is actually learned. Since the beginning of our public educational system, writing, reading, and arithmetic have served as the foundations. However, recently there have been concerns that students' writing ability is diminishing to the point to where they may not be able to use the written word to do justice to their talents and maximize their learning potential (Graham & Perin, 2007). Combined with this fear is the opinion that has been forming this past decade, primarily in relationship to the advent of state accountability measures, that more teachers are being pressured into “teaching to the test.” In turn, this test preparation instructional approach can lead to fewer opportunities for extended learning activities, such as those associated with writing. Writing should serve as a fundamental and primary focus for students in our current information age, where all available information allegedly doubles every two to three years (Graham & Perin). The ability to skillfully write is critical to organizing this information into knowledge (Graham & Perin). Without adequate writing skills, students run the risk of losing their ability to structure this information in a manner that can dramatically alter and expand their knowledge base.

When compared to college-age and elementary age students, writing research directed toward middle and secondary level students has been limited. Juzwik et al. (2006) examined 1,502 journal articles related to writing research that had been conducted between 1999 and 2004. The bulk of those studies were conducted on undergraduate, adult, and other postsecondary populations. K-12 studies, high school (139 articles) and middle-school youth (156 articles) were less studied than were elementary school-aged children (307 articles). These findings were consistent with a similar study conducted by Durst (1990), which focused on writing research conducted in the 1980s. He also concluded that writing research was less
prominent among middle and secondary age students when compared to both elementary and higher education populations. In addition, Juzwik et al. found that two of the least studied areas related to writing research were those involving writing and technologies (129 articles) and assessment and evaluation (113 articles). Thus, this study is significant in the fact that it is applicable to a topic that is rapidly gaining more attention in our schools, student writing proficiency, as well as a focus on less studied writing-related topics, including middle-level students and the use of technology to teach writing.

This study will further examine two aspects related to the characteristics of schools, socioeconomic status of students and grade level configuration, to determine if these variables are associated with writing achievement. Socioeconomic factors may impact students and schools in various ways. Similar to reading, those students from low socioeconomic backgrounds may not have the exposure and experiences to adequately write with a level of background knowledge that can help shape opinions and the thought processes, both key elements of the writing process. Also, this study will explore possible breakdowns in writing instruction that may exist among various grade levels as students make the transition to middle school. Schools, many times due to their small size, may be composed of grades different than the traditional grades 6-8 middle-level concept. Many of these schools that have multiple testing grades, other than just grade eight, are configured in such a manner due to their small student enrollment or lack of facilities. These schools may have certain advantages, which may include more writing instructional consistency among grade-level writing teachers, more opportunities to engage in teacher communication and discussions among multiple grade levels related to writing instruction, as well as other variables, such as small class size and increased parental support. Gaps in writing instruction may be more transparent when students leave one school to enter a new building, which is typical of most 6-8 middle level schools. However, there may also be disadvantages, such as the lack of multiple teachers per grade level to share ideas and discuss strategies related to writing instruction, the inability to focus on one specific instructional weakness, such as writing, due to the added instructional concern areas that may exist due to
addition of more grade levels, and the lack of resources, such as technology, to aide in writing instruction. Using the recommendations from The 2003 National Commission on Writing in America’s Schools and Colleges as guidelines, this study will further assist schools and school divisions in examining writing practices that are associated with schools’ writing achievement success. Implications of this study could facilitate school divisions to develop appropriate strategies that will address and positively impact writing achievement.

Scope of the Study

This quantitative study used a survey instrument to collect data that was sent to all 364 schools in the Commonwealth of Virginia that administered Virginia Standards of Learning (SOL’s) eighth grade writing tests during the 2006-2007 school year. Additional data analysis include free and reduced-price lunch percentages for each school based upon the October 31, 2006 Virginia Department of Education school nutrition eligibility report. Other data, which includes SOL writing passing percentages for each school, was obtained from a data specialist at the Virginia Department of Education.

Limitations

In this study, writing achievement will be analyzed with the understanding there are various levels of writing expertise and teaching experience unique to each school. In addition, other characteristics and resources unique to each school will be prevalent that impact writing achievement, such as the availability of technology and opportunities for professional development related to writing instruction.

Subsidized meal rate (percentage of free or reduced-price meals) is a common measurement of student poverty in educational research. This value has limitations because of the conditions unrelated to actual poverty levels, such as the willingness of eligible parents to apply for meal programs and procedures schools use to process applications.
The validity of the correlation coefficient for Research Question 1 may be limited by variations in the comprehensive writing plans.

**Delimitations**

This study was delimited to the state of Virginia and may not be generalized to other states with similar demographics of size, location, and socioeconomic status.

This study was also be limited to SOL writing data from the 2006-2007 school year. Using only one year of data may be impacted by the fact a particular class of students may be identified as being a high or low academic group, an unusual teacher turnover rate, and the loss of a teacher for a period of the academic year, due, for example, to sickness or pregnancy. Data from more than one testing year may help equalize these particular delimitations.

**Assumptions**

This researcher assumed that 2006-2007 SOL writing scores were accurately reported on data obtained from as assessment specialist at the Virginia Department of Education. Furthermore, survey results will be obtained assuming the teacher most qualified to evaluate the eighth-grade writing program at a particular school, as selected by the principal, did actually participate in the completion of the survey.

**Definition of Terms**

1. **Control** – The ability to use a given feature of written language effectively at the appropriate grade level as part of the Virginia Standards of Learning scoring rubric. A paper receives a higher score to the extent that it demonstrates control of the features in each domain of the scoring rubric (Pearson Educational Measurement, 2005).
2. *Holistic Scoring* – scoring a piece of writing based on several specific elements or domains of writing, with the writer judged in each domain independent of the others to determine how each component works in harmony to achieve an overall effect (Pearson Educational Measurement, 2005).

3. *Propositions* – the key intellectual process involved in concept mapping, these sentence-like-statements are created by two symbols and their connecting links that communicate how some aspect of the world is perceived by the maker of the concept map (Anderson-Inman & Horney, 1997).


5. *Self-Regulated Strategy Development (SRSD)* - a model of instruction in which students are unequivocally taught writing strategies in addition to procedures on how to regulate these strategies, including approaches such as goal setting, self-monitoring, and self-regulation (De La Paz & Graham, 1997).

6. *Writing Process* – the many aspects of the complex act of producing a written communication, specifically, planning or prewriting, drafting, revising, editing, and publishing; also refers to an approach to teach writing that explicitly teaches and has students use these steps (Unger & Fleischman, 2004).

**Overview of the Study**

This study is organized into five chapters. Chapter 1 includes an introduction to the problem and a brief overview of the literature related to writing achievement in our schools. Chapter 1 also includes the significance of this study, the limitations and delimitations related to
this study, and a definition of specific terms. Chapter 2 presents a review of literature relevant to writing instruction, writing assessment, and technology used to assist in the writing process. Chapter 3 contains the methodology and procedures that will be used to obtain data related to the research questions. Chapter 4 presents an analysis of the data. Chapter 5 includes the conclusions, implications for practice, and recommendations for further study.
CHAPTER 2
LITERATURE REVIEW

Introduction

Chapter 2 contains a review of current and historical literature in regard to topics related to the 2003 National Commission on Writing recommendations to improve writing in our schools. This chapter is organized into six sections, the first of which is a discussion on how writing can assist and impact the learning process. Secondly is a review of ways in which the instructional focus to teach writing has been transformed from one of a skills-and-product approach to one dependent upon teacher interaction throughout all steps of the composing process. The third section discusses the importance of allocating sufficient time to teach the writing process. The fourth section discusses state writing assessments and their perceived effects on writing instruction and curriculum in our schools. The fifth section relates to the varied ways in which technology perceivably impacts the writing process. Finally, the sixth section discusses possible implications for both our educational and economic sectors that may exist due to unskilled writers.

Writing to Learn

Writing impacts our lives in numerous ways. Naturally, writing serves a primary role in communication. In addition, writing is a source of permanent written records for accounts, theories, and laws and serves as a cultural value in the forms of novels, poems, and plays (Smith, 1994). The importance of persons being able to read and write well is considered to be one of the key principles of a literate society. Writing skill and reading comprehension are also predictors of academic success and basic requisites for participation in civic life and our global society (Graham & Perin, 2007). In the school setting, writing plays two primary roles. First, it is a skill that can achieve a variety of goals, such as writing a report, developing an essay, or expressing an opinion (Graham & Perin). Second, writing can extend and deepen students’ knowledge, thus serving as a tool to enhance the acquisition of subject matter (Graham & Perin). Teachers can
use writing to explore in more depth a particular topic, as a form of assessment for student comprehension, and as a method of inquiry and collaborative learning. The varied benefits of writing in our classrooms have led to the commonly accepted belief in the educational community that writing is also crucial to learning (Schumacher & Nash, 1991).

This acceptance of writing as a tool for learning has been supported in numerous studies. Many of these studies have been based upon research linked to how students recall or reorganize information after having to write about it (Schumacher & Nash, 1991). Critics argue that this type of research only addresses reproduction of material that has been previously learned, rather than actually measuring whether or not individuals have developed a more in-depth understanding of a topic after having to write about it (Ackerman, 1993; Schumacher & Nash). Writing to learn is much different than writing for the purpose of communication (Gammill, 2006). Writing to learn involves a variety of problem-solving strategies and cognitive processes that can promote critical thinking skills, which, in turn, allows students to become better communicators and learners as a result (Gammill).

Writing can enhance learning in numerous ways. According to Knipper and Duggan (2006), writing optimizes the learning process by allowing students to expand their thinking, deepen their understanding, and energize the meaning-making process. Students can increase their learning and build new knowledge by engaging in content-writing activities requiring self-monitored planning, concept-building, and review (Bangert-Drowns, Hurley, & Wilkinson, 2004). Writing can further link new understandings with familiar ones, manufacture new knowledge, explore relationships and implications, and serve as a tool for assessing comprehension of knowledge (Bangert-Drowns et al., Bromley, 2003). Writing allows us to communicate prior knowledge and develop new ideas and thoughts we did not know until having to put these thoughts on paper (Rief, 2006). Writing also offsets the time constraints of the regular classroom by offering students the opportunity to engage in various writing tasks that compliment and extend the learning objectives of the class and increase the likelihood of learning instructional content (Street, 2002).
Writing can additionally optimize learning by allowing students to recall, clarify, and question what they understand as well as what they need additional clarification about in order to fully grasp a particular instructional objective (Knipper & Duggan, 2006). One traditional, though often overlooked and understated activity, is the use of a combined reading and writing assignment. When reading and writing are used in combination, students can actively organize and select words as representations of understanding, providing both the student and the teacher with a better sense of what is being learned (Brozo & Simpson, 2003). Writing and reading should naturally serve as complementary partners to learning. According to Brodney, Reeves, and Kazelskis (1999), “. . . reading and writing are active, meaning-making processes that involve written language, with reading being the reception of ideas from printed words and writing being the expression of ideas through the creation of printed text” (p. 6). By placing thoughts and perspectives on paper, students can develop diverse opinions of what they have read, thus increasing their level of comprehension relevant to a particular topic or idea (Shanahan, 1997). This concept was demonstrated in a study conducted by Hayes (1987), who found that high school students who wrote response questions and compare-contrast statements in relationship to a reading assignment generated significantly more new information and had better recall than did those students who did not perform a writing task. Additionally, Konopak, Martin, and Martin (1990) concluded that the use of writing tasks in conjunction with a reading comprehension assignment resulted in students generating significantly higher quality of ideas and improved writing samples over those of a control group which did not use such writing techniques.

Writing, different from lower-level learning tasks such as worksheets and rote memorization, is inquiry driven, allowing for formal thought and student engagement (Paris & Paris, 2001). Writing can encourage passive learners to become active learners simply by the requirement of putting their thoughts onto paper (Urquhart & McIver, 2005). The active nature of writing creates a classroom that is student-rather than teacher-centered (Gammill, 2006). Active learning helps develop higher-order thinking skills and leads to a more comprehensive
understanding of subject matter (Hooey & Bailey, 2005) by connecting concepts and imaginatively expressing an understanding of subject matter (Bromley, 1998; Johnson, Holcombe, Simms, & Wilson, 1993).

Over the past 30 years, there has been increasing agreement between researchers and theorists that people learn to think by writing and thus they learn from writing. The connection between having to think in order to write is one of the primary reasons writing is taught (Murray, 1985). By writing, individuals must put their ideas on paper and provide clarification, or the process of putting words on paper to express what one really means (Hillocks, 2002). Writing can also enhance learning by increasing the long-term, rather than the short-term recall of taught objectives. This was made clear in studies conducted by a group of psychologists who found that the average person could only hold five to nine words in his or her short-term memory at any given time without the benefit of some mnemonic device (Hillocks, 2002). Writing dramatically increases this capacity and thus enables students to think in a more sophisticated and analytic way to solve highly complex problems and processes (Hillocks, 2002). Writing increases learning by providing students the capability to expand upon their knowledge base with implications for long-term memory and recall, rather than just the short-term benefits typically connected to learning approaches, such as rote memorization.

It is also possible to think of conditions in which writing could alter learning in a negative way. For example, writing may decrease content coverage in addition to serving as a determent to learning for those students with poor writing skills (Bangert-Drowns et al., 2004). One of the most extensive studies conducted to research the impact of writing on learning involved a meta-analysis of 48 studies, all related to writing-to-learn programs. Bangert-Drowns et al. (2004) concluded that such programs typically produced small, yet positive, effects on student achievement. These researchers indicated, however, that the small effect sizes were likely conservative estimates. These researchers also found that the increased treatment length, or the minutes spent per class on some type of writing task, as well as the use of meta-cognitive writing prompts, did moderate writing-to-learn achievement effects. However, in terms of time spent on
writing, these findings did not apply to middle school grades, with grades 6-8 studies yielding an average effect size significantly lower than the outcomes of the other writing-to-learn studies. The researchers attributed this finding to the developmental issues associated with early adolescent students as well as the new genres associated with new content as subject matter differentiates more distinctly in middle school than that at the elementary level. Many times the focus of the middle level student may be on social, rather than academic growth. Research in the 1970s demonstrated that adolescent youth might be at a disadvantage in regard to specific learning strategies, some of which are critical to the writing process, such as elaboration and organization (Paris & Paris, 2001). Overall, the Bangert-Downs et al. (2004) study did suggest some gain in learning by the incorporation of writing activities. However, this study would appear to confirm that the incorporation of writing as part of the instructional process does not automatically produce large dividends in learning, especially at the middle level.

As previously stated, combining reading and writing activities is a common instructional approach. However, incorporating the right type of writing assignment is critical. Many teachers still distinguish reading and writing as two separate subjects, thus neglecting to recognize the ways in which reading can serve as a springboard for writing and writing can serve as a means to make connections and applications to previously read content (Elbow, 1993). It is not uncommon for teachers to focus more on reading than writing, failing to remember that a student can read without having to write, but cannot write without having to read (Rief, 2006). However, without question, one does not always have to write in order to learn from reading. There are circumstances in which reading can serve as a focal point without the element of writing. For example, Penrose (1992) found that students who read informative essays and then simply studied for a multiple-choice comprehension test retained more facts and performed better than did those students who wrote essays and performed other writing strategies related to the assigned essay topic. This study demonstrated that there are no guarantees that written assignments will result in positive outcomes in student achievement. However, the method in which writing is incorporated into a lesson is crucial, with plenty of variables present that either
hinder or facilitate the impact of a written exercise on learning. This was evident in a study conducted by Newell and Winograd (1989). These researchers examined the association of various writing tasks, such as note-taking, answering study questions, and essay writing, on the frequency of recall of specific expository text elements. Their findings indicated that the relationship between writing and learning was complex, with other factors, such as prior knowledge of a topic, having some degree of influence on student recall, regardless of what type of written task was used. Thus, it is important for an instructor to understand that having students to write for the sake of writing can actually be more detrimental for some students than asking them to not write at all.

One widespread approach to increasing the frequency of writing in our schools is appropriately named Writing Across The Curriculum (WAC). For the past three decades, numerous scholars and teachers have overwhelmingly supported the idea of WAC, which encourages all subject area teachers to use writing as part of their instructional methods (Ochsner & Fowler, 2004). WAC first gained widespread acceptance at the postsecondary level and has slowly moved down to the middle and secondary levels, where it has been met with varied success, primarily due to a lack of formal guidance provided to teachers on how or why to teach writing in content areas other than English (Urquhart & McIver, 2005). The WAC movement at the postsecondary level began with a focus on faculty workshops, which offered new ideas and strategies for using writing as a tool for learning in all classrooms and all disciplines (Walvoord, 1996). However, the viewpoint that writing would lead to learning has been difficult for WAC supporters to validate for two primary reasons. One, attempting to measure student learning in relationship to writing is a complex process. And two, proponents evaluating the success of WAC programs have focused more upon the level of implementation of programs rather than concrete data that support the use of writing as a means to learning.

Two studies would appear to support the idea that the WAC movement has not produced the results that certain proponents would like to acknowledge. Ochsner and Fowler (2004) examined literature related to Writing Across The Curriculum and concluded that the WAC
movement had produced no concrete studies confirming the relationship between writing to learn and learning to write. In addition, these researches concluded there was not a collective group of studies demonstrating a compelling case for emphasizing writing as a unique tool for learning. These researchers further came to the conclusion that “it is crucial for students to learn to write first before using writing as focal point for learning” (p. 126). This statement is contradictory to the WAC theory that supports the opinion that students will learn by writing regardless of their writing ability. Ackerman (1993), in his analysis of 35 studies related to writing and learning, concluded that many of these studies supported write-to-learn programs without the statistical data or validity to support the commonly-held WAC belief that writing does promote learning. Ackerman attributed this lack of statistical proof to biased assumptions that many of the researchers used in the development of their research studies. For example, many of these studies reported generous gains in learning behavior from writing, even though other variables were present that may have had just as dramatic, if not more so, of an impact on the conclusions reached by the researchers.

With the widespread popularity of WAC programs, there are, of course, examples of successful program implementations. An example of one such project was conducted by two Canadian eighth grade science teachers. These teachers developed an action research project that used both group and individual student writing projects. Students were allowed to demonstrate their understanding of concepts taught by using their choice of writing genre. The goal of this project was to expand upon the traditional type of writing exercise used in many science classrooms, which, in many instances, is restricted to the traditional lab report. The experimental group was provided four 40-minute periods for in-class writing and peer editing activities in order to complete a group project. In follow-up interviews, teachers determined the following in regard to those students who incorporated the use of a writing activity to complete their assigned tasks. One, students communicated and worked on their projects at home, using MSN Messenger as a form of communication to plan and the Internet to expand their topic knowledge base. Two, students were motivated to write by being allowed to use their choice of writing genre. This
resulted in a variety of writing genres selected by students, which indicated to the teachers that students could expand upon the use of the commonly assigned lab report given the opportunity. These varied genres motivated students to write with a certain level of proficiency that typically would not have been produced, especially for those students who were not comfortable using a pre-selected format chosen by the instructor. And finally, students who were engaged in writing activities appeared to develop a contextual knowledge base different from the ones introduced in class. Based upon student interviews, these teachers were convinced that writing allowed students to expand their knowledge of the concepts taught in addition to improving their composition skills by their motivation to engage in writing genres they enjoyed (Peterson & Rochwerger, 2006).

Writing-to-learn strategies can easily be incorporated by teachers in all subject areas (Gammill, 2006). One of the unique features of writing, unlike the spoken word, is the fact writing creates a permanent record of a student’s thoughts that can easily be referenced for further discussion and questioning (Gammill; Haneda & Wells, 2000). This permanent record serves as a focal point for dialogue in the instructor’s effort to understand it, improve it, and respond to it (Haneda & Wells). The very act of composing has the potential to build knowledge, not by what is eventually stated, but rather by the thought processes the writer experiences in their efforts to communicate what they understand about a topic or situation to a different audience (Haneda & Wells). Teachers of all disciplines can benefit from the broad range of writing tasks available, even those that are only representations of the written word. Examples include short written notes, tables, graphs, and diagrams. All of these forms of writing can be powerful tools in developing knowledge and differentiating instruction for those students who learn best by a combination of varied instructional strategies (Haneda & Wells).

Similar to the writing methods used to maximize learning potential, the steps to becoming a proficient writer will vary by writer. However, there are general methods used to teach writing that many teachers agree upon as a uniform method of instruction. This method is appropriately called the writing process.
The Writing Process

Writing is somewhat unscientific in the fact that there is no specific wall chart that can depict the writing process due to the multiple purposes and passion of the writer (Fisher et al., 2004). Thomas (2004) states “Learning to write is not a formula that can be imprinted on each student but rather an act of discovery that classroom writing instruction must support” (p. 79). Similar to the varied instructional approaches used to teach reading, these are no universal methods to teach writing that will meet the needs of all students (Graham & Perin, 2007). However, many writing teachers still make the argument that good writing is a planned process that includes drafts, edits, rewrites, and proofreading until the final product is completed (MacGowan, 2005).

“For at least the past 25 years, process-oriented instruction, which emphasizes prewriting activities, multiple drafts, sharing of work with partners or small groups, and careful attention to writing conventions” (Center on English Learning & Achievement, 2006, p. 23) has become the norm in many classrooms. The skills or product-based approach is centered on an evaluation or critique of a final written product with little or no consideration behind the purpose or process in producing it (Bromley, 2003; National Writing Project & Nagin, 2006). As the name implies, process writing directs attention to the writing processes and techniques that students use to compose, rather than to the goal of only assigning a letter grade to a completed composition (Street, 2002). Teaching writing as a process tries to create an environment where instruction is aligned with what real writers do when they write (Kirby, Kirby, & Liner, 2004). The impetus behind the process approach to writing instruction began with research conducted by Janet Emig and Donald Graves, both of whom were instrumental in developing an understanding behind what it means to develop as a writer and what happens when a person writes (National Writing Project & Nagin). The process approach to writing instruction has gained widespread support and acceptance, in turn, leading many states to rewrite their writing curricula during the middle and late 1980s to better reflect a process perspective (Hoffman, 1998). The state of Texas has actually mandated that writing be taught using the five steps of the writing process (Hoffman).
With process writing becoming the norm in our classrooms, in turn, more research studies have been conducted the past 20 years in relationship to the steps writers take as they develop their written products (Unger & Fleischman, 2004). By studying the process writers use to write, five stages of the writing process have now emerged as instructional guides for teachers in helping their students develop a written product. These are (1) engagement in prewriting tasks; (2) the creation of an initial draft; (3) text revision; (4) editing for conventions; and (5) publishing a polished final draft (Unger & Fleischman).

Unlike the skills-based approach that depends upon insignificant teacher interaction and feedback to the student until the conclusion of a written product, process-oriented instruction focuses on teacher-student interaction, guidance, and dialogue throughout the various stages of the writing process (Hayes & Flower, 1986; McBride, 2000; Street, 2000). The process approach to teaching writing has helped teachers develop a better understanding of how to support writers as they write, instead of simply assigning topics for students to write about with very little explanation of how to improve (Strickland et al., 2001). Support for the process approach to writing instruction has come in part from research in the cognitive processes underlying writing and a new understanding of the connections between writing, thinking, and learning (Hayes & Flower, 1986). All steps of the writing process are now taught with the idea that students are active learners and need direction and discourse to expand upon their knowledge and skills associated with each of the writing steps. The process approach to writing is both recursive and overlapping, in that students move back and forth among the writing stages in an effort to produce a final product, rather than adhering to a linear approach in which each step is followed in a sequential format without the opportunity to revisit and alter a preceding step (Rief, 2006; Strickland et al.; Spandel & Stiggins, 1990). The recursive approach to writing also allows students the freedom to use a process that works best for them in the development of a written product, rather than being directed to adhere to a specific sequence and order.

The process approach to writing has been instrumental in encouraging teachers to actually teach what writers do, rather than to focus only upon the completion of a final product.
with little opportunity for teacher-student feedback (Haneda & Wells, 2000; Strickland et al.). Teachers who instruct students about the steps necessary to plan, revise, and edit their written compositions have been supported by research as having positive effects on improving the quality of students’ writing (Graham & Perin, 2007). Various studies have demonstrated the importance of the teacher and their role in helping students develop appropriate strategies related to each stage of the writing process. De La Paz and Graham (2002) used the self-regulated strategy development model to examine its effectiveness in teaching essay writing to middle school students. Self-regulated strategy development (SRSD) is a model of instruction in which students are taught writing strategies in addition to procedures on how to regulate these strategies, including areas such as goal setting, self-monitoring, and self-regulation. This approach to writing instruction can increase student motivation to write by clearly connecting gains in writing achievement to the use of the knowledge and strategies learned as well as an emphasis on maximizing effort throughout the writing process (Lane, Graham, Harris, & Weisenbach, 2006). De La Paz and Graham concluded that middle school students in the experimental group who were taught strategies to assist them in planning, drafting, and revising, produced essays that were longer, contained more varied vocabulary, and were qualitatively better than those students in the control group. These same researchers also conducted a study with 5th, 6th, and 7th grade students identified as having learning disabilities. This study, which also used the SRSD model of instruction, was centered on the effects of dictation and advanced planning instruction on composition skills. De La Paz and Graham (1997) concluded that those students who were taught strategies to help develop, evaluate, and organize their ideas prior to composing opinion essays produced essays that were longer, more complete, more cohesive, and qualitatively better than those produced by students in the comparison group. When asked to write essays 2 weeks later after the initial period of instruction, students still demonstrated their knowledge of previously taught strategies by spending considerably more time planning their compositions in comparison to the control group. Saddler (2006) further concluded that second grade learning disabled students with poor writing skills, when taught planning and writing
strategies using the SRSD, also wrote stories that were more complete, longer, and qualitatively better in addition to increasing the amount of time they spent planning before developing their initial draft.

The role of the writing teacher has shifted accordingly from a skills-based to a process approach to teach writing. This new role has further altered the perception of the writing teachers, who are now expected to be both skilled in the strategies and techniques to produce effective writers and assuming the role of writers themselves. Teachers who write along with their students can help influence reluctant writers in addition to gaining personal insights into the writing process. Teachers who face the same struggles and roadblocks as their students when developing written products exemplify from their own experience that writing is a difficult task and there is no perfect model from which to learn to write (Smith, 1994). Both students and teachers who were engaged in writing have become better writers by learning from the failures of early drafts and understanding that good writing was not going to take place the first time words were put to print (Murray, 1985; Romano, 2004).

Approaching instruction from the standpoint of a writer, instead of a teacher, communicates a different attitude to students. This was acknowledged in a study conducted by Street (2003) in which he interviewed teacher candidates, all of whom were involved in teacher preparation courses at a Texas University. The interviews were conducted in order to examine attitudes toward writing instruction from the perspective of soon-to-be classroom teachers. Street determined that those individuals who viewed themselves as writers exhibited more passion for writing than the other participants and viewed their roles as belonging to two intellectual communities – writing and teaching. In turn, he concluded that these teachers would eventually have more to offer to their students due to their attitudes about and past experiences with writing. Teachers assuming the roles of both writer and instructor are key concepts of The National Writing Project. The National Writing Project, which emerged in 1973 at the University of California, Berkley and now has network sites in all 50 states (National Writing Project & Nagin, 2006), has been instrumental in creating dialogue about writing among teachers, motivate
teachers to become writers themselves, and promote the important concept of teachers taking the
time to reflect upon their own writing experience (Strickland et al., 2001). The National Writing
Project conducts nearly 200 summer institutes, which are designed to provide teachers the ability
to assume leadership roles in their schools related to the writing process. More than 100,000
teachers annually, in grades K-16 and in all disciplines, are provided training to incorporate and
share the most effective research-based writing practices to help improve the writing skills of
their students (National Writing Project & Nagin). Through its professional development model,
teachers conduct project-sponsored programs in their own schools as well as neighboring schools
and districts. The success of The National Writing Project has helped distinguish this
organization as instrumental in supporting the important role of writing teachers and provide the
research-based instructional tools for teachers to put into practice in their classrooms.

Of course, the instructional approach used by the teacher, regardless of what process is
incorporated, is a key factor to writing improvement. Hillocks (1984), in his meta-analysis of
writing research conducted between 1963 and 1982, concluded there were three primary
instructional modes used to teach writing in the studies he examined relevant to instructional
delivery. He identified the mode of instruction based upon teacher-classroom relationships and
the types of writing activities in which students consistently participated. The three identified
modes were presentational, natural process, and environmental. Presentational, by far the most
common approach used in these studies, was characterized by the role of the teacher as the
presenter of knowledge and skills about writing, usually in the form of lectures, with students
serving as submissive recipients of rules, advice, and examples of writing. The natural process
mode was characterized by students generating their own ideas and criteria, having plentiful
opportunities to engage in free writing activities and interact with other students to gain feedback
and suggestions in order to revise and rewrite. The Environmental mode was characterized by a
balance among teacher, students, and materials, with the teacher planning activities and choosing
materials in order for students to interact with each other to generate ideas and engage in
problem-solving activities that help them deal with commons problems they face when
composing. Of these three modes, Hillocks concluded that the environmental mode was responsible for higher gains in writing achievement than the other two modes. When analyzing pretest-to-posttest measures using a meta-analysis to compute standard scores for various treatments’ gains or losses and their resulting effect size, the environmental mode was over four times more effective than the presentational mode and three times more effective than the natural process mode. Thus, this study provided evidence that regardless of what process a teacher uses to teach students to write, the instructional approach cannot be understated, which in most classrooms, is totally the decision of the classroom teacher.

Researchers have also identified primary features of the writing process. These include the fact that writing is goal directed; these goals are hierarchically organized using a framework of major and sub-goals; and to achieve these goals, writers use three primary processes - planning, sentence generation, and revision (Hayes & Flower, 1987). The planning stage, also commonly referred to as the prewriting stage, includes the steps one takes in order to prepare to write. The ultimate goal of any prewriting activity is to accentuate prior knowledge and prepare students for their first draft (Urquhart & McIver, 2005). Having students think before writing is a strategic step that should prelude any words put to print, a process commonly referred to as brainstorming. This stage is typically associated with the topic knowledge of the writer and by the writer’s knowledge of the various writing strategies (Hayes & Flower, 1987). Thus, students with a weakness in topical knowledge may benefit from visual overviews or plans such as outlines, webs, maps, or other forms of graphic organizers to assist in the prewriting process. One clear advantage of a visual outline is the ability of the writer to organize important concepts and form relationships between generated ideas in a format easy to modify and adjust (Fordham, Wellman, & Sandman, 2002). A popular technological tool to help students with this strategy is called Inspiration® Software, Inc (Inspiration). Inspiration allows students to use symbols to represent concepts and link these concepts with key words to further clarify meaning. This tool can further help motivate students to engage in the often burdensome task of outlining and planning by the numerous graphic features available to produce a visual organizer.
Many students need to be taught strategies, such as the creation of a web or visual outline, to assist them in planning. Students lacking content knowledge can benefit from both prewriting instruction and reading assignments applicable to an assigned topic before planning their initial drafts. This was evident in a study conducted by Brodney et al. (1999) who examined the use of paired reading and prewriting strategies with a group of fifth grade students who were assigned the task of writing an expository essay on volcanoes. These combined strategies resulted in superior writing style, better organization of written material, improved writing mechanics, overall superior writing effectiveness, and an increase in the development of ideas. The importance of teaching appropriate planning strategies was also evident in research conducted by Monroe and Troia (2006). This study examined the effects of teaching multiple strategies related to planning, revising, and self-regulation to middle school age learning disabled students. These strategies resulted in substantial gains between pretest and posttest scores for each of the five quality traits in which student essay papers were scored, with the largest gain in the area of organization, a direct component of the planning stage. Even though this study involved learning disabled students, the results support the importance of appropriate planning methods as students progress through the various steps of the writing process.

In a study conducted by Harris, Graham, and Mason (2006), these researches examined the effectiveness of using the self-regulated strategy development (SRSD) instructional mode to improve essay writing for a randomly selected group of struggling second grade writers. Planning was the primary focus of this study due to the opinion of the researchers, who considered planning an essential prerequisite for skilled writing. These researches found that the second graders participating in the SRSD model of instruction spent more time planning their papers and wrote more complete stories than those students not participating in SRSD. These findings further vindicated the importance of teaching students strategies to help them with the planning process.

The second step of the writing process is the development of a first draft. Murray (1985) states that the purpose in developing a first draft is to discover, with few limitations or rules to
keep the writer from taking risks, knowing the draft will be revised numerous times. The draft process should be a non-threatening act because it is expected that there will be mistakes made and changes initiated as new ideas are formed. When students compose drafts, they are essentially thinking on paper (Street, 2002). Thus, one of the main goals of the writer when drafting is to place his or her ideas on paper in a relatively coherent way (Urquhart & McIver, 2005). Many students may require several drafts before completing a final composition, which can be a time consuming task (Street, 2002). However, teachers sometimes feel pressured into only allowing limited time for drafting due to time limitations or pressure to cover content (Street, 2002). Finding time for students to process multiple drafts can be difficult. However, the difficulty in appropriating the time to draft often does not compare to the complicities associated with the third step of the writing process, the act of revision.

One of the more difficult mental challenges of the writing process is revising text, requiring a great deal of metacognition on the part of the writer (Urquhart & McIver, 2005; Saddler, 2003). Fitzgerald and Markham (1987) defined revision as … “the act of making changes at any point in the writing process” (p.4). Revision is a complex cognitive process, which is particularly difficult for younger writers. The skill to effectively revise is often dependent upon the writer’s background knowledge of what constitutes good writing (MacArthur, Graham, & Schwartz, 1991). For many students, revision only entails making superficial changes to text (Paris & Paris, 2001). Saddler (2003) states that many middle school students confuse revising with editing and fail to think critically about the writing they have written and how to improve it. Graham (1997), in his study of how students manage the unique knowledge and skills fundamental to the revision process, concluded that students had difficulty revising due to their inability to identify the source of trouble and successfully complete the intended change. He further states that a teacher can help develop revision skills by establishing a system of external feedback in the form of peer conferencing. For example, peer feedback creates interactive dialogue among students that allows students to critique each other’s written work and also learn revision strategies from their peers.
Helping students to revise in a way that actually alters text meaning rather than simply performing generic editing skills can have a positive impact on writing proficiency. MacArthur et al. (1991), in their study of how learning-disabled students approached the revision process, concluded these students associated revising with the process of correcting errors and making minor word changes, which only had a minimal impact on meaning. Furthermore, these students demonstrated minimal improvements in length and quality of writing between their first and second drafts due to their lack of revision skills. Faigley and Witte (1983) collected revision samples from inexperienced, advanced, and expert adult writers, all enrolled in a writing class at the University of Texas. The revision changes made by the inexperienced writers were typically surface changes, which the researchers attributed to less opportunity to practice refining and revising text due to their limited time spent on writing. The expert and advanced students made significantly more revisions, particularly those that added new meaning to a sentence, during the initial development of their first draft than the inexperienced writers. The authors attributed this to the fact experienced writers are more apt to revise from the beginning of a new composition, instead of waiting until the end to revise. This study confirmed the fact revision cannot be separated from the composing stage of writing, with success in revision directly related to a writer’s planning and reviewing skills early in the writing process (Faigley & Witte). Birdwell (1980) examined revisions performed by 100 randomly selected 12th grade students and also concluded that surface changes, such as altering spelling, punctuation, and word choice were by far the most frequent type of revisions made. He further concluded that there were revision patterns that existed among both successful and poor writers. A number of the successful writers had developed internalized writing conventions that allowed them to develop successful drafts with few revisions. The poorer writers either changed very little from their initial draft while others made numerous changes to their drafts, but these changes were typically surface changes, with plenty of spelling and punctuation changes compared to meaning-making changes. Teacher instruction on revision cannot be understated, as demonstrated in a study conducted by Fitzgerald and Markham (1987). These researchers examined the effects of instruction related to the
revision process and the impact this instruction would have on sixth graders knowledge of the revision process, their ability to make revisions on paper, and on their quality of writing. When compared to a control group, direct instruction in the revision process helped students make more meaning than surface changes and enhanced revision efforts for students as they completed multiple written drafts. This study further validates the need for teachers to develop revision strategies with students, particularly those students classified as poor writers.

Sommers (1980) found in her study of college freshmen that one of the main tasks they associated with revision was correcting repetition of words. However, Sommers also noted that students noticed repetition if they could “hear” it as they reread their sentences but were not able to diagnose repetition on a deeper level. In other words, students would use different words to avoid repetition, but the words conveyed similar contextual meaning. These students lacked the revision strategies, as do many students, to revise an entire essay with new lines of reasoning, to ask questions related to their purpose, and create new ways of structuring sentences. Asking students, regardless of their educational level, to revise in a manner that actually improves writing drafts is connected to the act of writing itself. Writing can be a highly complex and difficult activity. Motivating students to participate in the task of writing is often difficult for teachers to establish and even harder to sustain (Bruning & Horn, 2000). Teachers who consistently use classroom practices that emphasize the value and importance of writing (Bruning & Horn) can accordingly help students see the important role revision can play in the writing process.

As previously noted, even though the writing process entails certain steps, such as planning, composing, and revision, all of these steps interweave and overlap as students generate new text and work to refine and publish their draft into a final product. Revision changes should take place often and throughout each stage of the writing stages (Murray, 1985). However, many poor writers are reluctant to revise at any point during the writing process, thus making it imperative for teachers to accentuate the importance of providing time for revision techniques to be practiced. A survey conducted of Florida high school students exemplifies the finding that
students were not being provided the necessary time to practice revision strategies. Over 2000 public high school students were surveyed in order to collect data in regard to what they wrote, how they wrote, and the extent to which they wrote in their language arts classes (Scherff & Piazza, 2005). Survey results indicated that students were not guaranteed multiple opportunities to write, nor were they given adequate exposure in regard to best practices in writing instruction (Scherff & Piazza). One of the more alarming findings indicated that almost equally across schools, grades, and academic tracks, students were not participating in peer revision and editing in class (Scherff & Piazza). It would not be surprising to find similar results in many classrooms throughout our country.

The National Assessment of Educational Progress has been conducting national writing assessments since 1970. An additional component of these assessments include a series of background questions pertaining to key features of the school, classroom curriculum and instruction, home and community background, and teachers’ preparation (Center on English Learning & Achievement, 2006). An analysis of these background questions determined that by 1992, process-oriented instruction was the typical mode of writing instruction prevalent in our classrooms with 71% of eighth grade students acknowledging this as the primary method by which they were taught to write (Center on English Learning & Achievement). The emphasis on process instruction appears to be helping students become more efficient writers. The 2002 NAEP assessments found that students at both the 8th and 12th grade levels who indicated on these background questions that they typically engaged in process writing strategies performed better on these assessments than those students who did not regularly engage in such strategies (Center on English Learning & Achievement). Frequent student participation in the following writing strategies, all directly related to process writing, directly correlated to writing achievement at both grade levels: brainstorming with others; organizing your paper before writing; working in groups to improve writing; writing more than one draft; and making changes to fix mistakes (Center on English & Achievement). Teaching students to write with quality,
regardless of what process or method is used, is dependent upon one key variable – the variable of allowing sufficient time for students to write.

**Time Spent on Writing**

As stated by the 2003 National Commission on Writing, “many models of effective writing instruction exist . . . but the teaching and practice of writing are increasingly shortchanged throughout the school and college years” (p. 3). Most educators would agree that spending additional time on a particular instructional objective would lead to an overall better understanding of this topic, at least for the majority of students. One would further assume that increasing the amount of time a teacher spends on writing would lead to improved writing proficiency. Time is of particular concern at the middle school level. Students entering middle school are often faced with the new concept of subject departmentalization content courses that place academic demands on students from a variety of teachers in addition to the numerous social adjustments and pressure relevant to the young adolescent age group. Just when students are at an age where they can develop more strategies to enhance their level of writing efficiency, the curriculum demands of the middle school often leads to less time to dedicate to writing as teachers feel pressure to “cover the “curriculum”(Fletcher & Portalupi, 1998). This lack of commitment to finding the time for writing instruction takes place in spite of the fact educators know that improved writing performance requires students to write regularly (Reed, 2006).

According to Kirby et al. (2004), regardless of how capable the teacher or how sound the quality of writing instruction may be, students cannot develop as writers if they do not write frequently. This opinion is also supported by the American public which believes schools need to place more emphasis on teaching writing. According to national survey conducted for The National Writing Project by Belden Russonello and Stewart (2005), only 7% of Americans believe writing is emphasized enough in our schools. Survey results also indicated that only 15% of Americans said it was not realistic to expect schools to allocate more time to the teaching of writing, given all the pressures currently placed on teachers. Additionally, 63% of Americans
reported the opinion that all high school students should have daily writing assignments – regardless of whether students planned to go to college or not.

Several studies have concluded that daily writing instruction was beneficial to student writing improvement (Fisher & Frey, 2003). For example, survey results from first-year composition students at the University of Arizona found that students who recalled writing a lower number of essays in high school were more often placed into remedial composition classes than those students who recalled writing a higher number of essays (Ransdell & Glau, 1996). Marshall (1987) found that students enrolled in a high school literature course who participated in extended writing tasks had significantly higher posttest scores on questions related to assigned literary text readings. Opportunities to construct a written product appeared to provide these students with an intellectual representation that was helpful in remembering and understanding a story over a period of time. These examples are relevant of the role writing can positively impact student achievement when students are provided the time to construct meaning using the written word. Finding the time to spend on writing is important. However, finding the time, especially for those teachers who teach subjects other than writing, can be difficult. This was one of the consistent statements the 2003 National Commission on Writing consistently heard addressed during five hearings they conducted in varied regions throughout the United States in preparation for their final report, The Neglected "R"... The Need for a Writing Revolution. Teachers complained about the lack of time to integrate writing into their instruction, with the primary reason stated as their concern to adhere to accountability requirements related to No Child Left Behind’s Adequate Yearly Progress mandates (National Commission on Writing in America’s Schools and Colleges, 2003). However, it is still realistic to place writing as a primary component of the instructional setting. The key is selecting a method of writing integration that is both time efficient and instructionally productive, especially for those teachers who feel anxiety in relationship to not having enough time to teach required course objectives.

One successful model of writing instruction is called the writing workshop. Writing workshop incorporates three important elements in teaching students to write. These include
allowing students the freedom to choose their writing topics of interest, time at school to write and work in partnership with their peers, and genuine teacher feedback (Higgins, Miller, & Wegmann, 2006). The primary instructional components of writing workshop are mini-lessons related to the writing process, quick teacher surveys of what each student accomplishes in a workshop activity, conferences with student peers and teachers, and small and large group sharing of written compositions (Higgins et al.). Teachers using strategies such as the writing workshop communicate to students the importance of providing time for writing instruction in a patient and practical format. More importantly, the opportunity for students to write about topics they like and share compositions with their peers can be highly motivating factors that encourage students to want to spend additional time on writing.

Journal writing is another method of writing that can be used across all discipline areas to increase the amount of time spent on writing. Daily journal entries can help improve larger writing compositions, such as essay writing, by allowing students practice in developing thought and the fluency of ideas in a non-threatening manner (Kirby et al., 2004; Wanket, 2005). By asking students to use a journal to summarize and interpret concepts, students develop both critical thinking and writing skills (Hooey & Bailey, 2005). Journals can be used both for personal reflections and for cognitive applications, as well as recording key ideas, making predictions, and asking questions (Carr, 2002; Connor-Greene, 2000). Journal writing is also an excellent method of allowing students the time to reflect upon their personal understanding of previously taught concepts (Johnson et al., 1993). There are varied ways to use journaling, such as a dialogue journal using the concept peer feedback strategy, personal journal entries related to questions or reflections, and project journals that accompany large scale assignments (Kirby et al.). The journal also provides a mechanism for teachers to provide feedback on writing skills and, more importantly, gain a different perspective into student learning, other than just typical test and quiz assessment instruments.

Hooey and Bailey (2005) found that students exposed to journal writing as part of a college level world geography courses performed better on exams and assignments and had
better final grade averages. McCrindle and Christensen (1995), in their study of first-year biology students who used a journal in comparison to those students who did not, concluded journal writing impacted student cognitive processes in multiple ways. Examples included more sophisticated conceptions of learning, more active learning strategies, better organization of knowledge, the ability to structure relationships within this knowledge base, and better results on achievement tests. Cisero (2006) found that students using journal entries as part of an undergraduate educational psychology class had better overall class grades, with a statistically lower percentage of C and D grades, in comparison to previous classes who did not use journal entries. Connor-Greene (2000) also concluded that college students using journals had significantly better tests grades than those students not using a journal. In addition, interviews determined that these same students viewed journal writing as a valuable assignment which helped develop understanding and application of concepts. Connor-Greene additionally suggested that journal writing may be of extra benefit to the average student, but not have as much impact on the better student, who may already be inclined to achieve good grades and perform at a high level of achievement regardless of whether or not a journal is part of the class content. Similar to the purpose behind a particular writing genre, the journal method selected to expand upon the learning process is critical. Cantrell, Fusaro, and Dougherty (2000) found that seventh grade students using the steps involved in a comprehension journal format strategy called K-W-L generated greater learning of social studies content than those students who only engaged in summary journal writing entries. Hettich (1990) conducted an end of class survey involving 440 students to assess their thoughts and experiences on using a journal as a requirement of their psychology class. Students rated the journal high as far as a means of stimulating critical thinking, as a source of feedback for learning, and as a valid measure of learning.

Besides journals, teachers can also incorporate activities that teach the habit of writing, such as quickwrites and freewriting activities (Romano, 2004). Quickwrites allow students to produce a quick writing sample without having to spend time planning or brainstorming.
Freewriting builds upon the important concept of allowing students the freedom to write about their own personal interests and serves as an excellent method to assess pre-knowledge levels of content when introducing a new instructional concept.

There is an added variable associated with time. This variable relates to the amount of time a writing task(s) may require. Completing short answer questions, note taking, and essay writing all require varied levels of time commitments. Newell (1984) conducted a study examining different writing tasks and their impact on three measures of learning: recall, concept application, and gain in passage-specific knowledge. Results of this study indicated significant gains in passage-specific knowledge for essay writing in addition to students being more capable of integrating elements of prose passages into their knowledge of the topic. Essay writing further created more writing and learning operations than note taking and study questions. Thus, this study confirmed that for optimal writing learning experiences to take place, students may need to engage in more in-depth and thought provoking writing activities, which essay writing entails.

There are also studies that have been conducted that indicate increasing the duration of writing assignments and activities did not positively improve writing achievement. Hillocks (1984) conducted a meta-analysis of writing research conducted between 1963 and 1982. His study found that the duration of writing assignments did not result in an increased effect size, and in turn, that there was no relationship between the duration of treatment and a change in the quality of writing. These findings were based upon studies in which students were exposed to writing treatments ranging in periods from less than 12 weeks to over 17 weeks in length. Bangert-Drowns et al. (2004) found in their meta-analysis of 24 studies that longer writing tasks in writing-to-learn interventions resulted in smaller achievement outcomes. These researchers attributed this outcome to their belief that student motivation levels and the ability to stay focused on the assigned task decreased as the writing assignments increased in length. However, this same study also found that spending more minutes per class time in writing related activities did moderate writing-to-learn achievement effects. Thus, this study would indicate that the length of a writing assignment is not as imperative to improve writing achievement as the time
spent on shorter writing assignments and other frequent and less time consuming writing activities. In other words, quality over quantity would appear to be a more important variable than just having students write for the sake of writing. Setting instructional time aside for writing is important. However, it is just as important to allocate a proportionate amount of time for students to successfully engage in the writing process and apply new knowledge and skills in order to more thoroughly understand what has been taught (Urquhart & Mclver, 2005). Writing a time consuming and lengthy essay does not have to be the method of choice to accomplish this goal.

Increasing the amount of time students spend writing without providing necessary feedback for writing improvement to take place is a common mistake made in many schools. The best writing takes place when students are allowed adequate time to select their topics, draft and redraft ideas, and receive feedback from both their peers and instructor (Rief, 2006). Even when feedback is provided, many times it is inconsistent due to the preconceived idea of what one teacher constitutes as good writing may not be the same as another teacher (Andersen, 2003). Feedback is a critical component of assessment, which is most effective when it is on going, describes to students what they are or are not accomplishing, and used as a form of encouragement (Urquhart & Mclver, 2005).

Many writing instructors spend large amounts of time scoring individual student writing assignments. In their examination of increased writing achievement over a 3-year period at an urban middle school in San Diego, Fisher et al. (2004) found that one of the primary reasons for this improvement was due to a school-wide focus on consensus scoring and assessment by all teachers, not just those responsible for teaching writing. Teacher feedback is fundamental to writing improvement. However, there are other forms of feedback that can be used to achieve the goal of critiquing, revising, and improving the writing assignment. Peer feedback can be effective for both the author and the audience by allowing students to reflect and analyze more critically what they have composed as well as developing appropriate communication techniques to discuss their purpose and writing goals (Ketter & Pool, 2001). Students trained to score and
assess peer compositions can provide a degree of validity that strengthens their own writing as well as their peers. A study conducted by Cho, Schunn, and Wilson (2006) examined the validity and reliability of college students to rate peer writings in comparison to instructor ratings. Data collected from 708 students over a 3-year period, in which at least four different raters read and assessed each piece of writing, concluded that the scores assigned by the raters were both highly reliable and as valid as instructor ratings. This study, though conducted at the college level, has merit at the secondary and middle school levels by providing evidence that peer generated scoring can be a successful format to assist the instructor in the time consuming task of writing assessment. Also, using multiple reviewers, typically a collection of four to six peers, was supported by this study as providing the highest reliability in regard to assessment scores. In a study conducted by Rowe (1989), she found that conversation and different perspectives helped authors express the meanings they were forming as they created their own texts as well as when they read texts produced by other authors. Students can easily critique each other’s writing by asking questions related to the text, with such dialogue helping the writer to make necessary revisions (Wong, 2000). This type of feedback can provide a real audience for student work, which is both motivating and rewarding (Bromley, 2003). Peer feedback also allows students opportunities to develop the key element necessary to becoming a better writer, their written voice. Voice is defined as the writer’s presence in their writing, which is necessary to allow the reader to vividly participate in and understand the essence of what the writer is stating (Romano, 2004). Peer interaction also builds upon the social aspects of adolescents, who can suffice their need for social conversation and interaction with classmates (Atwell, 1998). Researchers Harris, Graham, and Mason (2006) studied the effects of adding a peer support component to the self-regulated strategy development model (SRSD). SRSD has shown to have a positive impact on writing achievement, particularly with those students classified as struggling writers. The researches found that the implementation of peer support was advantageous in helping second grade students improve their writing skills. In comparison to those students who did not engage in the peer support model, the experimental group wrote longer and qualitatively better posttest
stories, included more basic elements of writing in assigned persuasive papers than their counterparts, were more likely to transfer learned writing skills to writing assignments given outside their typical writing classroom, and included more story elements in their posttest narratives. Olson (1990) studied the effect of peer feedback on the amount and kind of revision behavior used by sixth grade students. Peer feedback did have a positive effect on the quality of writing. Students without peer feedback did revise more, but the quality of their writing did not improve because these revision changes were only surface oriented, such as correcting spelling mistakes and punctuation.

For optimal peer feedback to take place, students must be taught the skills necessary to provide feedback that is both appropriate and helpful, not just superficial comments designed to provide praise or criticism (VanDeWeghe, 2004). In a project supported by the U.S. Department of Education, writing teachers of college-bound seniors were paired with freshman composition teachers at both community and 4-year colleges in a joint effort to design writing assignments in which all students would complete simultaneously for the purpose of providing peer feedback. This project determined that students exhibited the need for extensive practice to develop the skills necessary for effective and beneficial feedback, the type of feedback that provides insight and suggestions that writers may take to improve their writing, other than feedback that provides only general praise with little substance for corrective changes (Simmons, 2003). This project was evident of the fact even highly academic students still need assistance in learning revision skills, especially when these skills may help improve their personal writing due to their experience in critiquing other student writing samples (Simmons, 2003).

A scoring rubric is one way to help ensure scoring consistency and provide non-writing teachers with a simple assessment tool. A rubric can provide a common set of criteria for both the teacher and student to reference in terms of scoring rules and how their work will be evaluated (Knipper & Duggan, 2006). Rubrics additionally provide those teachers with little background in assessing writing performance a method to analyze writing samples using qualitative measures to address differences in student writing performance (Strickland et al.,
2001). Besides serving as a scoring tool for teachers, the rubric can also assist students in becoming insightful critics as they analyze their own written work as well as the writing samples of classmates (Saddler, 2003; Saddler & Andrade, 2004). Rubrics can also be very beneficial to students by serving as a guide for the complex task of revision (Spandel, 2006).

In a 5-year study of characteristics associated with middle and high school reading and writing achievement, Langer (2001) found that teachers in high performing schools communicated and discussed with students the rubrics they used for evaluation purposes. In addition, these teachers regularly incorporated rubrics into their instructional activities to better familiarize students with the features required for high scores. Providing the time for students to practice using rubrics to assess their own compositions as well as their peers can lead to students becoming skilled in analyzing their own writing as well as the writings of their classmates. Students provided the knowledge and training to assess their compositions is only practical in today’s accountability environment where writing assessment is now the norm in most states.

**Writing Assessment**

In our current high-stakes testing and accountability environment, nowhere has the magnitude of test scores been felt more completely than in the area of writing (Callahan & Spalding, 2006). Not only are these tests being used for accountability purposes, but a number of states such as Maryland, Nevada, Georgia, Florida, and Ohio also include writing assessments as part of their required graduation requirements (Callahan & Spalding). The majority of these state writing assessments differ from the customary multiple-choice format used to assess other content areas by the requirement of a direct writing component, which is considered in the measurement community to be a valid and reliable assessment of writing skill (Ketter & Pool, 2001). There are two primary viewpoints associated to these required state writing assessments. One is the belief that there will be more of an emphasis on writing instruction in our classrooms and students will, in turn, become more skillful writers (Meredith & Williams, 1984). And two, a direct student writing assessment more effectively matches the customary daily activities and
writing objectives used in the majority of our classrooms and thus serves as a better method for determining student writing strengths and weaknesses (Mabry, 1999). There is national support for students being assessed to determine their levels of writing proficiency. According to a national survey conducted for The National Writing Project by Belden Russonello and Stewart (2005), 56% of Americans believed that state proficiency tests should include a writing component for high school students. Additional survey results also indicate that 70% of the public believed writing proficiency tests should be scored by teachers, and not machines. These survey results show both a support for writing assessments and an agreement that these assessments should be critiqued by those most capable of making sound and valid analyses – the classroom teachers.

Mandated student passing percentages have created somewhat of a double-edged sword in regard to writing assessments. The dilemma has to do with the fact many schools are adopting formulaic writing programs, which are typically contradictory to proven research-based practices, to help students pass these state assessments (Callahan & Spalding, 2006). Critics of prescription-type writing programs contend that the emphasis is upon the wants and goals of the teachers, rather than those of the student (Shafer, 2000). Teacher-centered writing programs that are only intended to prepare students for state writing assessments can stifle student creativity, risk-taking, and the act of critical thinking (Shafer; Wesley, 2000). One of the teacher-centered and formulaic approaches that has emerged in many classrooms around the nation is the focus on teaching the five-paragraph essay theme (Higgins et al., 2006; Shafer). Teaching students to memorize and use a particular format, such as the five-paragraph essay, and then apply this format to fit every writing genre discourages students from using writing styles and methods that best enable them to voice their opinions and meet the needs of their audience (Wesley). Research conducted in the state of Illinois indicated that direct writing assessment scored with a rubric did in fact produce formulaic writing by students (Hillocks, 2002; Mabry, 1999). The Illinois rubric stated that students should be credited for providing several points of support for each of their main topical points. However, an examination of essays discovered that assessors ignored
whether or not these points actually supported the thesis and whether or not a paper exhibited overall coherence (Mabry). Compliance with the rubric produced higher scores but performance based strictly on the stated criteria were not sufficient to produce good writing (Mabry). Critics have argued that allowing students to be judged on how they actually wrote rather than on how well their writing corresponded with specific scoring criteria would represent a better overall evaluation of writing proficiency (Mabry).

To evaluate the writing abilities of students, most states have required students to be assessed at various grade levels on their writing abilities, typically 1-day test sessions in which students write in response to an assigned prompt. One of the weaknesses in using a one-day assessment is the reality that writing is typically not assessed in this manner by classroom teachers. Teachers provide plenty of time to reflect and revise, which is not possible with a 1-day assessment. Thus, many teachers believe state assessments only provide a snapshot of a student’s writing at a particular moment in time and cannot accurately reflect student writing abilities (Kirby et al., 2004; Spandel & Stiggins, 1990; Strickland et al., 2001). Besides problems associated with assessing students on 1-day writing experiences, there is the additional issue that different types of writing require different types of writing skills (DeShields, Hsieh, & Frost, 1984). Some students may be more skilled, for example, in expository writing, which is designed to convey information or explain what is difficult to understand, while being less skilled in persuasive writing, or writing that attempts to convince the reader to accept a particular point of view or take a specific action (DeShields et al.) Even though all styles of writing are typically taught, some students, depending upon the type of prompt being used for assessment purposes, may be at a disadvantage due to having a lesser level of competency to write using a particular style. More research is indicating that both the content and surface features of a student composition are impacted greatly by a student’s interest level for the composition (Thomas, 2001). Additionally, students from lower socioeconomic groups may be at a distinct disadvantage due to their lack of real-world experiences and limited language skills, such as an expanded vocabulary (Ketter & Pool, 2001). Furthermore, research has shown that some of the
larges gains in writing improvement take place when students are allowed to write about topics that matter to them, which creates more pride and ownership of their compositions (McBride, 2000). Students having to respond to a prompt topic they have little personal interest in may be less motivated to put forth their best effort or write with less emotion than responding to a topic that naturally excites them.

The selection of an appropriate prompt that can stimulate student interest cannot be understated. States do place a great deal of thought and preparation behind prompt selection, using, for example, field test prompts that are scored for reliability and validity purposes. Meredith and Williams (1984) state four considerations that should be taken into account when selecting a prompt. These include:

1. the topic should be one that is appropriate for the targeted student group;
2. the topic must possess sufficient breadth so that students are not stifled by a topic that only lends itself to a narrow response;
3. the topic is free from creating an emotional response on the part of the students or the scorers;
4. the final and most important consideration is whether the topic is consistent with the purpose of the writing. (p. 12)

Without question, state writing assessments have had a dramatic impact on writing instruction in our schools, both for teachers and students. Ketter and Pool (2001), in a study conducted in relationship to the Maryland Writing Test (MWT), examined how this test had influenced teacher beliefs concerning writing instruction. Teacher interviews determined several positive opinions, including the test had increased the K-12 writing focus, encouraged the use of rubrics and unambiguous scoring criteria, gave the impetus for more structured writing instruction, and improved student writing competence. However, teachers also expressed frustration that the test had put extra pressure on those students considered less skillful writers, the writing prompts used for testing were irrelevant to student experiences, and the tests had narrowed the range of writing skills taught for student mastery due to the exclusive MWT.
writing requirement of either a narrative or explanatory prompt being the only writing styles
tested. This study could be replicated in other states and more than likely similar positive and
negative impacts would be stated by teachers.

To offset the problems associated with a 1-day assessment in addition to providing
students an opportunity to be assessed on more than just one type of writing, at least one state
has taken a different approach to evaluating writing achievement. Since 1990, Kentucky has
been instrumental in developing and implementing a Writing Portfolio Program as part of its
high stakes performance-based assessment (Coe et al., 1999). Though unique in their design, the
goals of the Kentucky portfolio assessments are similar to those in most state assessments. These
goals include the improvement of writing by increasing the amount and kinds of writings
students produce as well as training teachers to assess individual student writing in order to
provide improved instruction (Callahan, 1997). The portfolio includes a variety of written
assessments, rather than just a 1-day snapshot that may or may not adequately critique writing
proficiencies. Since the implementation of this writing assessment, performance has varied
widely among schools. A joint study conducted by the Appalachia Educational Lab and the
Kentucky Department of Education used both qualitative and quantitative analysis to examine
1992-96 writing results. Forty-two schools with consistently improving writing scores and 22
schools with consistently declining scores over this time period were the sample study groups.
Based upon this research, 36 indicators, including such measures as the level of administrative
support, quality of professional development, and family and community involvement, were
determined to discriminate between the high-and-low achieving schools (Coe et al., 1999). Of
these indicators, statistical analysis determined that the consistently improving schools had
significantly higher scores on 35 of the 36 indicators (Coe et al., 1999). This study demonstrated
that the variations in writing achievement may be in direct relationship to specific indicators that,
if known, can be used by lower performing schools to address improvements in writing
instruction.
Even though the Kentucky state writing assessments have been viewed nationally as a model for other states to replicate, it still has its fallacies. For example, scores associated with the portfolio assessment have been viewed with reluctance by some critics because the portfolios are scored by a local team at each school, leading to possible concerns regarding reliability and validity of scores (Callahan & Spalding, 2006). This concern even led Kentucky to add a timed writing test in 1997 as an additional component to the portfolio assessments at certain grade levels, adding fuel to the fire for those critics who believe the timed test will lead to teachers using more of a formulaic approach to teach writing (Callahan & Spalding). However, in spite of these perceived weaknesses, one of the positive and long lasting impacts of the Kentucky portfolio assessments has been a growth of professional development opportunities and more collaboration and discussion among all teachers, not just writing teachers, in regard to best practices in writing instruction (Callahan & Spalding).

The Virginia Standards of Learning state writing assessment is composed of two parts and given annually to students at the 5th, 8th, and 11th grade levels. One component consists of 24 multiple-choice questions. The other component is a direct writing test that has students construct a writing sample in response to a provided prompt (An example of a sample eighth grade writing prompt is located in Appendix B). Each test component is given on separate days, with both test components combined in order to produce a final scaled score. All students in Virginia, regardless of grade level, are tested on the same days, typically the first or second week of March. Students at the secondary level may be tested at dates in both the fall and spring due to their school incorporating a semester block schedule. Prompt readers located in states other than Virginia are responsible for scoring the submitted student writing samples.

As stated in the document The Virginia SOL Writing Tests: A Teacher’s Resource Notebook for Enhancing Writing Instruction and Improving Scores on the State Assessments (1999), prepared for teachers by the Virginia Department of Education, the SOL written prompts are scored according to the following procedure:
Focused holistic scoring is used to evaluate writing proficiency which is based on several specific elements or domains of writing. These three domains are composing, written expression, and usage/mechanics. These domains are features of writing traditionally considered the main aspects of quality writing at any level – elementary, secondary, adult, or professional. The features of the usage/mechanics domain consist of surface structure features that are dealt with during the drafting and editing phases of the writing process. The features of the composing and written expression domains are deep structure features dealt with during the drafting and revision phases of the writing process. The writer is judged in each domain independent of the others to determine how each component works in harmony to achieve an overall effect.

The Domain Scoring Model yields scores in all three domains, ranging from a low of one to a high of four. Each paper is scored by at least two readers, who independently award 4, 3, 2, or 1 point(s) for control of each domain. “Control” is defined as the ability to use a given feature of written language effectively for a given developmental level. A paper receives a higher domain score to the extent that it demonstrates appropriate control of the features in each domain, as portrayed in a set of anchor papers called the “anchor set” and as described in a set of accompanying documents called the “scoring rubric” for each grade level. Scorers award a 4 if the writer demonstrates consistent, though not necessarily perfect control of almost all domain’s identified features; a 3 if the writer demonstrates reasonable, but not consistent, control of most of a domain’s features; a 2 if the writer demonstrates enough inconsistent control of several features to indicate significant weakness in a domain; and a 1 if the writer demonstrates little or no control of most of a domain’s features.

All papers are read by at least two readers; the final score is the total of both readings. If the two readers’ scores for any domain are not at least adjacent scores, the paper is read by a third reader, who awards a score for the domain in question. The third reader’s score and the higher score of an original reader are then summed to become the official score in that domain. The summing of domain scores result in raw scores that range from 6 to 24 on the Direct Writing Test. This subtotal is combined with the sum of correct answers on the multiple-choice portion of the test. The multiple-choice component assesses student ability to deal with prewriting or revision questions that might arise about features within the composing or written expression domains, and with editing questions about features within the usage/mechanics domain. The final raw score from the direct-writing and multiple-choice portion of the writing test is converted to a scaled score. These standard scaled scores can range from 0 to 600, with 400 representing “proficient” (passing) and 500 representing “advanced proficiency” (p. 12).

Virginia is not unique in its methods of assessing student writing proficiencies. Many states ask students to respond to a prompt and rate these compositions according to a pre-determined scoring system, most of which are based upon the use of holistic scoring and a rubric to establish criteria for scoring. States use a variety of scoring procedures to assess writing
samples. Some states use teachers from within their own states, some use teachers from the same school, and some are similar to Virginia by using scorers from outside the state (Hillocks, 2002). One of the most important components of assessing student writing is the agreement of independent readers to look at a piece of writing and score this writing consistently, a process called interrater reliability (Huot, 1996). Without a sufficient level of agreement between these readers, a writing assessment scoring procedure will be questioned in regard to it being a valid scoring instrument (Huot, 1996). This agreement is further impacted by other variables such as the content and organization of a student’s writing as well as the ability to actually see all of a student essay and not just those parts relevant to the scoring guideline (Huot, 1990). With the primary discussion focus on interrater consistency, there has been limited discussion on the validity of these assessments as well as confusion in trying to link both reliability and validity to a common set of criteria (Huot, 1990). Huot (1990) states “. . . we must be able to generalize scores if we wish to claim that holistic scoring results reflect writing quality and ability” (p. 203).

Generalizing scores using holistic scoring methods are limited due to the problems testers have in transferring the value of scores from one situation to another (Huot, 1990). Trying to link reliability and validity is also difficult due to the inconsistency among state scoring guidelines, usually in the form of rubrics, how the scorers or raters are trained to assess writing samples, and the type of scores a paper receives (Huot, 1996).

Rubrics are used by a majority of states, including Virginia, to help create consistency in writing assessment scoring and improve interrater reliability (Mabry, 1999). Often referred to as scoring guides, assessment rubrics establish rules by which the quality of answers is determined (Mabry). Even though scoring rubrics are widely used to assess student writing proficiency levels throughout the United States, they are still not without their critics. For example, there are those who believe rubrics limit what counts as learning and what counts as a demonstration of learning (Thomas, 2001). One way rubrics supposedly improve interrater validity is by limiting the scope or variability of scores, thus directing all scorers to judge student writing in regard to limited and identical criteria (Mabry). Even though rubrics limit variability, they may actually
undermine validity by failing to predict the true features of a student’s writing, creating a
disparity between scoring criteria and actual performance (Mabry). The Virginia SOL scoring
rubric is not designed to list specific criteria that must be met in order to receive a certain score,
thus the word “may” is often used in a score point description (Pearson Educational
Measurement, 2005). The use of the word “may,” instead of a precise and specific requirement,
helps scorers focus on the fact that a paper needs to demonstrate only some characteristics of one
score point and some of another (Pearson Educational Measurement). To additionally help
readers (scorers), they are also provided guidelines to help prevent reader bias, or personal
factors that may affect a reader’s perception of a student response, but have no basis in the
scoring rubric. Examples include the quality of handwriting, length of response, the writer’s
personality, and the use of offensive or disturbing content (Pearson Educational Measurement;

Assessing student writing can be a time consuming and tedious task. However, the advent
of technology to assist teachers and students in the writing process is having a dramatic impact
on writing productivity in our schools.

**Technology and Writing**

In our rapidly expanding technological society, students are becoming more skilled in
their knowledge to use multiple forms of technology, both independently and in combination
(Urquhart & McIver, 2005). With these new skills and knowledge, it is only natural to assume
that technology can play a role in the writing process. According to a survey conducted for the
National Writing Project by Belden Russonello and Stewart (2005), two-thirds of Americans
favor allocating more resources to help teachers instruct their students on the mechanics of
becoming better writers. One of the resources gaining more popularity to assist in the writing
process is the dependence upon some form of technology. All aspects of a writer’s work, both in
and outside of the classroom, have been impacted and advanced by the use of technology
(National Writing Project & Nagin, 2006). Technology is both practical and efficient and, more
importantly, blends in the high-tech culture the majority of our students are accustomed to. Students now have the ability to use a word processor instead of the traditional paper and pencil, to complete writing assignments. Using the computer to accomplish a written task has both decreased the amount of time students need to produce a final product and engage students in a technological tool that most are comfortable with.

Besides the word processor, other technological tools are also impacting the writing process in a positive way. The planning and brainstorming necessary before drafting begins has been enhanced by software organizational tools, such as Inspiration® and Kidspiration® that allow students to easily synthesize information in a visual format more appealing than just putting these initial thoughts on paper using a pencil (Montgomery & Marks, 2006). This type of organizational tool allows students to use keywords, main ideas, or pictures to identify key information and also eliminates the need to frequently erase or rewrite as students manufacture their brainstormed ideas using words, graphics, and symbols (Anderson-Inman & Horney, 1997; Montgomery & Marks). Also referred to as concept maps, semantic webs, or mind map, using computer based tools to create symbols and then connect these symbols to show representations between and among key ideas can greatly enhance the brainstorming process necessary before drafting begins (Anderson-Inman & Horney). This process is also intellectually challenging and causes students to develop the understanding necessary to see how key concepts, or propositions, are related to one another (Anderson-Inman & Horney).

Computers not only provide a tool to compose a written product, but they also are motivating due to the numerous features that allow the interjection of images, color, and sound. Technology can further enhance collaboration on a scale that is not completely confined to the classroom. Examples would include electronic pen pals, collaborative distance learning projects with students in other schools, online interactions between students and subject-area experts, the development of school and student web pages, desktop publishing, and the ability to publish to a variety of internet sites (Bromley, 2003). Students now have the ability to practice writing and organization with the use of PowerPoint presentations, injecting visual elements, such as clip art,
charts, and graphs into their research papers, and use streaming video and digital photography to add a multimedia element as part of written presentations (Kirby et al., 2004). With the rapid changes that happen almost daily with technology, it is feasible to assume that these changes will only continue to enhance the writing capabilities afforded our students.

With technological resources being used more and more in today’s classrooms, more research is also being conducted to study the impact of technology on certain student outcomes. Lin, Michko, and Waxman (2003) conducted a meta-analysis of 42 studies to examine the effects of teaching and learning with technology on students’ cognitive, affective, and behavioral outcomes of learning. The researches determined that technology had a small, positive, and significant effect on student outcomes in comparison to traditional instruction. However, the researches noted that the results from their analysis were twice as high as other recent meta-analysis conducted in the area of instructional technology, indicating the overall effects of technology on student outcomes may be greater than previously thought.

As previously mentioned, the writing process is a recursive act, with students moving back and forth among steps. The word processor can enhance the ability to navigate easily the steps of the writing process in a manner that allow students to make changes, add content, and find more information. Additionally, students may be more inclined to make revisions if exposed to easily assessable data bases and other forms of information. This was one of the findings concluded by Baker and Kinzer (1998) in their study of how the effects of technology impacted the writing process. They concluded that fourth-grade students were more inclined to repeat the steps of the writing process as they added content and revisions to their compositions when using the Internet or software packages to research new information. The recursive act of the writing process was also made simpler due to the numerous features of the word processor, such as deleting and inserting text. An additional finding from this study determined students were more inclined to revise their compositions at a later date due to the capability to store and reopen their saved files. In other words, the computer gave these students the capability to keep their compositions a work in progress for a greater length of time. In addition, student compositions
were easily assessable for review by their classmates and instructor, adding the additional element of ease of access for peer review purposes. D’Agostino and Varone (1991) found that the computer lab setting created more opportunities for teachers to interact with their students while they composed and revised. The word processor enhanced the ability for teachers to provide more individual feedback and instruction because the compositions were more readily assessable. This study also found that students developed more systematic proofreading strategies due to traditional double space sentence format, making it easier to review for punctuation and sentence variety.

The outcomes, whether positive or negative, in using a technological component to assist in the writing process are often highly dependent upon the implementation of the instructional design (Cramer & Smith, 2002). The variable of a teacher being knowledgeable concerning best practices in the implementation of technology to assist in the instructional process cannot be overemphasized. There is also the added element of using technology as a means of time efficiency and productivity. This was evident in a study conducted by Cramer and Smith (2002) comparing two middle schools, one with a technology rich language arts instructional emphasis and the other school with a more traditional instructional approach. The study focused on how student writing would improve in the areas of voice, organization, and ideas using a special technological project called “The Movie Project.” The authors predicted that positive achievement differences in these writing areas would be evident for those students using technology as a focal point of their instructional program. However, in reality, the authors determined that those students in the traditional school had actually used certain forms of technology, such as word processing, more than did those students participating in “The Movie Project.” Thus, this study exemplifies one of the problems research may face in comparing traditional vs. technological-based instructional programs; the variable of the frequency of implementation. In other words, just because a particular type of technology is available, the method in which it is used as well as the frequency in which it is used will determine the impact of its usage on student productivity.
The frequency in which teachers use the computer for writing purposes may actually be diminished by the fact that state writing assessments are paper-based. In an 80-item national survey of teachers’ attitudes and opinions about state testing programs conducted in 2001 by the National Board on Testing and Public Policy two specific survey questions addressed the use of computers to teach writing. One encouraging finding was the fact that 95% of the teachers surveyed indicated their school district did not have a policy in place to prevent using the computer to teach writing (Pedulla et al., 2003). Thus, the majority of school districts nationally appear to be supportive of using the computer as a tool to teach writing. However, a second question addressed whether or not teachers are influenced to not use the computer for writing instruction because of the paper-pencil format of the test. Nationwide, 30.2% of the teachers indicated that they agreed or strongly agreed that they did not use the computer when teaching writing because the writing test is handwritten (Pedulla et al.). Even though the technology is available to teach writing, the results of this survey question would appear to support the viewpoint that teachers may still not be inclined to use word processing as a component of writing instruction due to the natural tendency to teach what students will be exposed to on the state assessments.

There is an added variable associated with the integration of technology and its effect on student writing. Changes in how writing instruction is organized and patterned in order to better integrate the technology cannot be ignored. Greenleaf (1994) concluded that when computers were installed as part of a high school writing program midway through the school year, numerous changes were made by the instructor to make a more flexible teaching environment to integrate computer use. These changes included how she would schedule student use of the computers, adapting to the level of frequency of writing assignments, the ability to provide more individualized instruction, and methods of diversifying her curriculum by the organization of multiple concurrent teaching activities. The researcher found that the method in which the instructor made use of the computers, rather than the computers themselves, can play a key role in magnifying the impact computers have on student learning and writing. Thus, as this study
confirms, the role of the teacher, regardless of the type or frequency of technological implementation, is the key to effective technology integration.

Will technology eventually supplant the role writing currently plays in our society? The word processor, for example, does expedite the writing process, and more importantly, the revision process. Word processors can provide numerous benefits to the writer. Some examples include the ability to navigate and search quickly throughout a text, to move and change text, and the capability to store information where it can be retrieved both rapidly and from various places (Bangert-Drowns, 1993; Street, 2000). Additional word processor features, such as spell and grammar checks, help make the writing process easier for students to produce a final written product (Bromley, 1998). Writing by means of a word processor also enable students to take more risks in their writing, to think about organization and word choices more freely, and sustain thoughts from one draft to the next (Newman, 1984). The numerous features afforded by word processing software allows students to take control of their own writing rather than relying on others to assist them, which is particularly advantageous to students with poor writing skills (Montgomery & Marks, 2006). Electronic texts also differ from print-based texts by allowing students the unique and motivating features of interactivity and the use of audiovisuals and graphics (Karchmer, 2001). Computers, unlike paper and pencil, make easy the act of revision, which can be crucial in helping motivate students to engage in this often difficult and time-consuming task. The three essentials of revising and editing – cutting, adding, and reordering – are additionally made easier with the use of the word processor (Murray, 1985). The word processor can especially be useful for low-achieving writers who are sometimes reluctant to write in quality or quantity for varied reasons (Graham & Perin, 2007). However, the word processor cannot supply the content and unique style that an individual must use to organize words in order to create a composition. In other words, the word processor can not write for students, but it can serve as a means for students to write.

With the numerous benefits afforded by the word processor, a logical question to address is whether or not the word processor can lead to improved writers and writing? Phenix and
Hannan (1984) determined that first grade students, through their use of a pilot word processing program called Story Writer, spent more time composing and revising, came to a better understanding of the writing process, gained more confidence in their writing ability, and improved their composing and transcribing skills, compared to than those students who were not exposed to this program. Goldberg, Russell, and Cook (2003) performed a meta-analysis of 26 studies conducted between 1992-2002, with each study comparing k-12 students writing with computers versus paper and pencil. The researchers concluded that students who wrote with word processors tended to produce longer passages and higher quality passages than students who wrote with paper and pencil. The mean effect size indicated that students who developed their writing skills using a computer produced written work that was .4 standard deviations higher in quality than those students using paper and pencil, with a larger effect for middle and high school students than for elementary students. Using qualitative analysis to examine 39 studies not included as part of their meta-analysis, these researchers also determined that writing becomes more of a social process when using the computer, as students are more likely to share their work with each other. At the middle school level, this finding is of particular significance considering socialization is a priority for many students. Bangert-Drowns (1993) also conducted a meta-analysis in which he analyzed 32 studies, all comparing groups of students who received identical writing instruction but only one group was allowed to use the word processor for writing assignments. Bangert-Drowns concluded that students using the word processor exhibited more improvements in the quality of their writing, especially for those students considered weaker writers. These students also wrote longer documents; however, their attitudes toward the writing process were generally no different from those students who used only paper and pencil to complete assignments. This finding would suggest that students may become more
enthusiastic about writing, not because of their positive attitudes toward writing, but instead, by their enjoyment and motivation to work on the computer to produce a written composition (Bangert-Drowns, 1993). Zhang (2000) further concluded that ROBO-Writer, a computer writing tool, helped elementary age students with an identified learning disability overcome their anxiety related to writing mechanics and help them express clearer ideas and improve their overall attitude toward writing.

However, not all studies have shown word processors improve writing quality. Dybdahl, Shaw, and Blahous (1997) studied the impact of the word processor in relationship to text quantity, defined as the length of text produced, and quality of student writing. Using fifth grade students as the study population, these researches determined that there was no difference in the quality of writing for students using the word processor compared to those using paper and pencil. There was also no difference in the total number of words produced. The only difference noted pertained to the fact students using the word processor wrote overall longer sentences. The researches noted that their findings validated the important role of a knowledgeable and competent teacher as the key to improving student writing, not the computer. Etchison (1989), in a comparative-design study of college-age students, found that basic writers using the word processor did write significantly longer texts, however, there was no different in writing quality. Dybdahl and Shaw (1989) found that an experimental group of fourth grade students actually exhibited decreases in quality of writing following a 9-week training session using the computer and a word processing program. However, this decrease was temporary as students showed improvement in writing quality with extended instructional time on the computer, actually producing significantly more writing than the control group composing by hand. Harris (1985) investigated the effect on word processing on revising. This study determined that these college-
age students actually made fewer revisions, particularly those types of revisions that affected the meaning of the written piece, than when they wrote using paper and pencil. Inexperienced writers were even less inclined to make major changes in their texts when using the word processor. This study would appear to confirm the importance of students being taught revision techniques and strategies, regardless of how their compositions are composed. Dalton and Hannafin (1987) found that there were no significant differences in how seventh grade students composed on the word processor compared to those seventh graders using paper and pencil. However, students considered low achievers did benefit more from the use of the word processor, particularly in the area of revision. The researchers also acknowledged several factors that may have negatively impacted students using the word processor to compose. These included the fact students were first asked to compose using paper and pencil, even though these students knew they were going to transfer these drafts to the computer; some students experienced difficulty with typing; there were sometimes untimely problems with gaining access to computer labs; and students in the word processing group reported they occasionally neglected careful planning practices prior to composing on the computer due to their impression that the word processor would simplify editing, thus planning was not viewed in the same way when compared to using paper and pencil. Dudley-Marling and Oppenheimer (1990), in their study of seventh and eighth graders and their new experience with using the computer to compose compositions, also concluded that these students rarely made substantive revisions and thus improve the quality of their work, instead focusing more on changes to spelling, punctuation, and changing words. These same factors may still exist in many school settings and thus cannot be underestimated by teachers when asking students to compose using the word processor.

Another important variable to consider when asking students to compose using the computer is their comfort level related to keyboarding navigation and skill. Students lacking the
speed to navigate the keyboard may actually be negatively affected in their desire to produce a high quality composition. Previous experience with word processing was the focal point in a study conducted by Wolfe, Bolton, Feltovich, and Bangert (1996). These researchers, based upon information collected from 406 tenth grade students, concluded students who had a greater level of comfort and experience using word processors for writing tended to score the same on essay writing assignments, regardless of whether they used the computer or paper and pencil. However, students who had poor keyboarding skills and less computer experience tended to score lower on essays written using the word processor than those composed with paper and pencil. This study would suggest that the element of keyboarding skill plays an important role in student composition using the word processor.

Dowling (1994), in interviews of college-age students over a 4-year time frame, also found other issues related to writing and the computer that may actually serve as a determent to the writing process. These issues included the inability to quickly and efficiently scan a document due to the constraints of the screen and the scrolling techniques available; a tendency for students to write with shorter words and simpler sentences due to their lack of keyboard fluency; the belief that there was less ownership and personalization of computer generated text; and, an unwillingness on the part of some writers to let go of their work and reach a level of completeness due to the frequent editing and format options afforded by the word processor, leading to the opinion that computer-generated text must be manipulated and altered more than hand-written text.

With the advent of technology, students are now using other multimedia tools to develop writing assignments. These technologies are helping expand the traditional definition of writing in which essays are composed on a word processor (Gerard, 2006). Other forms of technology that can be used to accomplish compositions, though not typically in the essay format, include PowerPoint presentations, blogs, moviemaker, web page design, and even e-mail and message boards. These non-traditional writing formats include pictures, sound, and other features associated with multimedia technology (Gerard). Of course, some in the academic environment
may question the use of this type of technology to develop writing skill. However, if the emphasis is on writing to organize ideas and help in understanding and applying concepts, these multimedia tools can be just as effective, though not in the customary sense (Gerard).

The Internet also affords the avenue for students to publish their written work for essentially the entire world to view. This in itself can be very motivating for students to publish work that they are not only proud of but are comfortable with as far as quality and content. In an interview study conducted of 13 K-12 teachers across the United States, all considered exemplary at using technology, the majority stated that they believed their student writing improved once the Internet was used as a publishing source in the form of teacher or student developed web pages (Karchmer, 2001).

The Internet is also allowing the use of web-based writing instructional tools, such as MY Access! and Criterion Online Writing Evaluation. Both of these programs provide the advantage of scoring student submitted writing prompts, allowing a teacher more time to focus on other aspects of the writing process. Both MY Access! and Criterion provides almost instantaneous feedback, which an instructor cannot possibly accomplish. However, these technological tools can only compliment the instructional program. Students need to be taught the writing process as well as understanding that state writing rubrics may score their writing samples differently than these web-based programs.

Another advantage to the computer, and in particular, the computer lab setting, is the different learning dynamics that come into play. Teachers are no longer confined to proofing paper drafts, which can be a tedious process, especially for those students with poor handwriting skills. Furthermore, students can compose at their own pace, which allows teachers the ability to deal with issues related to revision more immediately (Street, 2000). The lab setting provides an interaction pattern among students and teachers that is not possible with paper and pencil (Street, 2000). More importantly, the lab environment can provide a more comfortable setting for reluctant writers who may have writing deficiencies related to handwriting, drafting, or revision, all made easier by the word processor.
The Need for a Writing Agenda

The National Commission on Writing in America’s Schools and Colleges released a report in April 2003, entitled *The Neglected “R”: The Need for a Writing Revolution*. The report began with the following sentence; “American education will never realize its potential as an engine of opportunity and economic growth until a writing revolution puts language and communication in their proper place in the classroom” (p. 3). This alarming and eye-opening statement indicates the serious implications that could result if students are not provided the time, resources, energy, and commitment necessary to ensure they become proficient writers. This report also emphasized the significance of our nation’s leaders placing writing squarely in the center of the school agenda as well as policymakers at both the state and local levels providing the resources necessary to improve writing (National Commission on Writing). It was evident from the language in this report that the quality of writing in our country is of such a concern that it will take a national effort to implement changes that will result in dramatic improvements. Was the Commission overstating their concerns? Based upon past history, the Commission was only acknowledging a problem that surfaced centuries ago. According to one researcher, one of the earliest clay tablets produced by the Sumerians, the people responsible for giving the world writing, “recorded the agonized complaints of a Sumerian teacher about the sudden drop-off in students’ writing ability” (Jenkinson, 1988, p. 714). The desire to offer freshman writing courses dates back to 1874, when Harvard University, in direct apprehension over the poor writing skills of their upperclassman, initiated a written entrance exam as part of admission requirements in which half the candidates, the majority from elite preparatory schools, failed (National Writing Project & Nagin, 2006). In other words, the belief that the proficiency of student writing is sub-standard is not a newly formed opinion.

For nearly 20 years students have demonstrated they were not prepared for the level of writing required at the collegiate level (Simmons, 2005). One reason for this level of writing deficiency relates to the thought process of what high school students perceive as satisfactory writing performance. Many times secondary-level students have been more concerned with the
mechanics of writing rather than the impact or effect of their writing on the reader (Simmons, 2005). There are plenty of other variables that play a role in students not being exposed to a K-12 experience that helps them become proficient writers. Creating proportionate amounts of time for students to engage in the writing process is at the forefront of factors that impact writing achievement. The American public, based upon survey results by Belden Russonello and Stewart (2005), consistently supported the opinion that writing should be taught often and serve as a priority in our schools. Survey results also indicated the American public supported the following: writing instruction should begin at the early grade levels; writing should be taught across all subject and grade levels; all teachers should have the training and ability to teach writing; and writing should be acknowledged as a primary tool for enabling students the ability to think more in-depth about a topic. These survey results validate the importance of writing as viewed by the public. Unfortunately, for various reasons, writing is not always viewed in the same regard in our public schools.

As previously stated, many students entering post secondary education have felt unprepared for both the type and amount of writing required at the college level. However, in spite of the apprehension of students and instructors at all levels of education concerning their writing skills, there is still an overwhelming emphasis on reading instruction in comparison to writing instruction (Elbow, 1993). Reading is often perceived as being more fundamental than writing in many courses, with writing only assigned as a means to serve reading, rather than acknowledged as a tool that can compliment reading and thus benefit both (Elbow). This mindset of reading being more important than writing is established early in our schools, with numerous resources, materials, and personnel provided to ensure students can read by a specific age or grade level. Many schools employ reading specialists, reading tutors, after-school programs, all designed to help students improve their reading skills. However, this same level of commitment to guarantee students learn to write well at an early age and beyond is, without question, greatly skewed toward the side of reading. One of the areas associated with reading deficiencies relates to problems with comprehension. Writing can enhance comprehension by allowing students to
see how the meaning of text is constructed and words organized to create meaning and serve a specific purpose (Elbow). Thus, when teachers fail to acknowledge the role of writing to assist in teaching reading, students are missing out on a skill that can be especially important for those students having difficulties associating meaning with the words they have read.

An example of a widespread and popular instructional approach to increase writing frequency in our schools, particularly at the secondary level, is the research paper assignment. A 2002 survey sponsored by The Concord Review and conducted by the Roper Organization, demonstrated a typical problem associated with the research paper and extensive writing assignments in general. The Concord Review was established in order to publish and recognize exemplary history essays composed by students throughout the United States. However, this survey stemmed from the apprehension of Concord Review leadership who believed the research paper was being assigned less frequently due to an emphasis on other writing assignments intended to prepare students for state writing assessments (Center for Survey Research and Analysis, 2002). Results indicated that 95% of the teachers surveyed believe writing a research paper is still considered a critical component of their class assignments. However, it was also clear that many paper assignments considered to be research papers by these same teachers were not much longer than most general essay assignments, with 62% of teachers never assigning a paper of 3,000-5,000 words in length and 81% never assigning a paper of over 5,000 words in length (Center for Survey Research and Analysis). The primary barrier teachers cited for not assigning more lengthy essays was the amount of time required to read and grade these longer research papers, which not only required time away from school to grade, but also took time away from other teaching tasks (Center for Survey Research and Analysis). This survey is indicative of one of the main reasons writing is often neglected in our schools. Not only does the composition of a writing piece take time in class to compose, but the time required for teachers to grade and provide beneficial feedback can be overwhelming, particularly for those teachers with a large number of students.
The National Assessment of Educational Progress (NAEP), also known as “the Nation’s Report Card, periodically conducts national assessments in the core subject areas and reports to the nation these assessment results for students at grades 4, 8, and 12. The 2002 NAEP writing assessment concluded that students at Grades 4 and 8 had made significant gains in writing achievement from the previous assessments administered in 1998 (Center on English Learning & Achievement, 2006). However, the assessment results were not as promising for older students, minority students, and the poor. There was no significant change from the 1998 writing assessments for students in Grade 12, Black and Hispanic students, and those eligible for free or reduced-price lunch (Center on English Learning & Achievement). Thus, even though writing achievement improved for the students in the lower grades, students considered to be on the brink of entering post-secondary education or the work force were not making the same progress. For college-bound students, being able to write well in a global society characterized by an explosion of electronic and wireless communication is more imperative than ever before, regardless of the field of study (Graham & Perin, 2007; Juzwik et al., 2006; Urquhart & Mclver, 2005). Combine this concern with the fact our minority populations are rapidly expanding and their writing skill is not growing proportionally could also have long-term ramifications for their economic growth and prosperity.

The NAEP assessments also survey students to address other specific indicators. One of these indicators relative to writing is the students opinions on the amount of time they spend on writing, either as part of their language arts class, as a component of another core academic class, or as an assignment for completion at home. An analysis of long-term data (1988 – 1998) has indicated a moderate increase in the emphasis on writing and the teaching of writing, both in English language arts classrooms and across the curriculum (Center on English Learning & Achievement, 2006). However, in spite of the increases in time spent on writing, students are still not writing an extensive amount for any of their subjects, including English, and many are not writing for any length (Center on English Learning & Achievement). For example, in 1998, 40% of 12th grade students reported never or hardly ever writing papers of three pages or more
for their English classes (Center on English Learning & Achievement). Furthermore, data indicated that by the year 1998, only a small percentage of students had teachers who expected them to spend three or more hours per week on homework writing assignments, while two thirds of eighth grade students had teachers who expected an hour or less per week of outside class writing assignments (Center on English Learning & Achievement). NAEP data would appear to support the fact that teacher expectations for longer writing assignments, which, if properly assigned, can be productive in developing writing skills and providing opportunities to explore ideas and develop more in-depth opinions and arguments related to a particular topic, are lacking in many of our classrooms.

Writing is not just a concern at the public school or higher education level. A 2003 report from Public Agenda, a nonprofit organization that conducts national opinion polls on various issues, confirmed a fairly representative business and higher education viewpoint in regard to public school graduates’ basic reading and writing skills. Entitled Where We Are Know, this report was a summary of public opinion surveys drawing on a decade of Public Agenda research. Survey date collected between 1998 and 2002 found that large majorities of employees and professors were dissatisfied with the skills of public school graduates, especially critical of youngsters’ command of grammar and spelling and their ability to write clearly (Johnson & Duffett, 2003). Similar concerns exist among high school teachers, with only one of every five teachers surveyed affirming the belief that students in their own school typically learn to speak and write well (Johnson & Duffett).

Writing is also an increasingly required skill in today’s business and work setting. A report prepared by The National Commission on Writing For America’s Families, Schools, and Colleges (2004) acknowledged the important role writing plays in our business sector. Entitled, Writing: A Ticket to Work . . . Or a Ticket Out, was developed through data collected on survey results of 120 American corporations, with a combined employment of approximately 8 million people. Survey results indicated that writing is a “threshold skill” for both employment and promotion, particularly for salaried employees. Writing is also a characteristic part of the daily
work schedule, with more than half of the companies reporting their employees frequently produce technical and formal reports as well as memos and other types of written correspondence. With the use of e-mail, employers stated that their employees now have to write more often. One would assume that many of these salary positions are being occupied by those with a college degree who would have the ability to write skillfully. However, more than 40% of the employers indicated they either offer or require training for salaried employees due to inadequacies associated with their writing abilities, at a cost of close to $3.1 billion dollars annually.

Our economy is also becoming more knowledge driven. In this knowledge economy, wealth is being created by industries that generate and sell information and market products whose chief ingredient is knowledge (Brandt, 2005). Driving this knowledge economy is the element of human capital, which is associated with creativity, the process of learning, social networking, technology, and communication (Brandt). Writing is at the heart of this knowledge economy by serving as a tool to put this knowledge in a tangible and accessible form (Brandt; National Writing Project & Nagin, 2006). Individuals with the capability to use the written word in a highly skillful way can prosper and strive in various occupations as part of this knowledge driven economy.

These writing deficiencies are not just confined to the business sector. Another report conducted by The National Commission on Writing for America’s Families, Schools, and Colleges (2005) examined the role of writing in state government. This report, entitled Writing: A Powerful Message from State Government, also confirmed the importance of writing skill being a required talent for state employees. Similar to the business sector, survey results from state personnel directors indicated that 30% of state professional employees are below standard in writing, and states were spending close to a quarter of a billion dollars annually to provide writing training to their employees (National Commission on Writing for America’s Families, Schools, and Colleges, 2005). Implications from both survey reports only reinforces to those in the educational community the importance of preparing graduates with the skills they need in
order to be skillful writers, both in business and in life (National Commission on Writing for America’s Families, Schools, and Colleges, 2004).

Only during the past 3 decades has attention started to mount to determine what people do when they write as well as how teaching can support the writing process in the classroom (Strickland et al., 2001). Research during this time frame has helped teachers understand how to support students’ writing development and shift the emphasis from an evaluation of a final written product (Strickland et al.) Additionally, new state standards for the language arts has attributed to an awareness of what students should know and be able to replicate in regard to writing at all grade levels, increasing the instructional knowledge base and providing more consistency in writing instructional programs (Strickland et al.) Additionally, these standards have helped entire school faculties accept more responsibility for student performance, not just those teachers assigned to teach writing (Strickland et al.) The 2003 National Commission on Writing report was instrumental in stating what has been known for many years; the writing abilities of our students are lacking, particularly for those students entering higher education or a work-related field where communication is critical. With the advent of this report, more attention is being devoted to research and best practices in writing. A 2007 report to Carnegie Corporation of New York, entitled Writing Next, offers 11 specific teaching techniques teachers in grades 4-12 can use in developing their writing instructional programs. The ultimate goal of this report is to provide guidance for improving writing instruction for adolescents, a topic that has previously not earned the attention and focus it deserves (Graham & Perin, 2007). Reports such as Writing Next are providing relevant information and attention toward increasing student writing achievement and addressing educational and business concerns related to the area of writing. In turn, decades of simply ignoring the fact we have a writing crisis in our nation appear to be over. This new awareness of the important role writing plays in our society will hopefully be instrumental in a renewed commitment by our educational sector to make writing a priority in our schools.
Summary

The idea that writing is a prevalent and effective method to help students expand their knowledge base is still the general consensus of elementary and secondary school authorities. Getting teachers to develop methods to incorporate writing into their instructional goals and objectives is critical for students to gain valuable writing practice and be exposed to the learning potential writing can supply. With teachers interacting more with students during the recursive act of the writing process, there is now more of a focus on how a composition is developed, instead of only a concern with grading a completed written assignment. Written compositions are now being made easier to produce and publish with the numerous features offered by technology. Besides the ease and comfort with using the word processor, the difficult, but very important task, of revising is also dramatically enhanced.

State writing assessments have had a major impact on writing instruction in our schools, both in a negative and positive way. At least one positive outcome has been a renewed impetus for teachers to focus more on the importance of students becoming skillful writers, both for their benefit while in the educational setting and even more so as they enter a highly technological and communication-based society. Writing, often neglected and minimized in comparison to its ally, reading, can no longer be ignored or taken for granted. We owe it to our students to provide the time and commitment to help them become skillful writers. We can no longer ignore the fact that students are not writing at a level that will benefit them as they pursue an advanced education or enter a work field dependent upon communication. By establishing a new degree of dedication to ensure our students are skillful writers, we are in turn providing them a level of expertise in an area that will only continue to grow in importance and have the potential to impact their lives in a beneficial way.
CHAPTER 3
RESEARCH METHODOLOGY

This chapter outlines the methodology that was used for this study. It contains the following sections: research design, target population, instrumentation, data collection, data analysis, and summary. Quantitative methods using descriptive and inferential statistics will be used to provide results of this study that will be presented in Chapter 4.

Research Design

A quantitative research design using both descriptive and inferential research methods were used for this study. This primary focus of this study examined the Virginia Standards of Learning (SOL) eighth-grade writing scores in relationship to the 2003 National Commission on Writing Recommendations to improve writing achievement. In addition, this study examined differences in SOL writing scores that may exist due to certain variables unique to each school, including grade configuration, socioeconomic status, and the addition of a comprehensive writing plan. This study also examined the Southwest Virginia geographic region to determine possible differences in SOL writing performance that may exist when compared to other geographical areas in the Commonwealth of Virginia.

Target Population

The population for this study included 364 schools throughout the Commonwealth of Virginia that participated in the Virginia Standards of Learning eighth-grade writing assessments during the 2006-2007 testing year. Students at the 5th, 8th and 11th grade levels are tested annually on their writing proficiency as part of the Virginia Standards of Learning assessments, which also includes the other core subject areas of Math, English, History, and Science. Of the population schools, 51 were classified as having multiple SOL writing testing grades in their
building, which would include students being tested at grade levels other than just the eighth. These grade configurations consisted of one of the following: grades 5-8, grades K-8, grades K-12, or grades 8-12.

Instrumentation

This quantitative study was conducted using a survey instrument developed by the researcher. The research methods were designed to involve the collection of data by the survey questionnaire administered to a representative from each school in the Commonwealth of Virginia that assessed students at the eighth grade level on the Virginia Standards of Learning writing tests during the 2006-2007 testing year, which includes a total of 364 schools. For comparative analysis, schools were grouped according to their pre-determined regional study group, which includes eight regions throughout the Commonwealth of Virginia. These eight study groups are classified by the Virginia Department of Education for the purpose of regional superintendent meetings, research, and staff development. The person selected to complete the survey questionnaire was chosen by the principal at each school using criteria supplied by the researcher. The selection criteria was based upon the teacher selected being the one most qualified or interested in assessing the eighth grade writing instructional program at their school as determined by the principal.

The survey instrument was developed based upon the recommendations to improve writing proficiency as suggested by the 2003 National Commission on Writing, my personal experience as a middle school principal, and the literature review in this field. Section one of the survey was comprised of questions related to the grade configuration of the school and specific aspects of the school-wide writing program that are perceived as being beneficial to writing success, including questions relevant to a comprehensive school-wide writing plan and the employment of a full or part-time writing specialist.

The second and third sections included 26 statements that address the recommendations suggested by the National Commission on Writing to improve writing proficiency. Questions 2,
8, 9, and 10 related to the eighth-grade core curriculum teacher support of the writing program; questions 1, 3, and 4 related to the division-administrative support of the writing program; questions 6, 7, 12, and 13 related to the time spent on supplemental writing activities; questions 21 and 22 relate to the time that students spend on writing assignments; questions 5, 11, and 25 related to activities that promote writing development; questions 14, 15, 16, 17, and 18 related to the understanding of the scoring criteria used to evaluate the state writing assessments; and questions 19, 20, and 26 related to the use of technology to assist in writing instruction. A five-point Likert scale designed for a forced choice response was used for each statement, with the scale ranging in the following manner: 5 = strongly agree, 4 = agree, 3 = neither agree nor disagree, 2 = disagree and 1 = strongly disagree.

Factor analysis using principle component analysis with varimax rotation was used to determine the criterion variables in this study. Specifically, a factor analysis of the items in Section 2 and 3 of the survey instrument was conducted. The results of the factor analysis showed there were seven factors (dimensions) in the data. For each factor a new criterion variable was created by calculating the mean of the items that loaded on a given factor. The items were on a 1 to 5 scale, with 1 being the lowest level of agreement for a question and 5 being the highest level of agreement. Based on the factor analysis, two questions included on the survey questionnaire, numbers 23 and 24, were not used as part of the data analysis.

Listed below are the survey questions according to each of the seven dimensions:

**Eighth-Grade Core Curriculum Teacher Support for Writing Dimension**

2. Writing is viewed as an important instructional component by non-writing eighth-grade core curriculum teachers.

8. Writing across the curriculum is an instructional approach used by eighth-grade teachers at my school.

9. Eighth-grade core curriculum teachers incorporate various writing strategies in their class activities/assignments.

10. Eighth-grade core curriculum teachers provide students feedback to help improve their writing.
**Division-Administrative Support for Writing Dimension**

1. Eighth-grade writing teachers at my school have adequate writing resources and materials.

3. My school division places a high priority on writing instruction.

4. My school administration places a high priority on writing instruction.

**Time Spent on Supplemental Writing Activities Dimension**

6. Eighth-grade students receive feedback of their writing from their peers.

7. Eighth-grade students read aloud their written compositions to an audience.

12. Eighth-grade writing teachers write along with their students.

13. Eighth-grade writing teachers use research based practices to develop writing instruction.

**Time Students Spend on Writing Assignments Dimension**

21. Prior to SOL testing, how often are eighth-grade students given in-class writing assignments?

22. How often are eighth-grade students given homework writing assignments?

**Activities That Promote Writing Development Dimension**

5. Eighth-grade students at my school have their written compositions published (i.e., in booklets, school newspaper, on the internet, etc.).

11. Eighth-grade writing teachers in my school participate in a National Writing Project Summer Institute.

25. How often do eighth-graders use word processing software for their writing assignments?

**Understanding of Writing Scoring Criteria Dimension**

14. Eighth-grade writing teachers have a thorough understanding of the SOL scoring rubric.

15. Eighth-grade students have a thorough understanding of the SOL scoring rubric.
16. Eighth-grade students are comfortable using the SOL scoring rubric to analyze their own writing.

17. Eighth-grade students have a clear understanding of the components associated with the multiple-choice section of the SOL tests.

18. Eighth-grade students have a clear understanding of the components associated with the direct writing section of the SOL test.

Technology to Assist in Teaching Writing Dimension

19. Eighth-grade students use technological planning tools, such as Inspiration and CMaps to develop their writing drafts.

20. Eighth-grade writing teachers use computer applications, such as Criterion, to help in analyzing students’ writing.

26. Eighth-grade writing teachers use NCS Mentor as a training tool to help prepare students for the SOL writing test.

The final two questions were open-ended, one applicable only to those schools that reported at least a 5% decline in SOL writing passing percentage scores during the 2006-2007 testing year. The final question was provided for additional comments.

Data Collection

Three methods of data collection were used in this study. Virginia Standards of Learning aggregated writing pass rates, as expressed as the school percent passing rate for the 2006-2007 school year, were obtained from an assessment specialist from the Virginia Department of Education. The percentage of students receiving free or reduced-price meals was obtained from the Virginia Department of Education (VDOE) 2006-2007 Free and Reduced Price Meal Eligibility Report, which was found on the VDOE web site. The other form of data collection involved a survey questionnaire that was mailed to all 364 schools included in this study. Prior to the distribution of the questionnaire, the survey instrument was reviewed by a panel of experts, which consisted of seven eighth grade writing teachers in the Smyth County, Virginia School
System. This panel reviewed the instrument for clarity and provided suggestions and recommendations for revision purposes.

After receiving Institutional Review Board (IRB) and graduate committee approval, the survey packet of information was mailed to each of the 364 school principals included in this study. The survey packet contained a cover letter to the principal (See Appendix D), a letter to the teacher selected to complete the questionnaire that explained the procedures for completing the survey instrument (See Appendix E), and a return self-addressed stamped envelope. The cover letter included a brief description of the study, justification for completing the survey, an explanation of how the survey results will be used, and the criteria for the principal to use in order to select an teacher to complete the survey. The selection criteria consisted of the teacher being selected by the principal as the person most knowledgeable or interested in assessing the eighth grade writing instructional program at each school. A follow-up e-mail was sent on September 18th to those principals of each school who had not returned the questionnaire by the suggested date of September 15 (See Appendix F). An additional mailing of survey questionnaires was mailed directly to eighth grade writing teachers on September 26th, resulting in a final return rate of 44%. The return survey questionnaire was coded for tracking the name of the school completing the survey, with information contained in the cover letter indicating that this code is only for the purpose of identifying each school completing the survey and not for the purpose of identifying any individual or school.

Data Analysis

Descriptive and inferential statistics were used to analyze the research questions in this study. The Statistical Package for the Social Sciences (SPSS) software program, version 11.0, was used to analyze data. The following research questions guided this study:

Research Question 1: Are there differences in Virginia Standards of Learning 2006-2007 8th grade writing passing rates based on (a) grade configuration (single writing testing grade versus multiple writing grade testing), (b) whether or not schools have implemented a
comprehensive writing plan, (c) region (Southwest Virginia versus other regions in the state) and (d) the percent of students who participate in the free and reduced-price lunch program?

To answer this research question, a t test for independent samples was used to evaluate mean differences for grade configuration (single-testing grade versus multiple-testing grades), the implementation of a comprehensive writing plan, and region comparison, while Pearson’s correlation was used to evaluate the relationship between percentages of students on the free or reduced-price lunch program. The following null hypotheses for Research Question 1 were:

Ho1₁: There is no difference in the Virginia Standards of Learning 2006-2007 8th grade writing passing rates between schools with a single testing grade and schools with multiple testing grades.

Ho1₂: There is no difference in the Virginia Standards of Learning 2006-2007 8th grade writing passing rates between schools that have implemented a comprehensive writing plan and those that have not.

Ho1₃: There is no difference in the 2006-2007 8th grade writing passing rates of schools in the Southwest Region and those in schools in other regions of the state.

Ho1₄: There is no association between the percent of students who participate in the free or reduced-price lunch program and the 2006-2007 Virginia SOL 8th grade writing passing rates.

Research Question 2: After controlling for the percent of the student population who participate in the free or reduced-price lunch program, is there a difference in the 2006-2007 SOL 8th grade writing passing rates between schools with a single writing testing grade and schools with multiple writing testing grades, schools with and without a comprehensive writing plan, and region (schools in the Southwest Region compared to other regions in the state of Virginia)?
To answer this research question, analysis of covariance was used to evaluate mean differences in eighth-grade writing passing rates for grade configuration (single-testing grade versus multiple-testing grades), the implementation of a comprehensive writing plan and region comparison. The covariate in each ANCOVA model was percentage of students on the free or reduced lunch program. The following null hypotheses for Research Question 2 are:

Ho2₁: After controlling for the schools’ percent of students who participate in the free or reduced-price lunch program there is no difference in the 2006-2007 8th grade writing passing rates between schools with a single testing grade and those with multiple writing testing grades.

Ho2₂: After controlling for the schools’ percent of students who participate in the free or reduced-price lunch program, there is no difference in the 2006-2007 8th grade writing passing rates between schools with a comprehensive writing plan and those that do not.

Ho2₃: After controlling for the schools’ percent of students who participate in the free or reduced-price lunch program, there is no difference in the 2006-2007 8th grade writing passing rates between schools in the Southwest Region and other regions in Virginia.

Research Question 3: Are there differences in eighth-grade core curriculum teacher support for writing, division-administrative support for writing, supplemental writing activities, time students spend on writing assignments, activities that promote writing development, the understanding of writing assessment scoring criteria, and the use of technology to assist in writing instruction in the Southwest region compared to other regions in Virginia?

Seven t tests for independent samples were conducted to test the following null hypotheses:

Ho3₁: There is no difference between schools in the Southwest Region and those schools in other regions of the state regarding 8th grade core curriculum teacher support for writing.
Ho3₂: There is no difference between schools in the Southwest Region and those schools in other regions of the state regarding the division-administrative support for writing.

Ho3₃: There is no difference between schools in the Southwest Region and those schools in other regions of the state regarding the use of supplemental writing activities.

Ho3₄: There is no difference in the Southwest Region and those schools in other regions of the state regarding the time students spend on writing assignments.

Ho3₅: There is no difference between schools in the Southwest Region and those schools in other regions of the state regarding the use of activities that promote writing development.

Ho3₆: There is no difference between schools in the Southwest Region and those schools in other regions of the state regarding the understanding of writing assessment scoring criteria.

Ho3₇: There is no difference between schools in the Southwest Region and those schools in other regions of the state regarding the use of technology to assist in writing instruction.

Research Question 4: Is there a difference between schools that have implemented a comprehensive writing plan and those that have not and the 8th grade core curriculum teacher support for writing, division-administrative support for writing, use of supplemental writing activities, time students spend on writing assignments, activities that promote writing development, the understanding of writing scoring criteria, and the use of technology to assist in writing instruction?

Seven t test for independent samples was conducted to test the following null hypotheses:

Ho4₁: There is no difference in the 8th grade core curriculum teacher support for writing between schools that have a comprehensive writing plan and those that do not.

Ho4₂: There is no difference in division-administrative support between schools that have a comprehensive writing plan and those that do not.
Ho4₃: There is no difference in the use of supplemental writing activities between schools that have a comprehensive writing plan and those that do not.

Ho4₄: There is no difference in the time students spend on writing assignments between schools that have a comprehensive writing plan and those that do not.

Ho4₅: There is no difference in the use of activities that promote writing development between schools that have a comprehensive writing plan and those that do not.

Ho4₆: There is no difference in the understanding of writing scoring criteria between schools that have a comprehensive writing plan and those that do not.

Ho4₇: There is no difference in the use of technology to assist in writing instruction between schools that have a comprehensive writing plan and those that do not.

Research Question 5: To what extent, if any, is there an association between the 2006-2007 eighth grade SOL writing passing rates and (a) 8th grade core curriculum teacher support for writing, (b) division-administrative support for writing (c) the use of supplemental writing activities (d) time students spend on writing assignments (e) activities that promote writing development, (f) understanding of writing scoring criteria, and (g) the use of technology to assist in writing instruction? Each of the seven independent variables was measured as the mean of the items in Section 2 and 3 of the survey questionnaire which made up the dimension. Pearson’s correlation was used to evaluate the following null hypotheses:

Ho5₁: There is no association between 8th grade core curriculum teacher support for writing and the 2006-2007 8th grade SOL writing passing rates.

Ho5₂: There is no association between division-administrative support for writing and the 2006-2007 8th grade SOL writing passing rates.
Ho5₃: There is no association between the use of supplemental writing activities and the 2006-2007 8th grade SOL writing passing rates.

Ho5₄: There is no association between the time students spend on writing assignments and the 2006-2007 8th grade SOL writing passing rates.

Ho5₅: There is no association between the use of activities that promote writing development and the 2006-2007 8th grade SOL writing passing rates.

Ho5₆: There is no association between the understanding of writing scoring criteria and the 2006-2007 8th grade SOL writing passing rates.

Ho5₇: There is no association between the use of technology to assist in writing instruction and the 2006-2007 SOL writing passing rates.

Summary

Chapter 3 presented the research design, population, instrumentation, data collection and statistical procedures that were used to analyze four research questions and 19 null hypotheses. This study will examine the relationship of The National Commission on Writing recommendations to improve writing proficiency to the Virginia Standards of Learning eighth grade writing assessments. Data collected from this study should be beneficial in helping schools evaluate and implement recommendations to improve student writing performance.
CHAPTER 4
ANALYSIS OF DATA

The purpose of this chapter is to present the findings of the study by reporting the data examined in response to each research question. The Commonwealth of Virginia requires students at the 5th, 8th, and 11th grade levels to be tested yearly on the Virginia Standards of Learning (SOL) writing assessments. Students at the 5th and 11th grade levels have consistently performed better on these assessments since the initial SOL testing year in 1998. However, the past two testing years has shown a considerable improvement in 8th grade writing performance, comparable to performance of those students taking the 5th and 11th grade assessments. The purpose of this study was to examine the possible association between the increases in Virginia eighth grade writing scores and the National Commission on Writing Recommendations to improve student writing performance, in addition to differences in individual school writing performance that may be attributed to the availability of a comprehensive writing plan, a high free and reduced-lunch population, and the geographical location of a school. Five research questions guided the study’s analysis and 28 hypotheses were tested.

Description of the Sample

Schools in this study included all schools in the Commonwealth of Virginia that administered eighth-grade writing assessments during the 2006-2007 school year. The resulting population consisted of 364 schools. Schools were also grouped according to their Superintendent’s Regional Study Group, in which school divisions are placed within a particular region by the Virginia Department of Education. Superintendents from each of the study groups meet regularly with the Virginia Superintendent of Public Instruction in order to provide an opportunity for collaboration with the State Superintendent and the Board of Education. A listing of each of the school divisions in each of the eight Superintendent Regions is found in Appendix
Table 1 displays the number of schools, according to their regional study group, that were mailed the survey questionnaire and the response rate percentage of each of the 8 regions.

Table 1

*Descriptive Statistics for Survey Return Rate According to Regional Study Group*

<table>
<thead>
<tr>
<th>Regional Study Group</th>
<th>N</th>
<th>Total Surveys Returned</th>
<th>Return Rate Percent By Region</th>
<th>Percentage of Total Return</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>47</td>
<td>22</td>
<td>47</td>
<td>13.8</td>
</tr>
<tr>
<td>2</td>
<td>70</td>
<td>18</td>
<td>26</td>
<td>11.3</td>
</tr>
<tr>
<td>3</td>
<td>30</td>
<td>12</td>
<td>40</td>
<td>7.5</td>
</tr>
<tr>
<td>4</td>
<td>84</td>
<td>31</td>
<td>37</td>
<td>19.4</td>
</tr>
<tr>
<td>5</td>
<td>39</td>
<td>21</td>
<td>54</td>
<td>13.1</td>
</tr>
<tr>
<td>6</td>
<td>34</td>
<td>16</td>
<td>47</td>
<td>10.0</td>
</tr>
<tr>
<td>7</td>
<td>47</td>
<td>33</td>
<td>70</td>
<td>20.6</td>
</tr>
<tr>
<td>8</td>
<td>13</td>
<td>7</td>
<td>54</td>
<td>44.0</td>
</tr>
<tr>
<td>Totals</td>
<td>364</td>
<td>160</td>
<td></td>
<td>44.0%</td>
</tr>
</tbody>
</table>

Of the 160 respondents who returned the survey instrument, 133 (83.1%) worked at schools that only tested students at the eighth-grade level. Twenty-seven (16.9%) respondents worked at schools with tests administered at the 8th grade level in addition to either the 5th, and/or 11th grade levels. Fifty-three (33.1%) respondents reported their school did not have a comprehensive writing plan. However, 70.9% of the respondents from regions outside of Southwest Virginia reported their school had a comprehensive writing plan, while only 51.5% of
the respondents from schools in Southwest Virginia stated their school had a comprehensive 
writing plan in place. Only two schools reported they had a full or part-time writing specialist 
employed at their school. Of those returning the questionnaire, the mean percent of the student 
population participating in the free or reduced-price lunch program was 35.9% with a standard 
deviation of 18.3, while the mean eighth-grade writing passing rate was 85.3% with a standard 
deviation of 7.3.

The survey questionnaire was developed according to recommendations suggested by the 
National Commission on Writing to improve writing achievement. Questions were organized 
into seven different dimensions, with each dimension related to a particular recommendation. 
Individuals were asked to respond to each question on a scale of 1 to 5 with 1 being the lowest 
level of agreement for a particular question up to the highest level of agreement, a 5. The 
division-administrative support dimension for writing ($M = 4.25$, $SD = .68$) had the highest mean 
and the time students spend on writing assignments dimension ($M = 2.38$, $SD = .96$) had the 
lowest mean. Table 2 displays the descriptive statistics for each of the seven dimensions 
according to the level of respondent agreement with each.
Table 2

*Descriptive Statistics for the Seven Dimensions of Writing Practices and Support*

<table>
<thead>
<tr>
<th>Seven Dimensions</th>
<th>N</th>
<th>Md</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Division-Administrative Support</td>
<td>160</td>
<td>4.33</td>
<td>4.25</td>
<td>.68</td>
</tr>
<tr>
<td>Understanding of Writing Scoring Criteria</td>
<td>160</td>
<td>4.20</td>
<td>4.09</td>
<td>.64</td>
</tr>
<tr>
<td>Time Spent on Supplemental Writing Activities</td>
<td>160</td>
<td>3.88</td>
<td>3.82</td>
<td>.63</td>
</tr>
<tr>
<td>Core Curriculum Teacher Support</td>
<td>160</td>
<td>3.75</td>
<td>3.54</td>
<td>.99</td>
</tr>
<tr>
<td>Technology to Assist Writing Instruction</td>
<td>160</td>
<td>2.67</td>
<td>2.72</td>
<td>.91</td>
</tr>
<tr>
<td>Activities That Promote Writing Development</td>
<td>160</td>
<td>2.33</td>
<td>2.47</td>
<td>.81</td>
</tr>
<tr>
<td>Time Students Spend on Writing Assignments</td>
<td>160</td>
<td>2.00</td>
<td>2.38</td>
<td>.96</td>
</tr>
</tbody>
</table>

Five research questions were used to guide the investigation. The data collected were used to test 28 null hypotheses. Following is the data results according to each research question.

*Research Question 1*

Are there differences in Virginia Standards of Learning 2006-2007 8th grade writing passing rates based on (a) grade configuration (single writing testing grade versus multiple writing grade testing), (b) whether or not schools have implemented a comprehensive writing plan, (c) region (Southwest Virginia versus other regions in the state) and (d) the percent of students who participate in the free and reduced-price lunch program?

From Research Question 1, the following hypotheses were developed and tested:
Ho1: There is no difference in the Virginia Standards of Learning 2006-2007 8th grade writing passing rates between schools with a single writing testing grade and schools with multiple writing testing grades. Ho1:

A t test for independent samples was used to determine whether there was a difference between the 8th grade writing passing rates of schools with a single writing testing grade and those with multiple writing testing grades. The test was significant, $t(362) = 2.03, p = .04$. Therefore, the null hypothesis was rejected. The mean passing rate for schools with a single testing grade ($M = 84.92, SD = 7.77$) was 2.3 percentage points higher than for schools with multiple testing grades ($M = 82.63, SD = 8.07$). The 95% confidence interval for the difference in means was .07 to 4.51. The effect size, as measured by $\eta^2$, was small (.01). Figure 1 shows the distribution of 8th grade writing passing rates by grade configuration.

![Figure 1. Boxplot for Mean 8th Grade SOL Writing Passing Rates by Grade Configuration](image-url)
Ho12: There is no difference in the Virginia Standards of Learning 2006-2007 8th grade writing passing rates between schools that have implemented a comprehensive writing plan and those have not.

A t test for independent samples was used to determine whether there was a difference between the 8th grade writing passing rates of schools that had comprehensive writing plans and those that did not. The test was not significant, \( t (158) = -18, p = .86 \). Therefore, the null hypothesis was retained. The mean passing rate for schools with a comprehensive writing plan (\( M = 85.36, SD = 7.06 \)) was almost identical to those schools without a comprehensive writing plan (\( M = 85.13, SD = 7.78 \)). The 95% confidence interval for the difference in means was -2.65 to 2.20. The effect size, as measured by \( \eta^2 \), was small (< .01). Figure 2 shows the distribution of 8th grade writing pass rates by comprehensive writing plan.

![Boxplot for Mean 8th Grade SOL Writing Passing Rates by Comprehensive Writing Plan](image)

*Figure 2. Boxplot for Mean 8th Grade SOL Writing Passing Rates by Comprehensive Writing Plan*
Ho13: There is no difference in the 2006-2007 8th grade writing passing rates of schools in the Southwest region and those in schools in other regions of the state.

A t test for independent samples was used to determine whether there was a difference between the eighth-grade writing passing rates of schools in the Southwest Region and the other seven regions in the Commonwealth of Virginia. The test was significant, \( t(362) = 1.97, p = .05 \). Therefore, the null hypothesis was rejected. The mean passing rate for schools in the Southwest regions (\( M = 82.47, SD = 8.30 \)) was 2.4 percentage points lower than for schools in the other regions of Virginia (\( M = 84.87, SD = 7.75 \)). The 95% confidence interval for the difference in means was .01 to 4.81. The effect size, as measured by the \( \eta^2 \), was small (.01). Figure 3 shows the distribution of eighth-grade writing scores by region.

![Boxplot for Mean 8th Grade SOL Writing Passing Rates by Region](image)

**Figure 3.** Boxplot for Mean 8th Grade SOL Writing Passing Rates by Region

Ho14: There is no association between the percent of students who participate in the free or reduced-price lunch program and the 2006-2007 Virginia SOL 8th grade writing
passing rates.

The relationship between the percent of students who participated in the free and reduced-price lunch program and the 2006-2007 Virginia SOL 8th grade writing passing rates was significant \((p < .01)\). Therefore, the null hypothesis was rejected. The Pearson’s correlation showed a strong negative relationship between the variables \((r = -.59, N = 364), \) with an eta square index of \((\eta^2 = .34)\).

**Research Question 2**

After controlling for the percent of the student population who participated in the free or reduced-price lunch program, is there a difference in the 2006-2007 SOL 8th grade writing passing rates between schools with a single writing testing grade and schools with multiple writing testing grades, schools with and without a comprehensive writing plan, and region (schools in the Southwest region compared to other regions in the state of Virginia)?

From Research Question 2, the following hypotheses were developed and tested:

\(\text{Ho}_2\): After controlling for the schools’ percentage of students who participate in the free or reduced-price lunch program, there is no difference in the 2006-2007 writing passing rates between schools with a single writing testing grade and those with multiple writing testing grades.

After controlling for the percentage of the student population who participated in the free or reduced-price lunch program, there was no difference in the 8th grade 2006-2007 writing passing rates between schools with a single testing grade and schools with multiple testing grades \(F (1, 361) = 1.58, p = .21\). Therefore, the null hypothesis was retained. The mean passing rate for schools with a single testing grade \((M = 84.74, SE = .36)\) was similar to those schools.
with multiple testing grades ($M = 83.5$, $SE = .85$). The effect size, as measured by $\eta^2$, was small (< .01).

$H_02$: After controlling for the schools’ percent of students who participate in the free or reduced-price lunch program, there is no difference in the 2006-2007 8th grade writing passing rates between schools with a comprehensive writing plan and those that do not.

After controlling for the percentage of the student population who participated in the free or reduced-price lunch program there was no difference in the 8th grade 2006-2007 SOL writing passing rates between schools with a comprehensive and those that do not $F(1, 157) = .18, p = .68$. Therefore, the null hypothesis was retained. The mean for schools with a comprehensive plan ($M = 85.14$, $SE = .60$) was almost identical to those schools without a comprehensive writing plan ($M = 85.58$, $SE = .86$). The effect size, as measured by $\eta^2$, was small (< .01).

$H_03$: After controlling for the schools’ percent of students who participate in the free or reduced-price lunch program, there is no difference in the 2006-2007 8th grade writing passing rates between schools in the Southwest Region and other regions in Virginia.

After controlling for the percent of the student population who participate in the free or reduced-price lunch program there was no difference in the 8th grade 2006-2007 SOL writing passing rates between schools in the Southwest Region and other regions $F(1, 361) = .48, p = .49$. Therefore, the null hypothesis was retained. The mean for schools in the Southwest Region ($M = 85.18$, $SE = .95$) was similar to that of schools in other regions in Virginia ($M = 84.47$, $SE = .36$). The effect size, as measured by $\eta^2$, was small (< .01).

Research Question 3
Research Question 3: Are there differences in eighth-grade core curriculum teacher support for writing, division-administrative support for writing, supplemental writing activities, time students spend on writing assignments, activities that promote writing development, the understanding of writing assessment scoring criteria, and the use of technology to assist in writing instruction in the Southwest Region compared to other regions in Virginia?

From research question 3, the following null hypotheses were developed and tested:

Ho3₁: There is no difference between schools in the Southwest region and those schools in other regions of the state regarding 8th grade core curriculum teacher support for writing.

A t test for independent samples was used to determine whether there was a difference between 8th grade core curriculum teacher support for writing in the Southwest Region compared to other regions in the state. The test was not significant, $t (158) = -.01, p = .10$. Therefore, the null hypothesis was retained. The mean for 8th grade core curriculum teacher support for schools in the Southwest Region ($M = 3.55, SD = .99$) was almost identical to other regions in the state ($M = 3.54, SD = .98$). The 95% confidence interval for the difference in means was -.38 to .38. The effect size, as measured by the $\eta^2$, was small (< .01). Figure 4 shows the distribution of 8th grade core curriculum teacher support for writing by region.
Figure 4. Boxplot for Mean 8th Grade Core Curriculum Teacher Support by Region

Ho3: There is no difference between schools in the Southwest Region and those schools in other regions of the state regarding division-administrative support for writing.

A t test for independent samples was used to determine whether there was a difference between the division-administrative support for writing in the Southwest Region compared to other regions in the state. The test was not significant, $t(158) = .38, p = .70$. Therefore, the null hypothesis was retained. The mean for division-administrative support for schools in the Southwest Region ($M = 4.21, SD = .75$) was very close to other regions in the state ($M = 4.26, SD = .66$). The 95% confidence interval for the difference in means was -.21 to .31. The effect size, as measured by the $\eta^2$, was small ($<.01$). Figure 5 shows the distribution of division-administrative support for writing by region.
Figure 5. Boxplot for Mean Division-Administrative Support by Region

Ho3: There is no difference between schools in the Southwest region and those schools in other regions of the state regarding the use of supplemental writing activities.

A t test for independent samples was used to determine whether there was a difference between the use of supplemental writing activities in the Southwest Region compared to other regions in the state. The test was not significant, \( t(158) = .35, p = .73 \). Therefore, the null hypothesis was retained. The mean for time spent on supplemental writing activities in the Southwest Region (\( M = 3.79, SD = .64 \)) was very close to other regions in the state (\( M = 3.83, SD = .63 \)). The 95% confidence interval for the difference in means was -.20 to .29. The effect size, as measured by the \( \eta^2 \), was small (< .01). Figure 6 shows the use of supplemental writing activities by region.
Figure 6. Boxplot for Mean Supplemental Writing Activities by Region

Ho3,4: There is no difference between schools in the Southwest region and those schools in other regions of the state regarding the time students spend on writing assignments.

A t test for independent samples was used to determine whether there was a difference between the amount of time spent on writing assignments in the Southwest Region compared to other regions in the state. The test was not significant, \( t(158) = -1.86, p = .07 \). Therefore, the null hypothesis was retained. The mean for time spent on writing assignments in the Southwest Region (\( M = 2.65, SD = .98 \)) was comparable to other regions in the state (\( M = 2.31, SD = .94 \)). The 95% confidence interval for the difference in means was -.71 to .02. The effect size, as measured by \( \eta^2 \), was small (.02). Figure 7 shows the distribution of time students spend on writing assignments by region.
Ho3: There is no difference between schools in the Southwest Region and those schools in other regions of the state regarding the use of activities that promote writing development.

A $t$ test for independent samples was used to determine whether there was a difference between the use of activities that promote writing development in the Southwest Region compared to other regions in the state. The result was not significant, $t(158) = 1.67, p = .10$. Therefore, the null hypothesis was retained. The mean for activities that promote writing development in the Southwest Region ($M = 2.26, SD = .763$) was comparable to other regions in the state ($M = 2.53, SD = .821$). The 95% confidence interval for the difference in means was - .04 to .58. The effect size, as measured by the $\eta^2$, was small (.02). Figure 8 shows the distribution of activities that promote writing development by region.
Figure 8. Boxplot for Mean Activities that Promote Writing Development by Region

Ho3: There is no difference between schools in the Southwest Region and those schools in other regions of the state regarding the understanding of writing scoring criteria.

A $t$ test for independent samples was used to determine whether there was a difference between the understanding of writing scoring criteria in the Southwest Region compared to other regions in the state. The test was significant, $t (158) = 2.4, p = .02$. Therefore, the null hypothesis was rejected. The mean for the understanding of scoring criteria in the Southwest Region ($M = 3.85, SD = .63$) was less than other regions in the state ($M = 4.15, SD = .63$). The 95% confidence interval for the difference in means was .05 to .54. The effect size, as measured by $\eta^2$, was small (.04). Figure 9 shows the understanding of writing scoring criteria by region.
Figure 9. Boxplot for Mean Understanding of Writing Scoring Criteria by Region

Ho3: There is no difference between schools in the Southwest Region and those schools in other regions of the state regarding the use of technology to assist in writing instruction.

A $t$ test for independent samples was used to determine whether there was a difference between the use of technology to assist in writing instruction in the Southwest Region compared to other regions in the state. The test was not significant, $t(158) = 1.59$, $p = .11$. Therefore, the null hypothesis was retained. The mean for the use of technology to assist in writing instruction in the Southwest Region ($M = 2.49$, $SD = .86$) was similar to other regions in the state ($M = 2.78$, $SD = .02$). The 95% confidence interval for the difference in means was -.07 to .63. The effect size, as measured by the $\eta^2$, was small (.02). Figure 10 shows the use of technology to assist in writing instruction by region.
Research Question 4

Research Question 4: Is there a difference between schools that have implemented a comprehensive writing plan and those that have not and the 8th grade core curriculum teacher support for writing, division-administrative support for writing, use of supplemental writing activities, time students spend on writing assignments, activities that promote writing development, the understanding of writing scoring criteria, and the use of technology to assist in writing instruction?

From research question 4, the following null hypotheses were developed and tested:

\( H_{04_1} \): There is no difference in the 8th grade core curriculum teacher support for writing between schools that have a comprehensive writing plan and those that do not.
A t test for independent samples was used to determine whether there was a difference between 8th grade core curriculum teacher support for writing in schools that have a comprehensive writing plan and those that do not. The test was significant, $t (158) = -3.59, p < .01$. Therefore, the null hypothesis was rejected. The mean for 8th grade core curriculum teacher support for schools with a comprehensive writing plan ($M = 3.74, SD = .90$) was .57% higher than those schools without a comprehensive writing plan ($M = 3.16, SD = 1.06$). The 95% confidence interval for the difference in means was -.889 to -.258. The effect size, as measured by $\eta^2$, was medium (.08). Figure 11 shows the distribution of eighth-grade core curriculum teacher support by the availability of a comprehensive writing plan.

![Boxplot for Mean 8th Grade Core Curriculum Teacher Support by Availability of a Comprehensive Writing Plan](image)

**Figure 11.** Boxplot for Mean 8th Grade Core Curriculum Teacher Support by Availability of a Comprehensive Writing Plan

$H_{o4}$: There is no difference in the division-administrative support for writing between schools that have a comprehensive writing plan and those that do not.
A t test for independent samples was used to determine whether there was a difference between division-administrative support for writing in schools that have a comprehensive writing plan and those that do not. The test was significant, \( t (158) = -4.88, p = < .01 \). Therefore, the null hypothesis was rejected. The mean for division-administrative support for schools with a comprehensive writing plan (\( M = 4.42, SD = .58 \)) was .52\% higher than those schools without a comprehensive writing plan (\( M = 3.91, SD = .72 \)). The 95\% confidence interval for the difference in means was -.73 to -.31. The effect size, as measured by the \( \eta^2 \), was large (.13).

Figure 12 shows the distribution of division-administrative support by the availability of a comprehensive writing plan.

![Boxplot for Mean Division-Administrative Support by Availability of a Comprehensive Writing Plan](image)

**Figure 12.** Boxplot for Mean Division-Administrative Support by Availability of a Comprehensive Writing Plan

**Ho4:** There is no difference in the use of supplemental writing activities between schools that have a comprehensive writing plan and those that do not.
A *t* test for independent samples was used to determine whether there was a difference in the use of supplemental writing activities in schools that have a comprehensive writing plan and those that do not. The test was not significant, *t* (158) = -1.62, *p* = .11. Therefore, the null hypothesis was retained. The mean for the use of supplemental writing activities for schools with a comprehensive writing plan (*M* = 3.88, *SD* = .64) was almost similar to those schools without a comprehensive writing plan (*M* = 3.71, *SD* = .61). The 95% confidence interval for the difference in means was -0.38 to 0.03. The effect size, as measured by $\eta^2$, was small (.02). Figure 13 shows the use of supplemental writing activities by the availability of a comprehensive writing plan.

![Boxplot for Mean Supplemental Writing Activities by the Availability of a Comprehensive Writing Plan](image)

**Figure 13.** Boxplot for Mean Supplemental Writing Activities by the Availability of a Comprehensive Writing Plan

**Ho4:** There is no difference in the time students spend on writing assignments between schools that have a comprehensive writing plan and those that do not.
A $t$ test for independent samples was used to determine whether there was a difference between the time students spend on writing assignments in schools that have a comprehensive writing plan and those that do not. Because the Levene’s test for homogeneity of variances was significant ($F(1, 158) = 9.70, p < .01$), the $t$ test that did not assume equal variances was used. The test was not significant, $t(88) = .49, p = .63$. Therefore, the null hypothesis was retained. The mean for the time students spend on writing assignments with a comprehensive writing plan ($M = 2.35, SD = .89$) was slightly less than those schools without a comprehensive writing plan ($M = 2.43, SD = 1.09$). The 95% confidence interval for the difference in means was -.26 to .43. The effect size, as measured by $\eta^2$, was small ($<.01$). Figure 14 shows the time students spend on writing assignments by the availability of a comprehensive writing plan.

![Boxplot for Mean Time Students Spend on Writing Assignments by the Availability of a Comprehensive Writing Plan](image)

*Figure 14.* Boxplot for Mean Time Students Spend on Writing Assignments by the Availability of a Comprehensive Writing Plan
Ho4: There is no difference in the use of activities that promote writing development between schools that have a comprehensive writing plan and those that do not.

A $t$ test for independent samples was used to determine whether there was a difference between the use of activities that promote writing development in schools that have a comprehensive writing plan and those that do not. The test was not significant, $t(158) = -1.20$, $p = .24$. Therefore, the null hypothesis was retained. The mean for the use of activities that promote writing development for schools with a comprehensive writing plan ($M = 2.53$, $SD = .83$) was slightly higher than those schools without a comprehensive writing plan ($M = 2.36$, $SD = .78$). The 95% confidence interval for the difference in means was -.43 to .11. The effect size, as measured by $\eta^2$, was small (.01). Figure 15 shows use of activities that promote writing development by the availability of a comprehensive writing plan.

![Boxplot for the Mean for Activities that Promote Writing Development by the Comprehensive Writing Plan](image)

*Figure 15.* Boxplot for the Mean for Activities that Promote Writing Development by the Comprehensive Writing Plan.
Availability of a Comprehensive Writing Plan

Ho4: There is no difference in the understanding of writing scoring criteria between schools that have a comprehensive writing plan and those that do not.

A t test for independent samples was used to determine whether there was a difference between the understanding of writing scoring criteria in schools that have a comprehensive writing plan and those that do not. Because the Levene’s test for homogeneity of variances was significant \( F(1, 158) = 11.60, p < .01 \), the t test which did not assume equal variances was used. The test was significant, \( t(158) = -2.85, p = .01 \). Therefore, the null hypothesis was rejected. The mean for the understanding of writing scoring criteria for schools with a comprehensive writing plan \((M = 4.19, SD = .53)\) was .34% higher than those schools without a comprehensive writing plan \((M = 3.86, SD = .78)\). The 95% confidence interval for the difference in means was -.57 to -.10. The effect size, as measured by \( \eta^2 \), was moderate (.06). Figure 16 shows the understanding of writing scoring criteria by the availability of a comprehensive writing plan.
**Figure 16.** Boxplot for the Mean Understanding of Writing Scoring Criteria by the Availability of a Comprehensive Writing Plan

**Ho4:** There is no difference in the use of technology to assist in writing instruction between schools that have a comprehensive writing plan and those that do not.

A *t* test for independent samples was used to determine whether there was a difference in the use of technology to assist in writing instruction in schools that have a comprehensive writing plan and those that do not. The test was not significant, *t* (158) = -.51, *p* = .61. Therefore, the null hypothesis was retained. The mean for the use of technology to assist in writing instruction for schools with a comprehensive writing plan (*M* = 2.74, *SD* = .87) was very close to that of schools without a comprehensive writing plan (*M* = 2.66, *SD* = .99). The 95% confidence interval for the difference in means was -.38 to .23. The effect size, as measured by η², was small (<.01). Figure 17 shows the use of technology to assist in writing instruction by the availability of a comprehensive writing plan.
Research Question 5

To what extent, if any, is there an association between the 2006-2007 eighth grade SOL writing passing rates and (a) 8th grade core curriculum teacher support for writing, (b) division-administrative support for writing (c) the use of supplemental writing activities (d) time students spend on writing assignments (e) activities that promote writing development, (f) understanding of writing scoring criteria, and (g) the use of technology to assist in writing instruction?

From Research Question 5, the following hypotheses were developed and tested:

Ho5: There is no association between 8th grade core curriculum support for writing and the 2006-2007 8th grade SOL writing passing rates.

The relationship between eighth-grade core curriculum support for writing and the 2006-2007 Virginia SOL 8th grade writing passing rates was not significant ($p = .67$). Therefore, the
null hypothesis was retained. The Pearson’s correlation between the variables was \( r = .03, N = 160 \).

**Ho5\(_2\):** There is no association between the division-administrative support for writing and the 2006-2007 8\(^{th}\) grade SOL writing passing rates.

The relationship between eighth-grade division-administrative support for writing and the 2006-2007 Virginia SOL 8\(^{th}\) grade writing passing rates was not significant \( (p = .09) \). Therefore, the null hypothesis was retained. The Pearson’s correlation between the variables was \( r = .14, N = 160 \).

**Ho5\(_3\):** There is no association between the use of supplemental writing activities and the 2006-2007 Virginia SOL 8\(^{th}\) grade writing passing rates.

The relationship between time spent on supplemental writing activities and the 2006-2007 Virginia SOL 8\(^{th}\) grade writing passing rates was not significant \( (p = .06) \). Therefore, the null hypothesis was retained. The Pearson’s correlation between the variables was \( r = .15, N = 160 \).

**Ho5\(_4\):** There is no association between the time students spend on writing assignments and the 2006-2007 Virginia SOL 8\(^{th}\) grade writing passing rates.

The relationship between the time students spend on writing activities and the 2006-2007 Virginia SOL 8\(^{th}\) grade writing passing rates was not significant \( (p = .90) \). Therefore, the null hypothesis was retained. The Pearson’s correlation between the variables was \( r = -.01, N = 160 \).

**Ho5\(_5\):** There is no association between the use of activities that promote writing development and the 2006-2007 Virginia SOL 8\(^{th}\) grade writing passing rates.
The relationship between the time students spend on writing activities and the 2006-2007 Virginia SOL 8th grade writing passing rates was not significant \((p = .10)\). Therefore, the null hypothesis was retained. The Pearson’s correlation between the variables was \((r = .13, N = 160)\).

**Ho5c:** There is no association between the understanding of writing scoring criteria and the 2006-2007 Virginia SOL 8th grade writing passing rates.

The relationship between the understanding of writing scoring criteria and the 2006-2007 Virginia SOL 8th grade writing passing rates was significant \((p = .03)\). Therefore, the null hypothesis was rejected. The Pearson’s correlation showed a low relationship between the variables \((r = .17, N = 160)\), with an eta square index of \(\eta^2 = .02\).

**Ho5d:** There is no association between the use of technology to assist in writing instruction and the 2006-2007 Virginia SOL 8th grade writing passing rates.

The relationship between the use of technology to assist in writing instruction and the 2006-2007 Virginia SOL 8th grade writing passing rates was not significant \((p = .55)\). Therefore, the null hypothesis was retained. The Pearson’s correlation between the variables was \((r = .05, N = 160)\).

**Summary**

Chapter 4 included the analysis of data along with an overview of the instrumentation used in data collection. The chapter focused on five research questions related to the 2006-2007 Virginia Standards of Learning eighth-grade writing assessments. Writing scores were analyzed according to grade configuration, socioeconomic status, region, and the National Commission on Writing recommendations to improve writing proficiency.
CHAPTER 5

SUMMARY OF FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

The purpose of this study was to determine if there was any association between the 2006-2007 Virginia Standards of Learning writing scores and the recommendations to improve student writing proficiency suggested by the 2003 National Commission on Writing. In addition, this study examined other factors that may impact individual school writing performance, including the addition of a comprehensive writing plan, socioeconomic status, multiple writing grade level testing other than just the eighth, and geographical location. A summary of the findings, conclusions, and recommendations for practice and further research follow.

Summary of the Study

The study examined five research questions, all in relationship to the 2006-2007 Virginia Standards of Learning eighth-grade writing scores and the 2003 National Commission on Writing recommendations to improve student writing proficiency. Data were collected through the use of a 26-item survey. All survey questions were developed in relationship to the 2003 National Commission on Writing recommendations. Questions pertained to the availability of a comprehensive school writing plan, the employment of a full or part-time writing specialist, and seven dimensions applicable to individual school writing practices, which included (a) 8th grade core curriculum teacher support for writing, (b) division-administrative support for writing (c) the use of supplemental writing activities (d) time students spend on writing assignments (e) activities that promote writing development, (f) understanding of writing scoring criteria, and (g) the use of technology to assist in writing instruction. The survey was mailed to all schools in the Commonwealth of Virginia that administered 8th grade SOL writing tests during the 2006-2007 school year, which included 364 schools. One hundred sixty (44%) schools returned the survey.
questionnaire. Additional data used in this study were the 2006 Virginia Department of Education school nutrition eligibility report, which was available on the Virginia Department of Education web site, and 2006-2007 SOL writing scores, which were obtained from a research specialist, also from the Virginia Department of Education.

Summary of Findings

The analysis focused on five research questions. Independent variables included in this study were grade configuration, the availability of a comprehensive writing plan, geographical region, socioeconomic status, and the seven dimensions of writing practices. Dependent variables included SOL writing passing rates and the seven dimensions of writing practices. The following addresses each research question and provides a summary of the findings related to it.

Research Question 1

Are there differences in Virginia Standards of Learning 2006-2007 8th grade writing passing rates based on (a) grade configuration (single writing testing grade versus multiple writing grade testing), (b) whether or not schools have implemented a comprehensive writing plan, (c) region (Southwest Virginia versus other regions in the state) and (d) the percent of students who participate in the free and reduced-price lunch program?

Results indicated a significant difference (p = .04) between writing passing rates of schools with a single testing grade and those with multiple testing grades. The mean passing rate for schools with a single testing grade (M = 84.92, SD = 7.77) was 2.3 percentage points higher than schools with multiple testing grades (M = 82.63, SD = 8.07). The effect size, as measured by η², was small (.01).

Results further indicated there were no significant differences in the 2006-2007 8th grade writing passing rates between schools with a comprehensive writing plan and those that do not.
The mean passing rate for schools with a comprehensive writing plan \((M = 85.36, SD = 7.06)\) was almost identical to those schools without a comprehensive writing plan \((M = 85.13, SD = 7.78)\).

Results indicated a significant difference \((p = .05)\) between the eighth-grade writing passing rates of schools in the Southwest Region compared to the other seven regions in the Commonwealth of Virginia. The mean passing rate for schools in the Southwest Region \((M = 82.47, SD = 8.30)\) was 2.4 percentage points lower than schools in the other regions of Virginia \((M = 84.87, SD = 7.75)\). The effect size, as measured by the \(\eta^2\), was small (.01), with geographical region accounting for 1% of the variance of the dependent variable.

Using free and reduced-price percentages as a comparison, results indicated the association between the percent of students who participated in the free and reduced-price lunch program and the SOL 8th grade writing passing rates was significant \((p < .01)\). The Pearson’s correlation showed a moderate negative relationship between the variables \((r = -.59)\).

**Research Question 2**

After controlling for the percent of the student population who participate in the free or reduced-price lunch program, is there a difference in the 2006-2007 SOL 8th grade writing passing rates between schools with a single writing testing grade and schools with multiple writing testing grades, schools with and without a comprehensive writing plan, and region (schools in the Southwest region compared to other regions in the state of Virginia)?

As the findings in research question 1 indicated, there was a strong negative relationship between free and reduced-price lunch percentage and SOL writing passing rates. When controlling for the free and reduced-lunch price percentage, would there still be a difference in
SOL writing passing rates for the variables grade configuration, schools with and without a comprehensive writing plan, and geographical region.

When controlling for the percent of the student population who participate in the free or reduced-price lunch program, there was no difference in the 8th grade 2006-2007 writing passing rates between schools with a single testing grade and schools with multiple testing grades $F(1, 361) = 1.58, p = .21$. The effect size, as measured by $\eta^2$, was small (< .01).

Results indicated there was no difference in the 8th grade 2006-2007 SOL writing passing rates between schools with a comprehensive plan and those that do not $F(1, 157) = .18, p = .68$. The effect size, as measured by $\eta^2$, was small (< .01).

Additional results further indicated there was no difference in the 8th grade 2006-2007 SOL writing passing rates between schools in the Southwest region and other regions $F(1, 361) = .48, p = .49$. The effect size, as measured by $\eta^2$, was small (< .01).

Research Question 3

Are there differences in eighth-grade core curriculum teacher support for writing, division-administrative support for writing, supplemental writing activities, time students spend on writing assignments, activities that promote writing development, the understanding of writing assessment scoring criteria, and the use of technology to assist in writing instruction based upon the Southwest region compared to other regions in the Commonwealth of Virginia.

Using the recommendations suggested for writing success as indicated by the National Commission on Writing, this question addressed the possible differences that may exist between the implementation levels of these dimensions in the Southwest region compared to other regions in Virginia.
Results indicated there were no significant differences in eighth-grade core-curriculum teacher support for writing between the Southwest Region and other regions of the state. The mean for eighth-grade core curriculum teacher support for schools in the Southwest Region ($M = 3.55, SD = .99$) was almost identical to other regions in the state ($M = 3.54, SD = .98$). There was also no significant differences in the division-administrative support in the Southwest Region ($M = 4.21, SD = .75$) compared to other regions in the state ($M = 4.26, SD = .66$), the time spent on supplemental writing activities in the Southwest Region ($M = 3.79, SD = .64$) compared other regions in the state ($M = 3.83, SD = .63$), the time spent on writing assignments in the Southwest Region ($M = 2.65, SD = .98$) compared to other regions in the state ($M = 2.31, SD = .94$), the use of activities that promote writing development in the Southwest Region ($M = 2.26, SD = .763$) compared to other regions in the state ($M = 2.53, SD = .821$), and the use of technology to assist in writing instruction in the Southwest Region ($M = 2.49, SD = .86$) was also similar to other regions in the state ($M = 2.78, SD = .017$).

Results did indicate a significant difference between the Southwest Region and other regions of the state for one of the seven dimensions. The mean for the understanding of scoring criteria in the Southwest Region ($M = 3.85, SD = .63$) was less than other regions in the state ($M = 4.15, SD = .63$). The effect size, as measured by $\eta^2$, was small (.04).

Research Question 4

Is there a difference between schools that have implemented a comprehensive writing plan and those that have not and the eighth-grade core curriculum teacher support for writing, division-administrative support for writing, use of supplemental writing activities, time students
spend on writing assignments, activities that promote writing development, the understanding of writing scoring criteria, and the use of technology to assist in writing instruction?

This research question examined the seven dimensions in regard to whether or not a school had a comprehensive writing plan in place. Survey results indicated that 107 (67%) of the schools returning the questionnaire did have a comprehensive writing plan.

Results indicated a significant difference for eighth-grade core curriculum teacher support for schools with a comprehensive writing plan \((M = 3.74, SD = .90)\), with the mean .57% higher than those schools without a comprehensive writing plan \((M = 3.16, SD = 1.06)\). The effect size, as measured by \(\eta^2\), was medium (.08). Thus, there was a moderate relationship between eight-grade core curriculum support and writing in those schools with a comprehensive writing plan compared to those schools without a plan. The mean for division-administrative support for schools with a comprehensive writing plan \((M = 4.42, SD = .58)\) was .52% higher than those schools without a comprehensive writing plan \((M = 3.91, SD = .72)\). The effect size, as measured by the \(\eta^2\), was large (.13). Thus, there was a strong relationship between division-administrative support in those schools with a comprehensive writing plan. Results also indicate a significant difference in the mean for the understanding of writing scoring criteria for schools with a comprehensive writing plan \((M = 4.19, SD = .53)\). The mean was .34% higher than those schools without a comprehensive writing plan \((M = 3.86, SD = .78)\). The effect size, as measured by \(\eta^2\), was moderate (.06).

Results indicated that there was no significant difference in the supplemental writing activities for those schools with a comprehensive writing plan. The mean survey for the use of supplemental writing activities for schools with a comprehensive writing plan \((M = 3.88, SD = .64)\) was similar to those schools without a comprehensive writing plan \((M = 3.71, SD = .61)\).
Results further indicated there was no significant difference between schools with a comprehensive writing plan and those that do not in the time students spend on writing assignments ($M = 2.35, SD = .89$), which was only slightly less than those schools without a comprehensive writing plan ($M = 2.43, SD = 1.09$), the use of activities that promote writing development ($M = 2.53, SD = .83$), with a mean marginally higher than those schools without a comprehensive writing plan ($M = 2.36, SD = .78$), and the mean for the use of technology to assist in writing instruction for those schools with a comprehensive writing plan, with the mean ($M = 2.74, SD = .87$) very close to that of schools without a comprehensive writing plan ($M = 2.66, SD = .99$).

**Research Question 5**

To what extent, if any, is there an association between the 2006-2007 eighth grade SOL writing passing rates and (a) eighth-grade core curriculum teacher support for writing, (b) division-administrative support for writing, (c) the use of supplemental writing activities, (d) time students spend on writing assignments, (e) activities that promote writing development, (f) understanding of writing scoring criteria, and (g) the use of technology to assist in writing instruction?

Results indicate there was no association ($p = .67$) between eighth-grade core curriculum support for writing and the 2006-2007 8th grade writing passing rates, with a correlation between the variables of ($r = .03$). Additional results also indicated no association ($p = .09$) between division-administrative support for writing and SOL writing passing rates, with a correlation between variables of ($r = .14$), no association ($p = .06$) between time spent on supplemental writing activities and SOL writing passing rates, with a correlation between variables of ($r = .15$), no association ($p = .90$) between the time students spend on writing activities and SOL
writing scores, with a correlation between variables of \( r = -.01 \), no association \( p = .10 \) between the time students spend on writing activities and SOL writing passing rates, with a correlation between the variables of \( r = .13 \), and no association \( p = .55 \) between the use of technology to assist in writing instruction, with a correlation between variables of \( r = .05 \).

Results did indicate a significant difference \( p = .03 \) in the association between the understanding of writing scoring criteria and SOL writing passing rates, with a low correlation between variables of \( r = .17 \).

**Conclusions**

The following conclusions that can be drawn from the study:

1. The availability of a comprehensive writing plan was not associated with SOL writing scores. With the majority of schools in this study having SOL passing rates 80% or higher, this finding was not totally unexpected. However, the majority of schools returning the survey questionnaire indicated their schools did have writing plans in place. The National Commission on Writing recommended that every state should revisit its education standards to ensure they include a comprehensive writing plan (National Commission on Writing in America’s Schools and Colleges, 2003). The large majority of schools in this study are meeting this recommendation. A writing plan can provide the uniform goals and objectives necessary for all stakeholders to focus on as collective group in order to work together to meet the desired writing expectations of their students.

2. There was a significant difference in eighth-grade core teacher and division-administrative support in those schools with a comprehensive writing plan. This
finding is consistent with a 1995 collaborative research project, conducted by the Kentucky Department of Education and the Appalachian Lab. This project centered on identifying best practices and conditions associated with improved writing scores in 42 Kentucky schools. One of the conclusions of that study was that high-achieving schools had a prioritized, consistent and elevated level of district- and school-level support of the writing program (Coe et al., 1999).

3. There was significant difference in the understanding of writing scoring criteria in schools with a comprehensive writing plan. As stated by several respondents on one of the open-ended survey questions, not all schools used the same rubrics and scoring methods to assess writing. The key, however, would appear to be consistency in regard to assessing and scoring student writing. A comprehensive writing plan can provide the consistent methods to analyze student writing, which can serve as a guide for both teachers and students to critique writing performance.

4. There was a difference in writing performance among schools with a single eighth-grade testing grade and those schools with two or more testing grades. However, the difference was not of practical importance, and when controlling for free and reduced-price lunch population variable, there was no significant difference among the varied grade configurations in writing performance. Schools with multiple writing testing grades are traditionally small in size and can include elementary, middle, and even secondary grade levels. One of the advantages of having multiple testing grades in one school, other than just grades 6-8, is the consistency among the writing program as students progress to different grades,
often without having to leave the same school building. However, it is encouraging that this study found no difference between these multiple-grade level schools in SOL writing performance and the more traditional middle school configuration. This study would appear to confirm that improvements in writing achievement are taking place in a variety of school settings across the Commonwealth of Virginia.

5. There was a significant difference in SOL writing scores between schools in the Southwest region compared to other regions in Virginia; however, this difference was of small substantive importance. When controlling for the student free and reduced-price lunch percentage, there was no difference between writing scores in the Southwest region and other regions. This finding is similar to the results concerning grade configuration. Improved writing achievement is taking place in a variety of school climates as well as a variety of school locations throughout the Commonwealth of Virginia. The Southwest region is a region that is comprised of schools traditionally small in student population but high in the percentage of the student population on free and reduced-price lunch. When controlling for the socioeconomic variable, schools in the Southwest region performed as well as other regions in the state on the SOL writing tests, which validates the efforts of the Southwest region to enhance the writing achievement of their students in comparison to other regions in the state.

6. The Southwest region also compared favorable with other regions in regard to the implementation of the seven domains related to the National Commission on Writing recommendations to improve student writing proficiency. There was a
significant difference between the Southwest region and other regions in the state regarding the understanding of writing scoring criteria. However, this difference was of very little practical importance. Teachers completing the survey questionnaire in the Southwest region viewed these seven dimensions similarly to the views of other teachers in the Commonwealth. This finding is not surprising, considering SOL writing scores in the Southwest region are comparable to other regions in the state. This study would appear to confirm that teachers throughout the state, regardless of region, are consistent in their beliefs and implementation of these seven dimensions.

7. There was also little association between SOL writing scores and the implementation level of the seven domains, other than the understanding of SOL writing scoring criteria, which was of small substantive importance. This finding is also consistent with the comparison of the Southwest region to other regions in the state. There appears to be a great deal of consistency in the level of implementation of these dimensions. Furthermore, the fact that SOL writing scores have improved dramatically the past 2 years across the state could have been a key factor in the lack of a significant correlation between any of these variables and SOL writing achievement. With this improvement in writing scores, comparison schools were more closely compacted in their passing rate proficiency score, with many schools achieving at least an 80% pass rate or greater. Without a larger sample of poor performing schools in this study, the inability to find significant correlations for any of these seven variables was not unexpected. This finding adds to the possible argument that SOL writing scores have been impacted
the past 2 years by a small, but significant change in the SOL writing test. Two years ago, four additional multiple-choice questions were added to the test. However, the cut passing score did not change. Thus, this change would be similar to adding four bonus questions to a test. It is impractical to think that this is the only reason for the increases in tests scores. However, based upon the findings of this study, there would appear to be some positive relationship between increased SOL passing rates and the addition of these four questions.

8. One of the most important recommendations made by the National Commission on Writing was opinion that the amount of time students spend writing should be doubled. Even though there was no association between the time students spend on writing assignments and SOL writing scores, the amount of time spent on writing cannot be understated. Teachers may actually be spending more time on writing, but in this study, may have confused length with time. Bangert-Drowns, Hurley, and Wilkinson (2004), in their meta-analysis of writing-to-learn programs, found that writing tasks need not be elaborate as far as length, but, more importantly, that writing-to-learn effects can be enhanced with increased treatment length. In other words, writing more frequently with the goal of not writing for length is much more beneficial for students. Thus, one explanation for the possible insignificant correlation between the time spent on writing and SOL writing scores could be the confusion among teachers that writing for length is defined by length, rather than writing for frequency.

Recommendations to Improve Practice
As this study confirmed, schools in the Commonwealth of Virginia have made tremendous strides in their efforts to increase the writing proficiency of eighth-grade students. Even though this study did not highlight specific trends, focal points, or areas of emphasis that school divisions could use to adjust their instructional practices for even more improvements, it did confirm that schools are using many similar strategies across the Commonwealth to help students improve in the difficult task of writing. According to Brandt (2005) “writing is at the heart of the knowledge economy” (p. 166). School divisions need to continue to strive for methods that motivate students not only to write but also to write with a level of expertise critical to success in a society that is increasing in global communication and dependent upon the written word for success.

Without question, schools will continue to fight the battle against the neglect of writing in our classrooms. The 2005 National Assessment of Educational Progress data found that at the eighth-grade level, 71% of students reported they wrote weekly in English class, compared with only 46% for social studies, 32% for science, and only 13% for mathematics (Applebee & Langer, 2006). These data may suggest that writing is not viewed in the same context of importance by subject area teachers other than English. School divisions need to help non-writing teachers become more skilled in their comfort level to incorporate writing assignments as part of their class objectives and help teachers develop the expertise to assess writing strengths and weaknesses. This can be accomplished by providing professional development opportunities that address these issues. School divisions can easily prioritize and emphasize the additional influx of professional development related to writing for the simple reason that writing, as is reading, can be used by all teachers in the instructional setting. More importantly, higher education needs to play its role as well, requiring all individuals in teacher preparation programs
to be trained and knowledgeable about the writing process and have the skills to incorporate writing into their class activities.

With the increasing role of technology in our society, school divisions need to continue to explore methods of using technology to enhance the writing process. Writing is no longer accomplished by the traditional means of paper and pencil. Technology provides the avenue for students to improve their writing skills in an environment that may also include sound, graphics, and a highly interactive environment. There is no substitute for a quality teacher. However, providing the technological tools such as software programs that help assess student writing can provide the necessary motivation for students to engage in writing tasks and dramatically assist the classroom teacher in the difficult task of helping improve writing performance.

School divisions need to ensure that there is consistency in the scoring criteria used by their teachers. Open-ended survey questions acknowledged that teachers across the Commonwealth were using varied rubrics and programs to assess student strengths and weaknesses. These varied measures to assess student writing can lead to inadequacies within the scoring process. The fact that Virginia uses the same rubric to score eighth-grade student prompts is substantial reason for schools to ensure that teachers and students are trained and familiar with this state rubric in classrooms throughout the state. Additionally, the 1-day writing prompt assessment in Virginia does not allow for individual student choice as far as the prompt that is written about. Allowing students to choose a prompt that is of interest can lead to additional improvement in student writing performance.

Finally, this study did confirm the importance of teacher, administrative, and division support for writing. School divisions, regardless of the amount of resources, the percentage of the student population on free and reduced-price meals, the age of the building, the availability
of technology, etc., is irrelevant without support from the administration and school division to make writing a priority. Schools divisions need to continue to acknowledge to all stakeholders the importance of students being able to write well. Much is at stake in regard to students having the necessary writing skills to use the written word for a variety of purposes. As this quote so eloquently states “Young people who do not have the ability to transform thoughts, experiences, and ideas into written words are in danger of losing touch with the joy of inquiry, the sense of intellectual curiosity, and the inestimable satisfaction of acquiring wisdom that are the touchstones of humanity (Graham & Perin, 2007, p. 1).

**Recommendations for Further Research**

Research should be continued regarding writing achievement in Virginia’s public schools, particularly at the middle school level. The adolescent age can be a challenging time for educators and serve as an obstacle to student writing performance. Research in finding methods to motivate the adolescent youngster to engage and focus on writing improvement could be extremely beneficial, especially the role that new technologies can play in this regard.

Professional development is crucial for all teachers becoming knowledgeable about the writing process. Research related to the type of professional development opportunities proven to enlighten and strengthen the writing programs of schools would be helpful to all school divisions in narrowing down the numerous professional development opportunities available. Research geared to finding professional growth opportunities that truly impact the writing process would be conducive to helping schools divisions assist their teachers in becoming more resourceful concerning the writing process.
Even though this study did not include the concept of male and female differences related to writing achievement, additional research needs to be continued in this area. Traditionally, girls have achieved at a higher overall rate than boys on the Virginia Standards of Learning writing tests. Research needs to address these differences and the possible explanations for such.

With the addition of a writing component to the SAT test, an interesting study would be to compare performance by Virginia 11th grade students on the Virginia SOL writing test and their performance on the SAT. Student trends on the SAT writing component could serve as additional feedback for teachers to use to help ensure their students are prepared for the writing required at the postsecondary level.

Virginia, similar to many other states, uses a 1-day prompt to address writing performance. Using only a 1-day assessment may not be an accurate indicator of writing proficiency, especially for those students who find the testing prompt uninteresting or do not have the background knowledge to adequately write about a particular subject. At the least, the Commonwealth of Virginia needs to consider allowing students the capability to select from a variety of writing prompts in order to write about, thus providing the opportunity for students to write about a topic they find of interest or use a style of writing they are comfortable with.

This study could be replicated with varied adjustments. Each of the seven dimensions could be studied separately and in more detail. The Southwest region could be compared to similar demographic regions in Virginia instead of a combined comparison of all regions as was done in this study. And, research to analyze individual school writing plans to find areas of consistency among varied schools that have demonstrated a high level of writing success would be intriguing.
REFERENCES


138


Virginia Department of Education. (1999). The Virginia SOL writing tests: A teacher’s resource notebook for enhancing writing instruction and improving scores on the state assessments. Richmond, VA; *Office of Secondary Instructional Services*.


## 1998-2005 Virginia Statewide Standards of Learning Spring Assessment Results

*Shown in Percent Passing; Updated on 12/8/2005*

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Grade 5</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>English: Writing</td>
<td>65</td>
<td>81</td>
<td>81</td>
<td>84</td>
<td>84</td>
<td>85</td>
<td>88</td>
<td>91</td>
<td>26</td>
</tr>
<tr>
<td><strong>Grade 8</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>English: Writing</td>
<td>67</td>
<td>70</td>
<td>76</td>
<td>75</td>
<td>76</td>
<td>74</td>
<td>77</td>
<td>74</td>
<td>7</td>
</tr>
<tr>
<td><strong>High School</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>English: Writing</td>
<td>71</td>
<td>81</td>
<td>85</td>
<td>84</td>
<td>86</td>
<td>91</td>
<td>87</td>
<td>88</td>
<td>17</td>
</tr>
</tbody>
</table>
Appendix B
Sample Eighth Grade Direct Writing Prompt

Think about a time when something funny happened to you or someone you know. Write about what happened.

CHECKLIST FOR WRITERS

_____ I planned my paper before writing it.

_____ I revised my paper to be sure that

_____ the introduction captures the reader's attention;

_____ the central idea is supported with specific information and examples that will be interesting to the reader;

_____ the content relates to my central idea;

_____ ideas are organized in a logical manner;

_____ my sentences are varied in length;

_____ my sentences are varied in the way that they begin; and

_____ the conclusion brings my ideas together.

_____ I edited my paper to be sure that

_____ correct grammar is used;

_____ words are capitalized when appropriate;

_____ sentences are punctuated correctly;

_____ words are spelled correctly; and

_____ paragraphs are clearly indicated.
Appendix C
Virginia Regional Superintendent Study Groups

Region 1
Charles City
Chesterfield
Colonial Hts. City
Dinwiddie
Goochland
Hanover
Henrico
Hopewell City
New Kent
Petersburg City
Powhatan
Prince George
Richmond City
Surry
Sussex

Region 2
Accomack
Chesapeake City
Franklin City
Hampton City
Isle of Wright
Newport News City
Norfolk City
Northampton
Portsmouth City
Southampton
Suffolk City
Virginia Beach City
Williamsburg City
York

Region 3
Caroline
Colonial Beach
Essex
Fredericksburg City
Gloucester
King and Queen George
King George
King William
Lancaster
Matthews
Middlesex
Northumberland
Richmond
Spotsylvania
Stafford
West Point
Westmorland

Region 4
Alexandria
Arlington
Clarke
Culpepper
Fairfax
Fairfax City
Falls Church City
Fauquier
Frederick
Loudon
Madison
Manassas City
Orange
Page
Prince William
Rappahannock
Shenandoah
Warren
Winchester City

Region 5
Albemarle
Amherst
Appomattox
Augusta
Bath
Bedford
Bedford City
Buena Vista City
Campbell
Charlottesville City
Fluvanna
Greene
Harrisonburg City
Highland
Lexington City
Louisa
Lynchburg City
Nelson
Rockbridge
Rockingham
Staunton City
Waynesboro City

Region 6
Alleghany
Botetourt
Covington City
Craig
Danville City
Floyd
Franklin
Henry
Martinsville City
Montgomery
Patrick
Pittsylvania
Roanoke
Roanoke City
Salem City

Region 7
Bland
Bristol City
Buchanan
Carroll
Dickenson
Galax City
Giles
Grayson
Lee
Norton City
Pulaski
Radford City
Russell
Scott
Smyth
Tazewell
Washington
Wise
Wythe

Region 8
Amelia
Brunswick
Buckingham
Charlotte
Cumberland
Greensville
Halifax
Lunenburg
Mecklenburg
Nottoway
Prince Edward
Appendix D
Sample Principal Letter

Dear Fellow Principal:

My name is Jeff Comer and I am a doctoral student at East Tennessee State University. I currently serve as the principal of Northwood Middle School, located in Smyth County, Virginia. Like many middle schools in the Commonwealth, our school was having difficulty achieving the type of success we would like on the eighth-grade SOL writing assessment. Thus, the selection of my dissertation topic, which will examine eighth-grade SOL writing scores in relationship to the National Commission on Writing recommendations to improve writing, will hopefully provide data that will benefit schools as they continue to strive for methods that enhance the writing proficiency of their students.

I am requesting that you pass along the enclosed survey and direction page to the teacher in your building that you believe is most qualified to assess the eighth grade writing program at your school. More than likely, this will be an eighth-grade English teacher. I realize some schools have multiple eighth-grade writing teachers. Thus, I value your opinion on selecting the teacher you believe would be best qualified or most interested in completing my survey. Please note that no individual, school, or school division will be identified in any report.

All schools in the Commonwealth that tested eighth-grade writing during the 2006-2007 school year are being asked to complete my survey questionnaire. With this large sample, the data obtained should be useful in helping principals and teachers explore writing strategies and programs that are proving to be successful.

I will be more than happy to provide you with a summary report of my findings. Feel free to contact me by e-mail if you are interested.

Thanks again for passing along my survey questionnaire, and best of luck for a very productive and rewarding school year.

Sincerely,

Jeff Comer
Northwood Middle School
156 Long Hollow Road
Saltville, VA 24370
276-624-3341
jeffcomer@scsb.org
Appendix E
Sample Teacher Letter

Dear Teacher:

My name is Jeff Comer and I am a graduate student at East Tennessee State University. I am working on my doctoral degree in Educational Leadership. In order to finish my studies, I need to complete a research project. The selection of my dissertation topic, *A Study of the Virginia Standards of Learning Eighth Grade Writing Scores in Relationship to The National Commission on Writing Recommendations to Improve Writing, Grade Level Configuration, and Socioeconomic Status*, will hopefully provide data that will benefit schools as they continue to strive for methods that enhance the writing proficiencies of their students.

One of the major purposes of this study is to identify writing instructional practices that are proving to be successful in eighth grade classrooms throughout the Commonwealth of Virginia. You have been selected by your principal to complete the enclosed survey, which should take no more than 15 minutes. Questions on the questionnaire pertain to the recommendations suggested by the 2003 National Commission on Writing to improve student writing proficiency. Since this project deals with questions related to your school and instructional program, it might cause some minor stress. However, you may also feel better after you have had the opportunity to express your opinion about the writing program in your school.

Your responses will be anonymous and cannot be attributed to you or your school. No individual, school, or school division will be named in any report. Although your rights and privacy will be maintained, the Secretary of the Department of Health and Human Services, the ETSU IRB and the primary researcher will have access to the study records.

You should determine your responses based upon the most recent school year, 2006-2007. I realize that in large schools with multiple eighth-grade writing teachers, it may be difficult for one teacher to answer certain questions without dialog with colleagues. Feel free to discuss any of these questions for comment from your colleagues in determining the best response for your school.

Participation in this research experiment is voluntary. You may refuse to participate and can quit at any time. If you quit or refuse to participate, the benefits or treatment to which you are otherwise entitled will not be affected.

If you have any research-related questions or problems, you may contact me at my work number (276) 624-3341 or home number (276) 496-5744. I am working on this project under the supervision of my Committee Chair, Mr. Terry Tollefson. You may reach him at (423) 439-7617. Also, the chairperson of the Institutional Review Board at East Tennessee State University is available at (423) 439-6055 if you have questions about your rights as a research subject. If you have any questions or concerns about the research and want to talk to someone independent
of the researcher and you can’t reach the study staff, you can call an IRB Coordinator at (423) 439-6005 or (423) 439-6002.

Thank you again for completing my survey questionnaire and returning in the self-addressed envelope by September 15th. I will be more than happy to provide you with a summary report of my findings. Feel free to contact me by e-mail if you are interested. I wish you the best of luck for a very productive and rewarding school year.

Sincerely,

Jeff Comer
Northwood Middle School
156 Long Hollow Road
Saltville, VA 24370
276-624-3341
jeffcomer@scsb.org
Appendix F
Survey Questionnaire

Survey Questions

Please respond to the following questions by indicating the appropriate response for how you would evaluate the eighth grade writing program at your school based upon this most recent school year (2006-2007). Unless indicated, questions are applicable to all eighth-grade writing teachers and students.

1. What is the grade configuration of your school? (Check one.)
   ___ 1. 5-8  ___ 5. 8-12
   ___ 2. 6-8  ___ 6. K-8
   ___ 3. 7-8  ___ 7. K-12
   ___ 4. 8-9  ___ 8. Other (please specify) ___________

2. Does your school have a comprehensive writing plan that states desired writing expectations for eighth grade students?
   _____ 1. No (If no, skip to question 4)
   _____ 2. Yes

3. If yes, in what academic year was the plan implemented?
   _____ 1. prior to the 2003-2004
   _____ 2. 2003-2004
   _____ 3. 2004-2005
   _____ 4. 2005-2006
   _____ 5. 2006-2007

4. Does your school have access to a full or part-time writing specialist?
   _____ 1. No
   _____ 2. Yes
### Section 2

For each of the following statements, please circle the number that most closely reflects the extent to which you agree or disagree with the statement as it relates to your school.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neither Agree nor Disagree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Eighth-grade writing teachers at my school have adequate writing resources and materials.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>2. Writing is viewed as an important instructional component by non-writing eighth-grade core curriculum teachers.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>3. My school division places a high priority on writing instruction.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>4. My school administration places a high priority on writing instruction</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>5. Eighth-grade students at my school have their written compositions published (i.e., in booklets, school newspaper, on the internet, etc.).</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>6. Eighth-grade students receive feedback of their writing from their peers.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>7. Eighth-grade students read aloud their written compositions to an audience.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>8. Writing across the curriculum is an instructional approach used by eighth-grade teachers at my school.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>9. Eighth-grade core curriculum teachers incorporate various writing strategies in their class activities/assignments.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>10. Eighth-grade core curriculum teachers provide students feedback to help improve their writing.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Strongly Agree</td>
<td>Agree</td>
<td>Neither Agree nor Disagree</td>
<td>Disagree</td>
<td>Strongly Disagree</td>
</tr>
<tr>
<td>---</td>
<td>----------------</td>
<td>-------</td>
<td>---------------------------</td>
<td>----------</td>
<td>------------------</td>
</tr>
<tr>
<td>11. Eighth-grade writing teachers in my school participate in a National Writing Project Summer Institute.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>12. Eighth-grade writing teachers write along with their students.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>13. Eighth-grade writing teachers use research based best practices to develop writing instruction.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>14. Eighth-grade writing teachers have a thorough understanding of the SOL scoring rubric.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>15. Eighth-grade students have a thorough understanding of the SOL scoring rubric.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>16. Eighth-grade students are comfortable using the SOL scoring rubric to analyze their own writing.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>17. Eighth-grade students have a clear understanding of the components associated with the multiple-choice section of the SOL test.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>18. Eighth-grade students have a clear understanding of the components associated with the direct writing section of the SOL test.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>19. Eighth-grade students use technological planning tools, such as Inspiration and CMaps, to develop their writing drafts.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>20. Eighth-grade writing teachers use computer applications, such as Criterion, to help in analyzing students’ writing.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>
Section 3

21. Prior to SOL testing, how often are eighth-grade students given in-class writing assignments?

___ 1. once a week or less  ___ 4. four times a week
___ 2. two times a week     ___ 5. daily
___ 3. three times a week

22. How often are eighth-grade students given homework writing assignments?

___ 1. once a week or less  ___ 4. four times a week
___ 2. two times a week     ___ 5. daily
___ 3. three times a week

23. How often do eighth-grade writing teachers in your school attend professional development workshops or conferences on writing instruction?

___ 1. once every three years or less  ___ 4. two times a year
___ 2. once every two years     ___ 5. three or more times a year
___ 3. once a year

24. How often do eighth-grade students simulate the SOL direct writing by practicing writing prompts?

___ 1. never  ___ 4. three times a year
___ 2. once a year  ___ 5. four or more times a year
___ 3. twice a year

25. How often do eighth-grade students use word processing software for their writing assignments?

___ 1. once a month or less  ___ 4. once a week
___ 2. once every three weeks     ___ 5. more than once a week
___ 3. once every two weeks
26. Eighth-grade writing teachers use NCS Mentor as a training tool to help prepare students for the SOL writing test?

   ____ 1. Never   ____ 4. three times a year
   ____ 2. once a year  ____ 5. four or more times a year
   ____ 3. twice a year

27. If your school’s 2006-2007 eighth-grade passing rate was at least 5 percentage points lower than the previous year, what do you attribute to the decline? (Please use the back of this page if you need additional space):

28. Please use this space for any additional comments you wish to make.

Thank you for your participation in this study!
Appendix G
Open Ended Survey Response Questions

27. If your school’s 2006-2007 eighth-grade passing rate was at least 5 percentage points lower than the previous year, what do you attribute to this decline?

- As far as I know it did not decline, but if there was one, it would be because this community does not stress education as a whole. Our budget this year was several million short for a reason: the community at-large already feels the schools here have enough.
- Our school had to focus more on reading than writing due to AYP.
- Teachers leaving; students not motivated.
- A district-wide emphasis on reading across the curriculum. Rezoning resulting in a change in student population. Larger class sizes. Due to NCLB, several overage students held back and did not meet standards. Eighth grade English teacher with secondary degree was replaced with several long-term substitutes.
- I honestly believe the difference was that I was out on maternity leave for two months prior to testing, and the substitute felt more comfortable with reading instruction.
- I have analyzed and agonized over the decline. I, of course, have no absolute answer. I will say that I did have a student teacher, but she adhered to the program. Several Special Education scores were included that had not been included previously. Additionally, I analyzed results from the county test that was given to this group at the end of the seventh grade. There were a significant number of failures and low scoring papers. There was a huge improvement when they took the SOL test.
- As eighth grade English teachers with many years’ experience, we find it unreasonable to compare classes from one year to the next. Every class is different: personalities, abilities, and motivation are only a few of the factors we should consider. Our emphasis on writing has not had the desired effect we had hoped would be reflected in our scores.
• Overall weaker eighth grade class.
• New teacher, no writing text, no school curriculum or guide, low ability group.
• Our school’s writing pass rate increased by around 5% over the past year as we moved from a semester/block arrangement to a full-year curriculum, so time matters immensely, especially for the kids at risk and with disabilities.
• Student ability levels, for one. If it takes me longer to catch them up to what the state feels they need to pass the test, I can’t always get there. Last year’s group was very low. They made great progress, but a few still did not reach the level they needed. Inadequate writing instruction in lower grades. I feel like I play catch up in the eighth grade. The students receive little writing instruction. They write, but are not instructed on good writing. Lack of communication between teaches and schools is to blame.
• School-wide shift in focus to reading and math.
• Prompt and students need to understand formal vs. informal writing.
• Our student population changed with the redrawing of attendance zones, with our school becoming a larger replacement school. The student GPA and SOL average scores were significantly lower than those of the prior year. Of course, the test itself may be a contributing factor.
• Weaker writers and more emphasis on reading.
• As always, I feel very strongly about the composition of students in any given year. My scores were slightly lower last year, I’m sure partly due to my inadequacies, but also due to a lack of motivation and interest on the part of some of my students.
• According to our administrators, the decline is attributed to a tougher scoring rubric than the previous year (s). For example, missing one multiple choice question dropped a student from the advanced pass range to average.
• Teachers at my school report different reasons for the decline. One reason is that the state of Virginia has changed the pass rates. The second reason deals with AYP subgroups. Some feel it’s a statistics games that affects our pass rates.

• The ESL pass rate was included in the school’s scores for the first time this year.

• I attribute the decline to the lack of specific feedback to the students. The feedback given was too general and did not truly address their problem areas.

• Our decline was due the absence of tow of our core English 8 teachers. One teacher resigned at the beginning of the year due to family issues. The other teacher was on maternity leave from December to February. We had two subs who were not strong in writing.

• We questioned the scoring process from the 2005-2006 school year. The scores across the state was high – there was talk of “issues” with the assessors. That is why 2006-2007 scores were lower.

• The 8th grade English teacher was out sick most of the year.

• Apathy is one and burnout is another. These students have so many tests that they just don’t care.

• We were redistricted and had a major change in our student population. We also had only one full-time language arts teacher. All other sections were staffed by part-time teachers.

• The students we had last year were apathetic to school as a whole. So, a writing SOL test wasn’t even on the radar for most.

• Over the past 4 years there has been a great fluctuation in the passing rate, by as great as 15%. I do not know what to attribute this to, but one year I believe the prompt for the direct writing test was very confusing.

• An increased level of difficulty of the multiple choice test; therefore it is more challenging for students with low reading ability. Unreliability of the readers scoring. Lack of students’ familiarity with the writing genre.
• A new writing teacher replacing a veteran teacher who retired.
• Students lacking support and elaboration in their writing as well as a large teacher turnover rate.
• ESL students in general education classes. Lack of writing resources. High teacher turnover rate. Writing Across the Curriculum is not mandatory.
• I truly believe the subjectivity of the test played a factor in the decline of our scores.
• Special education students with different skill levels. Lack on one-on-one remediation program.

28. Please use this space for any additional comments you wish to make.

• We use the Kansan Writing Strategies
• Most of our writing is done in the classroom. It is all done by hand.
• Writing is focused on in English classes throughout Grades 6-8. Eighth grade has extended writing in SOL Impact classes that meet daily. A month before the SOL writing, there is a concentrated writing program in all 8th grade core classes.
• I see the necessity of SOL exams, but there’s more to teaching English and writing than what is on that test. Many teachers become stressed during this time of year.
• We are pleased with our writing scores. We need more guidance from the state department on what we are doing right or wrong. The English teachers at our school get no feedback from the direct writing test.
• Training on how to use the SOL writing rubrics should be provided for all teachers (core, other subject areas). These teachers should use these rubrics to assess student writing.
• At our rural school, technology is limited; therefore, use of computers is limited. Lack of the use of technology must be attributed to lack of resources, not to teacher unwillingness.
• We use the four square writing method. In the first year that we used it, our scores went up over 30%. It is used in all core classes at least once a week.

• I group my writing to go along with my reading. That way we can do writing workshops. So I might not work on writing for a week or two, then we will do a writing workshop that might take two weeks.

• We don’t like many of the writing programs on the computer – we feel they are terribly inaccurate and don’t help our students.

• Since we have raised our writing scores from 64% to 90% in the past four years, we place more emphasis on professional development for reading.

• Students in our school system do well, I believe, because we teach writing through the state rubrics 3rd through 5th and 6th through 10th grades. We have also given a county wide practice test that closely simulated the state test and that is scored by teachers. Thus, our students are receiving the instruction and practice to fully prepare for the state test.

• We felt that although 8th grade English/Writing teachers emphasized the importance of the SOL writing test, core (non-English) teachers did not feel the pressures as much due to having their own SOL tests to prepare for. An emphasis on how Writing Across the Curriculum could benefit their students learning and SOL scores if/it was known, but it was not utilized fully.

• We have a writing day for 8th grade approximately two weeks prior to the March SOL writing tests. Beginning with Bell 1, where brainstorming and pre-write takes place, the students move to a different writing phase for Bells 2, 5, 6, and 7. The final paper is a grade for English and Social Studies (the prompt involves the 1920’s). This day is a most successful one and has helped with writing scores.

• Although we do not have a writing specialist, we do have a full-time reading specialist.

• We do not have a scripted writing program. Since I customize instruction based on pre-testing data, I’m grateful for the freedom to be creative.
• From the data, we know that we have to reinforce our writing strategies with our Special Education and ESOL groups. Years ago we had a fairly strong “Writing Across the Curriculum” program in our school. We probably need to reexamine it.

• Thank you for doing this study. The more research we have, the better our chances of turning all of our kids into true writers!

• I would like to see the federal Department of Education, along with the state, emphasize writing more. The SAT’s have been updated to include a writing component; it is unfortunate NCLB does not consider writing in the AYP mandate. Two years ago I sat on the committee to determine cut scores for the writing 8 SOL. The process was extremely beneficial as it showed the exact method for scoring and measuring work across the state. Obviously, much discussion and disagreement occurred over standards and curriculum, but what was gained far surpassed any frustrations.

• I have never heard of NCS mentor. We always have some type of professional development related to writing. I do not make 8th graders read their papers aloud because not every student has the same ability (Promotes embarrassment). I’ve never heard of the National Writing Project Summer Institute.

• When surveyed, teachers felt that writing is difficult to assess because it is so subjective. Another point was made is that students with disabilities need not to be lumped together because certain disabilities affect writing differently. Teachers also feel that grammar, punctuation, and spelling instruction needs to be re-evaluated beginning at the elementary level.

• We do not have “writing teachers” per se, so some English teachers focus more on writing than others. Some write throughout the year, but stress prompt writing after winter break when there is a greater push to focus on SOLs. NCS Mentor is still looked at by some teachers as a “novelty,” so they don’t even use it.

• This new school year will bring more training for teachers and more understanding of scoring by the students - a definite positive change.
• We love using the 6 + 1 Traits of Writing as an instructional tool.
• Continued remediation programs have increased our students’ Sol scores as well as overall writing skills. Students write daily in 8th grade English class.
• It is critical for teachers to have a curriculum guide that is aligned to the SOLs. The SOLs for reading and writing are vague. This makes curriculum development and planning a real challenge.
• I see my standard level students for 90 minutes everyday, but I only see my Honors level students for 90 minutes every other day. This discrepancy as well as our need to pull up our reading SOL scores really affected my responses to your questions.
• All 8th grade teachers meet one timer per week – teach same skills, give same tests – last two years improved SOL scores.
• Every student in our school responds to a non-fiction writing prompt weekly. One sample from each class in turned into the administration. This really has helped us.
• We have never been told about a writing conference or workshop. When computer software can be used for the writing SOL, students will be allowed to use it in daily writing.
• Writing has not been a priority in our school system. We have been using Accelerated Reader for reading and our curriculum specialist for English (K-12). She is a reading specialist in her training. Only now that we have some teachers with strong writing backgrounds are we beginning to address the void that has been our writing program.
• We are a middle school functioning on a 6 weeks grading schedule. We require an essay each 6 weeks and do a school-wide SOL writing simulation two times each year. All papers are graded by two readers, using the 4 point rubric. Areas addressed are composing, written expression, and usage/mechanics. All system English teachers have been trained in consistent methods.
• We have been very successful using the 4 + 3 + V + C model. Our struggling students really respond to this!

• Speaking frankly, athletics and social skills are a priority over educational issues. This is reflected in the fact that many students comment about how “poor” (financially) the schools are. The talents and the teachers are here though, and I think the fact that SOL scores are as high as they are is a testimony to the hard work being done on a daily basis.

• If the technology/training and enough available labs, with enough computers for every student, were provided, teachers would do more with technology.

• District has hired a Language Arts Specialist just this year (2007-2008).

• We have a substantial number of special education students who have difficulty writing. Their spelling and logical order of words in sentences are main problems with their writing.

• Writing is focused on throughout the year but really is hit hard from January-March.

• We are implementing a new curriculum at our school and saw our scores improve ten percent. We now have every student in a writing class for fifty minutes a day.

• Writing is a tough subject to analyze and the actual scoring is full of subjectivities and inconsistencies. My main frustration is with Richmond itself and how it seems to arbitrarily adjust the “bell curve” for results. I probably don’t need to tell you how last year’s results were, with a relative lack of advanced scores. This indicates a problem of some sort at V.D.O.E. That needs to be addressed. Note, however, that I don’t feel this affected the overall pass rate.
VITA

JEFFREY R. COMER

Personal Data:
- Date of Birth: November 26, 1960
- Place of Birth: Saltville, Virginia
- Marital Status: Married

Education:
- Emory and Henry College, Emory, Virginia; Health and Physical Education, B.A. 1983
- Virginia Polytechnic Institute & State University, Blacksburg, Virginia; Educational Administration, M.A. 1993

Professional Experience:
- Health and Physical Education Teacher, Paulding County High School, Dallas, GA 1984-1987
- Health and Physical Education Teacher, Rockmart High School, Rockmart, GA 1987-1989
- Health and Physical Education Teacher, Marion Senior High School, Marion, VA 1994-1999

162
Principal, Saltville Elementary School, Saltville, Virginia; 1999-2003

Principal, Northwood Middle School, Saltville, Virginia; 2003-present