The Impact of Peer Discussion Groups on the Recreational Reading of Seventh Grade Students

By

Dana Kay Haring

B.A., University of Houston, Houston, Texas, 1990
M.A., University of Montana, Missoula, Montana, 1996
M.Ed. University of Montana, Missoula, Montana, 2004

Dissertation

presented in partial fulfillment of the requirements for the degree of

Doctor of Education

The University of Montana
Missoula, MT

Autumn 2006

Approved by:

Dr. David A. Strobel, Dean
Graduate School

Dr. Carolyn Lott, Chair
Curriculum and Instruction

Dr. Beverly Ann Chin
English

Dr. Merle Farrier
Educational Leadership

Dr. Marian McKenna
Curriculum and Instruction

Dr. Darrell Stolle
Curriculum and Instruction
The Impact of Peer Discussion Groups on the Recreational Reading of Seventh Grade Students

Chairperson: Carolyn Lott, Ed.D.

Recreational reading is declining. The decline starts early in elementary school and rapidly accelerates during adolescence. Adolescent literacy is impacted on many fronts, including various factors in psychological, emotional, intellectual, academic, and social development. Because social factors and emotional factors are especially relevant in the study of adolescents and their recreational reading, these elements were integrated in this quasi-experimental research.

This study was designed to answer the following research question: if given the choice of what to read and time with peers to discuss their reading, will seventh grade students spend more time reading? The sample of 117 seventh grade students from three schools in Northwest Montana was divided into two groups of 54 and 63 students. Using a two-group, switching replications quasi-experimental design, the study lasted 14 weeks total with a 5 week intervention period for both groups at alternate periods during the study’s duration. Students recorded the number of minutes they spent reading each day on weekly log sheets. During the intervention periods, the students had a 30 minute session each week in English class to discuss what they were reading in small group discussions. Unlike traditional literature circles, the discussions were not about one book read by multiple students. However, students did have 25 suggested open-ended discussion prompts to keep their groups focused.

The group (n=49) that experienced the discussion group intervention during weeks 3 through 7 of the study increased its weekly average of minutes spent reading from 101 minutes during week 1, the pretest, to 166 minutes during week 14, the posttest, a 62% increase (t=3.4; p=.0014). The group (n=31) that experienced the discussion group intervention during weeks 8 through 12 increased its weekly average of minutes spent reading from 193 minutes during week 1 to 262 minutes during week 14, a 36% increase (t=1.9; p=.07).

Discussion groups, used in concert with independent choices of reading materials and discussion prompts, led to increased reading time among most seventh grade students in the study. Concluding recommendations included implementing these three elements in English classes to increase and thus improve reading among adolescents.
Acknowledgements and Dedication

You may not realize it, but this thing that you are holding, or this file you are viewing, is actually a quilt. It may not keep you warm or be a thing of beautiful craftsmanship, but, nonetheless, it is a quilt. My quilt. You see, about the same time I began working on my doctoral degree, my mom began piecing quilts. As I was sitting and writing or reading for classes or for this dissertation, over a thousand miles away, my mom would also be sitting, putting needle and thread and love to fabric and stitching. Now that her quilts are done and that this final paper is done, I see how the two are similar.

Writing a dissertation, like creating a quilt, although it may seem like an individual project, often involves the assistance of many. Neither quilts nor dissertations are simple undertakings and involve many steps and processes. While my mom pieced quilts by herself, she had help with design ideas and with the quilting itself. I, on the other hand, required far more help all along the way. For that help, I acknowledge the following people.

For the four dedicated teachers who volunteered their classes for the research study, giving me the pieces to stitch together, I am very thankful. I truly could not have completed this work without them. Although to protect the anonymity of them and their students, I can’t name them, I can say that they were all dedicated professionals who went out of their way to try something that, beyond raising test scores, would make a difference in the lifelong learning of their students.

The professors on my committee were instrumental in providing me with both the tools to initiate this work and guidance along the way to complete it. Dr. Beverly Ann Chin, Dr. Merle Farrier, Dr. Carolyn Lott, Dr. Marian McKenna, and Dr. Darrell Stolle all helped make sure my stitches were straight and the pieces were properly aligned as they read and commented on various drafts, urging me closer to excellence. To Dr. Lott, the chair of my dissertation committee and my doctoral program, I am especially grateful, as she kept me focused and inspired throughout the process, helping me to see that the finished product was within reach.

Although quilting friends are usually the ones who work together on piecing or quilting, my friends more typically helped me in different ways. Dorothy Hett Hintz and I began our programs together, and she has been one of my main cheerleaders and commiserators. Cindy Dyson and Deb Hunt seemed to instinctively know when I needed time to work or time to play and did their best to provide both. Sometimes, by taking me away, they provided me the distance I needed to see the overall design, and sometimes, by giving me time to write, they provided me the luxury of close concentration. My friends, one could say, provided the loft between the layers of quilt top and bottom, keeping the layers connected with the right amount of tension.

Quilts like the ones my mom made are often considered family heirlooms, and, while this dissertation may not be treasured by my family for generations, it took
generations of family to get it done. I am thankful to my father-in-law, Don Haring, who came during the summers to visit and take care of my son so I could work on my doctoral program. I am thankful to my brother Dwayne Harris who was here during the darkest times and would remind me of my goal. I am thankful to my husband James Haring who refused to let me give up during these long eight years. His encouragement and faith sustained me. And I am thankful to my son Dylan Haring, who is almost exactly the same age as my doctoral program. At one point during intense work on this project, he informed me, worriedly and wisely, that I was not doing anything for my soul. At the time, it seemed he was correct, but now that it is over, my soul seems to be just fine.

Finally, I thank my parents Dona and Angus Harris. My mom, who was far more productive in her quiltmaking, wondered how long it was going to take for me to finish this book, as she called it, and beamed at my accomplishments. My dad, whose pride in both my mom’s quilts and in the work I was doing, gave me strength. They both passed away shortly before they could see the completion of this work, but the qualities they bequeathed me long ago allowed me to finish, providing the edging around the pieces that pulled it all together.
TABLE OF CONTENTS

Acknowledgements and Dedication .......................................................... iv
List of Tables and Figures ...................................................................... viii

CHAPTER ONE: THE STATEMENT OF THE PROBLEM ............................ 1
  Problem Statement .............................................................................. 2
  Research Question .............................................................................. 4
  Importance of the Study ..................................................................... 4
  Definitions .......................................................................................... 5

CHAPTER TWO—REVIEW OF THE LITERATURE ................................ 8
  Adolescents ....................................................................................... 8
  Adolescents and Reading ................................................................... 10
    Reading Interests ............................................................................ 14
      Reading Interests Outside of School Requirements ....................... 16
    Reading Habits .............................................................................. 18
    Reading Amount and Reading Attainment ....................................... 22
    Stages of Literary Appreciation ..................................................... 24
    Affective Dimensions of Reading .................................................... 26
      Attitude Toward Reading .............................................................. 27
      Motivation For Reading ............................................................... 28
      Intrinsic and Extrinsic Motivation ............................................... 30
  Aliteracy ............................................................................................. 34
  Other Factors in Reading Habits .......................................................... 37
    Gender ............................................................................................. 37
    Home environment ....................................................................... 38
    Peer Group ..................................................................................... 39
  Methods to Increase Reading ............................................................. 40
  Summary ............................................................................................ 45

CHAPTER THREE—METHODOLOGY ................................................... 46
  Introduction ....................................................................................... 46
  Research Question ............................................................................ 46
  Research Design .............................................................................. 46
  Figure 1—Research Design ................................................................ 50
  Variables and Levels of Data ............................................................... 50
  Sample ............................................................................................... 51
  Instrumentation and Materials ........................................................... 53
  Data Collection Procedures ............................................................... 55
  Null hypothesis ............................................................................... 57
  A priori .............................................................................................. 57
    Experimental Importance .............................................................. 57
    Experimental Consistency .............................................................. 57
  Statistical Procedure ....................................................................... 58
  Assumptions ...................................................................................... 59
  Analysis of Threats to Validity ........................................................... 59
    Internal Validity ............................................................................. 59
    External Validity ............................................................................ 61
Limitations ................................................................................................................................. 61
Delimitations ............................................................................................................................... 61
Summary ........................................................................................................................................ 62
CHAPTER FOUR--ANALYSIS .......................................................................................................... 63
Introduction ..................................................................................................................................... 63
Research and Analysis Procedures ................................................................................................. 63
Analysis of Group Receiving Intervention during Weeks 3-7 (G 3-7) ............................................... 64
Average minutes spent reading in G 3-7 ....................................................................................... 65
Pretest and Posttest Data, G 3-7 ..................................................................................................... 65
Pretest/posttest analysis, G 3-7 ....................................................................................................... 66
Weeks 1, 7, and 14, G 3-7 ............................................................................................................... 66
Mean Minutes Spent Reading at Weeks 1, 7, and 14 of the Study in G 3-7 ................................. 67
Cumulative Minutes, G 3-7 ........................................................................................................... 68
Analysis of Group Receiving Intervention during Weeks 8-12 (G 8-12) ............................... 68
Average minutes spent reading in G 8-12 ..................................................................................... 69
G 8-12 Average reading minutes per week ................................................................................... 69
Pretest and Posttest Data, G 8-12 ................................................................................................. 69
Pretest and Posttest Analysis, G 8-12 .......................................................................................... 70
Weeks 1, 7, and 14, G 8-12 ........................................................................................................... 70
Mean Minutes Spent Reading at Weeks 1, 7, and 14 of the Study .............................................. 71
Cumulative Minutes, G 8-12 ........................................................................................................ 72
Comparison of G 3-7 and G 8-12 ................................................................................................. 72
Pretest and Posttest Data ANCOVA ...................................................................................... 72
Cumulative Data ANCOVA ......................................................................................................... 73
Comparisons .................................................................................................................................. 73
Qualitative Information ............................................................................................................... 75
Variety of Materials ..................................................................................................................... 75
Teacher Comments ...................................................................................................................... 76
Summary ........................................................................................................................................ 76
CHAPTER FIVE--CONCLUSION .................................................................................................... 78
Introduction ..................................................................................................................................... 78
Summary ........................................................................................................................................ 78
Null Hypothesis ............................................................................................................................ 79
Discussion ...................................................................................................................................... 80
Conclusions ................................................................................................................................... 82
Implications for Further Research ............................................................................................... 83
Recommendations .......................................................................................................................... 85
REFERENCES ............................................................................................................................... 88
Appendix A: Letter to Principals and Superintendents ................................................................. 105
Appendix B: Letter to Teachers .................................................................................................... 107
Appendix C: Parental Permission Form ...................................................................................... 110
Appendix D: Student Assent Form .............................................................................................. 113
Appendix E: Reading Log .............................................................................................................. 116
Appendix F: Discussion Starters .................................................................................................. 118
## List of Tables and Figures

<table>
<thead>
<tr>
<th>Item</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Figure 1</td>
<td>Research Design</td>
<td>50</td>
</tr>
<tr>
<td>Table 1</td>
<td>Average Minutes Spent Reading G 3-7</td>
<td>65</td>
</tr>
<tr>
<td>Table 2</td>
<td>Minutes Spent Reading in 1 week</td>
<td>66</td>
</tr>
<tr>
<td>Table 3</td>
<td>Mean Minutes Spent Reading at Weeks 1, 7, and 14 of the Study in G 3-7</td>
<td>67</td>
</tr>
<tr>
<td>Figure 2</td>
<td>G 3-7 Average Minutes Spent Reading</td>
<td>67</td>
</tr>
<tr>
<td>Table 4</td>
<td>Average minutes spent reading in G 8-12</td>
<td>69</td>
</tr>
<tr>
<td>Table 5</td>
<td>Minutes Spent Reading in 1 Week as Recorded on the Reading Logs During Week 1 (pretest) and Week 14 (posttest) of the Study</td>
<td>70</td>
</tr>
<tr>
<td>Table 6</td>
<td>Mean Minutes Spent Reading at Weeks 1, 7, and 14 of the Study</td>
<td>71</td>
</tr>
<tr>
<td>Figure 3</td>
<td>G 8-12 Average Minutes Spent Reading</td>
<td>71</td>
</tr>
<tr>
<td>Figure 4</td>
<td>Reading Minutes by Week</td>
<td>74</td>
</tr>
</tbody>
</table>
CHAPTER ONE: THE STATEMENT OF THE PROBLEM

Adolescents straddle the divide between childhood and adulthood, sometimes straining forward into the world of adults, and sometimes leaning back into the world of children, but mostly teetering unsteadily between the two. Along with the visible changes of maturity, unseen changes take place cognitively and emotionally, changes that continue to resonate long after the pimples disappear. One area of impact is the development of literacy habits, specifically the development of a habit of independent, recreational reading.

Adolescent literacy is the study of the reading and writing of students aged 12-18. When people think of reading and students, they often think about primary grade students. The “literacy needs of the adolescent reader are far different”(Moore, Bean, Birdyshaw, & Rycik, 1999) from the needs of primary students. Reading develops along a continuum, and the literacy needs of adolescence are part of that development (Moore, Bean, Birdyshaw, & Rycik, 1999). In a joint statement issued in December 2001, the National Middle School Association and the International Reading Association posited, “The ability to comprehend a variety of texts, to use sophisticated comprehension and study strategies, to read critically, and to develop a lifelong desire to read are not acquired entirely during the early years. A good start is critical, but not sufficient” (p.1). The early stages of literacy development are reading readiness, learning to read, and reading for unconscious enjoyment (Donelson & Nilsen, 1989). As students enter adolescence, their development is stretched across a vast spectrum from those early stages to the later stages: reading autobiographically, for vicarious experiences, for philosophical speculation, and for aesthetic experiences. Paying attention to students’
recreational reading habits is one possible way to meet students at all these different places.

Problem Statement

During adolescence, some students read voluntarily, and in so doing build knowledge, vocabulary and comprehension skills (Allington, 2002; Anderson, Wilson & Fielding, 1988; Cipielewski & Stanovitch, 1992). Other students do not read for personal enjoyment. Voluntary reading and enjoyment of reading start to decline for many young people at around age 11 (Guthrie & Alao, 1997; Heather, 1981; Hincks & Balding, 1988; Strommen & Mates, 2004). By age 14, between 30 and 40% of students report little or no voluntary reading (Heather, 1981; Hincks & Balding, 1988; National Center for Educational Statistics [NCES], 2004). This aliteracy, defined as a lack of reading habits in capable readers (Irwin, 2003; Mikulecky, 1978), poses problems for the rest of their schooling and beyond.

When skills are not used and developed, they atrophy. For students to become better readers and progress beyond basic literacy, additional reading helps (Taylor, Frye, & Maruyama, 1990). In National Assessment of Educational Progress (NAEP) surveys in 2003, 79% of fourth graders reported reading for pleasure “a lot” while only around 34% of eighth graders and 25% of twelfth graders indicated a lot of reading for pleasure (NCES, 2004). The NAEP assessment results from 2004 indicate that the average reading scale scores of twelfth graders declined from 1984 to 2004, and were the same as they were in 1971. According to the 2004 results, only 44% of twelfth grade students were reading well enough to understand complicated information, such as textbooks and literature (NCES, 2005). The average reading scores of fourth and eighth graders
increased slightly over the same period (NCES, 2005). Even though eighth graders’ average reading scores showed slight increases, only about half of the tested eighth graders demonstrated even intermediate reading skills (NCES, 2005). Adolescents’ reading skills do not automatically improve with age and additional schooling. Without development and use, students’ abilities can also erode. Many who do not read voluntarily eventually lose academic ground (Anderson, Wilson, & Fielding, 1988; Stanovitch, 1986).

The problem does not stop there. Adolescents whose skills in reading decline continue on a path of declining literacy. About 20% of adults who are able to read choose to do so to any extensive degree (Cramer & Castle, 1994). The National Endowment for the Arts recently published Reading at Risk: A Survey of Literary Reading in America, a report based on a survey of 17,135 adults in the United States in 2002. The report presented a “bleak assessment of the decline of reading’s role in the nation’s culture” (2004, p. vii). Only 46.7 percent of adults had read a novel, short story, play, or poem in the previous 12-month period. Only 56.6 percent had read any sort of book. Further, the largest decrease in literary reading was found in the youngest age group, 18-24 year olds (National Endowment for the Arts, 2004, p. xi). In 1982, 59.8 percent of this group had read a novel, short story, play, or poem; in 2002, that figure was reduced to 42.8 percent. The study also found that reading literature was strongly correlated to active civic participation; readers make involved citizens. The report’s conclusion stated: “At the current rate of loss, literary reading as a leisure activity will virtually disappear in half a century” (National Endowment for the Arts, 2004, p. xiii).
Adults who do not read create an uninformed citizenry. As Thomas Jefferson said in 1816: “If a nation expects to be ignorant and free in a state of civilization, it expects what never was and never will be” (cited in Coates, 1996). Nearly 200 years later, the authors of Reading at Risk stressed: “If one believes . . . that a well-read citizenry is essential to a vibrant democracy, the decline of literary reading calls for serious action” (National Endowment for the Arts, 2004, p. ix). Therefore, this study proposed to begin such action. Seventh grade students are at the brink of the decline in reading; by investigating an intervention in their recreational reading, it may be possible to begin renewing the role of reading.

Research Question

In general, the research question guiding this study was as follows: Will seventh grade students’ recreational reading increase following a program of peer-involved book discussion groups?

Importance of the Study

Reading more leads to better reading skills, and solid reading skills are an important predictor of academic achievement (Donahue, Voelkl, Campbell, & Mazzeo, 1999; Taraban, Rynearson, & Kerr, 2000). A program that motivates students to read more could prove useful to students across academic areas.

Fewer than half of the adults in the United States read literature (National Endowment for the Arts, 2004, p. ix), and the youngest age group, 18-24 year olds, experienced a 28 percent rate of decline in literary reading from 1982 to 2002 (p. xi). An intervention involving subjects approaching that age group might provide information useful in slowing or reversing that decline.
Definitions

The following terms are defined as they are specifically used in this study.

*Adolescence:* The developmental stage between childhood and adulthood is termed adolescence and varies in start and duration from one individual to another. Preadolects are aged from 10 to 13; early adolescents range from 13 to 15; and late adolescents are between 15 and 18 years old.

*Aliteracy:* According to Mikulecky who coined the term in 1978, aliteracy is the lack of a reading habit when the ability to read is present (1978, p. 6). Beers called it simply the choice not to read (2003).

*Attitude:* Mathewson (2004) explained attitude toward reading consisted of prevailing feelings about reading, action readiness for reading, and evaluative beliefs about reading. According to McKenna (1994), attitude develops over time and is partly formed by previous experiences with reading.

*Leisure reading, independent reading, and recreational reading:* These are interchangeable terms for the reading in which a student engages that is not specifically required for school.

*Literacy:* The simplest definition of literacy is the ability to read, write, and comprehend text. Different societies, cultures, and time periods hold different standards for literacy. This study will focus specifically on reading which is just one element of literacy.

*Middle school student:* For the purposes of this study, a middle school student is grades six, seven, or eight and is between 11 and 14 years old. Specifically, seventh graders are usually 12 or 13 years old.
**Motivation:** Motivation determines why people choose to do certain activities. Intrinsic motivation refers to choosing and doing an activity for its own sake and leads to deep involvement in the activity. On the other hand, extrinsic motivation involves competition, compliance, rewards, and recognition.

**Reader response theory:** According to reader response theory, reading is a transaction between reader and text (Rosenblatt, 1937). Meaning depends on the reader and the text jointly, depending partly upon what the reader brings to the text. Rather than one correct interpretation of a work, there are many probable interpretations.

**Reading levels, reading achievement, reading proficiency, and reading attainment:** Different studies utilized different measures of reading and used different terms to denote the reading score students achieved on an assessment. As examples, Taylor, Frye and Maruyama (1990) used standardized reading comprehension scores from the Gates-MacGinitie Reading Test, Greaney (1980) used a reading attainment score which was the sum of vocabulary and comprehension scores on the Drumcondra English Test, Level III (p. 344), and Anderson, Wilson, and Fielding (1988) used three different tests on vocabulary, reading speed, and reading comprehension to determine reading proficiency (p. 290). In general, studies referring to reading ability report some combination of reading comprehension and vocabulary scores, sometimes with a grade level equivalency and sometimes with ratio level data.

**Self-efficacy:** Self-efficacy is a person’s judgment of his or her ability to be successful in an activity (Scott, 1996); positive self-efficacy allows a student to feel in control of his or her learning and success.
Young adult literature: Teri Lesesne pointed out that professionals disagree over the term young adult literature (2003). In her book about matching readers with books, she defines young adult literature broadly as “books either written for or read by YA readers” (p. 54). Since this study is focused on why and how much students read rather than what, that definition applies here as well.
CHAPTER TWO—REVIEW OF THE LITERATURE

For this study, several areas of literature are relevant. Literacy as specific to adolescents is one area of review, as is the research on aliteracy and leisure reading. Literature concerning affective dimensions of reading, including attitude and motivation will inform this study, and gender, home, peer, and instructional impacts on reading will be presented as well.

Adolescents

Adolescent students present unique challenges to educators. In the past 15 years, recognition of these challenges has increasingly spurred educators to create learning environments better suited to the physical, social, and cognitive development of middle school age students (Carnegie Council on Adolescent Development, 1989). Cognitively, middle school students are beginning to move from concrete operational thinking to formal operations, moving from the concrete to the abstract (Piaget & Inhelder, 1969).

Adolescence is a relatively new concept, and a culturally specific one. In 1904, G. Stanley Hall wrote that adolescence needed to be understood and viewed as a unique stage of development. This time of transition from childhood to adulthood has its own steps and tasks. In 1953, Robert Havighurst delineated the developmental tasks for adolescents in a model still referred to today:

1. Achieving new and more mature relationships with age-mates of both sexes
2. Achieving a masculine or feminine social role
3. Accepting one’s physique and using the body effectively
4. Achieving emotional independence of parents and other adults
5. Achieving assurance of economic independence
6. Selecting and preparing for an occupation
7. Preparing for marriage and family life
8. Developing intellectual skills and concepts necessary for civic competence
9. Desiring and achieving socially responsible behavior
10. Acquiring a set of values and an ethical system as a guide to behavior (p.111-147)

In addition, in the last few years, brain research has shown that the adolescent brain is going through a “biological remodeling” (Valpy, 2003) to rebuild a teenage brain into an adult brain. Various areas of the brain activate during reading, thus as the brain changes in adolescence, reading changes as well. A team of researchers at Washington University determined through functional Magnetic Resonance Imaging (fMRI) studies that children, adolescents, and adults use their brains differently during a reading task (Schlaggar, Lugar, Brown, Coalson, & Peterson, 2003). An fMRI shows an image of blood flow in the brain, and the blood flow indicates which regions are involved in tasks. They found that activity in 17 regions of the brain differed among the three age groups when the subjects engaged in a simple word reading task. In a study of electroencephalographic (EEG) and evoked related potential (ERP) data, an intervention in phonemic awareness, that is, the ability to hear and identify sounds, produced changes in adolescent brain activity that contrasted with the same intervention results in elementary age students (Given, 2004).

Reading tasks involve more than word recognition and phonics exercises as are used in such laboratory studies. Especially for older students, the affective dimensions of reading are as important as the cognitive dimensions (Cramer & Castle, 1994). This
quantitative proof that adolescent brains are different, however, gives credence to other studies that show through anecdotal evidence that adolescents are different.

Adolescents and Reading

Precisely because adolescents are different, their literacy needs are different. Traditionally, literacy learning has been viewed as a part of elementary education, but the literacy needs of adolescents have been more on the forefront in recent years. Vacca and Alvermann, co-chairs for the International Reading Association’s (IRA) Commission on Adolescent Literacy at its founding in 1997, stressed that “the literacy learning that takes place in adolescents between the ages of 10 and 18 is of critical importance in preparing for life in and out of school” (1998). Vacca and Alvermann argued that the multiple literacies of adolescent students, especially their out-of-school literacies, warrant more attention. Later, in 2001, the National Middle School Association (NMSA) and the IRA issued a joint statement that said, in part, “The ability to comprehend a variety of texts, to use sophisticated comprehension and study strategies, to read critically, and to develop a lifelong desire to read are not acquired entirely during the early years” (International Reading Association & National Middle School Association, 2001). Recognition of the importance of adolescent literacy has continued to grow.

In 2002, a group of government and private entities convened workshops on adolescent literacy under the auspices of The Partnership for Reading. In addition to questions surrounding learning to read in adolescence, the rationale for the workshops stated “it is not well understood how adolescents can be motivated to read” (National Institute for Literacy, 2002, Rationale section, para. 4). During the workshop, researchers established several known literacy concepts. Reading itself was identified as a domain
that ties together skills and processes for lifelong learning. Struggling adolescent readers were recognized as having “varied natures” but sharing “certain cognitive, sociocultural, motivational, and strategic characteristics” (National Institute for Literacy, 2002, Profiling section, para. 1). One presenter proposed a range of profiles of adolescent readers, each with specific knowledge, skill, behavioral, and affective characteristics. The list of profiles included the following: highly competent readers, effortful processors, knowledge-reliant readers, non-strategic processors, resistant readers, and seriously challenged readers.

Another speaker at the workshop presented a review of research from 1990 to 2002 on the ERIC and PsycINFO databases which related to reading of students in grades 6-12 (Curtis, 2002). She developed a framework for the 155 articles, categorizing them as focused on print, language, cognition, or situation. Situation referred to studies concerning motivation, attitudes, and interests of adolescents as well as the influence of teachers, schools, and families on reading development. The 33 studies on situation were conducted more frequently with readers exhibiting typical development, whereas print, language and cognition investigations were usually focused on struggling readers. In the realm of situation, the area of concern in the present study, Curtis found two aspects in the studies she examined, motivation and context. In the studies on motivation, Curtis found time spent reading is positively correlated with reading ability, but that adolescents spend little time reading outside of school. Other findings were that early adolescents tend to have more extrinsic than intrinsic goals in their reading, and diversity and choice in reading seem to have an impact on reading motivation. Another finding was that positive attitudes toward reading seemed to be fostered by parents. Curtis’s guidelines
were restrictive; articles had to be “either research/technical reports or descriptions of empirical studies” (2002, para. 4) to be considered. Throughout all the areas, additional methodologically rigorous research was needed to fully understand aspects of adolescent literacy. Also, the fact that this workshop occurred with such broad government, professional, and educational involvement speaks to the emerging recognition of the importance of adolescent literacy.

That recognition has continued to grow. The National Council of Teachers of English issued a call for action concerning adolescent literacy in 2004. The federal government recently began a grant program, Striving Readers, specifically for the research and improvement of middle and high school reading achievement (United States Department of Education). The National Governors Association commissioned and issued a report on adolescent literacy for its members (Berman & Biancarosa, 2005). Various states have established their own task forces for adolescent literacy. The Carnegie Corporation, with input and authorship from leaders in adolescent literacy, released Reading Next: A Vision for Action and Research in Middle and High School Literacy, a manual for development of adolescent literacy which delineated 15 elements for successful adolescent literacy programs (Biancarosa & Snow, 2006). And, according to the International Reading Association’s survey of literacy leaders, adolescent literacy moved from a “hot” to a “very hot” topic from 2005 to 2006 (Cassidy & Cassidy, 2005).

In 2003, the Carnegie Corporation began initiatives to identify, document, disseminate, and fund resources to reinforce the learning of underperforming adolescent students (Snow & Biancarosa, 2003). They identified two gaps in adolescent literacy. One was the gap in achievement between privileged and less-privileged adolescents. The
other was the gap between what is being done to address the achievement gap and what
needs to be known and done to truly bring about change and improvement.

Another review of research on adolescent literacy overlapped and extended the
work done by Curtis. This work, produced by the North Central Regional Educational
Laboratory, reviewed 55 research studies from 1994 to early 2005, focusing specifically
on “key factors that influence adolescent literacy” (Phelps, 2005, p. 1). The review
divided the factors into “four broad categories: developmental variables; social, cultural,
and linguistic variables; instructional and assessment variables; and professional
development variables” (Phelps, 2005, p. 1) and analyzed a mixture of qualitative,
quantitative, and mixed methodology studies.

In the area of adolescent development and its relationship to reading, Phelps
concluded that because of the differences evident in adolescents, a need existed for
alternatives to “one size fits all curricula and text selection” (p. 7), especially the practice
of choosing one book for the whole class to read (p. 14). Additionally, literacy was
found to play an important function in the development of adolescents’ identities, but for
adolescents, literacy expands well beyond the confines of traditional, school-based
literacy. Phelps contended that the definitions of literacy and text must be expanded and
that adolescents need space in school to experiment with these texts and literacies and to
receive feedback and encouragement from adults and peers as they work through
understandings.

Social, cultural, and linguistic variables were also inextricably woven through
adolescents’ developing literacy. The research Phelps reviewed suggested, among other
things, that social and cultural variables influence the literacy development of adolescents
and that “males and females bring different discourse styles and ways of understanding to
the classroom” (p. 13). In instructional, assessment, and professional development
variables, the quantitative data supported the qualitative findings. Phelps found that
student discussion was an important variable related to higher test results (p. 22) and that
students found it helpful to discuss reading with peers. Also, the research showed that no
one foolproof strategy is ideal for all students, that professional development in
adolescent literacy needs to reach teachers in all content areas and be reality-based, that
instructional variables will probably continue to be one of the most important areas in
literacy research, and that the need for research on adolescent literacy is ongoing.

Reading Interests

In a case study of three individuals, Ivey (1999) found a broad range of interest
and ability in reading among adolescents. Reading preferences and personal relevance
played strong roles in the students’ reading. Her subjects self-selected a wide range of
reading materials, they often chose books that were not cognitively demanding for them,
and they craved relevant and valuable reading activities. Because of their variability,
complexity, and performance, Ivey posited that whole class teaching methods may not
meet their needs. Although her study included only three individuals, she suggested that
it, along with previous research, “suggests that we are beginning to know what is and
what is not motivating, interesting, and developmentally appropriate for middle school
readers” (p. 190).

In interviews for a literacy study, Farnan found that middle and high school
students exhibited much variability in their views on reading, some calling it boring,
others deeming it important for skill development and information gathering, and still
others identifying it as enjoyable (1996). In her study, several students viewed reading in
two categories: assigned reading and recreational reading. The assigned reading was
perceived as dull while the chosen reading was considered fun and far removed from
academics (Farnan, 1996). A different research project attempted to discern what caused
students to engage with a text or to disconnect, either enjoying the work or finding it
boring. In interviews for that study, Reeves found that students would call a book boring
if it felt emotionally threatening, difficult to understand, or was far removed from their
own lives (2001). Books that contained role models or other lessons that helped them
negotiate their lives were found by the same students to be good or interesting (Reeves,
2001). Other studies found that, in addition to the individualized aspects of reading,
social interactions in organized discussion groups shaped adolescents’ understanding and
preferences in texts (Alvermann et al., 1996; Alvermann, Young, Green, & Wisenbaker,
1999; Kasten & Wilfong, 2005).

Students know what they like in their reading, even if they cannot always
articulate their reasons. By analyzing approximately 2200 written responses for the
Young Adults’ Choices Program, Samuels generalized that “students liked books for a
variety of reasons” (1989, p. 719). They liked books with teen protagonists, books that
seemed real to them, books with fast-paced action, and books about subjects in which
they were interested. The word real, Samuels noted, was the most common word in
positive responses. Samuels’ study analyzed responses of students who had finished
books from a list of suggestions. Sometimes, the search for a book is a difficult part of
students to accurately predict whether or not they will like a book (Rinehart, Gerlach,
Wisell, & Welker, 1998). Sometimes, though, the choices in a library are overwhelming for reluctant readers; such students particularly benefit from book talks or other methods geared toward matching readers and books (Beers, 2003; Lesesne, 2003).

Adolescents read much that teachers and parents might hesitate to call literature. According to Traw (1992) this “subliterature” included many books adolescents chose in the genres of romance, mystery/suspense, and supernatural/horror. In Traw’s study of 55 eighth grade students, the students who read subliterature were the most prolific readers in the sample. Carlsen and Sherrill found that those who were prolific readers as adults had devoured series books and the like as children (1988). Importantly, these books, although deemed low in literary quality, may satisfy developmental needs of adolescents (Traw, 1992, p. 17), and may lay critical groundwork for higher quality reading (Carlsen & Sherrill, 1988; Traw, 1992).

**Reading Interests Outside of School Requirements**

The literacy experiences students have outside of school assignments and school walls are not always taken seriously or even considered as a part of literacy development (Vogel & Zancanella, 1991). However, many researchers and educators argue that the reading done outside school requirements is most relevant to adolescent students and thus needs to be considered in development of lifelong reading habits (Anderson, Wilson, & Fielding, 1988; Bintz, 1993; National Council of Teachers of English, 2004; Sanacore, 2000; Stallworth, 2006; Vacca & Alvermann, 1998; Vogel & Zancanella, 1991; Worthy, 1998). For example, Bintz, as a collaborator on a constructivist inquiry research team, determined from the study of 44 students from grades 6-11 that “we need to recognize that out-of-school reading activities have a strong association with reading achievement
and that reading books is a cause, not merely a reflection, of reading proficiency” (p. 614). Also, in a study of 1,765 middle school students, Ivey and Broaddus found that most students’ positive experiences with books involved books they had chosen on their own, while their most negative reading experiences were directly related to assigned reading (2001).

Different reading strategies for out-of-school reading. Bintz further maintained that adolescents use different strategies for in-school and out-of-school reading, utilizing shortcuts for assigned reading and more complex strategies for pleasure reading (1993). In a qualitative study, seventh and eighth grade students assured the investigator that they did not read assigned books the same way they read their self-chosen books, and they insisted that the way to get kids excited about reading was to let them choose their own books (Goncalo, 1997). Atwell, in her book In the Middle, asserted “allowing readers to choose virtually ensures that everyone will get into books” (1987, p. 162). In a short-term qualitative study, Mercurio found that allowing students to self-select reading materials increased reading, engagement in reading, and improved students’ attitudes about reading, hopefully inspiring more to develop a lifelong reading habit (2005).

In summary, the current literature expresses the differences of adolescents as learners and readers. Particularly since 1997, researchers, professionals, and even certain government entities have recognized or stressed the importance of a policy and professional focus on adolescent literacy. Out-of-school reading is an important element of adolescent literacy, especially in the development of lifelong reading habits. Unfortunately, however, research has shown that adolescents do not spend much time reading for pleasure (Heather, 1981; Hincks & Balding, 1988; NCES, 2004). When they
do choose to read, adolescents themselves often know what they like in reading, and most often, what they like is the reading that they choose to do outside of school assignments. Some research shows that when they read what they like, they use higher levels of reading and meaning-making strategies. Further, while adults may not always fully approve of the books adolescents choose to read, reading experts claim that even reading of subliterature nudges adolescents along in their development as readers and as healthy adults.

Reading Habits

Some studies have been conducted which examine young people’s reading habits. According to the National Assessment of Academic Progress, the percentage of 13- and 17-year-old students who read for fun everyday was lower in 2004 than in 1984; during the same period, the number of students who indicated they never or hardly ever read for fun increased (Perie, Moran, & Lutkus, 2005). From a two-year study of 60 13-15-year-old students in England, researcher Pauline Heather reported several specific findings (1982). The time students spent reading tended to decline over the two years, although only five out of the 60 read no books at all. Students cited various reasons for the changes in their reading habits, including changes in schedules and routines, other leisure activities, family commitments, pressures of exams and homework, and difficulty in finding enticing books. Students read magazines frequently and with little decline during the study. Most of the books read by her subjects were intended for adults and more than half had a link to mass media such as a film or television show related to the book. Students chose books for various reasons including the cover art, a recommendation, the author, or the influence of other media. Since the publication of this study in 1982, the
field of young adult literature has broadened considerably. According to Stallworth, “today’s young adult literature is sophisticated, complex, and powerful” (2006, p. 59).

The wide range of young adult books provides young adolescents with realistic models for their own development, opportunities for reflection and imagining, and companions for the navigation of teen experience (Beach, 1993; Lesesne, 2003; Probst, 1984; Probst, 2002; Stallworth, 2006).

In contrast, a study of reading among high school students found that most adolescent students do read for leisure (Moffitt & Wartella, 1992). In this questionnaire study of 414 students in grades 9-12, 78% of the sample claimed to read books for pleasure, and the trend was upward from the freshman year to the senior year students (p. 5). Many of the students, however, read for less than 30 minutes each day. This study also found differences in reading among students of different gender, different socioeconomic status, different grade point averages, and different parental educational levels. An informal study of over 700 teens in rural North Carolina similarly found that more than 70% of those surveyed read various materials in their leisure time, including novels, nonfiction books, magazines, and newspapers (Mellon, 1990). Students in this group reported they read for entertainment and information, mainly, and, often, for escape. Time spent reading was not addressed in this study. The groups of students with California Achievement Test scores for reading in the lowest 25th percentile claimed to read less in their spare time, but half of this group read for pleasure as well, according to Mellon (1990).

These findings were grounded somewhat when a lengthy study of 801 Australian children aged 10-18 found that 74% of the group enjoyed reading at least somewhat;
however, only 46% of the secondary students in that study read once every few days or more (Australia Council, Australian Centre for Youth Literature, & Woolcott Research, 2001). The Australian study additionally found that girls were more likely to be avid readers than boys, younger students read more than older students, and that many students preferred magazines as reading material. Also, the research found that many students aspired to read more, and no students actually aspired to hate reading (Australia Council, Australian Centre for Youth Literature, & Woolcott Research, 2001, p.17). In a week-long study of 707 students in grades seven through ten, 61% claimed to be reading a book at home; 93% of the students claimed to have read something other than a book that week, such as a magazine, newspaper, or information on the Internet (Hopper, 2005). Strommen and Mates concluded after interviews with sixth and ninth grade students who read avidly that to become reading adolescents, children need access to books, modeling from parents and other adults, and conversations about books (2004).

Importantly, one study concluded that reading habits in adolescence impact students as they grow older. McCoy, Larson, and Higginson, after surveying college students enrolled in developmental reading courses and seventh and eighth grade students, suggested that the low reading levels of college students may be the result of a decline in independent reading in middle school (1991). The college students reported that their reading habits changed in seventh or eighth grade, and the seventh and eighth grade students’ surveys corroborated this finding. Even for the students who continued to be interested in recreational reading, it was their lowest ranked leisure time activity.

Another study looked at both readers and nonreaders. Out of 2,731 surveyed seventh grade readers, 487 were identified as either readers or nonreaders (Landy, 1977).
Readers were those who read two or more books per week; nonreaders were those who read two books or fewer a year. They then completed questionnaires and profiles to determine the possible impact of over 100 psychological, social, demographic, personal, and environmental variables on voluntary reading. Out of all the various factors, gender, reading achievement level, and number of books the subject owned were the most important predictors of the amount of reading and the most important discriminators between readers and nonreaders. With the addition of four more variables: a quiet place at home to read, sibling’s use of the library, mother’s use of the library, and the subject’s IQ, a total of 52.56% of the variance in the amount of reading could be predicted. This study also showed, among other findings, that readers tend to be more involved in a range of pastime activities such as lessons and clubs and that nonreaders used reading more for facts and information rather than entertainment. At the conclusion of this very thorough study, Landy indicated that reading habits remained highly individual and difficult to fully quantify, but also, importantly, subject to change.

The various studies of adolescents’ reading habits have yielded interesting, sometimes contradictory information. Reading habits appear to be largely impacted by the gender and the reading ability of the reader or nonreader. Other factors influencing the development of leisure time reading include book ownership, home environment, parental reading, and television watching. Since the primary studies in this area were conducted, much has changed. Young adult literature has improved and broadened (Donelson & Nilsen, 1989), television has become more entrenched in our society, and other pastimes, such as digital entertainment, have emerged. Studies have found that most adolescents engage in leisure reading, a figure ranging from 70% to 78%. This still
leaves 22-30% who do not read for pleasure at all, and a wide gap spans between the avid
readers and those who read minimal amounts. The more that can be learned about
recreational reading among adolescents, the more chance there is to stem the burgeoning
tide of aliteracy among young adults (National Endowment for the Arts, 2004).

Reading Amount and Reading Attainment

In both formal and informal studies, researchers have looked for a connection
between amount of reading and reading attainment in students of various ages. Greaney,
in a study of 720 fifth grade students in Ireland, examined correlations among reading
levels, various types of leisure activities, various types of reading, and various personal,
school, and home variables (1980). Information was collected through diary entries
completed by students and by questionnaires. This early but often cited study found the
two strongest predictors of amount of leisure reading were gender (r=.31) and reading
attainment (r=.31), meaning each one accounted for only 9.6% of the predictability of
time devoted to books. Overall, students in the study spent 5.4% of available leisure
time reading books, ranking reading seventh among nine leisure time pursuits.
Substantial reading of either books or comics was inversely related to low reading levels,
and 22.2% of students did not do any reading at all during the three days for which they
completed diary data (Greaney, 1980). This study also examined the variable of
television watching, and found that 97% of the sample had spent some time watching
television, and this in a time when many had only one channel to watch. Although the
relationships between reading and television viewing were insignificant in this study,
Greaney indicated television was a variable of interest for future studies. Greaney
concluded by stressing the “complexity of the phenomenon of leisure reading” (p. 355) and the need for more research.

A later study of fifth graders also found a positive relationship between time spent reading out of school, or leisure reading, and reading proficiency (Anderson, Wilson, & Fielding, 1988). Like Greaney’s study, it employed student-recorded diaries of the time they spent in various activities, but these diaries were kept for 8-26 weeks. The study showed “reading books was the out-of-school activity that proved to have the strongest association with reading proficiency” (p. 297) and “time spent reading books was the best predictor of a child’s growth as a reader from the second to the fifth grade” (p. 297). For example, in reading comprehension, the amount of time spent reading out of school accounted for 15.6% of the variance in reading comprehension percentile, 10% of the variance in vocabulary, and 8.8% of the variance in reading speed (pp. 293-295). In addition, this study revealed “staggering differences between children in the amount of out-of-school reading” (p. 296). Their results indicated that more than half of the 155 subjects spent less than five minutes per day reading books (p. 292).

However, another study of fifth and sixth graders found that reading during school contributed to gains in student achievement, but reading at home did not (Taylor, Frye, & Maruyama, 1990). In their study of reading logs kept by 195 fifth and sixth grade students, time spent reading at home and school was recorded immediately after the school reading time. This self-report measure is a limitation of the study, the authors admitted, because the students were likely more accurate about the school reading that had just occurred than the home reading from the day before, possibly leading to the lack
of significant findings. Regardless, consistent reading for pleasure yielded positive returns in student achievement.

Although contradictory results have been found about the relationship between home reading and reading achievement, more reading does seem to be related to reading achievement. This, too, is problematic. Stanovich posited that time spent reading and reading achievement are reciprocally related (1986). That is, one reads because one can read so one gets better and reads even more. He urged a new framework to clarify thinking about reading and move away from a rich-get-richer and poor-get-poorer paradigm of explaining reading growth. In the existing research, asking how students’ reading levels related to their leisure reading was essentially asking the same question, whether or not a student read, in two different ways.

Stages of Literary Appreciation

The most widely referenced studies of reading amount and reading ability may not apply to adolescent students. Because of their specific developmental tasks (Havighurst, 1954) and their changing brains (Given, 2004; Schlaggar, Lugar, Brown, Coalson, & Peterson, 2003; & Valpy, 2003), adolescents reside at different stages of reading development than do younger students.

In 1960, Early proposed a three stage model of literary growth:

1. Unconscious enjoyment: The reader is deeply involved in reading experiences but unable to explain why. Children from pre-school through pre-adolescence are at this stage.
2. Self-conscious appreciation: The reader enjoys reading experiences and does not want to work very hard at enriching that enjoyment. This usually happens during early adolescent years.

3. Conscious delight: The reader enjoys reading and can fully explain likes and dislikes. Readers become more discriminating and trust their judgment about books. This stage is found in late adolescence and adulthood.

Building on this model, Carlsen (1974) developed a five stage model of literary development that included grade levels:

1. Unconscious delight: Students in grades three to seven begin to experience losing themselves in their reading. Students at this stage may read voraciously, devouring series books, everything by certain authors, stacks of books in certain genres, and so on. Donelson and Nilsen pointed out that during this stage, reading abilities start to widen, with some children reading much and others reading only at school (1989). The school-only readers may never lose themselves in a book and never advance to the next stage.

2. Vicarious experience: During this stage, from grades seven to nine, a student reads to collect knowledge and experiences.

3. Seeing oneself: Around grades nine through eleven, readers become more egocentric in their reading and seek books in which they are represented either realistically or symbolically.

4. Philosophical speculations: From the late teens to early adulthood, literature becomes a springboard for philosophical, religious, and psychological
speculation. At this stage, readers go beyond themselves and consider the larger world.

5. Aesthetic experience: This demanding stage requires adult readers to work at all the other stages in an active construction of meaning and analysis.

Building upon both of these models, Donelson and Nilsen (1989) described the development of lifetime readers with the following stages:

1. Reading for unconscious delight.
2. Reading autobiographically.
3. Reading for vicarious experiences.
4. Reading for philosophical speculation.
5. Reading for aesthetic experience.

In all of these models, a reader cannot advance to the next stage without fulfilling the prior one, but readers may move from the higher levels to the lower levels, depending upon the reading material and situation. Either because of age or situation, seventh graders reside at the edges of reading for unconscious delight, reading self-consciously, reading autobiographically, and reading for vicarious experience. Thus, their reading amounts and abilities may be quite different from those of younger students.

Affective Dimensions of Reading

Developing lifelong readers who move through the stages of literary development takes more than teaching the skills of reading. The affective domain, that is, motivation and attitudes toward reading, must also be addressed. Cramer and Castle posited that affective aspects of reading are equally important as the cognitive aspects of reading, although they are often neglected (1994). On a list of 99 options, teachers selected
creating interest in reading as their top priority (Guthrie, Alao, & Rinehart, 1997, p.439), but the actual practice of helping students become motivated to read is more difficult to sustain (Cramer & Castle, 1994). One writer stressed that “promoting the lifetime love of reading should be one of our most important goals in middle schools” (Sanacore, 2000, para. 1). That writer is not alone. As early as 1916, a reference work for teachers called on teachers of reading to teach children three things: how to read, what to read, and to read (cited in Cramer & Castle, 1994). The U.S. Commission on Reading stated in their 1985 report *Becoming a Nation of Readers*: “Increasing the proportion of children who read widely and with evident satisfaction ought to be as much a goal of reading instruction as increasing the number who are competent readers” (Anderson, Hiebert, Scott, & Wilkinson, 1985). As educators’ and policymakers’ attention focuses on adolescent literacy, the importance of encouraging students to read continues. In *Reading Next*, fifteen elements are deemed important in effective adolescent literacy programs; one element is to increase student motivation for and self-direction in reading (Biancarosa & Snow, 2006).

### Attitude Toward Reading

Attitude resides in the affective domain and is an important consideration in a study of leisure reading. Mathewson (2004) theorized that attitude toward reading consists of three parts: prevailing feelings about reading, action readiness for reading, and evaluative beliefs about reading (p. 1435). These three aspects form a complete attitude that influences intention to read; intention acts as a mediator between attitude and reading itself. As a revision to Mathewson’s model, McKenna discussed the development of attitude over time and its causal relationship with different beliefs:
normative beliefs, beliefs about the outcomes of reading, and specific reading experiences (1994). The formation of these beliefs about reading depends upon a variety of factors, including the development of reading ability, social considerations, and beliefs about the results of other activities. Especially as children grow older and have more leisure options available to them, the intention to read will be weighed against alternative pastimes (McKenna, Kear, & Ellsworth, 1995). These postulations were supported by a large-scale study that investigated the reading attitudes of 18,185 children in Grades 1 through 6 throughout the United States. In this study, attitudes toward academic and recreational reading declined steadily from a positive attitude to one of indifference (McKenna, Kear, & Ellsworth, 1995). All reading ability groups experienced decline in attitudes, but the decline among low ability students was the most rapid, leading to the conclusion that the relationship between ability and attitude grows stronger as a result of bad experiences with reading (McKenna, Kear, & Ellsworth, 1995). Gender also affects attitude; regardless of ability, girls as a group showed more positive attitudes toward reading than boys, a gap that widened with age in recreational reading.

Motivation For Reading

Motivation is part of McKenna’s model of reading attitude acquisition (1994). In a study of the relations between children’s reading motivation and the amount and breadth of their reading, Wigfield and Guthrie reported the nature of reading motivation was multifaceted (1997). In their study, one of the first that specifically applied motivation research to reading, they assessed self-efficacy, intrinsic and extrinsic motivation and goals, and social aspects of motivation. Because they found that intrinsic motivation predicted amount and breadth of reading more accurately than past amount
and breadth of reading, they surmised that motivation, in essence, comes first. That is, rather than reading making one want to read more, the findings suggested that the students who possessed reading motivation did read and tended to increase their amount of reading. In fact, students who were highly intrinsically motivated read nearly three times as much as students who scored low on the composite of intrinsic motivation. The researchers pointed out that further research should measure reading amount, achievement, and motivation simultaneously to further clarify the relationship between reading and motivation. In a later study, motivation to read was correlated with stimulating tasks connected to that reading, with evidence that comprehension improved as well (Guthrie, Wigfield, Humenick, Perencevich, Taboada, & Barbosa, 2006). The researchers in that study recognized student choice and social goals for reading as two of the seven areas of motivation for reading. An instructional technique utilizing student choice, Silent Sustained Reading (SSR), was found in a meta-analysis to improve students’ attitudes toward reading (Yoon, 2002).

A later study examined the motivation, metacognition, and reading performance of German students in seventh and eighth grade. Students who were more highly motivated in reading and who had higher self-concepts in reading performed better on reading assessments (Roeschl-Heils, Schneider, & van Kraayenoord, 2003). The students at the highest academic level in their schools scored better than their peers on almost every variable related to reading. Subjects for the study were recruited from a group of 140 students who had participated in a reading study in third and fourth grade, and the researchers found that their later results could have been predicted by the results obtained when the students were younger. Showing the stability of these traits indicated, according
to the authors, the considerable impact reading may have on continued academic achievement and lifelong reading.

**Intrinsic and Extrinsic Motivation**

If motivation has been viewed as important by so many and for so long, why do so many adolescents and adults lack the motivation to read? The answer might be found in the difference between extrinsic and intrinsic motivation. In Wigfield and Guthrie’s study (1997), fourth and fifth grade students with high intrinsic motivation read more books and more minutes than students with low intrinsic motivation on every variable studied. The students with high intrinsic motivation spent almost three times as many minutes reading outside of school than did students with low intrinsic motivation. In contrast, students with high and low extrinsic motivation showed much smaller differences in reading amount and breadth. Further, Wigfield and Guthrie found that intrinsic motivation was a better predictor of reading amount and reading breadth than was extrinsic motivation. That study’s sample consisted of fourth and fifth grade students.

Middle school students exhibit many differences from younger students. Studies have indicated that intrinsic motivation for reading as well as other academic subjects declines beginning as early as Grade 3, and decreases in intrinsic motivation are often accompanied by increases in extrinsic motivation (Guthrie, Alao, & Rinehart, 1997; Lepper, Corpus, & Iyengar, 2005). Another study found that both intrinsic and extrinsic motivation decreased from Grade 8 to Grade 10 (Otis, Grouzet, & Pelletier, 2005).

While intrinsic motivation is highly correlated with use of deep processing strategies, extrinsic motivations such as competition, grades, and social approval lead to
avoidance of reading and less use of reading strategies (Guthrie, Alao, & Rinehart, 1997). The writers posit in their review of multiple studies that by middle school, children’s beliefs in their abilities have eroded, causing less successful students to lose their intrinsic motivation. At the same time, middle school students, either by curricular design or simple biology, are more competitive, grade-oriented, and social, thus creating an increase in extrinsic motivation and an accompanying decrease in intrinsic motivation. Two writers argued that the transition from elementary structure to middle school structure is a source of an important negative motivational shift, and to keep it from happening middle school teachers could employ specific practices that ease the transition by making middle school reading instruction more responsive to students (Guthrie & Davis, 2003). Allowing students choice in their reading shows potential as a student-centered reading instruction strategy; research on instructional, motivational, and cognitive processes lead Guthrie and Alao to specify eight constructs conducive to long-term reading motivation: conceptual themes, real world interactions, self-direction, interesting texts, social collaboration, strategy instruction, self-expression, and curricular coherence. Three of the eight could be utilized by having students discuss self-chosen texts: self-direction, real-world interactions, and social collaboration (1997).

Intrinsically motivated students of any age are personally inclined to read as a voyage of discovery about the world and themselves. They derive “cognitive and emotional satisfactions” from reading, leading to a greater investment of time in reading (Wang & Guthrie, 2004, p. 165). One writer stressed that high levels of personal interest can allow a student to transcend his or her reading level, working through a text that normally would be too difficult (Hunt, 1970). Interest in a text tends to facilitate
comprehension and recall (Hidi, 2001). Further, Hidi stressed that addressing both individual and situational interests, especially utilizing social activities for academic goals, could increase academic motivation (2001). Also, it is probable that motivational factors are the foundation for strategies and cognitive goals in reading (Guthrie & Wigfield, 2000). For example, if a person is intrinsically motivated to read a text and feels capable in the task, he or she will persist even through difficulties to work through the text strategically. To summarize, “becoming an excellent, active reader involves attunement of motivational processes with cognitive and language processes in reading” (Guthrie & Wigfield, 2000, p. 408). To impact student outcomes in reading, according to Guthrie and Wigfield, student engagement in literacy tasks is key, and student engagement is most impacted when instruction fosters student motivation, strategy use, growth in conceptual knowledge, and social interaction (2000).

Two researchers proposed a two-factor motivational measurement model, with intrinsic motivation consisting of aspects of curiosity, involvement, and challenge and extrinsic motivation consisting of recognition, grades, social factors, competition, and compliance (Wang & Guthrie, 2004). They then used this model to examine how the two factors impacted the comprehension and reading amount of U.S. and Chinese fourth grade students. In both groups, they found that intrinsic motivation positively predicted frequency of reading for enjoyment and that extrinsic motivation negatively predicted reading for enjoyment. However, intrinsic and extrinsic motivation themselves were highly correlated, suggesting the integration of the two factors and the diversity of aspects that impact reading motivation. Based on their results, the researchers
recommended integration of social and academic values of reading as a means for improvement.

Self-efficacy is one aspect of intrinsic motivation (Scott, 1996). Self-efficacy is a person’s judgment of his or her ability to be successful in an activity; positive self-efficacy allows a student to feel in control of his or her learning and success. When a student has high self-efficacy, he or she is motivated to work toward goals. Low self-efficacy leads to a lack of confidence and perseverance. As students age, they become more aware of their abilities in comparison with others (Chan, 1993), and self-efficacy can suffer. When self-efficacy suffers, motivation suffers. When motivation suffers, reading suffers. Cyclically, when reading suffers, self-efficacy suffers (Scott, 1996).

Despite the evidence about the importance of intrinsic motivation, rewards and extrinsic motivation persist in schools, especially in the area of reading. One reading program growing in popularity in elementary schools and middle schools is Accelerated Reader. This program’s philosophy, and its selling point, is that students who use it are motivated to read more and better books. However, in a study of 1,771 middle school students, researchers found that students who had not had Accelerated Reader as elementary students were reading more as middle school students (Pavonetti, Brimmer, & Cipielewski, 2003). This adds to the more generalized research showing that extrinsic motivators by themselves do not have a positive long-term effect and can actually have negative influence in the longer term (Wilson & Corpus, 2001).

Because intrinsic motivation and avid reading have been found by various researchers to be linked, studying the conditions and qualities of reading that students do independently could yield important findings about the nature of the relationship.
Further, because research has shown that positive reading attitudes decrease throughout schooling and intrinsic motivation decreases starting in middle school, it would be appropriate to target middle school students with a study involving motivation and recreational reading.

Aliteracy

Lack of motivation is one element of aliteracy. Coining the term in 1978, Mikulecky recognized the growing threat of aliteracy, that is, being able to read but choosing not to do so. He expressed concern that Americans were developing a pattern of reading just for the job early in life by reading just for school (p. 3). Stressing the rising standards of literacy in society, he asserted that a high school graduate who left school without learning a habit of reading would soon be sub-standard (p. 5). In effect, aliteracy, according to Mikulecky, may guarantee functional illiteracy. Further exacerbating the problem was basic skill instruction programs of the time, which, because of their de-emphasis on lifelong reading habits, could create more aliterates. A later writer suggested that aliteracy could prove more dangerous than illiteracy to the nation as a whole (Baroody, 1984). Literacy serves two primary social goals: it creates a common culture and it provides “intellectual tools used to question, challenge, understand, disagree, and arrive at consensus” (Baroody, 1984, pp. ix). When fewer citizens can thus exchange ideas, democracy is weakened. At a 1984 conference on aliteracy sponsored by the American Enterprise Institute for Public Policy Research that was broadcast on public television, speakers from government, mass media, and the academy spoke of the causes, lasting problems, and possible preventions of aliteracy (Thimmesch, 1984). They stressed that aliteracy was replacing illiteracy as a major threat to American society,
because of its growth and its effects across all socioeconomic and educational levels. Although the participants agreed that aliteracy was a problem with lasting effects, there was much less agreement about its causes and prevention. Another writer in the 1980s blamed growing aliteracy on television, changes in American family structures, and back-to-basics legislation dictating curriculum in many American states (Decker, 1986). Those same threats continue to exist, and others have been added in the last two decades.

More work has been completed in the area of aliteracy in recent years. After observations and interviews with seventh grade students over the course of a year, G. Kylene Beers developed three categories of aliterates: dormant, uncommitted, and unmotivated (1996a). Dormant readers are those who have positive attitudes toward reading; they are just too busy or stressed at the current time to read. Uncommitted readers do not read because to them reading is a skill, not a source of enjoyment. They still view readers positively, though, and think they may like reading someday. Unmotivated readers also see reading as a skill, but they view readers and the possibility of becoming a reader negatively.

Beers discovered some particular qualities of the different groups of aliterates. She found that uncommitted and unmotivated readers did not have early experiences with reading-related activities whereas the avid and dormant readers had joined libraries, book clubs, reading groups and other such groups as young children. She also found that uncommitted and unmotivated readers did not form visual images in their heads when reading, did not connect with characters, and did not respond aesthetically to reading (Beers, 1996b). Uncommitted and unmotivated readers reported they preferred nonfiction, personal choice (from a narrowed selection), illustrations, art activities,
magazines, and seeing a movie based on the book first. Her study concluded that teen aliteratees are not just adolescents who hate to read, but adolescents whose reasons not to read were varied and very much connected to their views of themselves and others. Motivation in reading, or lack thereof, has its roots in personal, social, academic, and familial terrain.

Among other age groups, studies have been conducted to explore the specific impact of aliteracy. Although college students are likely capable readers, studies have shown that college students read little of what they were assigned to read and even less for pleasure (Duchein & Mealey, 1993; Goodwin, 1996). One study specifically examined the relationship between reading and health risk behaviors such as drug use, binge drinking, and smoking. The results indicated that the number of books read was positively correlated with seatbelt and bicycle helmet use and negatively correlated with alcohol consumption, binge drinking, and fighting. Attitude toward reading was positively correlated with seatbelt use, helmet use, and vegetable consumption and negatively correlated with alcohol consumption and binge drinking (Burak, 2003). Another study found that reading for pleasure was linked to decreased loneliness in elderly individuals, showing that reading for pleasure has more lifelong value than perhaps previously realized (Rane-Szostak & Herth, 1995).

Aliteracy continues to grow as an issue, an issue that begins early in childhood, worsens through maturity, and continues to impact adults of all ages. As adolescents find more ways to spend their leisure hours, finding methods to keep adolescents reading could help educators focus attention in an effort to halt the spread of aliteracy.
Other Factors in Reading Habits

*Gender*

Previously mentioned studies found correlations between gender and reading habits at different ages (Greaney, 1980; Hopper, 2005; Landy, 1977; McKenna, Kear, & Ellsworth, 1995; Moffitt & Wartella, 1992; National Endowment for the Arts, 2004). According to their results, girls read more than boys. In the 2004 National Assessment of Educational Progress (NAEP) girls scored higher in reading achievement than boys in every grade measured (4, 8, and 12), and the gap grew in each grade tested (National Center for Educational Statistics, 2005). Millard, in research specifically focused on gender and literacy, concluded that voluntary reading is a gender-marked activity, one that is shaped by a social need to behave in a gender-appropriate manner (1997). Reading is perceived as an activity that is more associated with girls and women from early in a child’s life (Millard, 1997; Pottorff, Phelps-Zientarski, & Skovera, 1996). For example, both boys and girls perceive that mothers read more than fathers; reading is perceived as an activity of the female members of the family (Millard, 1997). In the National Endowment for the Arts survey of adults, 55.1% of women read a novel, poem, or play in 2002 compared to 37.6% of men (2004). Drawing on the research of self-efficacy, Smith and Wilhelm conducted an in-depth qualitative study with 45 adolescent male participants (2002, 2004). They found their subjects embraced activities in which they felt competent or in which they could quickly become competent. Further, they craved immediate and clear feedback about their growing competence. For most of the boys they studied, conventional literacy activities, especially school literacy activities, did not provide experiences of competence. In different research, a case study of three
male adolescents, researchers found that the subjects depended on their literacy practices to help them negotiate their masculine and social identities (Hinchman, Payne-Bourcy, Thomas, & Olcott, 2002). Various writers have found that when boys are allowed to choose their own texts, whether books, magazines, or Internet documents, reading increases and attitude toward reading improves, even though the boys themselves don’t see themselves as readers (Smith & Wilhelm, 2002; Cavazos-Kottke, 2005). Although the gap between male and female achievement on school-based literacy measures seems to show that boys are falling behind, one writer argued that boys are simply engaging in different literacies (Sanford, 2006).

*Home environment*

A student’s home environment exerts an influence on his or her reading achievement and habits. Some environments foster and encourage the habit of reading, but others do not. Studies have established relationships between reading and socioeconomic status, parental occupation, and parental education levels. Referring to those studies, one writer insisted “there is no doubt a direct linkage between socioeconomic status, home characteristics, and the home learning environment” (Neuman, 1986, p. 340). Neuman’s study, rather than focus on those sociological factors, examined instead the relationships of specific parental attitudes and behaviors with fifth grade children’s recreational reading habits. In other words, it looked more at what parents do in interacting with their children. The number of diverse leisure activities, the child’s independence and responsibility, and, especially, parental encouragement of reading were all positively and significantly related to recreational reading both before and after controlling for socioeconomic status and gender. Diverse leisure activities, that
is, involvement of children in hobbies, trips, outings, sports, music, and family activities, accounted for 14% of the variability in leisure reading before adjusting for socioeconomic status and gender and 6% after the adjustment. Parental encouragement of reading, that is, having reading materials at home, talking about reading, reading together, providing places and opportunities for reading, parental reading, and simple encouragement accounted for 28% of the variance in leisure reading before the adjustment and 17% afterward (Neuman, 1986).

Also, in a large-scale study in Australia, Rowe (1991) found that reading activity at home, including independent voluntary reading at home, reading with family members, and discussions about books or stories with family members had significant positive influences on reading achievement and attitudes toward reading. The association between positive attitude toward reading and reading discussions at home was particularly strong in the 12 to 14 year-old age group. Other studies have also found linkages between home environments and reading activity (Australia Council, Australian Centre for Youth Literature, & Woolcott Research, 2001; Chall & Snow, 1982; Landy, 1977; National Center for Educational Statistics, 2004; National Center for Educational Statistics, 2005).

Peer Group

The peer group wields significant influence in the lives of youngsters. A student’s peer groups can even influence reading habits. According to Fleming, Cook, and Stone, “peer group quality was significantly related to growth in reading between fifth and eighth grade” (2002, p. 61). Peer groups rated positively by the research subjects influenced more reading, while peer groups rated negatively deterred reading. And
students with learning disabilities “reported significantly lower ratings of peer climate quality than students without disabilities” (p. 61). In their action research study of peer discussion groups in middle and secondary school classes, Kasten and Wilfong found that students’ attitudes toward reading improved following the implementation of discussion groups (2005). Others indicated that many students relied on their peers for recommendations about books and other materials to read (Edmunds & Bauserman, 2006; Hopper, 2005). The literature seems to indicate that harnessing the power of peer groups could yield positive results in reading attitudes.

Methods to Increase Reading

In a survey of 1,765 sixth grade students, students emphasized quality and diversity of reading materials, teacher read-alouds, personal reasons, and time to read as motivating factors in their choice to read (Ivey & Broaddus, 2001). These findings lead the researchers to believe that school happenings affected how students felt about reading more than previously believed. A previous study of students in grades one through six had documented “a negative trend in children’s attitudes toward recreational reading and reading instruction as they pass through the elementary grades” (McKenna, Kear, and Ellsworth, 1995, p. 952). They found that poor reading ability partially explained the negative trend, amplifying previous studies that reported a relationship between attitude and ability. Ivey developed working generalizations to help educators with struggling middle school readers (1999). She determined that struggling middle school readers need materials appealing to a wide variety of interests and abilities, they need opportunities to share reading experiences with others, and they want to and can become good readers. All of these surveys stressed that instructional techniques to improve attitudes and
achievement will yield positive results in terms of student motivation to read. In a conversational interview study, Edmunds and Bauserman asked students what motivated them to read. Their main motivation for reading either narrative or expository text involved having personal choice in what to read. Other important influences, according to the students interviewed, were learning about personal interests and gaining knowledge (2006). A similar study which surveyed fifth grade students determined that having a lot of books in the classroom library and choosing their own books were the most important sources of reading motivation for the subjects (Pachtman & Wilson, 2006). A more formal study conducted on a sample of 1839 students in grades seven through twelve determined that students were motivated by the prereading strategies and activities of being allowed to choose what to read, regular exposure to a library, having parts of books read aloud, seeing a movie of the book, and being allowed to read picture books. The same group of students preferred the postreading activities of art activities connected to the book, reading games, reading contests, and talking about books with friends (Giles, 2005).

In opinion pieces, various authors have suggested instructional techniques and other ways to motivate the unmotivated. Personal choices, movie tie-ins, conversations, art activities, drama activities, nonfiction, read-alouds, comic books, poetry, and silent, sustained reading time are all concrete possibilities (Cunningham, 2005; Gardiner, 2005; Lesesne, 2006; Norton, 2003; Parr & Maguiness, 2005; Sebesta, 2001; Worthy, 1998). Studies, both formal and informal, also suggest why some of these possibilities yield more motivation. Personal choices, comic books, and other materials permit students to feel a sense of ownership over text and task (Norton, 2003; Worthy, 1998). Specific
comprehension strategy instruction can increase students’ self-efficacy for reading, thus encouraging more reading (Wood, Edwards, Hill-Miller, & Vintinner, 2006).

Various activities such as conversation, art, and drama can enhance a student’s connection with the text, especially when activities are mindful of reader response theory (Rosenblatt, 1937). Later writers connected reader response theory more explicitly to adolescent development in affective and cognitive realms (Probst, 1984; Donley, 1991). Probst, in defining the case for reader response theory in secondary classrooms, pointed out that literature invites the typically self-absorbed adolescent’s participation and gives adolescents the opportunity to test their “perceptions against those of author, character, and other readers, and in that testing to see more clearly who they are and how they feel, react, and think” (1984, p. 5). Irwin further stressed the connection between reading and personal identity of students in her analysis of the literature concerning enhancement of adolescent reading engagement. Because cognition, motivation and emotion are linked, she concluded that reading interventions needed to be early, intense, and individually based (2003).

Literature circles, as a reading instruction method, embrace the ideas behind reader response theories (Daniels, 2002). Literature circles involve students in small groups sharing discussion about commonly read texts; not everyone reads the same book at the same time. Students pick the readings, make the assignments, raise the questions, and lead the discussions (p. 18). Such reading circles can be used across grade levels and are different from traditional reading instruction. By design, they focus on both academic and social goals. Similarly, talking about books in a less structured way is seen as a way to increase reading and reading motivation among adolescents, using the philosophy of
reader response theory and the power of social interaction to keep adolescents “connected to books” (Lesesne, 2006, p. 45).

Much of the literature on the topic of adolescent reading calls for more and different reading instruction in middle and high schools, leading to research investigating the effect of specific interventions or strategies. One such strategy is thinking aloud during the process of reading. In a small study of eight student participants, middle school students were asked to think aloud while reading high school level texts. This study found that thinking aloud was not similarly effective for all texts but was “influenced by such factors as difficulty level, text structure” and other factors (Caldwell & Leslie, 2004, Conclusion section, para. 3). Caldwell and Leslie further concluded that any one strategy is not sufficient to support the reading of all students. Another article chronicled the addition of several strategies to enhance reading at a high school. The strategies were common ideas: silent, sustained reading time, classroom libraries, young adult literature in content classes, and alternatives to the standard class texts for struggling students and very accomplished readers. This increased, multi-faceted focus on reading produced marked improvement (Brozo & Hargis, 2003). In an extensive study of exemplary language arts instruction in secondary schools, student involvement in peer group discussions not only led to increased student understandings, but was one of the six factors associated with higher test scores in reading and writing as well (Langer, 1999). Another writer posited that increasing reading motivation involved classroom characteristics more than instructional strategies, stressing in particular the characteristics of “access to reading materials, opportunities for self-selection, and social interactions about books” (Gambrell, 2002, p. 36).
In recent years, as adolescent literacy has become a focal point for broader school improvement, more strategies and programs are being advocated to increase reading and achievement. In *Creating Literacy Rich Schools for Adolescents*, Ivey and Fisher called for and described the kinds of classroom practices that will enhance literacy across the curriculum (2006). They eschewed in particular the tradition of the whole-class novel, claiming the practice does not respond to the needs or interests of adolescents, supporting instead the practice of wide ranges of texts from which students can choose and learn. They also devoted an entire chapter to sustained, independent reading. The National Council of Teachers of English (NCTE) issued a call for action in the area of adolescent literacy, specifying that adolescents need experiences with diverse texts and student-led discussions of those texts as well as critical examinations and thinking about texts (2004).

In *Reading Next: A Vision for Action and Research in Middle and High School Literacy*, Biancarosa and Snow (2006, p. 12) suggested nine instructional improvements for enhanced literacy:

1. Direct, explicit comprehension instruction
2. Effective instructional principles embedded in content
3. Motivation and self-directed learning
4. Text-based collaborative learning
5. Strategic tutoring
6. Diverse texts
7. Intensive writing
8. A technology component
9. Ongoing formative assessment of students
In this list, motivation, collaboration, and choice are again deemed important in adolescent literacy.

Summary

The current research shows that adolescents are as varied in their approach to leisure reading as they are in their approaches to everything else. Some read avidly; some hardly read at all. When they do read the books they choose on their own, the reading is powerful: such reading leads to improved reading and to more reading. Whether they read or not, the habits they are developing in grades seven and eight may be the ones they keep. And aliteracy, whether viewed on an individual or societal basis, is a dangerous habit. A few areas have emerged from the literature as possibilities in developing recreational reading: self-chosen books, peers, and opportunities for discussion.
CHAPTER THREE—METHODOLOGY

Introduction

Readers are leaders: students see this slogan on posters, pencils, software programs, commercials, and advertisements. Readers also tend to be the thinkers, the achievers, and the doers (Donahue, Voelkl, Campbell, & Mazzeo, 1999; Landy, 1977; National Endowment for the Arts, 2004; Taraban, Rynearson, & Kerr, 2000). Regardless of the benefits, however, teens and adults spend little of their leisure time engaged in reading (Cramer & Castle, 1994; Heather, 1982; Hincks & Balding, 1988; National Center for Educational Statistics, 2004; National Endowment for the Arts, 2004). The literature indicates that students who read what they choose, read more (Anderson, Wilson, & Fielding, 1988; Atwell, 1987; Bintz, 1993; Goncalo, 1997; Ivey, 1999; Ivey & Broaddus, 2001; Mercurio, 2005; National Council of Teachers of English, 2004; Sanacore, 2000; Stallworth, 2006; Vacca & Alvermann, 1998; Vogel & Zancanella, 1991; Worthy, 1998), and that sharing what they read leads to clarified understandings and preferences in texts (Alvermann et al., 1996; Alvermann, Young, Green, & Wisenbaker, 1999; Kasten & Wilfong, 2005).

Research Question

The research question guiding this study was as follows: Will seventh grade students’ independent, recreational reading time increase following a program of peer-involved reading discussion groups?

Research Design

This study utilized a two-group, switching replications quasi-experimental design. Procedurally, the study unfolded in a pretest-treatment-posttest pattern.
After approval from the University of Montana Institutional Review Board was granted, the researcher used a database provided by the Northwest Montana Educational Cooperative to obtain the addresses of principals and superintendents of the 22 schools in the cooperative. Letters were sent to the principals or superintendents of the schools, excluding the school district where the researcher works, informing them of the study and asking permission to solicit teachers to participate in the study (see Appendix A). No principal or superintendent was opposed to his or her teachers being involved in the study. Then, more specific letters were sent to the seventh grade English teachers in the schools of the cooperative (see Appendix B). Seventh grade was the level chosen for this study because this age group is at the brink of adolescence, the time when students begin to read less for recreation. The letters sent to the teachers detailed the reasons for the study and the requirements of involvement. Four teachers out of 21 possible seventh grade teachers volunteered their classes. All of the students in those teachers’ classes became part of the sample, which initially included 117 students.

The researcher then visited with the four teachers who volunteered their classes, providing extensive information sheets and training on grouping, guided questioning, and discussions for consistency among the groups. The teachers then distributed the permission and assent forms for students and parents (see Appendixes C & D). When the permission and assent forms came back, the researcher divided the classes into two groups. The group scheduled to have the intervention during weeks three through seven, G 3-7, had 54 subjects, and the group scheduled to have the intervention during weeks eight through twelve, G 8-12, had 63 subjects. All teachers determined they would distribute new reading logs and collect completed logs on Mondays during the study.
Because the instrument for the study, the reading log, was created by the researcher, it was used in a pilot study for refinement before it was given to the teachers. The researcher distributed the reading log sheet to a group of seventh grade students who were not participants in the study but lived in the same area of Northwest Montana and whose school was a part of the Northwest Montana Educational Cooperative to allow the researcher to refine it for specific seventh grade use. Based on the responses of the pilot group, each copy of the instrument had clear directions, there was a space to mark book or non-book each day, and it was printed on bright paper to make it easier to find in a seventh grade student’s locker or binder (see Appendix E).

The same pilot groups also helped the researcher refine the discussion prompts used in the study. In whole class groups of 22 to 29 students, individual students reviewed the list of discussion prompts, and then they gathered in genre groups, self-chosen groups, or teacher-assigned groups of three to five students to talk about books they had recently read or were still reading. They were instructed to use the prompts as much as necessary to initiate and continue their discussions. The researcher circulated during these discussions, noting what prompts the students used and discussions the prompts stimulated. After 30 minutes, the researcher facilitated a whole class discussion about the prompts and the discussions. The prompts were used to varying degrees. Some groups used only one or two and still thought they had productive discussions about their books. Other groups had productive discussions around several different prompts. Some others used the prompts as a list of questions for each person to briefly address. The researcher asked which were the least useful and most useful prompts and for other suggestions. Based on these sessions, the researcher refined the prompts, removing the
ones that were the least useful, adding three based on student suggestions, and revising others to make them more open-ended. Directions were added, and the font size was increased (see Appendix F). For the study participants, this sheet was printed on bright cardstock to make it easy to find and durable.

For two weeks before the treatment began, both groups, all study participants, recorded the time they spent reading for recreation on the individual reading log sheets. Then, the students’ English teachers began facilitating peer discussion groups with G 3-7, the first experimental group which experienced the discussion intervention during weeks 3 through 7 of the intervention. Peer discussion groups took place once per week in thirty-minute sessions during English classes for five weeks. The four teachers in the study followed the same procedures for all discussions. Upon entering class, normal class routines proceeded: attendance, announcements, and regular opening activities. Then students were instructed to gather in groups of three to five based on genre, student choice, or teacher choice. Each teacher varied grouping techniques throughout the five weeks of the study. The students kept their discussion prompt sheets out for reference. As their discussions began in their small groups, the teacher would circulate in the classroom as for any group activity. Discussions continued for approximately 30 minutes. Sometimes, the discussion sessions were shortened and sometimes they were extended, according to the teachers, depending on the involvement of the students.

During the discussion group intervention for G 3-7, log sheets continued for both groups. At the beginning of week 8, G 8-12, the second experimental group, began the peer discussion groups. Again, log sheets continued for both groups. During weeks 13 and 14, both groups completed log sheets for a second two-week time period without the
peer discussion groups. The amount of time that participants in the two groups spent reading was compared at different points in the study. The following diagram illustrates the research design for this study:

*Figure 1—Research Design*

\[ \text{O}_1 \quad \text{X}_1 \quad \text{O}_2 \quad \text{O}_3 \quad \text{O}_4 \]

\[ \text{O}_1 \quad \text{O}_2 \quad \text{X}_2 \quad \text{O}_3 \quad \text{O}_4 \]

*Figure 1: Research design: a pretest-treatment-posttest pattern for a two-group, switching-replications quasi-experimental design.*

**Variables and Levels of Data**

The independent variable for this study was participation in an organized, peer book discussion program designed and initiated by the researcher. Although interested as an education professional, the researcher had no vested interest in the intervention program. Both groups engaged in the peer book discussion program for five weeks at different times during the study. The dependent variable was the time each student spent reading materials of his or her choice for recreational purposes as measured in minutes by the participants on a self-completed recreational time log designed by the researcher. The unit of comparison was individual students, but the data were also compared group to group.

The level of data for the dependent variable was measured in minutes on a ratio scale, that is, a scale that has a true zero point and equal, measurable distances from one point to another. In other words, if a student spent 5 minutes reading, a 5 was entered on
the log; if a second student read for 50 minutes, a 50 was entered on the log, indicating exactly 10 times as much reading was done by the second student. This raw data of minutes spent reading were averaged across each group’s subjects for each of the 14 weeks of data collection.

Sample

The potential population for this study was the approximately 600 seventh grade students in public schools in the Northwest Montana Educational Cooperative, a coalition of 22 member school districts. These school districts are located in Flathead, Sanders, and Lincoln Counties and are members of the curriculum cooperative for purposes of curriculum work and professional development. Multiple steps were taken to obtain a sample. First, in October 2005, the researcher issued letters to all principals or superintendents of the member school districts informing them of the study. No principal or superintendent expressed opposition to the study. Two weeks later, the researcher issued invitations to participate in the study to all seventh grade English teacher of the Northwest Montana Educational Cooperative. The researcher followed up on those invitations with electronic mail messages and phone calls.

Out of 21 seventh grade English teachers in the cooperative, four teachers from three different school districts volunteered to join the study. All of the schools were located in Flathead County in the state of Montana. Two of the school districts had a total enrollment of approximately 200 students; one had approximately 750 students total. Two of the volunteers came from the district with approximately 750 students; the other two came from the two smaller districts. In the larger school district, 57% of the students were eligible for free and reduced lunch. In the smaller districts, one school indicated
that 28% of their student body were eligible for free or reduced lunch. Information about free and reduced lunch eligibility was not available from the other school district. All three districts enrolled kindergarten through eighth grade students only. None of the schools had reading motivation programs in progress that would cause an additional increase in reading time. The teachers ranged in experience from a first year teacher to a veteran of more than 25 years.

All of the seventh grade students in each of the three school districts were involved, creating an initial sample size of 117 students. However, as the study progressed, not all students turned in their reading logs every week, in effect reducing the sizes of the groups and of the sample. For elements of the statistical analyses that required pretests and posttests, the sample had a total of 80 students; for elements requiring pretests, posttests, and a third observation, the sample had a total of 71 students; for elements requiring all 14 log sheets, the sample was reduced to 46 students.

The subjects were part of intact classroom groups and therefore lacked random assignment. In the three schools that became part of the study, every seventh grade student was involved, creating heterogeneous groups. The volunteered class groups were separated into two groups for the study with regard to teacher needs, school characteristics, and class size to keep the groups as balanced as possible in number, school size, and teacher experience. One group consisted of 54 students who all attended the same school of about 750 students and were taught by the same teacher who had about 15 years of teaching experience. The other group had 63 students, with groups at all three schools in the study. The three teachers of those students ranged in experience
from a first year teacher to a teacher with over 25 years of experience. In both of the
groups, class sizes ranged from 14 students to 24 students.

Because the sample was created through the volunteering of the teachers, not all
seventh graders in the potential population had an equal chance of being part of the study.
In such a case, the sample is not fully representative of the population. Thus, the sample
for this study is also the population for this study.

Instrumentation and Materials

The instrument used as a measurement throughout the study was a weekly log
sheet that was created, distributed, and explained by the researcher. This instrument was
used as the pretest, the posttest, and the observation measurement throughout the study.
These logs instructed students to document the number of minutes they spent reading by
personal choice each day. It was a form printed on one side of one page with directions
and a table with the days of the week listed and spaces for students to write the number of
minutes spent reading each day. There were also optional items students could complete,
including gender, grade point average, an indication of whether the item was a book or
non-book, and the work’s title.

In previous studies, leisure time logs had been used for time periods from three
days (Greaney, 1980) to 17 weeks (Taylor, Frye, & Maruyama, 1990) to 26 weeks
(Anderson, Wilson, & Fielding, 1988). In this study, a total of 14 weeks of recording
reading time was required. The period of 14 weeks was chosen because it allowed the
entire study to take place within one season, while still being long enough to give each
group a substantial time period (5 weeks) for the intervention. Subjects in the previous
studies were fifth or sixth graders, and their logs were completed with large amounts of
class time and adult supervision (Anderson, Wilson, & Fielding, 1988; Greaney, 1980; Taylor, Frye, & Maruyama, 1990). In this study with seventh grade students, students kept logs independently without additional class time and with minimal adult supervision. The treatment, a weekly program of peer discussion groups, took place in the students’ regular language arts class time once per week for 30 minute sessions for five weeks. To maximize individual participation, students had the opportunity to join groups of three to five students based on their preferred literature genres, including, for example, realistic fiction, science fiction, fantasy, humor, nonfiction, adventure, and horror. Although not all classes necessarily contained all of these groups simply because of student preferences and numbers, it was clear to students that a broad range of literature was welcomed. At other times during the treatment, teachers used other grouping techniques. For example, at times, teachers formed random groups; at other times students were allowed to choose groups. To initiate and continue book discussions, students were given and briefly instructed in the use of a list of 25 discussion prompts created by the researcher. Because the discussions were about self-selected texts rather than assigned texts, the prompts were broadly applicable and designed to encourage authentic sharing and discussion. One prompt, for example, was the unfinished statement to help start a line of talk: “I really liked this book because . . .” Another was designed to continue a discussion: “I read a book like that once, except . . .” Others encouraged more critical inquiry, for example, “The book’s beginning made me want to keep reading because . . .” and “The characters were believable/not believable because . . .” The students were encouraged to use the discussion prompts as needed to start conversations or to keep conversations active. Neither teachers nor the researcher lead the discussions,
but a teacher was present during the discussions as would normally be expected in a school setting.

Data Collection Procedures

Following the acceptance of the proposal, permission was sought from The University of Montana’s IRB. The IRB delineates very specific procedures for any research project involving human subjects. The following required information was submitted for review: the IRB checklist, completed in full; the 11-point IRB summary; copies of the initial solicitation letters; copies of the reading logs; and copies of permission and consent forms. After IRB approval was granted on October 7, 2005, the researcher contacted the schools and districts involved to inform administrators and secure permission. The first correspondence was a letter of information to principals and/or superintendents, followed in two weeks with letters to teachers asking for participants.

In a study with children of seventh grade age, both the students’ assent and the parents’ permission were necessary. The subjects and their parents received clear descriptions of the research, including assurance of their anonymity in the study. Written consent forms and parental permission forms, composed using the IRB model, were issued and collected. Students who did not return assent forms or did not have their parents’ permission to participate were not a part of the data collection process. When these steps were completed, the study commenced.

The researcher visited with the four involved teachers to distribute and explain log sheets for the subjects. The researcher provided enough copies of all handouts for the students. Teachers were also given calendars and information sheets with timelines and
guidelines. All teachers were briefly trained in the use of the log sheets and the discussion groups. Teachers agreed to collect and distribute log sheets each Monday and to remind students about them daily. Cooperative group guidelines were reviewed, including ideas about size and composition of groups. The teachers and the researcher shared ways of grouping the students, for example, in genre groups, in heterogeneous groups, or in student-chosen groups. The teachers agreed that trying different methods during the 5 weeks of the intervention would be ideal. They also agreed that groups should have no more than five students to maximize student participation. Monitoring of groups was outlined, with teachers instructed to manage and observe, but not direct discussions. Scenarios of managing off-task behavior were discussed, with agreement among the teachers that off-task groups, those no longer discussing reading, would be redirected to a reading-related prompt on the discussion prompt sheet. A new log sheet was distributed to each student each Monday; the researcher visited periodically to collect completed log sheets. The researcher was also available by phone or email at all times during the study. All four teachers reviewed the log sheets completed by their students for accuracy before giving them to the researcher.

For the first two weeks of the study, all students in both groups completed reading log sheets. Peer discussion groups started in G 3-7 in the third week, occurring for 30 minutes once a week for five weeks. After those five weeks, discussion groups ended in G 3-7. For the next five weeks, the students in G 8-12 participated in discussion groups (for weeks eight through twelve of the study). For weeks 13 and 14, there were no discussion groups in either of the groups. The students in both groups completed log sheets for weeks 13 and 14. The researcher then collected all remaining log sheets.
Null hypothesis

There will be no experimentally important or consistent mean difference in amount of time seventh graders spend reading before and after a discussion group intervention.

A priori

*Experimental Importance*

A mean difference of 10% in recreational reading time between the pretest and the posttest was considered experimentally important. According to the review of literature, adolescent students are spending less time reading as they age, and adolescents today are reading less than the adolescents of 10 years ago (Guthrie & Alao, 1997; Heather, 1981; Hincks & Balding, 1988; National Center for Educational Statistics, 2004; Strommen & Mates, 2004). Any increase is desirable. Other research indicates that adolescent students read for an average of less than 30 minutes per week (Moffitt & Wartella, 1992). An increase of 10% for a student reading 30 minutes a week would mean an additional 156 minutes of reading per year, which could amount to one additional book per year.

*Experimental Consistency*

Experimental consistency was set at a p-value of .05. A consistency level of .05 indicates that there is a 5% probability that the relationship found between the variables is due to chance, and in many areas of research this is considered an acceptable error level (Howell, 1997).
Statistical Procedure

The instrument used in this study collected the number of minutes read for recreational purposes each week by individual students, ratio level data. The data collected for each subject was entered in Microsoft Excel 2000, with each subject having his or her specific line of data for the entire 14 weeks. The data were averaged across the subjects in each of the two groups for each week. Cumulative data were compiled as well. The first seven weeks of data for each student were added together, including the two weeks before discussion groups started and the five weeks in which G 3-7 was engaged in discussion groups. Cumulative data for the second seven weeks of data were compiled by adding together the data for each student for the five weeks in which G 8-12 was engaged in discussion groups and the last two weeks when there were no discussion groups. Descriptive statistics were completed for these different sets of data. Then parametric procedures were utilized to analyze comparable sets of data.

The analysis of covariance (ANCOVA) is a statistical technique that is used to control for initial differences in pretest scores (Borg, Gall, & Gall, 1993, p. 162). In this study, scores (reading amounts) were collected before, during, and after the reading group intervention for both groups. An ANCOVA was conducted to determine if the mean difference between the posttest scores (reading amount) of the two groups were experimentally important at the 10% level and experimentally consistent at the .05 level.

A t-test was used to test the difference between two means for statistical consistency. In this analysis, a paired groups t-test was used to analyze the differences between pretest and posttest means because the data were correlated.

Data analysis was completed using GB Stat 10.0.
Assumptions

The assumption of normality was met by sufficient sample size. The central limit theorem states that with sufficient sample size, 30 or more for a skewed (or asymmetrically distributed) population (Howell, 1997, p. 171), a sample’s means will show a normal distribution and the sample will have statistical properties similar to the population from which it came. The assumption of homogeneity of variance and the assumption of homogeneity of regression was met at the .05 level.

Analysis of Threats to Validity

Internal Validity

Campbell and Stanley identified eight threats to internal validity (cited in Borg, Gall, & Gall, 1993, p. 301). History has to do with uncontrollable external changes. This study could have been impacted by external changes because students kept track of their time each week for 14 weeks, and extraneous events might have influenced how much time they spent in recreational reading. However, the study took only 14 weeks total, so the historical threat may have been somewhat reduced simply because of the short duration and because types of activities and events would not change much during the time period of the study, late November through early March. In contrast, comparing reading done during the first two weeks of December to reading done during the first two weeks of June would likely show differences due to uncontrollable external changes. Maturation was not a threat in this study because it covered only a brief period of time.

Testing could have posed a threat because subjects completed reading logs for 14 weeks, and over time they may have improved at keeping track of time. In the traditional sense, though, this study did not involve taking the same test twice. Instrumentation
could possibly have jeopardized this study. Because students were recording their own recreational reading time, there could have been inaccuracies due to memory, to immaturity, or to trying to please adults. To try to control for this threat, the instrument was used in a pilot study with a different but similar group of students to allow the researcher to refine its structure for specific seventh grade use.

The danger of statistical regression was reduced because the subjects were not chosen based on extreme scores. However, selection biases posed a significant threat that was reduced in the following ways. The subjects had been randomly assigned into classes by their school districts, and the researcher carefully separated the volunteered class groups into the two groups, making sure that the groups were balanced for teacher experience, group size, and school size. Further, all of the seventh grade students in the three participating school districts became a part of the sample. Differing pretest scores were accounted for when conducting later statistical tests; specifically, an ANCOVA adjusted posttest scores based upon differences in pretest scores. In these ways, the study accounted for differences in the groups. Because the groups were nonrandom, selection maturation loomed as a threat, but because the students were heterogeneously grouped in all the schools and were similar in age and geographic location, living within a 30 mile radius of one another, the passage of time did not affect them differently, reducing this threat.

Mortality could have posed a threat in the early stages if students decided not to be a part of the study, thereby reducing the sample size. Mortality also posed a threat to validity when some students did not turn in their reading logs. To control for this, more students than necessary for sufficient sample size were initially selected for participation.
External Validity

External validity concerns the extent to which a study’s findings can be applied to other settings and populations. To insure external validity and thus generalizability, a random sample is necessary. As the sample in this study was not random, the findings are not generalizable. Users of the research need to be cautious to limit their application of the findings to similar circumstances.

Limitations

This study encountered several limitations. One limitation was that the study had to rely on the honesty and/or recall of its subjects. To help insure accuracy, students were instructed and reminded to update their reading logs on a daily basis. Another limitation was the possible lack of consistency in the implementation of the study. Four different teachers were involved, and although given the same training and materials, the researcher could not completely control for their expectations, instructions, and consistency concerning the study’s elements. Additionally, there may have been other factors affecting reading habits that could not be gathered from students in a quantitative format.

Delimitations

This study focused only on seventh grade students, and the study was delimited in time with no more than 14 weeks’ duration for the subjects’ involvement. The intervention portion of the study took place in the students’ schools during the school day, but the pretest and posttest were both based on students’ recreational reading and thus were by design mostly outside the school day. Although based on previous research findings, the instrument was designed by the researcher and thus was not widely
distributed or tested. Although most aspects of the study occurred in a familiar setting, the regular class routine was altered for the discussion groups.

Summary

This study was created to examine how much seventh grade students read before, during, and after a discussion group intervention. The intervention, book discussion sessions in small groups during English class, lasted for five weeks out of the 14 weeks observed. The population and sample for this study resided in Northwest Montana, and the sample was comprised of students of four teachers in three different schools.

The next chapter displays and explains descriptive and statistical information about the results of the study.
CHAPTER FOUR--ANALYSIS

Introduction

The purpose of this study was to examine the amount of time a group of seventh grade students in Northwest Montana spent reading for recreation before and after a discussion group intervention. Students logged the time they spent reading each week for 14 weeks; the discussion groups occurred during English or Language Arts class for 5 consecutive weeks of that time period.

The log used by students to record their reading minutes was the instrument used throughout this study. Students used one log sheet each week for 14 weeks. The data from those log sheets were recorded in Microsoft Excel 2000 and analyzed using GB Stat 10.0, a statistical software package. Descriptive statistic analyses were conducted on the data, including the computing of means and medians. Data were analyzed and compared using parametric statistics including t-tests and an ANCOVA.

The treatment for this study was a peer reading discussion group. The groups of three to five students were organized according to genre, personal choice, or teacher choice at different times during the study. These groups convened once per week for 5 consecutive weeks during the 14 weeks of the study to discuss what they had been reading.

Research and Analysis Procedures

The subjects in this study were divided into two groups, the group receiving the intervention during weeks 3-7 (G 3-7, n = 54) and the group receiving intervention during weeks 8-12, (G 8-12, n = 63). Both groups started and ended the study at the same time and had the same instrumentation and intervention. A switching-replications quasi-
experimental research design was used. Because of the research design, the two groups experienced the same elements of the study, the only difference between them being the timing of the discussion group intervention. All students were required to turn in a reading log once a week for each of the 14 weeks of the study. Not all of them did. When statistical analyses were conducted, they were conducted only on the data from students who had data for that week or weeks. As a result, throughout the analyses, the sample sizes will change.

Analysis of Group Receiving Intervention during Weeks 3-7 (G 3-7)

The data of reading minutes were then analyzed in the two separate groups: G 3-7 and G 8-12. Only the subjects in G 3-7 with data for each particular week were included in the following table, causing the sample size to fluctuate.
Table 1  

*Average minutes spent reading in G 3-7*

<table>
<thead>
<tr>
<th>Week:</th>
<th>1</th>
<th>2</th>
<th>3*</th>
<th>4*</th>
<th>5*</th>
<th>6*</th>
<th>7*</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
<th>13</th>
<th>14</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sample size:</td>
<td>50</td>
<td>51</td>
<td>47</td>
<td>46</td>
<td>46</td>
<td>52</td>
<td>48</td>
<td>50</td>
<td>51</td>
<td>50</td>
<td>51</td>
<td>50</td>
<td>51</td>
<td>51</td>
</tr>
<tr>
<td>Average minutes per week per student:</td>
<td>101</td>
<td>98</td>
<td>95</td>
<td>70</td>
<td>119</td>
<td>142</td>
<td>148</td>
<td>149</td>
<td>137</td>
<td>139</td>
<td>140</td>
<td>171</td>
<td>155</td>
<td>166</td>
</tr>
<tr>
<td>Average gain or loss per week</td>
<td>-3</td>
<td>-25</td>
<td><strong>50</strong></td>
<td><strong>23</strong></td>
<td><strong>5</strong></td>
<td>2</td>
<td>-12</td>
<td>1</td>
<td>1</td>
<td>31</td>
<td>-15</td>
<td>10</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| G 3-7 (n=47 across these three measurements) | Pretest (Week 1) | 103 average minutes | 115 During Intervention Average Weekly Reading Min. | 15% gain from pre-intervention to intervention | 151 Post Intervention Average Weekly Reading Minutes | 32% gain after intervention; 52% net gain | Posttest (Week 14) | 167 minutes |

**Pretest and Posttest Data, G 3-7**

The seventh grade students in this study were asked to record how many minutes they spent reading each day on a weekly log sheet for 14 consecutive weeks. For this analysis, 49 students from G 3-7 turned in logs for both the first and last week. The range on the pretest for G 3-7 (n = 49) was 420 minutes, with a student who reported reading 0 minutes and a student who read 420 minutes being the extremes at either end of the range. The mean for G 3-7 on the pretest (the reading log for week 1) was 101 minutes. The posttest consisted of another weekly reading log completed after the 14th week of the
study, a minimum of 2 weeks after all formal discussion groups had concluded. The mean on the posttest for G 3-7 was 166 minutes of reading.

Table 2

Minutes Spent Reading in 1 Week as Recorded on the Reading Logs During Week 1 (pretest) and Week 14 (posttest) of the Study

<table>
<thead>
<tr>
<th>G 3-7</th>
<th>Pretest mean</th>
<th>Posttest mean</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>(n = 49)</td>
<td>101 minutes</td>
<td>166 minutes</td>
<td>Mean difference: 65 minutes (64% increase)</td>
</tr>
</tbody>
</table>

Pretest/posttest analysis, G 3-7

On the posttest log, on average, the subjects in G 3-7 read 65 more minutes per week than on the pretest, resulting in a 64% increase. A t-test comparing the times resulted in a t-value of 3.4 with a two-tailed probability of .0014.

Weeks 1, 7, and 14, G 3-7

Other analyses were completed comparing weeks 1, 7, and 14. The switching-replications design necessitates three points of measurement: a pretest, a posttest after the first group has completed the intervention, and a posttest after the second group has completed the intervention. Week 7 was the midpoint of the study. At the 7th week, G 3-7 had just completed the discussion groups and G 8-12 was set to begin discussion groups the following week. Based on the minutes of reading for the 47 students who turned in data for all three of these points, the following means were calculated for G 3-7:
Table 3

*Mean Minutes Spent Reading at Weeks 1, 7, and 14 of the Study in G 3-7*

<table>
<thead>
<tr>
<th></th>
<th>Week 1 (pretest)</th>
<th>Week 7</th>
<th>Week 14 (posttest)</th>
</tr>
</thead>
<tbody>
<tr>
<td>G 3-7 (n=47)</td>
<td>103 minutes</td>
<td>150 minutes</td>
<td>167 minutes</td>
</tr>
</tbody>
</table>

**G 3-7 Average Minutes Spent Reading**

![Graph showing reading minutes over weeks](image)

*Figure 2.* Amount of time spent reading at the beginning of the study, the midpoint, and at the end.

The mean time spent reading for G 3-7, which had the discussion groups first, increased from 103 minutes the first week of the study to 150 minutes during week 7, which was the last week of the discussion intervention for that group. This difference of 47 minutes represented a 46% increase with a consistency of $p = .0133$. Their reading minutes continued to rise during the last 7 weeks from 150 minutes to 167 minutes. The
17 minute difference from week 7 to week 14 was an increase of 11%, with a p-value of .3039. The difference from week 1 to week 14 of 64 minutes is an increase of 62% with p=.0021.

During the five actual weeks of the discussion group intervention, G 3-7 showed an increase in reading minutes from 95 minutes during week 3 to 148 minutes in week 7, an average gain of 53 minutes. During the seven weeks when they were no longer discussing books in class, weeks 8-14, their reading minutes increased from 148 minutes to 167 minutes, an average gain of 18 minutes.

Cumulative Minutes, G 3-7

Another goal of the study was to determine if students read more after the introduction of the discussion group intervention. To this end, cumulative minutes of reading were computed for individual subjects who had a complete set of all 14 weeks of data. In the group G 3-7, a mean difference of 295 minutes existed between the first 7 weeks and the second 7 weeks. This would indicate an additional 42 minutes of reading per week for each student, on average. The t-value was 3.7 with p=.0008.

Analysis of Group Receiving Intervention during Weeks 8-12 (G 8-12)

The data of reading minutes were also analyzed for G 8-12. Only the subjects reporting data for each particular week were included in the following table, causing the sample size to fluctuate.
Table 4

*Average minutes spent reading in G 8-12*

<table>
<thead>
<tr>
<th>Week:</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8*</th>
<th>9*</th>
<th>10*</th>
<th>11*</th>
<th>12*</th>
<th>13</th>
<th>14</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sample Size:</td>
<td>54</td>
<td>57</td>
<td>43</td>
<td>50</td>
<td>49</td>
<td>48</td>
<td>41</td>
<td>36</td>
<td>38</td>
<td>39</td>
<td>34</td>
<td>26</td>
<td>31</td>
<td></td>
</tr>
<tr>
<td>Average minutes per week per student:</td>
<td>180</td>
<td>205</td>
<td>172</td>
<td>200</td>
<td>225</td>
<td>209</td>
<td>194</td>
<td>207</td>
<td>202</td>
<td>214</td>
<td>189</td>
<td>217</td>
<td>236</td>
<td>262</td>
</tr>
<tr>
<td>Average gain or loss per week</td>
<td>25</td>
<td>-33</td>
<td>28</td>
<td>25</td>
<td>-16</td>
<td>-15</td>
<td>13</td>
<td>-5</td>
<td>11</td>
<td>-25</td>
<td>28</td>
<td>19</td>
<td>27</td>
<td></td>
</tr>
</tbody>
</table>

**G 8-12**

<table>
<thead>
<tr>
<th>198 Pre-intervention average weekly reading minutes</th>
<th>206 During Intervention Average Weekly Reading Min.</th>
<th>249 Post-intervention average weekly reading min. 4% gain from pre-intervention to intervention 21% gain after intervention; 26% net gain</th>
</tr>
</thead>
<tbody>
<tr>
<td>G 8-12 (n=25 across these three measurements)</td>
<td>Pretest (Week 1) 199 average minutes</td>
<td>Week 7 (before intervention) 210 minutes</td>
</tr>
<tr>
<td></td>
<td>Posttest (Week 14) 248 minutes</td>
<td></td>
</tr>
</tbody>
</table>

**Pretest and Posttest Data, G 8-12**

The seventh grade students in this study were asked to record how many minutes they spent reading each day on a weekly log sheet for 14 consecutive weeks. For this analysis, 31 students from G 8-12 turned in logs for the first and last weeks. The range on the pretest for G 8-12 (n = 31) was 1,517 minutes, with a student who read for 10 minutes and another who read for 1,527 minutes at opposite ends of the range. The pretest mean for G 8-12 was 193 minutes.
The posttest consisted of another weekly reading log completed after the 14th week of the study, a minimum of 2 weeks after all formal discussion groups had concluded. The mean for G 8-12 was 262 minutes of reading.

Table 5

*Minutes Spent Reading in 1 Week as Recorded on the Reading Logs During Week 1 (pretest) and Week 14 (posttest) of the Study*

<table>
<thead>
<tr>
<th></th>
<th>Pretest mean</th>
<th>Posttest mean</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>G 8-12 (n = 31)</td>
<td>193 minutes</td>
<td>262 minutes</td>
<td>Mean difference: 69 minutes (36% increase)</td>
</tr>
</tbody>
</table>

*Pretest and Posttest Analysis, G 8-12*

The subjects in G 8-12 read an average of 69 more minutes per week on the posttest than on the pretest, an increase of 36%. A t-test comparing the scores resulted in a t-value of 1.9 with a two-tailed probability of .07.

*Weeks 1, 7, and 14, G 8-12*

Other analyses were completed comparing weeks 1, 7, and 14. According to the switching-replications design, three points of measurement are required: a pretest, a posttest after the first group has completed the intervention, and a posttest after the second group has completed the intervention. Week 7 was the midpoint of the study. At the 7th week, G 8-12 was set to begin discussion groups the following week. Based on the minutes of reading of the 25 students who had data for all three of these points, the following means were calculated:
Table 6

*Mean Minutes Spent Reading at Weeks 1, 7, and 14 of the Study*

<table>
<thead>
<tr>
<th></th>
<th>Week 1 (pretest)</th>
<th>Week 7</th>
<th>Week 14 (posttest)</th>
</tr>
</thead>
<tbody>
<tr>
<td>G 8-12 (n=25)</td>
<td>199 minutes</td>
<td>210 minutes</td>
<td>248 minutes</td>
</tr>
</tbody>
</table>

**Figure 3.** Amount of time spent reading at the beginning of the study, the midpoint, and at the end.

The mean time spent reading for G 8-12 increased gradually for the first 7 weeks, before the intervention began, from 199 minutes to 210 minutes, a 6% increase. During the last 7 weeks, including the 5 weeks of the intervention, their reading minutes increased from 210 at week 7 to 248 at week 14. This difference of 38 minutes was an 18% increase. The increase over the entire 14 weeks was 49 additional minutes spent reading per week per student, which was a 25% increase.
In G 8-12, before the reading intervention, the minutes spent reading increased 8 minutes, an increase of 4%. During weeks 8-12, when they were discussing their readings, G 8-12 showed an increase of 10 minutes in their average weekly reading time. During weeks 13-14, after they were involved in the discussion group intervention, their average reading time increased 43 minutes per week, a 21% gain over the intervention period. The net gain in reading minutes for G 8-12 was 26%.

*Cumulative Minutes, G 8-12*

Another goal of the study was to determine if students read more after the introduction of the discussion group intervention. To this end, cumulative minutes of reading were computed for individual subjects who had a complete set of all 14 weeks of data. For G 8-12, a mean difference of 97 minutes between the first 7 weeks and the second 7 weeks of the study was found. This would indicate, on average, an additional 14 minutes of reading per week per student.

*Comparison of G 3-7 and G 8-12*

*Pretest and Posttest Data ANCOVA*

An analysis of covariance (ANCOVA) was conducted on the groups’ pretest and posttest minutes spent in recreational reading as collected from their reading logs. The ANCOVA is a statistical technique that adjusts posttest scores to control for initial differences in pretest scores (Borg, Gall, & Gall, 1993, p. 162). The test for the assumption of homogeneity of regression resulted in an F-Value of 13.5 (p=.0005); therefore, the data did not meet the assumption for homogeneity of regression and an ANCOVA was not used.
Cumulative Data ANCOVA

The cumulative data of G 3-7 and G 8-12 were also compared. An ANCOVA was computed to compare the cumulative minutes of G 3-7 and G 8-12. The test for the assumption of homogeneity of regression resulted in an F-Value of 5.16 (p=.0284); therefore, the data did not meet the assumption for homogeneity of regression and an ANCOVA was not used.

Comparisons

The results of the two ANCOVA tests support that one of the groups has more variability than the other; despite the variability, the data for the two groups show similarities during the study. For both groups, reading minutes changed little from the pretest weeks to the first week of their intervention. For G 3-7, reading time went from an average of 100 minutes for week 1 and 2 to 95 minutes in week 3, a 5% decrease. For G 8-12, reading minutes went from an average of 193 minutes for week 1 and 2 to 207 minutes in week 8, a 7% increase. During the time period of the intervention for G 3-7, reading minutes for G 3-7 increased by 56%, while reading minutes for G 8-12 increased 13% during the same 5 weeks. During the period of the intervention for G 8-12, reading minutes increased 5% for G 8-12 and reading minutes increased 13% for G 3-7 during the same 5 weeks.

The scores fluctuated for both groups throughout the study with gains and losses in reading minutes evident from week to week. Both groups showed a large decrease around week 3 and another, smaller one at week 9. Both groups experienced an upward and a downward spike during the times of their interventions. Also, after a dip, both groups plateaued for about 6 weeks. One group, G 3-7, hovered around 140 minutes of
weekly reading from week 6 until week 11 and then showed an increase. The other
group, G 8-12, hovered around 200 minutes of weekly reading from week 4 to week 11
and then showed an increase. Many of the fluctuations in gain scores come around those
plateau points.

![Reading Minutes by Week](image)

**Figure 4**: Average Weekly Reading Minutes for G 3-7 and G 8-12.

Both groups demonstrated an increase in reading minutes during the
interventions, but both groups also experienced substantial increases after their
interventions ended. In G 3-7, the average over their 5 weeks of intervention was 115
minutes of reading per week, a 15% increase over the pre-intervention time; in G 8-12,
the average over their 5 weeks of intervention was 206 minutes, a 4% increase over the
pre-intervention time. After the interventions, both groups’ reading minutes continued to
increase. After the interventions in their groups, G 3-7 showed a 32% gain in reading
minutes and G 8-12 showed a 21% gain in reading minutes. By the end of the 14 weeks,
G 3-7 showed a net gain of 52% more reading minutes and G 8-12 showed a net gain of
26% more reading minutes over the pretest scores.
Qualitative Information

Variety of Materials

On the reading log sheets, sections were provided to indicate whether the materials read were books or non-books. Although this section was not marked as optional, many students did not always indicate what sort of materials they had read. This was especially true of male students. Of the students who did list what type of materials they had read, frequently they had read both books and other materials during the week. The percentage of marks for book reading and other reading varied, but generally non-books were indicated about 25% of the time. For example, in G 3-7 during week 13, 45 marks for books and 18 marks for non-books added up to 63 marks total, with non-books being marked in 29% of the cases. Among boys, books were indicated about twice as often as non-books; among girls, books were indicated about three times as often as non-books.

An optional section gave students space to write the titles of what they had read. This section was often left blank. Of the students who did provide titles, girls and boys showed differences in the materials they read, especially in book titles. Books were classified by the researcher as one of 10 often overlapping genres: adventure, animal stories, classics, fantasy, historical fiction, horror, nonfiction, outdoors, realistic fiction, or science fiction. Girls read more realistic fiction than any other genre. Among the girls in G 3-7 during week 13 for example, out of 33 titles, 15 were realistic fiction. Boys’ responses were more widely distributed among different genres with no genre consistently listed more than any other. In general, girls listed more different titles each
week than boys. For both genders, in the category of books, young adult literature was read almost exclusively.

Early in the study, the titles different students read rarely overlapped. In the last few weeks of the study, many individual titles were listed on two or more students’ lists during the same week or consecutive weeks.

Teacher Comments

At the end of the study, the researcher briefly met with three of the four teachers in the study. Although not a formal interview, each of the three teachers indicated intentions to continue the processes of reading logs and discussion groups introduced in the study. They cited anecdotal evidence that their students were reading more as a result of the study, such as students visiting the school library more frequently, more students carrying books on a daily basis, informal conversations about books among students, and books being physically shared among students.

Summary

The purpose of this study was to determine if engaging in reading discussion groups with peers would lead to an increase in the amount of time seventh grade students in Northwest Montana spent reading. The sample was divided into two groups to implement a two-way switching replications design. Data, namely, the number of minutes each student read each week, were collected for 14 weeks from both groups.

On the pretest, the first week of the study, students in G 3-7 read an average of 101 minutes each week; students in G 8-12 read an average of 193 minutes each week. The posttest at week 14 followed the discussion group intervention by 7 weeks for G 3-7 and 2 weeks for G 8-12, and it showed an increase in reading minutes for both groups.
The average for G 3-7 increased from 101 minutes to 166 minutes, an increase of 64% (p=.0014). The average minutes for G 8-12 increased from 193 minutes to 262 minutes, an increase of 36% (p=.0704).

When the two groups were compared, similarities were evident. Both groups showed little change in reading minutes before their discussion interventions. During the interventions in the groups, reading minutes increased, but after the interventions, reading increased more.

The quantitative data along with the informal, qualitative data will form the foundation for the discussion and conclusions of the following chapter.
CHAPTER FIVE--CONCLUSION

Introduction

Aliteracy is a growing problem in the United States (National Endowment for the Arts, 2004), and it is a problem that starts when people are young. According to the National Assessment of Academic Progress, reading for fun has steadily declined for students in grades eight and twelve over the past two decades (NCES, 2005). The authors of *Reading at Risk: A Survey of Literary Reading in America* theorized: “At the current rate of loss, literary reading as a leisure activity will virtually disappear in half a century” (National Endowment for the Arts, 2004, p. xiii). Lesesne (2006) conceptualized the problem:

If we lose a generation of readers, we also lose a generation of learners. Since today’s intermediate and middle school kids are tomorrow’s legislators, tomorrow’s workforce, and tomorrow’s parents, their lack of interest in books and reading and learning will affect subsequent generations. It is enough to make you, like me, determined to reignite a passion for reading. (p.2)

This investigation focused on a way to rebuild the habit of reading for pleasure among seventh grade students using two elements identified in the literature as being positive elements for improving adolescent literacy: choice in reading materials and social interaction about that reading.

Summary

Two groups of Northwest Montana seventh graders who experienced a planned implementation of reading discussion groups in their English classes for 5 weeks during a 14 week study formed the sample of this study. The minutes they spent reading per week
at the beginning of the study (pretest) were compared to the minutes spent reading at the end of the study (posttest) and were analyzed throughout the study’s duration. While both groups showed increases in the number of minutes they spent reading, only the results for the group that participated in the intervention during weeks three through seven were consistent.

In comparing the two groups across various time periods of the study, several similarities were evident despite the groups’ variability. The reading of both groups changed little in the weeks before their interventions. After the interventions, the reading of both groups increased substantially. In comparing their pre-intervention average reading minutes to their post-intervention average reading minutes, the group that had the intervention first showed a net gain of 52% more reading minutes, and the group that had the intervention second showed a net gain of 26% more reading minutes over the pretest scores.

Null Hypothesis

The null hypothesis for this study stated that there would be no experimentally important or consistent mean difference in the amount of time seventh graders spent reading for recreation before and after a discussion group intervention. An experimentally important difference was defined as a 10% difference between pretest and posttest minutes. The a priori level of consistency was p<.05. Correlated pairs t-tests were conducted on the pretest and posttest minutes of the two separate groups. The null hypothesis for the group that experienced the intervention during weeks three through seven was rejected, as a difference was found between pretest and posttest scores of greater than 10% with a p-value of less than .05. The null hypothesis for the group that
experienced the intervention during weeks eight through twelve was not rejected, because, although a 26% increase was found, it was not consistent enough to meet a priori levels.

In analysis of the similarities of the two groups, both demonstrated increases in reading minutes. Even though fluctuations in gains were evident from week to week in both groups, overall, increases were shown during the interventions and after the interventions.

Discussion

In this study, during and after a discussion group intervention, most, but not all, students showed a notable increase in time spent reading. Before the reading discussions, minutes spent reading increased for both groups slightly, perhaps in anticipation of the discussion groups. The group that had the discussion intervention first showed an experimentally important and consistent increase in recreational reading over the course of the 14 weeks, an increase that largely occurred during the five weeks of the peer reading discussion group intervention and continued to grow after the discussion groups had ended. However, although in some measures the group that experienced the discussion intervention second showed increases in reading, no results for those increases showed consistency. The two groups contained similar students from similar schools, making the results puzzling, at least on the surface.

Some differences between the groups could help explain the discrepancy. Four teachers volunteered for the study, two from small, K-8 schools and two from a larger junior high school. The entire sample for the study was divided into two sections based on teacher experience, group size, school size, and teacher convenience. This meant that
the group that had the intervention during weeks three through seven consisted of students of one teacher and the group that had the intervention during weeks eight through twelve consisted of students of three different teachers, one at the same school as the first discussion intervention students and two at other schools. The teacher for the students in the group that experienced the intervention first had 15 years of teaching experience; the teachers for the group that experienced the intervention second ranged from a first year teacher to a teacher of more than 25 years. During the second half of the study, teachers for the second group were frequently absent from the classroom for long periods of time. Although they did not report this to the researcher formally, they were often gone when it was time for a site visit, and their fellow faculty members commented on the teachers’ absences. These changes in the classroom could have led to inconsistencies in the implementation of the discussion groups and in the data recording and collection. For example, the return rate of the reading logs was far higher in the group that had the intervention during weeks three through seven than in the group that had the intervention during weeks eight through twelve.

Other discrepancies were evident. The data that were collected from the second intervention group had many irregularities, such as two students with completely identical data, several instances of extreme data, and a few students whose reading minutes dropped dramatically. One teacher in the second intervention group mentioned a student with a vocally mutinous attitude toward the reading logs and a teacher-initiated change in independent reading time practices at school late in the study. Both groups, but the second intervention group especially, seemed to have changes in enrollment during the study, evidenced by regular receipt of reading logs for the first several weeks.
compared to a dearth in reading logs thereafter. On the other hand, because the first intervention group students were all at the same school, that commonality perhaps allowed more book discussions to occur outside the classroom in an informal way, encouraging more reading. Certainly, classrooms are not laboratories but are infused with irregularities, which, in research, can cause the detours to become parts of the discovery.

Conclusions

The primary conclusion of this study is involvement in peer reading discussion groups increased the amount of time the seventh grade students in the study spent reading for recreation at a time when the recreational reading of the students would otherwise be expected to decrease. Such discussion groups harness the power of social interaction and student choice, both especially motivating to adolescent students.

Another conclusion from this study was that students read a variety of materials. In keeping with results from other studies, the students in this study were encouraged to record their reading of anything of their choosing, and they had optional blanks on their reading logs to write down what they had read. Not all students opted to fill in these blanks, but the answers of the ones who did included novels of various genres, poetry, informational books, newspapers, magazines, instruction manuals, websites, recipes, and cereal boxes. During any given week, some students recorded up to five different items they spent time reading. When allowed to consider a broad range of texts, more students saw themselves as readers, a healthy viewpoint for their overall development, and a reason to keep reading. During the discussion intervention, students also found social reasons to motivate reading. In the early weeks of the study, overlap in book titles was rare. Later in the study, book titles would surface on multiple student’s reading logs.
during the same or subsequent weeks, indicating that students were seeking out books they had heard about from the peers, putting the power of the social interaction about reading into action.

Based on the different results for the two groups, the importance of consistency in the implementation of a method is evident. The first intervention group had the same teacher presumably doing the same things throughout the 14 weeks to keep students engaged in the elements of the study. The second intervention group, for reasons largely beyond the control of the researchers and the teachers, had less consistency, and their results were less positive. Consistency reaches beyond just one method or one subject; it is important across the curriculum.

A final conclusion addresses elements beyond the scope of this study. Importantly, although reading attainment scores were not examined in this study, the review of the literature also suggested that more reading is related to higher reading assessment scores (Anderson, Wilson, & Fielding, 1988; Greaney, 1980; National Center for Education Statistics, 2005; Stanovich, 1986). So, whether for the specific goal of reading assessment scores or for the more intrinsic, social, and aesthetic values of recreational reading, methods that increase recreational reading, such as the discussion groups used in this study, are important ideas to consider in the development of adolescent literacy.

Implications for Further Research

A research project is seldom the end of a line of inquiry; rather, at a project’s conclusion, more paths to knowledge begin to emerge. This study is no different in that respect.
Some questions raised by this research would best be answered through qualitative methodology. Through open-ended interviews, a researcher could learn why students thought they read more as the study progressed. Particularly of interest would be the students’ impressions of the impact of reading discussions: whether they sought out books they had heard about during discussions, whether the discussions made them want to read more, or whether they had discussions about books more often outside of class. A replication of the quantitative elements of the study could be further elucidated if a qualitative element were studied simultaneously. Case studies could be made of select students simultaneously with a discussion intervention, focusing on their reading habits, with the goal of tracking more specifically the increase in reading for recreation. Or, the researcher could be involved during the discussions as a participant observer to better understand the dynamic of the discussions and how reading for recreation was impacted.

Quantitative methodology could be used in further research on this topic as well. From the number of logs that were not turned in, it is possible to assume that the reading logs were an annoyance to some students; using discussion groups but finding another way to track reading minutes might provide more complete data. Students could perhaps record their reading minutes on a chart each day as one of the opening or closing routines in the class.

Comprehension or other reading skills were not addressed in this study. Some studies suggest that additional reading is associated with improvement in reading assessment scores (Anderson, Wilson, & Fielding, 1988; Greaney, 1980; National Center for Education Statistics, 2005; Stanovich, 1986), and that talking with peers about reading is also related to high reading attainment scores (Langer, 1999; National Center
for Education Statistics, 2005). Adding a pretest and posttest of a reading assessment to the discussion intervention study could indicate whether reading as a skill is improved by additional reading and/or by talking about reading.

Recommendations

Based on the results of the group that had the intervention during weeks three through seven, the tendencies of the group that had the intervention during weeks eight through twelve, and the comparison between the two, this study yielded a specific, usable recommendation to impact adolescent literacy in the classroom and beyond.

The discussion group intervention in this study consisted of three elements: student choice in reading, small peer group reading discussions, and discussion prompts. The three elements used in concert yielded increased recreational reading by the seventh grade students of the study. The primary purpose of this study was to discover if peer discussion groups would impact the amount of time seventh grade students spent reading for pleasure. According to this study, most students did read substantially more during and after a discussion group intervention. Adolescents are focused on the social aspects of their lives; using that focus for educational purposes can uniquely reach students. Simply letting students talk about what they have been reading encourages them to read more. Not only are they reading more, discussion of texts can have other positive results for their learning, as Santa suggests in her ideas for adolescent literacy: “It is their talking, their oral grappling with meaning, that leads to deeper understanding” (2006, p. 473). Discussion in small groups leads to more reading and more understanding. Thus, students should be given time during the school week to talk about what they are reading.
To initiate and guide those discussions, the students in the study referred to a list of discussion prompts. When asking adolescents to discuss what they are reading, some need help getting started or with continuing a discussion. In this study, students were given a list of general prompts to initiate discussion. Although the prompts on the list focused more on fiction, lists could be created which included suggestions for other reading materials. In the pilot study, which the researcher observed, students used the prompts to varying degrees, with some groups referring to them only occasionally and other groups depending on them to begin and sustain every string of discussion. The teachers in the study indicated that their students used the prompts similarly and that they would continue to use them when the study was completed as an aide to productive discussion.

The third element of the discussion intervention is student choice. Many adolescent students are required to read for their English or Language Arts classes, sometimes with every student reading the same novel. Adolescents represent a wide range of reading stages, developmental levels, interest areas, and reading attainment. In this study, students read a wide range of materials, including many genres of books and various other materials. As they talked about that reading, their recreational reading increased, but their reading also increased when they were not involved in discussion groups, indicating that just being able to choose, and having that choice honored in the classroom, inspired more reading.

These three elements, taken as a whole construct, encouraged the seventh grade students in the study to read more. The three-part recommendation, discussing reading, discussion prompts, and choice in reading, represents important ideas for the
improvement of adolescent literacy. Because they are attentive to adolescent development in all its myriad manifestations, they are effective. Increase and improvement in reading are certainly two of the most important goals for adolescent learners. Adolescents like to talk, and they like to have choices. Using those tendencies in reading discussions leads to more reading, and more reading leads to better reading.
REFERENCES


*Journal of Research and Development in Education, 29*, 203-211.


Probst, R. (2002). Sir Gawain was just out of middle school. . . *Voices from the Middle, 10* (1), 52-53.


Reeves, A. (2001). Reading this and refusing that: Case studies of high school students’ patterns of reading and resistance. Paper presented at the annual meeting of the National Council of Teachers of English, Baltimore, MD. (ERIC Document Reproduction Service No. ED467288)


Appendix A: Letter to Principals and Superintendents
Dear Colleague,

Greetings! I am a seventh grade English teacher at Linderman School in Kalispell; I am also a graduate student at the University of Montana. You are receiving this letter because I want to inform you about a study I will be launching soon in our area. I am hoping teachers in your school will participate.

Reading has long been a focus of schooling, and of late, that focus has both intensified and broadened. It has intensified in testing requirements; it has broadened with a new focus on adolescent students. From research, we know that the more students read on their own, the better they are at reading. The better they are at reading, the better their overall academic achievement, both of which translate to improved test scores. The problem is, starting in early adolescence, kids read less and less on their own. Journal and research articles variously point out that letting students choose their reading materials and talk about books show promise as instructional strategies. That’s where this study initiated.

The study I am proposing would have students use reading logs to simply write down the number of minutes they read each day for fourteen weeks. During that record keeping time, there would be a five-week intervention consisting of peer reading discussion groups in their language arts classes. (Both of these elements, by the way, support various Montana state communication arts standards.) Then we would have some evidence about whether or not conversations about books can really lead to increases in reading time. I will be happy, of course, to share my findings with you and the involved teachers.

If you have questions, need more information, or if you would prefer I not contact your seventh grade language arts teachers, you can contact me by phone or email. Thanks for your time.

Sincerely,

Dana Haring
620 First Avenue West
Kalispell, Montana
406-257-8169 home
406-212-2162 cell
406-751-3975 school
dana.haring@umontana.edu
Appendix B: Letter to Teachers
October 18, 2005

Dear Colleague:

Greetings! I hope your school year is off to a good start. Like you, I am a seventh grade English teacher. Also, probably like you, I am often concerned that my seventh grade students do not read enough on their own time. In fact, the research says that’s true. Voluntary reading and enjoyment of reading start to decline for many young people starting around age 11, and by age 14 between 30 and 40% of students report little or no voluntary reading. In a nationwide study in 2003, 79% of 4th grade students reported reading for pleasure a lot, but only about 34% of eighth graders and 25% of twelfth graders reported reading a lot for pleasure.

So, what do we do about it? In addition to being a seventh grade English teacher, I am also a graduate student at the University of Montana, and I decided to do some research on this problem. Several journal articles I found talked about the promise of simple conversations about books. Students themselves said in a couple of articles that letting them talk about their reading would encourage them to read more. Social activities about books seem to tap both extrinsic and intrinsic motivation to read, and could be one possible answer to declining reading.

As a result of this research, I designed a study for which I need your help. I am asking that you volunteer one or more of your classes for this research. I know you have more than enough to do already, but involvement in this study would take less than an hour of your precious out-of-class time. It does require some class time, but the activities fit into Montana communication arts standards and benchmarks. This study would use a reading log that students would use to record the minutes each day of independent reading for 14 weeks. During that time, the volunteered classes would engage in 30-minute book discussion sessions once a week for five weeks. I will conduct a training session for all teachers who participate in the study on the discussion group procedures, just so that everyone is consistent. The idea is to measure whether or not those discussion groups cause students to read more on their own.

All participant classes will receive a report of the study’s results and a small collection of award-winning young adult books for the classroom library. If you would like more information, you can call or email me at school or home. Thank you so much for considering this unique opportunity.

Sincerely,

Dana Haring
620 First Avenue West
Kalispell, Montana
406-257-8169  home
406-212-2162 cell
406-751-3975 school
dana.haring@umontana.edu
Appendix C: Parental Permission Form
Parental Permission Form

Title: Peer Discussions and Independent Reading

Project Director: Dana Haring, 620 First Avenue West, Kalispell, Montana 59901; dana.haring@umontana.edu; 406-257-8169

Special Instructions:

This consent form may contain words that are new to you. If you read any words that you do not understand, please ask the person who gave you this form to explain them to you.

Purpose:

You are being asked to give permission for your child to take part in a research study. This research study will look at how much seventh grade students read. It will also see if the amount of reading changes after student discussion groups.

Procedures:

Your child will be asked to write down how many minutes he or she reads each day for fourteen weeks. Your child will be asked to talk about books in small groups of other students once a week for five weeks. This discussion will take place during the school day as a part of his or her regular English class.

This study will mainly take place at school. The students can also fill out the log sheet at home.

Risks/Discomforts:

Although this study uses activities that are done in lots of classrooms, the activities may be out of the normal routine for your child. Your child’s teacher will be there to provide assistance when or if your child needs it.

Benefits:

Although your child may not benefit from taking part in this study, other research has found that reading independently improves reading skills. Talking about books has also been shown to improve reading. Also, the researcher will give any teacher who participates a collection of young adult books to use in the classroom.

Confidentiality:

Both your identity and your child’s identity will be kept confidential. The school’s name will also be kept confidential. There will be no name or other identifying parts on the
reading logs. The consent forms and permission forms will be kept separate from the data.

**Compensation for Injury:**

We do not foresee any risk in taking part in this study. Still, the following liability statement is required in all University of Montana consent forms:

“In the event that you are injured as a result of this research you should individually seek appropriate medical treatment. If the injury is caused by the negligence of the University or any of its employees, you may be entitled to reimbursement or compensation pursuant to the Comprehensive State Insurance Plan established by the Department of Administration under the authority of M.C.A., Title 2, Chapter 9. In the event of a claim for such an injury, further information may be obtained from the University’s Claims representative or University Legal Counsel.”

**Voluntary Participation/Withdrawal:**

Your decision to allow your child to take part in this study is entirely voluntary. The reading logs and the discussion groups will be a part of your child’s regular class. If your child does not participate, he or she will still complete the reading logs and participate in the discussions. The difference is that the researcher will not collect the reading logs.

**Questions:**

If you have questions now or during the study contact: Dana Haring, 257-8169. If you have any questions regarding your child’s rights as a research subject, you may contact the Chair of the Institutional Review Board through The University of Montana Research Office at 243-6670.

**Subject’s Statement of Consent:**

I have read the above description of this research study. I have been informed of the risks and benefits, and all of my questions have been answered to my satisfaction. Also, I know whom to contact if I have more questions. I voluntarily agree to have my child take part in this study. I understand that I will receive a copy of this consent form.

_____________________________________
printed student name

___________________________________________
signature of parent or legally authorized representative
Appendix D: Student Assent Form
Subject Information and Assent Form

Title: Peer Discussions and Independent Reading

Project Director: Dana Haring, 620 First Avenue West, Kalispell, Montana 59901; dana.haring@umontana.edu; 406-257-8169

Special Instructions:

This form may contain words that are new to you. If you read any words that you do not understand, please ask the person who gave you this form to explain them to you.

Purpose:

This research study will look at how much seventh grade students read. It will also see if the amount of reading changes after student discussion groups.

Procedures:

You will be asked to write down how many minutes you read each day for fourteen weeks on a log sheet. You will turn in this log sheet to your teacher. You will be asked to talk about books in small groups of other students once a week for five weeks. This discussion will take place during the school day as a part of your regular English class.

This study will mainly take place at school. You can fill out the log sheet at home if you prefer.

Risks/Discomforts:

The activities you do for this study may be a little different from your normal class routine. Your teacher will be there to provide assistance when you need it.

Benefits:

Although you may not benefit from taking part in this study, other research has found that reading on your own makes you a better reader. Talking about books has also been shown to improve your reading. As an added benefit, any teacher whose class participates will receive a collection of books that you and your classmates will be able to use.

Confidentiality:

Your identity will be kept confidential. There will be no name or other identifying parts on the reading logs.
**Compensation for Injury:**

We do not foresee any risk in taking part in this study. Still, the following liability statement is required in all University of Montana consent forms:

“In the event that you are injured as a result of this research you should individually seek appropriate medical treatment. If the injury is caused by the negligence of the University or any of its employees, you may be entitled to reimbursement or compensation pursuant to the Comprehensive State Insurance Plan established by the Department of Administration under the authority of M.C.A., Title 2, Chapter 9. In the event of a claim for such an injury, further information may be obtained from the University’s Claims representative or University Legal Counsel.”

**Voluntary Participation/Withdrawal:**

Your decision to take part in this study is entirely voluntary. The logs will be collected in your class, and the discussion groups will take place during class. If you choose not to be involved in the study, you will still need to complete the log sheets for class and participate in the discussion groups. The difference is the log sheets will not be collected by the researcher.

**Questions:**

If you have questions now or during the study contact: Dana Haring, 257-8169. If you have any questions regarding your rights as a research subject, you may contact the Chair of the IRB through The University of Montana Research Office at 243-6670.

**Subject’s Statement of Consent:**

I have read the above description of this research study. I have been informed of the risks and benefits. All of my questions have been answered. Also, I know whom to contact with more questions. I agree to take part in this study. I understand that I will receive a copy of this consent form.

______________________________
printed name

______________________________
signature
Appendix E: Reading Log
Name: ____________

Week: ____________

**Reading Log**

On this sheet, please record the amount of time you spend reading books in your free time at home or at school. In other words, only record the time you spent reading when you could count, but if you are reading after a test or at lunch because you want to, that does count. Filling it out right after reading or at the same time every day will help you keep a better record. Accuracy is important! Thank you!

*Please circle the appropriate selection:*

Gender: Male or Female

GPA (optional): 4.0  3.75  3.50  3.25  3.0  2.75  2.50  2.25  2.0  1.75  1.5  1.25  1.0  .75  .50  .25

<table>
<thead>
<tr>
<th>Day of the week (You can write in the date if that helps you.)</th>
<th>Amount of time (in minutes)</th>
<th>Book or Non-book</th>
<th>Title (optional)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monday</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tuesday</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wednesday</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thursday</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Friday</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Saturday</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sunday</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Appendix F: Discussion Starters
When you are having your peer book discussions, you may use the following starters as needed to help you think of things to discuss about your books.

1. I really liked this book because...
2. The best part of this book is...
3. The worst part of this book is...
4. I read a book like that, except...
5. The plot of this book was...
6. If I wrote a book like this...
7. This author is really good at...
8. This part made me laugh...
9. This part was really sad...
10. This part was really gross...
11. The setting of this book was...
12. This book would be a good movie because...
13. The movie based on this book is...
14. The ending was good/bad because...
15. The ending of a book is important because...
16. If there was/is a sequel to this book, I would read it...
17. The characters were believable/not believable because...
18. The characters remind me of/make me think about...
19. This book is better than any other book like this because...
20. Compared to other similar books, this book is worse because...
21. The setting of this book is worse because...
22. When I am choosing a book, I...