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The Effects of Singing and Chanting on the Reading Achievement and Attitudes of First-Graders

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THE EFFECTS OF SINGING AND CHANTING ON THE
READING ACHIEVEMENT AND ATTITUDES
OF FIRST GRADERS

A Dissertation
Presented to
the Graduate School of
Clemson University

In Partial Fulfillment
of the Requirements for the Degree
Doctor of Philosophy
Curriculum and Instruction

by
Kathy Holcombe Cochran
August 2008

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ABSTRACT

This research involves a mixed-methods case study of the reading instruction in a first grade class taught by Ms. Bing, a veteran of 29 years of first grade teaching. Analyses of classroom field notes and interviews of Ms. Bing provided insights into her methods of teaching reading, which focused largely on the use of song lyrics and chants instead of basal text. Occurring predominantly during the first semester of the school year, the study involved observations of reading instruction given to Ms. Bing’s class, which initially numbered 23 students. While the school required all first grade teachers to employ Cunningham’s Four Block Method of Literacy, Ms. Bing’s instruction focused the Guided Reading Block of instruction on song lyrics and chants. Quantitative data were gathered from two sources, one involving assessment of students’ attitudes toward reading and one focusing on reading achievement. The Elementary Reading Attitude Survey (ERAS) was administered twice, once near the beginning of the school year and once near the middle, to Ms. Bing’s class and also to the other five first grades in the school that served collectively as the control group, with a total of approximately 100 students in the control group. Ms. Bing administered the ERAS a third time to her students in May. The STAR Reading Test was administered regularly to the first graders in this school in conjunction with the Accelerated Reading Program, and scores from administrations of the first grade STAR Test from two consecutive school years provided data for comparison of the first grade students’ reading achievement. Quantitative data analysis revealed a statistically significant improvement from September until May in reading attitude scores among Ms. Bing’s students, while both experimental and control
classes experienced a decline in reading attitude scores between September and January. Reading achievement scores increased at a significantly higher rate among Ms. Bing’s students than they did among the other first grade classes during this same time span. Qualitative data analyses revealed that Ms. Bing’s students were highly engaged during their reading and singing/chanting lessons and that their levels of self-efficacy increased with their successful experiences in singing, fingerpoint reading, embedded phonics, and reading.
DEDICATION

To Alan, my best friend, counselor, and loudest cheerleader. His support and faith have both encouraged me and pushed me across the goal line.

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ACKNOWLEDGEMENTS

Gratitude obviously and overwhelmingly goes to my dissertation committee members for their hard work and their devotion to seeing me through this tedious process. To Dr. Switzer: thank you for the hours spent reading, crunching numbers, giving sage advice, and attempting to keep statistical formulae in my head long enough for them to be useful. To Dr. Gillis: thank you for our breakfast meetings, your questions and suggestions, your outstanding editing, and for Inspiration. To Dr. Headley: thank you for pushing and encouraging me and for seeing me through. To Dr. Vick: thank you for coming to my rescue when Dr. Maag left us, for our many lunch meetings, and for your constant encouragement. And to all of my committee members: thank you for your friendship, expertise, and patience.

My friends at Furman University have been motivators from the time I’ve first known them, inquiring regularly into the status of my work and understanding my absences from recitals and meetings. Thanks to all of you! To Dr. Thomas: thank you for allowing me time to write. To Dr. Quast, Dr. Hecker, and Dr. Henderson: thank you for your constant interest and invaluable encouragement.

My family has been tremendously supportive. My mom Louise has declined to ask for my help on many occasions when she probably could have used it, so that she could leave me alone to do my work. Her prayers have been particularly encouraging and uplifting. My brother-in-law Neil has spent many weekends working with Alan on his projects so that I could study, and his wife Candy has generously loaned him out on these weekends.
“Ms. Bing” has been an incredible and priceless asset, as she allowed me into her classroom and her life. She has become an invaluable friend whom I will never forget for her hospitality and amazing teaching.

Rion and Molly, my godchildren, have given me balance so that I could bring my head up out of the books from time to time and be reminded of the true priorities of life. Their parents, Danny and Susan, have been so generous in giving me time with the children, and I will always be grateful for their kindesses to me.

Thank you, Maria, for spurring me to begin this process, for helping me to keep my head on straight, and for assisting me in seeing things from different perspectives. You’ve always been a godsend to me!

Although many obstacles had the potential to thwart my educational pursuits, none has been as difficult as the sickness and death of my father. I know that he was cheering for me, however. The lessons he taught me regarding hard work have surely proven to be beneficial, and I am grateful for them.

Last, but certainly not least, my stalwart husband Alan has supported me morally and financially, helping me to keep my nose to the grindstone, yet insisting that I occasionally come up for air. He has sacrificed a great deal of his time with me, and his housekeeping skills have been unbelievable. I will be forever grateful for his support and encouragement. He has taught me to persevere and to believe in myself.

To all my family and friends, I send a heartfelt “thank you!”
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CHAPTER ONE  
INTRODUCTION

“A surer way [to teach children to read] that nobody thinks of is to create the desire to read. Give the child this desire and have done with gadgets, and any method will be good.” [Jean-Jacques Rousseau in Emile (Boyd, 1962, p. 52)]

Statement of the Problem

If only teachers were allowed the luxury of waiting until their students have the desire to learn to read before having to toss them into their elementary school literacy lessons! If only children were allowed the freedom to become developmentally ready and interested in reading before having to be thrown into matters of formal and direct instruction and assessment! In a classroom of the present, Rousseau’s young protégé, Emile, might too early be forced to experience the thrill of drill and might well have become desperately frustrated by worksheets, tests, and perhaps feelings of failure. Such failure may well be assured if his teachers are unsuccessful at inducing what could be the premature birth of his interest in learning to read, of the development of his cognitive proclivities, and of his grasp of the importance of literacy education. Because today’s Emile is perhaps too young to understand or to be inspired by many of the implications for his future of the importance of his learning effective reading skills today, his teachers may need to find ways to motivate him through methods that will lead to more immediate gratification. A significant question that reading educators have long asked themselves is, “How does one ‘give the child this desire’ (Boyd, 1962, p. 52)?”
**Educational Importance**

The significance of learning to read can not be overstated. When our federal government reported in 1983, “Our society and its educational institutions seem to have lost sight of the basic purposes of schooling, and of the high expectations and disciplined effort needed to attain them” ("A nation at risk: The imperative for educational reform," 1983, Paragraph 4), the focus of our nation quickly turned toward education. At the time of the report, around 23 million Americans were labeled as functionally illiterate, along with around 13% of all 17-year-olds. Functional illiteracy among minority youth was estimated to be as high as 40 % ("A nation at risk: The imperative for educational reform," 1983). The focus of education consequently zeroed in on the admonition to schools to teach our students to read effectively.

This announcement spurred a high level of interest in reading education, and the federal government formed a Commission on Reading, charged with recommending steps to alleviate this national problem. One result of the work of the Commission on Reading was *Becoming a Nation of Readers*, a national report that includes not only a working definition of reading as “the process of constructing meaning from written texts” (Anderson, Hiebert, Scott, & Wilkinson, 1985, p. 7) but also includes recommendations for teaching and assessing literacy.

*Becoming a Nation of Readers* garners from a decade of research five major generalizations about the nature of reading instruction:

- “Reading is a constructive process” (p. 9). Interpretation of what one reads is based on prior knowledge of the topic, which varies from reader to reader.
• “Reading must be fluent. . . Readers must be able to decode words quickly and accurately so that this process can coordinate fluidly with the process of constructing the meaning of the text” (p. 10).

• “Reading must be strategic” (p. 13). Readers must be able to change the way they read with regard for both the purpose for which they are reading a particular passage and their existing prior knowledge of the subject matter. Effective readers are metacognitive; they monitor their progress in understanding the text, and they adjust their strategies accordingly.

• “Reading requires motivation. As every teacher knows, motivation is one of the keys to learning to read” (Anderson, et al., 1984, p. 14). Children who are taught by teachers who maintain high levels of motivation make higher than average gains on reading achievement tests (Walberg, Hare, & Pulliam, 1981).

• “Reading is a continuously developing skill.” It is a lifelong pursuit, “a matter of continuous practice, development, and refinement” (Anderson et al., 1984, p. 16). The federal government has continued to promote and to investigate the status of literacy and literacy education by bestowing research grants and by carrying out its own research. The National Literacy Act of 1991 broadened the definition of literacy to include "an individual’s ability to read, write, and speak in English and compute and solve problems at levels of proficiency necessary to function on the job and in society, to achieve one's goals, and to develop one's knowledge and potential” (Sum, 1999, p. 6), and our country almost simultaneously realized the broadening implications of reading proficiencies.
If only today’s Emile could comprehend the negative predictions for his future that are related to a lack of success in learning to read, then perhaps his zeal for participating in reading lessons might mature more quickly. If only today’s Emile could understand the implications of the 1999 report of the U.S. Department of Education Office of Educational Research and Improvement, entitled “Literacy in the Labor Force: Results from the National Adult Literacy Survey” (Sum, 1999, p. 6), then perhaps he could more easily be persuaded to increase his engagement in learning to “to read, write, and speak in English and compute and solve problems at levels of proficiency necessary to function on the job and in society, to achieve one's goals, and to develop one's knowledge and potential” (National Assessment of Adult Literacy, 2003, Section 3). Not only might Emile understand the importance to the national economy and national industrial output of his learning to read, but he might, in turn, recognize its potential personal significance as measured in economic terms and professional standing for him when he reaches adulthood.

During the 1992 administration of the National Adult Literacy Survey (NALS), trained researchers queried a random sample of over 14,000 American adults, ages 16 and older, in three categories of literacy proficiencies—prose, documentary, and quantitative. They described these three types of literacy as follows.

- **Prose literacy**—the knowledge and skills needed to understand and use information from texts that include editorials, news stories, poems, and fiction; for example, finding a piece of information in a newspaper article, interpreting
instructions from a warranty, inferring a theme from a poem, or contrasting views expressed in editorials;

- Document literacy—the knowledge and skills required to locate and use information contained in materials that include job applications, payroll forms, transportation schedules, maps, tables, and graphs; for example, locating a particular intersection on a street map, using a schedule to choose the appropriate bus, or entering information on an application form;

- Quantitative literacy—the knowledge and skills required to apply arithmetic operations, either alone or sequentially, using numbers embedded in printed materials; for example, balancing a checkbook, figuring out a tip, completing an order form, or determining the amount of interest form a loan advertisement.

(Sum, 1999, pp. 6-7)

Researchers obtained scores from each subject in each of the above three categories of literacy and rated the results in each category on a scale of Level 1 to Level 5, from weakest to strongest. Analysis of the data produced findings that could have a strong personal impact on young Emile’s future.

1. The highest mean literacy proficiencies were achieved by workers in the finance, insurance, and real estate industries and in the public administration sector. The lowest proficiencies on average were those of workers in goods-producing industries (agriculture, construction, manufacturing, and mining).
2. Professional workers held the highest mean literacy proficiencies, followed by managers, administrators, and technical workers. Semi-skilled and unskilled blue-collar workers and farm, forestry, and fishing workers held the lowest mean literacy proficiency scores.

3. Last, but certainly not least, was the finding that workers’ weekly and annual earnings were positively and strongly associated with their literacy proficiencies. Mean weekly earnings ranged from $355 for full-time workers in Level 1 to $531 for those in Level 3 to $910 for those in Level 5 on the prose scale (Sum, 1999).

Not surprisingly, the conclusions of this study bode well for competent readers. They also bear implications for the field of education as a whole, as they show that the weekly earning impact of higher literacy scores was less for workers who had completed some high school work (9 to 12 years, no diploma) and largest for those with a two- or four-year degree (Sum, 1999).

According to Carl Kaestle et al., the most pervasive result of the NALS is that one’s “level of formal schooling is strongly related to adult literacy proficiency. . . . Increased levels of formal school correlate with substantial gains in adult literacy proficiency for all groups, at all levels of education” (Kaestle, Campbell, Finn, Johnson, & Mikulecky, 2001, p. 1). Kaestle et al. maintain that this finding came as somewhat of a surprise when juxtaposed to the magnitude of criticism that was directed toward schools at that time for their failure to teach reading effectively and to make learning relevant to “real-life tasks” (Kaestle, et al., 2001, Section 2).
Some reading educators believe that real-life tasks have more recently taken a back seat, even though the 2001 federal act entitled “No Child Left Behind” made available 6-year competitive grants and sub-grants in order to carry out what the act describes as “President Bush’s unequivocal commitment to ensuring that every child can read by the end of third grade” (NCLB, 2001, Section Putting Reading First,” Paragraph 1). To this end, this legislative act requires continuing accountability on the parts of school districts, schools, principals, and teachers, and such accountability is currently measured in standardized test scores, not in real-life assessments.

The more recent National Assessment of Adult Literacy (NAAL, 2003) is a continuing assessment of the English literacy skills of Americans 16 years of age and older. Conducted by the National Center for Education Statistics (NCES), this survey is the first of its kind since NALS of 1992. Two new components, Fluency Addition to NAAL (FAN) and Adult Literacy Supplemental Assessment (ALSA), were designed to provide more extensive background information than was gathered by NALS. FAN uses software to determine adults’ abilities to recognize and decode words and to read fluently. ALSA assesses the abilities of the “least-literate adults” (NAAL, 2003, “What are the New Features of NAAL?,” Paragraph 2) to recognize letters and numbers and to understand simple prose and text. In addition to FAN and ALSA, NAAL gathers more extensive demographic information and includes a component to assess the ability of adults to understand health-care information, with the objective of allowing health organizations to build upon this information.
Preliminary results of NAAL found no significant change in prose and document literacy among America’s adults, while there was an increase in quantitative literacy. While fewer adults scored *Below Basic* on document and quantitative literacy in 2003 than in 1992, it was found that fewer adults scored *Proficient* in prose and document literacy. Eleven million adults were found to be non-literate in English, the sum of seven million who could not answer simple test questions and four million who could not take the test because of language barriers (NCET, 2005).

Results of NAAL point even more vividly to the need for increased language and literacy skills in our country; however there are many differences of opinions as to how best to make these advances happen. This situation is neither unusual nor unexpected, as ideology regarding literacy education has historically created contention among literacy educators. The trend continues today.

Not since the Great Debate, which began officially in the 1960s, has there been more contention over how best to teach reading. The National Conference on Research in English (NCRE) convened a panel in 1959 to investigate the uproar caused by the publication in 1955 of Rudolph Flesch’s book, “Why Johnny Can’t Read” (Flesch, 1955), which decried the then-current fashion of using the look-say method of teaching reading. The publication in 1967 of Jean Chall’s “Learning to Read: The Great Debate,” an indirect result of the NCRE’s panel of 1959, added fuel to the fire of the phonics versus whole language debate (Chall, 1967). The debate still rages today, with proponents of explicit phonics instruction (Gough, 1996; Levine, 1994; Schlafly, 1996; Shaywitz & Shaywitz, 2004), advocates of whole language instruction (Goodman, 1993; Goodman,

An Associated press article that appeared on July 19, 2004, continued to add fuel to the methodological fire when Silverman explained that the work of educators at the University of Oregon had been endorsed by the Bush administration and that the professors are promoting teaching techniques that they say have been tested extensively in classrooms and have produced good results on standardized exams. Critics say the Oregon professors have helped usher in an age of rigidity in education, with classrooms full of teachers who “teach to the test,” and students whose creativity is stifled because so much time is devoted to preparing for testing. (Silverman, 2004, p. 1)

In an email response to this article, dated July 21, 2004, Stephen Krashen, emeritus professor of education at University of Southern California, wrote:

“Ore. Education Professors Influence Bush,” July 19, gives the false impression that heavy phonic programs are scientifically based, while other approaches are not. The current emphasis on “systematic, intensive phonics programs” has been criticized by a number of respectable scientists, who argue that scientific evidence actually supports programs that emphasize interesting, comprehensible reading, with a modest amount of phonics instruction.

No Child Left Behind insists on teaching all the major rules of phonics (including many that are very complex with numerous exceptions) in a strict sequence, a view that critics regard as extremist and without scientific support. (Krashen, 2004)
Also influencing education in the 1990s was one particular body of thought about teaching methods, called *multiple intelligences*, which emerged as an outgrowth of an earlier definition by psychologist Howard Gardner of a new way to view intelligence (Gardner, 1983). Gardner’s work followed that of professionals such as the English psychologist Sir Francis Galton (Galton, 1869/1892/1962), who developed statistical means by which to rank humans by virtue of their physical and mental abilities, and the French lawyer-turned-psychologist Alfred Binet (Binet, 1916; Binet & Simon, 1916), who began his work with human intelligence in a 1904 attempt to create for a French professional child psychology group, called La Société Libre pour l'Etude Psychologique de l'Enfant, a means by which it could identify retarded children and determine the appropriate grade levels for other children (Gardner, 1983).

Binet’s assessment, designed to reveal a child’s mental age, was in some regards situational. He readily admitted that intelligence is dynamic and that his test could be used to compare only children with similar backgrounds. Although he recommended that one’s intelligence be studied with added qualitative measures, his test was eventually standardized using a large American sample and was employed as a tool in “curtailing the reproduction of feeble-mindedness and in eliminating an enormous amount of crime, pauperism, and industrial inefficiency” (White, 2000, Paragraph 5). Feeling that traditional IQ assessments were based on much too narrow a view of intelligence, Gardner formulated a new definition of *intelligence*—“the ability to solve problems, or to create products, that are valued within one or more cultural settings”—and then based a categorization of seven human intelligences (to which he later added an eighth and
hypothesized a ninth and tenth): linguistic, logical-mathematical, musical, spatial, bodily-kinesthetic, interpersonal, and intrapersonal. To these seven intelligences he added the naturalistic intelligence, and he and his researchers are reportedly considering the existence of spiritualistic and existential intelligences (Smith, 2002).

Gardner’s work with Project Zero, a Harvard-based research group formed in 1967, has sought to fulfill the mission of the project, “. . . to understand and enhance learning, thinking, and creativity in the arts, as well as in humanistic and scientific disciplines, at individual and institutional levels” (Project Zero). Partially as a result of his work and of the work of other researchers indicating that inclusion of the arts into the educational scene can lend help in meeting the educational needs of diverse learners (Cardarelli, 1979; Goetz, 1999; Hanshumaker, 1986; Hetland & Winner, 2001; McDonald, 1975; Vaughn & Winner, 2000) with different styles of instruction (Hanson, Silver, & Strong, 1991), some curriculum specialists now extol the virtues of this type of arts integration into other academic instructional areas (Andrews, 1997; Hendrix, 1995; Matthews, 2001; Wright, 2003).

Perhaps encouraged by the thinking of Gardner and his followers, educators have enlisted the help of the “arts”—visual, musical, dramatic, and dance—throughout academic settings in an effort to achieve “arts integration” in many schools (Bresler, 1995; Gould, 2000; Hendrix, 1995; Kelley, 1981; Lipson, Valencia, Wixson, & Peters, 1993; Matthews, 2001; Nash, 1974; Pressley, Wharton-McDonald, Allington, Block, & Morrow, 1998; Smith, 1995). Although opinions differ widely with regard to the best
strategies to use in this effort (Bresler, 1995), *arts-integration* has become a common compound buzz-word in educational circles.

Regardless of philosophy, methodology, standardized assessment, curriculum constraints, or accountability measures, it falls upon schools to teach reading successfully, to make learning relevant to real life tasks, and to take whatever ethical measures are necessary to insure that these goals are reached.

**Theoretical Bases for This Study**

“As every teacher knows, motivation is one of the keys to learning to read.”
(Anderson et al., 1984, p. 14)

A great deal of research into educational motivation, in general, and into reading motivation, in particular, has been done in recent years, perhaps most notably by educational psychologists Wigfield, Guthrie, Eccles, Pintrich, Schunk, Nicholls, and reading education educator, Gambrell (Eccles et al., 1983; Eccles & Wigfield, 2002; Eccles, Wigfield, Harold, & Blumenfeld, 1993; Gambrell, 1999, 2001, 2004; Gambrell, Palmer, Codling, & Mazzoni, 1995; Gambrell, 1981; Gambrell, 1995; Gambrell & Marinak, 1997; Guthrie, 2002; Guthrie & McCann, 1977; Guthrie, Schaefer, Wang, & Afflerbach, 1995; Guthrie & Wigfield, 1997; Guthrie & Wigfield, 2000, 1997; Guthrie, Wigfield, Metsala, & Cox, 1999; Guthrie, Wigfield, & VonSecker, 2000; Nicholls, 1978; Nicholls, 1983; Nicholls, Cheung, Lauer, & Patasnick, 1989; Nolen, S.B., 2007; Pajares, 1997; Pintrich, Marx, & Boyle, 1993; Schunk, 2003; Schunk & Hanson, 1989; Schunk, Hanson, & Cox, 1987; Schunk & Rice, 1993; Schunk & Zimmerman, 1997; Wigfield,
1994; Wigfield, 1997; Wigfield, 1997; Wigfield & Eccles, 1992; Wigfield & Eccles, 2000; Wigfield & Guthrie; Wigfield & Guthrie, 1997). A major focus of teachers of literacy is how to motivate their students to learn to read.

In her work in 1978, Rosenblatt defined two forms of reading foci—efferent, which refers to the comprehension of reading, and aesthetic, which refers to the affective experience involved in reading (Rosenblatt, 1978). Unfortunately, the academic world did not catch on quickly to the importance of affect in teaching children to read.

In her Foreword to Guthrie and Wigfield’s Reading Engagement: Motivating Readers through Integrated Instruction, Jan Shapiro (1997) explains that a study of journal titles stretching from their initial volumes until their volumes of 1992 indicated that only around 9% were devoted to the matter of affect in learning. In 1992 the National Reading Research Center (NRRC) conducted a survey of members of the International Reading Association (IRA) and discovered that motivation was one of their top ten priorities. Despite this fact, very little research had been done on that topic. Shapiro reports that between 1992 and the time of her writing in 1997 the amount of literature devoted to motivation in reading declined to about 7%. The major publications of the 1990s “are virtually silent on the various components of the affective dimension and motivation” (Shapiro, 1997, p. v). In this category of benchmarks, Shapiro includes the publications of Becoming a Nation of Readers (Anderson et al., 1984), the Handbook of Reading Research, Volume II (Barr, Kamil, Mosenthal, & Pearson, 1991), and Beginning to Read: Thinking and Learning about Print (Adams, 1990). Although figures are not readily available to show what percentage of current
journal articles and books deal specifically with the affective content of the reading process and motivation to engage in it, there is no shortage of easily accessible professional material now available on these topics. This fact reflects only one indicator of the educational world’s increasing interest in and value of this dimension of literacy education.

As more and more pressure has been exerted on reading educators to increase reading test scores, all avenues of performance have necessarily been placed between the crosshairs of educational scrutiny. In the introduction to their book, *Reading Engagement: Motivating Readers through Integrated Instruction*, editors Allan Wigfield and John Guthrie describe four lines of inquiry that have recently been examined in relation to their motivational connotations:

1. Studies of cognitive strategy development, emphasizing the "deliberate, conscious, effortful nature of strategies" [(Pintrich & Schrauben, 1992) as cited in (Guthrie and Wigfield, 1997, p. 4)] and why students choose or fail to choose to use reading strategies they have been taught;

2. Studies regarding the importance of the contribution of the amount of reading that students do (Anderson, Wilson, & Fielding, 1988; Guthrie et al., 1995; Mori, 2002), which may be the “single largest factor contributing to reading achievement” [italics added] (Guthrie & Wigfield, 1997, p. 5);

3. Studies exploring how motivation and cognition come together to enhance achievement (Wigfield & Eccles, 1992), self-determination models (Deci, 1992; Deci & Ryan, 1985; Deci, Vallerand, Pelletier, & Ryan, 1991), goal-oriented
research (Dweck & Leggett, 1998), and interest in text (Alexander, Kulikowich, & Jetton, 1994);

4. Studies concerned with psycholinguistic interaction (Bloome & Green, 1992; Heath, 1983).

Wigfield defines motivation as the “whys of behavior” and discusses “the engagement perspective on reading (Baker, Afflerbach, & Reinking, 1996; Guthrie, 1996; Guthrie, McGough, Bennett, & Rice, 1996) [in which] both cognitive and motivational aspects of reading are considered” (Wigfield, 1997, p. 14). He narrows the focus of cognitive motivational inquiry to three questions students ask themselves. “Can I succeed?” “Do I want to succeed and why?” and “What do I need to do to succeed?” (Wigfield, 1997, pp. 16-17). In the field of reading education, these questions translate into “Can I be a good reader?” “Do I want to be a good reader and why?” and “What do I need to do to be a good reader?”

Brophy defines motivation as “a theoretical construct used to explain the initiation, direction, intensity, and persistence of behavior, especially goal-directed behavior” (Brophy, 1998, p. 3). He further defines the concept of student motivation to explain “the degree to which students invest attention and effort in various pursuits, which may or may not be the ones desired by their teachers” (Brophy, 1998, p. 3).

Current researchers frequently base their motivational work on what has come to be called the expectancy X value model of motivation, which states that the effort that people are willing to expend on a task is the product of two factors: the degree to which they expect to be able to perform the task successfully if they apply themselves (and thus the degree to which they expect to get whatever rewards that successful task performance will bring), and the degree to which they
value those rewards as well as the opportunity to engage in the processes involved in performing the task itself. (Brophy, 2004, p. 18)

Also known as expectancy theory, this idea evolved from the work of Victor Vroom, who wrote about motivation as it applies to the workplace. His theory, also known as VIE theory, purports that one’s level of motivation is a function of expectancy times instrumentality times valence [(Vroom, 1964) cited in (Ratzburg)]. Valence refers to the level at which one values the outcome of his or her efforts. Instrumentality describes the probability that the effort one expends will, indeed, result in the desired outcome. Expectancy refers to the level at which one believes that he or she is capable of performing the required work. The motivation to accomplish a task or to achieve a goal is a function of these three factors; and if any of the three is missing or is negligible, the level of motivation for that task will likely be nil, or will, in the least, be insufficient to propel the worker to achieve the stated goal. In terms of Vroom’s VIE theory, the questions for reading motivation translate into the following:

- “Do I want to do the work?” (valence),
- “Will the work that I am doing lead me into being a good reader?” (instrumentality), and
- “Can I do the work?” (expectancy).

Several constructs are related to expectancy, including self-concept (LaBenne & Greene, 1969; Rotter, 1966; Weiner, 1974), locus of control (Rotter, 1966; Weiner, 1974), and self-efficacy (Bandura, 1977; Linnenbrink & Pintrich, 2003; Pajares, 1997; Pintrich & Schrauben, 1992; Powell, 2006). This study will focus on the construct of self-efficacy and its effects on students’ levels of expectancy and instrumentality.
Pintrich and Schrauben (1992) define self-efficacy as “individuals’ beliefs about their performance capabilities in a particular domain” (p. 154), which includes their judgments about their abilities to accomplish certain tasks through their own power (Schunk, 1985). Bandura defines self-efficacy as “people’s judgments of their capabilities to organize and execute courses of action required to attain designated types of performances” (A. Bandura, 1986, p. 391). Self-efficacy is, therefore, domain-specific and is not a “global personality trait” (Pintrich & Schrauben, 1992, p. 154). With reference to expectancy theory, researchers have found that students’ self-reported ratings of self-efficacy and their expectancies that they will be successful at a given task are highly correlated (Pintrich, Smith, Garcia, & McKeachie, 1991). Other researchers have also found a significant negative correlation between reading comprehension scores and students’ anxiety levels (Earley, 2007), such levels being affected by their perceptions of efficacy for a given task or set of tasks.

Focus of This Study

First-grade teacher, Mary Bing may have found at least a partial answer to the question posed earlier in this paper, “How does one give the child this desire [to read]?” As a portion of her daily reading instruction, Ms. Bing allows her children to sing familiar songs and chant familiar poems while she prompts them to track the texts of the songs.

I first became aware of Ms. Bing’s song method about 20 years ago when I had an occasional opportunity to teach music to her first-grade students. It appeared to me that
her students learned to read more quickly, more capably, and with more enthusiasm than other first-graders I had taught. I approached Ms. Bing with an inquiry into both her teaching methods and her personal assessment of how her students’ reading skills compared with those of other first graders in her school. She provided me with a simple explanation of her unique method of teaching and responded that although she had never compared her children’s level of achievement with that of other first grade classes, she would certainly be interested in doing so. She reported that it would be important for her to know if her methods were at least equally as effective as other teaching methods. She stated that her experience told her that this was true but that she had no concrete comparisons on which to base this opinion. Because I was in a position at that time to compare her students’ skill levels only anecdotally and only to those of children in schools other than her own, I had little basis on which to make a reliable personal judgment in this matter, but it was not difficult to make the observation that her students were reading well.

Reconnecting recently with Ms. Bing, I learned that she was still teaching first grade, that she was still incorporating the singing and chanting method of reading instruction, and that she still had made no statistical comparison of her children’s reading education outcomes with those of any other first grade classes or students. Because she was eager to determine whether her musical reading instruction was as effective as more traditional instruction and because such findings could have potentially far-reaching effects in the field of reading education, we sought to make such a determination in this dissertation study.
Research Questions

This study sought to answer the following questions:

• Are students’ attitudes toward reading affected by Ms. Bing’s methods of teaching reading?

• Are the achievement levels of Ms. Bing’s students affected by her methods of teaching reading?

• What are the main components of Ms. Bing’s methods of teaching reading?

• How are Ms. Bing’s methods implemented in the classroom?

• Do Ms. Bing’s methods of teaching reading appear to have any unique effects? If so, what are they?

• Do Ms. Bing’s methods affect students’ levels of self-efficacy in reading?

• How might the strategies employed in Ms. Bing’s curriculum generalize to reading education in other classrooms?

Overview of the Research Design

This dissertation study is a naturalistic case study in which I acted as a non-participant observer (Fraenkel & Wallen, 1993)—recording lessons and taking field notes regarding the content, implementation, and effects of those lessons. Starting as nearly at the beginning of the school year as possible, I spent Tuesday and Thursday mornings in Ms. Bing’s classroom, taking copious field notes regarding all aspects of her reading lessons and focusing particularly on behaviors and dialogue that appeared to increase students’ self-efficacy for reading. I documented Ms. Bing’s methods of teaching with
the aim, to the extent possible, of making the outcomes of this study generalizable to other classrooms if the findings so warranted.

I collected data in Ms. Bing’s school until just before Christmas vacation when rehearsals for her class play, followed by an ice storm that closed the school, pre-empted my research.

Concurrent with data collection, I transcribed field notes and continually coded and analyzed them for common themes, categorizing data as warranted. The purpose of continual data analysis was to identify categories and outcomes of strategies that were implemented in the reading lessons and indications of the effectiveness of these strategies as they appeared to relate to children’s attitudes toward reading and achievement in reading.

Ms. Bing provided member checks (Merriam, 1998) throughout the study, and other adults provided member checks of their particular views. Field notes, long-term observations, interviews, and quantitative data provided additional avenues for enhancement of internal validity. Lincoln and Guba (1985) suggest that one can measure reliability by determining whether the results of the given data make sense—if they are dependable and if they are consistent. “The question then is not whether findings will be found again [traditional view of reliability] but whether the results are consistent with the data collected” (Merriam, 1998, p. 206).

The process of fieldnote analysis was reviewed by an audit trail, an independent review of the way in which data were collected and analyzed. In terms of external
validity, Lincoln and Guba (1985) suggest that the generalizability of this study will best be determined by individual readers and educators.

Three times during the school year—near the beginning, middle, and end of the school year—Ms. Bing’s school required the administration of the STAR Reading test to all first graders in conjunction with their Accelerated Reader Program. Results of the administrations of this test in all of the first-grade classes were used as pre- and post-test scores in this study. Additionally, each student in the first grade at Allgood Elementary School was given the Elementary Reading Attitude Survey (McKenna & Kear, 1990) near the beginning of the school year and again near the middle of the school year.

Results from the pre- and post-administrations of STAR Reading Test and the Elementary Reading Attitude Survey (ERAS) were compared for a quantitative indication of the effectiveness of Ms. Bing’s methods and strategies and for triangulation of the qualitative data analysis. The STAR and ERAS scores of Ms. Bing’s 2005-06 class were compared to the overall first-grade scores at Allgood Elementary School for the school year 2005-06, and the STAR scores were also compared for the school year 2006-07.

Significance of This Study

As has been discussed earlier in this paper, methods of teaching reading are controversial, and there appears to be no one method of teaching that is perfectly suited for every student. In her study, Reading Researchers in Search of Common Ground, in which she surveyed experts in the field of reading education, Rona Flippo concluded that “[d]ecisions about reading instruction are multifaceted... and only the classroom teacher
who works with a child every day is in a position to know what is appropriate instruction for that particular child and when” (Flippo, 2001, p. 20). The International Reading Association (IRA) decided in 2000 that “making a difference means making it different” (IRA, 2000, p. 1)—that children have a right to excellent reading instruction that is tailored to the extent possible to each child’s needs. Regardless of the methods of teaching that are available and regardless of the controversy surrounding these methods, there appears to be little equivocation regarding the belief "that reading is the gateway to learning in all content areas and [is] essential for achieving high standards," as acknowledged by the National Education Association's official reading policy (NEA, 2003b). Toward this end, as Rousseau maintained, perhaps more important than method or “gadgets” is the goal of instilling in the child the desire to read (Boyd, 1962).

As parents and teachers can attest, inspiring children to do something they truly do not want to do often results in contention, confrontation, frustration, and futility of efforts. Finding a teaching strategy that makes children want to do what the teacher wants them to do (i.e., to read), without force or coercion, has the potential to revolutionize classrooms, reading instruction, students’ levels of reading skills, achievement in all academic areas, and attitudes toward oneself and toward school.

*Why study this strategy of teaching reading through song lyrics?* Because reading skills are so very important and because motivating children to learn to read is a crucial component of helping children gain those skills, this study has the potential to affect reading education in a positive manner. As teachers and researchers seek ways to incorporate music and other arts areas into the academic curriculum (Andrews, 1997;
Bresler, 1995; Gould, 2000; Hendrix, 1995; Kelley, 1981; Lipson et al., 1993; Matthews, 2001; Nash, 1974; Pressley et al., 1998; Smith, 1995), this study can potentially lend credibility, validity, and guidance to their efforts.

Why perform this particular study? I maintained that if results were to indicate that singing provides a significantly higher level of motivation or of language or literacy insights for young students of reading than do more traditional methods, then the merits of this study need no defense in light of the above explanation of the importance of reading motivation and its potential subsequent achievement. If results were to indicate that singing and chanting provide a level of motivation or of language or literacy insights equal to that of more traditional instruction, then, once again, the merits of this study need no defense in light of the preceding discussion. I reasoned that if it were to be shown that singing detracts from students’ progress in learning to read, then Ms. Bing, and any other teachers who may include similar strategies in their reading lessons, should be made aware of the need to find an alternative method of teaching their children to read, and researchers and curricular specialists should look elsewhere for supportive structures for reading education. The National Educators Association (NEA) states, “Teachers should be supported by parents, skilled education support professionals, communities that value and promote reading, and policies that provide adequate resources and allow them to use their expertise” (NEA, 2003b, p. 1). This dissertation study is an attempt to support reading teachers in the important work they do each day.
CHAPTER TWO

REVIEW OF LITERATURE

“All teachers today are challenged by the increasing diversity of their students, and they all need more effective ways to work with these differences. Music is a language that everyone speaks and understands.” (Dickinson, 1993, Paragraph 19)

Extra-Musical Benefits of Music

A great deal of research has focused on determining music education’s effects on other academic work. One of the earliest formal studies of this type took place in Hungary in the early 1950s, soon after Zoltán Kodály formed his Primary Singing Schools in Budapest, whose curriculum varied from that of the regular Primary Schools only in the fact that music lessons based on singing and literacy were included in their daily schedules. Sandor reported in 1966 that the academic records of children attending these singing schools were much higher than those of children attending regular primary schools. The reason for this finding, he pointed out, “lies in music’s power to educate, and in the fact that it can be used to master other branches of knowledge” (Sandor, 1966, p. 145).

Hurwitz et al. discovered in 1975 that a group of American first graders who were taught music with Kodály’s methods not only performed better on both temporal and spatial tasks than first graders who did not have such training but that they also performed more effectively on reading tests than other comparable groups of first graders who did not receive Kodály training. The researchers observed that the positive effects
on reading continued beyond first grade when the music program was continued (Hurwitz, Wolff, Bortnick, & Kokas, 1975).

As early as 1947 Janet Harris observed that aspects of musical performance such as eye-span and phrasing in the reading of music and the auditory discrimination required to perceive and reproduce musical tones accurately were important skills for children to acquire in remediating “certain reading defects” (Harris, 1947, p. 30). It has traditionally not been unusual for music performance and music education to be touted for their extra-musical outcomes.

Indeed, when vocal music education was introduced into the American public educational system in Boston in 1838 (instrumental music education was not considered at this time), Lowell Mason, the new, volunteer music teacher, was required to teach under auspices of extra-musical objectives. On August 24, 1837, when Thomas Kemper Davis, chairman of a committee charged by Mayor Samuel Eliot with introducing music education into the Boston schools, made his report to the School Committee, he provided several rationales in support of the inclusion of music into the district’s curricula. Among these principles he listed the intellectual, moral, and physical advantages that music education could give to the learner. “[I]t is self-evident that exercises in Vocal Music, when not carried to an unreasonable excess, must expand the chest, and thereby strengthen the lungs and vital organs” [(Davis, 1840, p. 2) as cited in (Miller, 1989, p. 4)]. So that the committee might see its responsibility to “set in motion a mighty power which silently, but surely in the end, will humanize, refine, and elevate a whole community. . .” [(Davis, 1840, p. 11) as cited in (Miller, 1989, p. 6)], Davis reported to
the school committee that music can produce virtuous feelings or degenerate character, depending upon the nature of the music.

The extra-musical value of music education in American elementary schools became a highly debated and closely scrutinized issue in the 1970s and ‘80s, due in part to the elimination and threatened elimination of many music programs, as our country faced high inflation and reduced funding for education (Fields, 1982; Ingrum, 2005; Klotman, 1977; "Music survival: Don't let it be a matter of chance," 1977; Prescott, 1981; Runkel & Early, 1981; "U.S. music education: What's its state of health?," 1977; Youngert, 1963).

While many music educators eschewed this pragmatic approach for fear that it would diminish the integrity of music education purely for music education’s sake (Broudy, 1977), music educators were desperate for arguments to promote the continued existence of our country’s music education programs.

In the face of the severe financial problems besetting many school districts, the role of education in the arts has come under increasingly close scrutiny as school administrators have sought to balance their budgets. Because many people are able to dismiss music and the other arts as educational frills, they find them the logical targets for reductions when school finances are strained. In situations such as these, the effect on music education is crippling. (Wolff, 1979, p. 1)

It was during this time that music became more closely examined as a means to the end of increased academic achievement, not unlike experiences of our more recent past ("The arts and education: New opportunities for research," 2004; Benson, 2000; Burton, 2000; Catterall, 1998, 2002; Hartman, 1999; Hetland & Winner, 2001).

In 1975 Dorothy McDonald proposed that students’ auditory perception and auditory skills could be improved through music education (McDonald, 1975). Such a
belief was perhaps part of the impetus for the 1976 dissertation by Don Lauder entitled *An Experimental Study of the Effect of Music Activities Upon Reading Achievement of First-Grade Students* (Lauder, 1976). As Lauder undertook an experiment involving 144 students, he randomly selected two classes each from three different elementary schools and then randomly assigned experimental or control status to the classes, one of each in all three schools, respectively. While all six classes received music instruction for 35 minutes each week, the experimental classes also incorporated musical activities into their classroom reading lessons. Using methods established by Kodály (Kokas, 1970), Orff (Crinklaw-Kiser, 1996), and Dalcroze (M. D. Johnson, 1993), teachers integrated activities using movement, rhythm, and instrumental performances into their reading lessons. They also included chants, songs, drama, and composition. Although Lauder found a slight increase in reading skills of students in the experimental groups, it was statistically insignificant.

In the same year Babbitt (1976) studied nine experimental groups and five control groups of second-grade reading students to determine whether studying music with a music specialist (experimental groups) made any difference in their reading scores as opposed to studying music with their classroom teachers (control groups). What she discovered during her nine-month study was that, with only one exception, there was no significant difference between the reading achievement of second grade classes whose music lessons were taught by a music specialist and those whose music lessons were taught by the classroom teacher (Babbitt, 1976).
In an attempt to show causation between musical training and increased academic abilities, Nering (2002) performed a study using a sample of ten sets of pre-school and primary aged identical twins. Separating all of the pairs into experimental and control groups, she provided for the children in the experimental group two private 45-minute piano lessons per week for seven months. The children were pre-tested and post-tested with Wechsler standardized intelligence tests, the pre-tests having determined that the groups were intellectually equivalent. The experimental subjects showed significant improvement in verbal and mathematical areas, while the control subjects did not show significant improvement. Nering holds that the findings of her research indicate causation—that private piano study causes increased intelligence in these extra-musical areas (Nering, 2002).

In public schools in Helena, Montana, Harding (1989) conducted research to determine if there existed a statistically significant relationship between the amount of musical experiences children had in early childhood and their language achievement after second grade. Basing her data analysis on information supplied by the parents of 81 beginning third-graders (36 in the category of low-music experience and 45 in the category of high-music experience as determined by the Home Musical Environment Scale), Harding studied the effects of both gender and early musical experience on four different areas of achievement in school: mechanical language skills, expressive language skills, total reading skills, and spelling skills.

The major conclusion of Harding’s research that is pertinent to this discussion is that there does exist a strong relationship between early music experience and three of the
areas of language development—expressive language, total reading, and spelling (Harding, 1989). Although these findings show a positive correlation, there is no basis for causation.

A more recent study, conducted in 2006 by the University of Kansas and directed by music educator and music therapist, Christopher Johnson, in conjunction with Jenny Memmott, confirms that in elementary (third- or fourth-grade) and middle level schools (eighth- or ninth-grade), there exists a positive correlation between exemplary choral and band programs and high test scores. Studying 1,119 elementary school students and 3,620 middle school students from the South, East Coast, Midwest, and West Coast of the United States, researchers first determined the status of the quality of the schools music programs as follows:

Table 2.1: Delineations of music programs in a study by Johnson and Memmott (2006)

<table>
<thead>
<tr>
<th>Level and Type</th>
<th>Ratings</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Elementary:</strong></td>
<td></td>
</tr>
<tr>
<td>General music</td>
<td>Exemplary or Deficient</td>
</tr>
<tr>
<td>No music</td>
<td></td>
</tr>
<tr>
<td><strong>Middle:</strong></td>
<td></td>
</tr>
<tr>
<td>Choral</td>
<td>Exemplary or Deficient</td>
</tr>
<tr>
<td>Instrumental</td>
<td>Exemplary or Deficient</td>
</tr>
<tr>
<td>No music</td>
<td></td>
</tr>
</tbody>
</table>

Elementary students who were taught in exemplary music programs scored higher on both English and math standardized tests than students who received music instruction that was deemed to be deficient. Students in middle school who were taught in exemplary choral programs or deficient instrumental programs scored better on math and
English standardized tests than those students who were in deficient choral programs or no music programs at all (Johnson & Memmott, 2006). Johnson explains, “In most cases, people believe something is better than nothing. . . But in music education, a bad chorus is not better than no chorus at all” (Olson, 2008, p. 23). Writing about this study, Olson discusses the possibility that a number of organizational skills and learning strategies that occur in exemplary music programs can transfer to other subjects and aid students in the acquisition of knowledge in those areas. This study points to the fact that the quality of a student’s exposure to music education is important not only for the music education that the student receives but also for its transfer to and influence on the learning of other subject matter.

**Music and Intellectual Development**

Believing that mere exposure to music could perhaps increase students’ intellectual abilities, Rauscher et al. (1993) performed a study in which college students listened to music by Mozart and then reportedly showed increased spatial-temporal abilities as manifested in tests of pattern analysis, matrices, paper-cutting, and paper folding. This study launched a movement dubbed the “Mozart Effect” (Haroutounian, 2001). A school of thought and corresponding body of marketed materials followed this theory (Campbell, 2001), and some researchers appeared to replicate such findings (Hetland, 2000b; Steele, Bass, & Crook, 1999; Steele, Brown, & Stoecker, 1999).

Although Rauscher et al. (1997) found in subsequent research that the study of keyboard by kindergarten children appears to increase their spatial capabilities, other
researchers were unable to replicate their findings (Hui, 2006; McCutcheon, 2000; McKelvie & Low, 2002; Steele, Brown et al., 1999; Taetle, 1999).

According to a study directed by Chan (Ho, Chung, & Chan, 2003), children with strings training did display significantly better verbal memory than their counterparts without such training, and the longer their training lasted, the better their verbal memories became. These psychologists at the Chinese University of Hong Kong studied 90 boys between the ages of 6 and 15. Half had musical training as members of their school’s string orchestra program for one to five years, in addition to lessons in playing classical music on Western instruments. The other 45 participants were schoolmates with no musical training. The researchers gave the children verbal memory tests to see how many words they could recall from a list and a comparable visual memory test for images. Students with musical training recalled significantly more words than the untrained students, and they generally learned more words with each subsequent trial. After 30-minute delays, the trained boys also retained more words than the control group. There were no such differences for visual memory. The researchers found it noteworthy that verbal learning performance rose in proportion to the duration of musical training.

Schellenberg (2004) found that even the potential for learning rose after musical training when he divided 144 six-year-olds into four groups: one with piano training, one with the Kodály method of vocal training, one with drama training, and one with no specific training. The groups with piano and vocal training showed slight increases in IQ scores; the group with drama training showed a smaller increase; but the control group showed no significant change. Schellenberg himself admitted, however, that
confounding variables outside the realm of the classroom could have affected these findings and that intellectual activities other than music could potentially exert the same influence on IQ scores.

Particularly scrutinized is the correlation of music training with math scores, exemplified notably by Graziano, Peterson, and Shaw (1999). One hundred thirty-six second graders from an inner city school were divided into six groups. The first group \((n=26)\) was given training in spatial-temporal math for two one-hour sessions a week for a total of 61 sessions via a video game that was designed by the researchers to train spatial ability and spatially-presented proportional math concepts and via piano training for that same period of time, consisting of learning to read music and to play simple melodies. The second group \((n=29)\) received the same amount of video training but received English-language training (reading, pronunciation, spelling, sentence structure) via a computer instead of receiving piano lessons. The third group \((n=28)\) received no special training at all. Three additional groups received only the video game training—one group for one month, one group for two months, and one group for three months. All children were tested both before and after the training with tasks from the WISC-III: object assembly, block design, and picture arrangement. They were also post-tested with a spatial-temporal math video game evaluation, which tested the same types of spatial problems that were presented in the video training. Shaw et al. found that the first group (video and piano training) scored 15% higher on the spatial-temporal math video game evaluation than the second group (video and English training) and that both these groups scored higher than the group that received no video training at all. The remaining three
groups showed a positive association only between the length of their training and their scores on the math video game evaluation.

Do the same findings that appear to occur with music and math also correlate for music and other academic endeavors? “Does music really make us smarter?” queried Donald Hodges, director of the Music Research Institute at University of North Carolina at Greensboro. Hodges posits that music educators sometimes have “the tendency to jump on a bandwagon before we know if it has wheels or where it’s going” (Hodges, 1999, p. 31). He answers his question with no, maybe, and yes: no, because merely listening to music does not make one smarter; maybe, because there may possibly be connections between music and other cognitive processing strategies; yes, because musical experiences alter the makeup of the brain, both in terms of the structure of the brain and in terms of information processing (Zatorre, 2003). Hodges explains that it is important to keep in mind that nearly everything one does alters one’s brain in some way, so there is nothing magical about music in this regard. More interesting, however, are the ways in which music can change one’s brain.

Music and Brain Development

The auditory cortex (the part of the brain that processes sounds) of people with absolute pitch and of people who started serious study of music prior to age seven is larger on the left side than on the right (Schlaug, Jancke, Huang, & Steinmetz, 1995). Lee, Chen, and Schlaug (2006) found the corpus callosum of musicians who began their training early in life to be larger than non-musicians. The corpus callosum is the system
of neural fibers that connects the two hemispheres of the brain (Bergen & Coscia, 2001), and Schlaug found that it was 10 to 15 percent larger in musicians who began study prior to the age of seven than it was in nonmusicians or later-beginning musicians ("Music of the Hemispheres," 1994). Because there appears to be a positive correlation between the size of the corpus callosum and the number of fibers crossing through it, these data indicate a difference in interhemispheric communication. In a study by Elbert et al. (Elbert, Pantev, Weinbruch, Rockstrub, & Taub, 1995) violinists who began training early in life presented a larger right somatosensory cortex (the part of the brain that processes information related to the left hand) than others, even other violinists who started playing as teenagers or later. Likewise, electroencephalograph brain mapping shows differences between trained and untrained musicians (Petsche, 1992). Hodges concludes his answers by stating, “In sum, brain research indicates that music learning experiences change brain organization and brain processing. Trained musicians’ brains are organized differently and operate differently than untrained musicians’ brains” (Hodges, 1999, p. 32).

While researching differences in the brain hemispheres of musicians and non-musicians, Tramo asked the question, “Is it possible that boosting brain activity through music could improve math, reading, and spatial skills?” (Tramo, 2001, p. 56). He cautions that the short-lived effects of passive encounters with music should not be confused with the stronger effects of practice and training but that we should not discount the positive effects that such musical experiences can have on test performance, blood pressure, mood state, and pain perception and how they can affect even oxygen
saturation, heart rate, and weight gain in premature infants in intensive care units (Coleman, Pratt, Stoddard, Gerstmann, & Abel, 1997).

As stated previously, music did seem to have an effect on students who were studied by Schellenberg (2004), as they presented small increases in IQ after their musical training. Schellenberg himself is quick to point out, however, that other factors such as school attendance may have played into the results. In another study, however, he found that music lessons promoted the ability in students to decode prosodic cues in speech (Thompson, Schellenberg, & Husain, 2004). Prosodic cues include changes in duration, pauses, and alteration in intensity or fundamental frequency—pieces of information that provide clues regarding language form (Fisher, Plante, Vance, Gerken, & Glattke, 2007). Schellenberg postulates that music lessons can help to develop the capacity for reasoning and critical thinking, and he also maintains that indications of temporarily increased spatial abilities (Hetland, 2000a, 2000b; Rauscher et al., 1997; Rauscher & Zupan, 2000), dubbed the Mozart Effect (Campbell, 2001; Haroutounian, 2001; Nantais & Schellenberg, 1999), may actually be the results of a more positive mood and of relatively optimal levels of arousal (Thompson, Schellenberg, & Husain, 2001), produced by listening to music, possibly leading to higher levels of performance on spatial tasks.
Incorporation of Singing into Reading Education

Numerous researchers have verified a correlation between rhythmic abilities and reading skills (Atterbury, 1983; David, Wade-Wooley, Kirby & Smithrin, 2007; Horne, 2002; Mitchell, 1994; Niamatali, 1990; Valerio, 2002; Wood, 2006), and still other studies point toward the increase of test scores in various academic areas when the arts (music, visual arts, drama, dance) are incorporated into classroom routines as a part of thematic units (Gould, 2000; Hendrix, 1995; Lipson, Valencia, Wixson, & Peters, 1993; Matthews, 2001; Schellenberg, 2004; Stapleton, 2003). Additional research indicates that the study of music increases learning in ESL classrooms (Fitzgerald, 1994) and in overall academic learning (Hetland & Winner, 2001; Winner & Hetland, 1999).

In a study of fifth grade students, Andrews (1997) compared reading achievement and reading attitudes between an experimental group that received integrated music instruction during their biweekly reading classes and a control group that had no such integrated instruction. The instructionally-integrated music approach was deemed to have affected the experimental group significantly in both reading achievement and attitudes (Andrews, 1997).

The amount of time that students are engaged in reading is an important indicator of their reading achievement levels. In 1988, Anderson, Wilson, and Fielding performed a study of 155 fifth-graders who self-reported every day how much time they spent on a wide range of out-of-school activities for a period of up to 26 weeks. Among all the ways children spent their time, the reading of books was the best predictor of several measures of reading achievement. Reading books, for example, was the out-of-school
activity that held the strongest association with reading proficiency (Anderson, Wilson, & Fielding, 1988).

We educators must ask ourselves, however, which came first--the chicken or the egg? Did the children read more because they were better readers or were they better readers because they read more—or both? Did they read more because there was more reading material available to them? Did they merely appear to read more because they inflated in their reports the amount of time they read? Regardless of the answers to these questions, the Matthew effect was surely at work; for the rich were getting richer, and the poor were getting poorer (K.E. Stanovich, 1986; Walberg & Tsai, 1983). Logic and research (Morgan & Fuchs, 2007) support the idea that because there is a correlation between the amount of time one spends reading and one’s reading achievement level, then an effective way to improve children’s reading achievement is to find ways to motivate them to spend more time engaged in reading.

Junkins (2003) sought to determine if the inclusion of singing in a Chicago public school would form the basis for a change in attitude of the mostly Hispanic ESL fourth and fifth graders. She performed a mixed method, quasi-experimental study, focusing on one school that had a music program based mainly on singing and another school that offered a mixed program of both instrumental and vocal music. In the fall and then again three months later she administered the Elementary Reading Attitude Survey (ERAS) (McKenna & Kear, 1990) to students in all of the sample classes. She found no quantitatively significant difference in the attitudes of students in the two schools. She maintains, however, that qualitative data, taken in the form of student interviews, indicate
that the students in the vocal program did have a more positive attitude toward reading. Owing to a large number of absences on the day that the post-experiment ERAS was administered, however her quantitative findings may have been compromised (Junkins, 2003).

A large body of anecdotal information exists regarding the apparent effectiveness of the teaching of beginning reading with song lyrics (Algozzine & Douville, 2001; J. Allen, 2001; R. H. Allen, 2002; Lynette Bradley & Bryant, 1985; Brown & Brown, 1997; E. Church, 2001; E. B. Church, 2002, 2004; Compton, 1999; Dean & Gross, 1992; Douville, 2001; Doyle, 1975; D. Fisher & McDonald, 2001; D. Fisher, McDonald, & Strickland, 2001; Harp, 1988; A. Johnson, 1995; Kay, 1991; Kolb, 1996; Langfit, 1994, 1996; "Learning through language: Stories, songs & sounds," 1994; MacLean, Bryant, & Bradley, 1987; McCracken & McCracken, 1987; Morrow-Pretlow, 1994; Muller, 1996; Nash, 1974; Painter, 1989; Renwick, 2002; Smith, 2000; Wiseman, 1992; Wright, 1977; Yaacob, 1973), and a number of studies positively correlate music reading skills with textual reading skills (Barwick, Valentine, West, & Wilding, 1989; Bilhartz, Bruhn, & Olson, 2000; Dalton, 1952; Hahn, 1987; Wheeler & Wheeler, 1952). There is relatively little organized research, however, that deals specifically with the effectiveness of the inclusion of singing and chanting into daily reading lessons. Some of the studies that do deal with singing, chanting, and reading are geared specifically toward students with reading disabilities.

As a music teacher in Northport, New York, in 1972, Diane Nicholson sought to determine whether specifically-designed music instruction could help “slow” learners
improve reading readiness skills. In this case the “slow” learners were divided into two
groups of 25 students, all of whose IQs were in the range of 85-90 as tested by the
Stanford Binet Intelligence Test and whose ages ranged from six to eight. Specifically,
she sought to find out the following information:

1) The extent to which melody and rhythm in music can help increase attention
   span;
2) Whether music can aid in the development of certain concepts, such as high
   and low, loud and fast, heavy and light, fast and slow;
3) If letters in the alphabet can be connected to musical pitches;
4) If the use of music can develop and improve discrimination for paired groups
   of letters that frequently presented difficulties to her students due to their
   similarities and differences.

The control group received two 60-minute periods of music instruction per week in the
same manner in which Nicholson had previously taught kindergarten children. The
experimental group received the same amount of music instruction, but their lessons were
specifically designed to address Nicholson’s goals. As measured on the Metropolitan
Readiness Test and the Botel Test of Reading Achievement, scores indicated that music
can, indeed, improve “slow” children’s learning with regard to the alphabet and to
readiness skills, can help them attend to the tasks at hand, and can make an experience
more meaningful so that memory is enhanced (Nicholson, 1972).

Because Marguerite Green (2000) realized that her special education preschool
students had particular difficulty in the retelling of stories, she composed melodies to
accompany children’s books so they could sing their books during story time. She included these songs in a qualitative study, the results of which were based on her observational data. Over the course of the first eight months of the school year, she presented 18 story books to her class, nine of them through traditional means and nine of them with musical intervention. The children, 10 four-year-olds in her morning class, both recited and clapped the words in rhythm, in addition to singing them. The sung books lend themselves well to this treatment.

- *Brown Bear, Brown Bear, What Do You See?* (Martin, 1999a),
- *It Looked Like Spilt Milk* (C. G. Shaw, 1992),
- *Polar Bear, Polar Bear, What Do You Hear?* (Martin, 1999b),
- *Quick as a Cricket* (Wood, 2000),
- *Sheep in a Jeep* (N. E. Shaw, 1997),
- *Silly Sally* (Wood, 1994),
- *The Napping House* (Wood, 1996),
- *There Was an Old Lady Who Swallowed a Fly* (Taback, 1997),
- *Who is the Beast?* (Baker, 1994).

The nine books that were presented through traditional means include the following titles:

- *Anansi and the Moss-Covered Rock* (Kimmel, 1990),
- *Corduroy* (Freeman, 1968),
- *Elmer* (McKee, 1989),
- *Patrick’s Dinosaurs* (Carrick, 1983),
• *Sleepy Bears* (Fox, 1999),
• *The Jacket I Wear in the Snow* (Neitzel & Winslow, 1997),
• *The Paper Bag Princess* (Munsch, 1986),
• *The Very Hungry Caterpillar* (Carle, 1994),
• *Tops and Bottoms* (Stevens, 1995).

Seeking to determine if the singing of storybooks would affect her students’ emergent literacy skills and if they would influence the choices that students made when they entered their reading centers, Green found a direct relationship between the use of music as an instructional strategy and a positive impact on her students’ reading skills, some of which showed a significant rise in achievement. Other findings include, but are not limited to, the following.

• Children enjoyed story time, as they increased their participation levels in the story times that included singing.
• Their understanding of print concepts increased, as they knew when to turn the pages.
• They more easily made predictions.
• They preferred to retell a story by singing it rather than by speaking. Their ability to retell books musically transferred to their spoken voices.
• Articulation errors decreased significantly when the songs were sung. Green considered this achievement to be highly significant.
• The story time that used a musical approach integrated four emergent literacy skills: learning to retell a story, sequencing events, rhyming, performing rhythmically.

• Children chose to read books at a higher rate if they had fewer words on the page. The books *Brown Bear, Brown Bear, What Do You See?, Silly Sally*, and *Polar Bear, Polar Bear, What Do You Hear?* were selected more frequently than books that contained more detailed pictures and more text (Green, 2002).

When Angela Reis (2001) accepted a job teaching kindergarten, she immediately began to seek ways to motivate her children to read. She selected ten students of varying abilities and used them as subjects for a qualitative study regarding the regular inclusion of music into her classroom. She focused most closely on four children—a Caucasian girl, a Filipino girl (ESL), a Caucasian boy, and an African-American boy.

Through observations, student and parent interviews, and interviews of other teachers in the school, all of which took place during the last six months of the school year, Reis collected data. Soliciting the assistance of the school’s music teacher to select songs that were developmentally appropriate for her children, she implemented three categories of musical activities into her classroom.

1) “Morning music”—included *America* and seasonal songs

2) “Learning concepts” music—included songs about colors, counting, days of the week, and the alphabet

3) “Reading skills” songs—included songs that challenged the students to recall events in the song, make predictions, and remember vocabulary. Reis wrote
lyrics in the form of big books that the students took turns tracking while the
class sang.

Reis summarized the analyses of her classroom observations in two findings.

1) Children are naturally attracted to singing, and the music seemed to help them
focus more easily on the tasks at hand, thereby setting the tone for successful
learning by providing a comforting, enthusiastic environment that Reis feels
children must have in order to feel at ease and to learn optimally.

2) Music has positive effects on reading activities. Reis states, “The repetition of
these musical activities helped ‘cement the learning’ taking place” (Reis,

Reis concludes her study with the statement, “I have been a witness to significant
improvement in students’ attitudes toward reading and in their exploration of reading
concepts (such as learning the directionality of text, finding punctuation, and identifying
letters and words within text). Music, in more ways than one, leads to student (especially
in early learners) success” (Reis, 2001, p. 102).

Colwell and Murless (2002) studied a group of 5 students, ages 6 to 8, who were
diagnosed with learning disabilities and who participated in a different treatment each
week that was designed to increase their ability to learn new words. Each week they
received a pre- and a post-test on a set of new words, and each week their treatment was
different. During week 1 they had reading instruction as usual. For week 2 they were
placed into 2 different groups—one that sang the targeted words and one that chanted the
targeted words. In week 3 they switched music and chanting groups. During week 4
they went back to their regular reading instruction. Two weeks later they were retested on all of the new words. Results indicated that participants’ reading accuracy improved regardless of condition, although they were more on-task during the music conditions. The small sample of students, the narrow focus on only students with learning disabilities, and the short amount of time devoted to the two music conditions prevent Colwell’s and Murless’s study from producing any significant information with regard to this present study except for the finding that reading engagement was enhanced during music conditions (Colwell & Murlless, 2002). This finding, in itself, may be highly significant.

Rarely has research focused specifically on the effects of using singing as a strategic part of a reading program, however Gambill did perform one such study in 1999. Set in an early childhood development center, the research focused on a class of 19 three- to six-year-olds, primarily from low-income, minority families. Through the incorporation of rhymes, songs, and singing games into the daily routine, the collection of data during classroom observations, and the collection of work samples, Gambill maintained that the students’ language and literacy learning were positively influenced, and one of the positive outcomes was the children’s increased levels of engagement with text through their singing (Gambill, 1999).

Perhaps the study that has the most direct bearing on this current research is an investigation that was carried out with two groups of second-graders in the Mid-West in the 1980s by Marilyn Kingswriter (1998) in which she sought to determine if there were a correlation between students’ attitudes toward reading and the addition of music to
literacy lessons. Kingswriter used the Elementary Reading Attitude Survey (ERAS) (McKenna & Kear, 1990) as a pre-test and as a post-test, and between the two administrations she taught eight weeks of literacy lessons into which she included musical elements for one-half of the students. She met with both groups separately for three 30-minute sessions per week. Group I received whole class literacy instruction, which included read-alouds, unison reading, group discussions, question-and-answer periods, buddy reading, drama, story-webbing, listening, creative writing, invented spelling and illustrations for a class book, rhyming activities, prediction, and sequencing. Group II received the same instruction with musical elements included—the reading and singing of words to stories, the use of rhythm instruments and xylophones, chanting, clapping, finger-snapping, and patschen (patting legs—from the Orff tradition of music education).

Although Kingswriter found no statistical differences in reading attitudes between the two groups, she determined that at least the musical intervention did not appear to impair the learning of the students in the experimental group. She reports that both she and the second-grade classroom teachers did observe differences in the behaviors of the students, stating that the students in the music treatment group more eagerly came to class and were more ready to begin their lessons so that their class time was used more effectively and efficiently. She maintains that the questions they asked were of a higher level than those of the other group and that they remained more attentive. Kingswriter observed that their level of involvement was greater and more enthusiastic, and their expressiveness in singing appeared to result in more expressive reading. The classroom
teachers reported more positive attitudes toward listening to poetry and toward reading in
general among the students of the music treatment group. While the short period of
intervention may have confounded the quantitative results of the study, one might still
expect the teachers’ reports of affective results to mirror those of the survey findings.
Kingswriter offers no explanation for this possible discrepancy.

In light of Kingwriter’s findings, it is not surprising that Erikson (1997) had
similar results with her study. Working with 26 third- and fourth-grade students with
learning disabilities, she examined the effects on word recognition, reading
comprehension, and oral reading of the inclusion of adapted song lyrics into reading
instruction. During the intervention, stories were read by the control group and sung by
the experimental group. Students were pre-tested and post-tested on their skills in the
three focus areas and post-tested with an attitudinal questionnaire. Although the use of
singing did not have a significant effect on the skills that were evaluated, the results of
the attitudinal questionnaire indicated a more positive response to instruction by the
experimental group. These more positive attitudes may well have resulted in increased
engagement in the learning process.

Guthrie (2000) reports that engagement and reading achievement maintain a
strong relationship, as engagement in reading can not only compensate for low
achievement that is attributed to low socio-economic status and low family educational
background but can also help readers to overcome obstacles and take charge of their own
growth in reading (J. T. Guthrie, Schafer, & Huang, 2001).
Reading Engagement

Skinner and Belmont (1993) refer to children who are engaged in learning as the children who will “stay in school longer, learn more, feel better about themselves, and continue their education after high school” (E.A. Skinner & Belmont, 1993, p. 571). In a discussion of struggling readers Victoria Purcell-Gates (2001) states that when they do become engaged in the reading process, they see and feel themselves actually reading and getting pleasure and satisfaction from it. . . They begin to consider the possibility that this is something that they can do. They begin to try, take risks, and push themselves, all necessary components of further development. (Purcell-Gates, 2001, p. 127)


What is it that motivates children to become engaged, not only in reading but in any activity? Some researchers insist that engagement is part of a bigger picture of motivation called expectancy X value model of motivation. Also known as expectancy theory, this theory maintains that one’s level of motivation is a function of expectancy, the level at which one believes that he or she is capable of performing the required work, times instrumentality, the probability that the effort one expends will, indeed, result in the desired outcome, times valence, the level at which one values the outcome of his or her efforts. In terms of expectancy theory, the questions for reading motivation translate into the following:

- “Do I want to be a good reader?” (valence),
• “Will the work that I am doing lead me into being a good reader?”

(instrumentality),

• “Can I do the work?” (expectancy).

Pintrich and Schrauben (1992) define self-efficacy, a component of expectancy, as “individuals’ beliefs about their performance capabilities in a particular domain” (p. 154), which include their judgments about their abilities to accomplish certain tasks through their own power (Schunk, 1985). As students engage in tasks, they observe their own performances and compare them to the performances of others. Students whose performances in reading equal or surpass those of their friends are apt to feel efficacious about reading and are therefore more likely to become even more engaged: enhanced self-efficacy, motivation, and achievement sustain students’ self-efficacy for learning and lead them to set new goals when they master their present ones. Skunk and Zimmerman (1997) suggest that the level of self-efficacy need not be extremely high, for if it is, students may feel overconfident and may then become slack in their efforts, thwarting their potential for learning. They list four sources from which learners can obtain information with which to appraise their self-efficacy for a particular task: actual performance, vicarious experiences, forms of persuasion, and physiological reaction (Schunk & Zimmerman, 1997, p. 36).

In general, successes raise efficacy and failures lower it. Students acquire efficacy information socially by comparing their overt performances with those of others, such as when they compare a written essay with that of a similarly performing classmate (Schunk, Hanson, & Cox, 1987).
Is it possible that children who compare their abilities to read the words of songs while they sing them, even though the words may be only memorized and not actually read at all, acquire efficacy information that tells them they are just as successful as their peers? After all, they are as successful—at singing and fingerpointing if not at reading per se. Does this potential high level of self-efficacy translate into continued engagement, rather than into the feelings of failure that often accompany children whose efforts in traditional reading instruction are not equal to that of their peers? The activities in which we feel most successful are the activities in which we want to persist, and persistence in reading education is a must for young learners. Does the inclusion of singing, therefore, lead to persistence instead of resistance and ultimately to more successes in reading, leading to even more successes? This present study investigated these questions, among others, and one of the first questions involves methodology.

**Methodology**

The decision to perform this study as a mixed methods study was fairly obvious, but details beyond that determination were more difficult to select. Because I wanted to work, at least initially, within the framework of an established theory, expectancy theory, and to focus on a component construct, self-efficacy, it appeared prudent to begin data collection under the auspices of the constant comparative method of qualitative research.

The overriding objectives of the constant comparative method are the determination of patterns in the data and the subsequent grouping of those patterns into categories. Developed by Glaser and Strauss (1967), the constant comparative method of
data analysis was originally established as a means of developing grounded theory, a theory-after method of research. Constant comparative analysis has subsequently been recognized and utilized by researchers who do not necessarily want or need to construct a substantive theory through their research.

Merriam (1998) provides a concise summary of the techniques involved in constant comparison analysis:

The basic strategy of the method is to do just what its name implies—constantly compare. The researcher begins with a particular incident from an interview, field notes, or document and compares it with another incident in the same set of data or in another set. These comparisons lead to tentative categories that are then compared to each other and to other instances. Comparisons are constantly made within and between levels of conceptualization until a theory can be formulated. (Merriam, 1998, p. 159)

Bits of data—incidents, participants’ remarks, any pertinent observations—are called *units of data* and are sorted into groupings with common characteristics. Miles and Huberman refer to these groups as “intellectual bins, containing many discrete events and behaviors” (Miles & Huberman, 1994, p. 18), and “starting with them (deductively) or getting gradually to them (inductively) are both possible” (Miles & Huberman, 1994, p. 17). Into these bins go *units of data*—“any meaningful (or potentially meaningful) segment of data. . .” (Merriam, 1998, p. 179). A unit of data can be as small as a word a participant says or as large as several pages of field notes describing a particular incident. Lincoln and Guba (1985) delineate two criteria that qualify a piece of information as a *unit of data*. It must be (1) *heuristic*, revealing information that is relevant to the study and that also causes the researcher to read between the lines, and it should be (2) “the
smallest piece of information about something that can stand by itself—that is, it must be interpretable in the absence of any additional information other than a broad understanding of the context in which the inquiry is carried out” (Lincoln & Guba, 1985, p. 345).

Cresswell (1998) advocates five types of data and corresponding analyses for case studies.

- Categorical aggregation—looking for categories in the data,
- Direct interpretation—looking for meaning from single instances,
- Establishing patterns—while also looking for a correspondence between two or more categories,
- Naturalistic generalizations—generalizations that people can learn from the case,

Yin (2003) recommends three general strategies for data analysis.

- Relying on theoretical propositions that led to the study,
- Thinking about rival explanations,
- Developing a case description.

While qualitative researchers may disagree about the timing of theory generation, there is little dispute that data collection must be extensive and that data analysis must occur in conjunction with the data collection phase in order that it may determine the direction of further data collection. There is also little argument that category (bin)
construction is the foundation of such data analysis. Indeed, Merriam states that

Hewitt-Taylor (2001) describes specific, concrete steps that can be taken in the
use of constant comparisons that she purports will make the unwieldy job of data analysis
as manageable as possible. She describes constant comparative analysis as “. . . a method
of analysing [sic.] qualitative data where the information gathered is coded into emergent
themes or codes. The data is constantly revisited after initial coding, until it is clear that
no new themes are emerging” (Hewitt-Taylor, 2001, p. 39). Hewitt-Taylor recommends
coding data in themes and then into categories. Coding takes place when the researcher
reads all documents garnered from the data collection process and attributes a code to
salient sentences, paragraphs, or sections of the writings. The codes, representing themes
or ideas expressed by artifacts and in observations, are written on hard copies of the
documents in the related sections. Notes are made about decisions concerning how
particular data units are coded. These codes are generated from the data (emerge from
the data), however, and are not to be preconceived.

Hewitt-Taylor admonishes that data should be analyzed as soon as possible after
they are collected so that “qualitative elements of the encounter recorded in the data can
be recalled as accurately as possible” (Hewitt-Taylor, 2001, p. 40).

Once coding is finished, codes that hold common elements can be merged into
categories. (Codes may be placed into more than one category.) Finally, categories that
are derived from coding analysis should be “clustered around each research question they
contributed to answering” (Hewitt-Taylor, 2001, p. 40). (Categories may be used to
answer more than one research question.) Information regarding each question is then examined and a report compiled.

As data units are extracted, codes are attached, categories are derived, themes are described, questions are answered, and the report is written; then an audit trail (Lincoln & Guba, 1985) becomes obvious, not only facilitating the audit process but also establishing credibility.

Credibility is one of the most important goals for which the researcher must always strive. Validity, defined by Eisenhart and Howe as “the trustworthiness of inferences drawn from data” (Eisenhart & Howe, 1992, p. 644), is of supreme importance in all research and boils down to common sense, according to Maxwell (2005). “... I use validity in a fairly straightforward, commonsense way to refer to the correctness or credibility of a description, conclusion, explanation, interpretation, or other sort of account” (Maxwell, 2005, p. 106). He further describes the key to an increase in validity as that of determining and extinguishing threats to the validity of the project, i.e., ways in which the researcher could be wrong. Validity, therefore, consists of the means by which the researcher identifies and rules out such threats or explains them sufficiently.

While quantitative researchers take strong measures prior to the implementation of their experiments to diminish the import of such threats, qualitative researchers do not have this luxury. They may predict such threats and take whatever measures are possible to avoid them, or they may explain such threats and how they can be overcome in the event they are encountered, but Maxwell (2005) contends that the researcher’s best
course of action is to provide a clear argument that the research design will deal adequately with such threats.

Maxwell categorizes validity threats into those of bias and reactivity. Bias involves the subjectivity of the researcher and how his or her values and beliefs may influence the outcome(s) of the study. Reactivity refers to the effect that the researcher’s presence may have on the participants of the study. He provides a checklist of research characteristics that he maintains will assist the researcher in maintaining credibility while admonishing the researcher to keep in mind that these strategies work only if you actually use them. Putting them in your proposal as though they were magical spells that could drive away the validity threats and criticism of the proposal won’t do the job; you will need to demonstrate that you have thought through how you can effectively use them in your own study. Not every strategy will work in every study, and even trying to apply all the ones that are feasible might not be an efficient use of your time. (Maxwell, 2005, p. 100)

Maxwell’s checklist for validity includes

- Intensive, long-term involvement;
- “Rich” data;
- Respondent validation (member checks);
- Intervention—refers to the fact that merely because the study is being performed, portions of the study may be changed by the participants—should be recognized and accounted for by the researcher;
- Searching for discrepant evidence and negative cases;
- Triangulation—collecting information from a variety of individuals, settings, and methods;
• Quasi-statistics—“Any claim that a particular phenomenon is typical, rare, or prevalent in the setting or population studied is an inherently quantitative claim, and requires some quantitative support” (p. 112). [Becker (1970) coined the term *quasi-statistics*.]

• Comparison (How does one datum unit differ from another?) (Maxwell, 2005).

Eisenhart and Howe (1992) differentiate between internal and external validity, instructing that internal validity refers to the credibility of the design and implementation of the study, i.e., the factors taken into account by Maxwell’s checklist above, and that external validity refers to the possibility of generalizing the results of the study to other populations and contexts. “For external validity, the researcher must show that the characteristics of the people, settings, and variables that define the experimental conditions are unlikely to matter when the treatment is applied to other targeted populations and situations” (Eisenhart & Howe, 1992, p. 645).

Campbell (1963) created two lists of factors that threaten internal and external validity, respectively. The threats he listed for internal validity are cited by Eisenhart and Howe (1992).

• Historical events occurring between measurements
• Maturation of subjects between measurements
• Subject selection effects on results
• Interaction of maturation and selection effects on results
• Loss of subjects
• Testing effects
Changes in instrumentation

Statistical regression toward the mean of groups originally chosen.

Regarding external validity, Campbell cited the following threats:

- Differences in likely response to treatment (reactive effects of treatment)
- Differences in likely response to testing (reactive effects of testing)
- Multiple treatment interference
- Subject selection effects on applications (Eisenhart & Howe, 1992).

While some threats to validity can be diminished by the research design, Goetz and LeCompte (1984), as cited in Eisenhart and Howe (1992), add the following characteristics to the description of a valid design.

- Completeness— Does the report of the study contain all the elements considered necessary for a research report of this kind?
- Appropriateness— Are the approach and design used effective and suitable for the research questions posed?
- Comprehensiveness— Is the scope of the study large enough to address convincing the questions posed?
- Credibility— Are the conduct and results of the study believable?
Eisenhart and Howe describe “five general standards for validity in educational research”:

- The data collection techniques employed should fit, or be suitable for answering, the research question entertained. . . research questions should drive data collection techniques and analysis rather than vice versa.
- Application of specific data collection and analysis techniques must be effective.
- Subjectivities must be made explicit.
- Valid research studies . . . must include discussion of values, that is, of the worth in importance or usefulness of the study and of its risks
- Comprehensiveness is required “in the sense of being alert to and able to employ knowledge from outside the particular perspective and tradition within which one is working and being able to apply general principles for evaluating arguments,” (for example, triangulation) (Eisenhart & Howe, 1992, pp. 658-663).

One measure of external validity is the generalizability of the findings of the study. Bogdan and Biklen define generalizability as “whether the findings of a study hold up beyond the specific research subjects and the setting involved” (Bogdan & Biklen, 1992, p. 44).

**Four Blocks Method of Literacy Education**

Comprehensiveness is required not only in data collection and analysis but also in disclosure to the reader of important information that will add to the understanding and credibility of the study. Into this category falls information regarding the Four Blocks
Method of Literacy Education, for it was required that all first-grade teachers at Allgood Elementary School teach literacy through this method.

The creators of this approach intended *Four Blocks* to be a framework for teaching (P. M. Cunningham, Hall, & Sigmon, 1999), not a prescription, and large amounts of instructional support are available through publications relating to this framework. These blocks outlined in this framework are:

- The Guided Reading Block,
- The Writing Block (called “Writers’ Workshop” by some educators),
- The Working with Words Block [includes “Word Wall” (phonics) work],
- The Self-Selected Reading Block (called “Readers’ Workshop” by some educators) (P. M. Cunningham, Hall, & Defee, 1998, pp. 653-656).

The amount of time allotted to each block and the order of the blocks may change, depending on the dictates of the school’s schedule and the specific needs of the students and the teachers, but the purposes of the blocks do not change. These purposes are aptly described by the title of each block of instruction.

Although not necessarily the first block to be explored during each day’s instruction, the Guided Reading Block is often the first segment of instruction that is mentioned by educators. While guided reading typically centers on Big Books (books that have been enlarged to a degree that allows everyone in the class to read them simultaneously, usually with the teacher’s lead) and on the basal readers that have been adopted by school districts, the use of other types of books is desired, and various reading strategies are encouraged. Some of these strategies include choral reading, echo reading,
shared reading, and partner reading. While strategies and materials may vary from classroom to classroom, the purposes and goals of the guided reading block do not change.

“The purposes of [the guided reading block] are to expose children to a wide range of literature, teach comprehension strategies, and teach children how to read material that becomes increasingly harder” (P. M. Cunningham et al., 1999, p. 43), and more specific goals are to

- Teach comprehension skills and strategies,
- Teach children how to read different types of literature,
- Develop background knowledge, oral language, and meaning vocabulary,
- Provide as much instructional-level reading as possible,
- Maintain the self-confidence and motivation of struggling readers (P. M. Cunningham et al., 1999).

Because children learn to read by writing as well as by reading (Burriss, 2002; Kamii & Manning, 2002; D. Strickland, 1998; D. S. Strickland & Morrow, 1989), the Writing Block is an important component of the Four Blocks approach. Children write, edit, and publish their work. They also share their writing in the “Author’s Chair” (P. M. Cunningham et al., 1999, p. 86) in which they assume the role of an author and read their work to the rest of the class. “One way children learn to read is by writing. For struggling children, their own writing is sometimes the first thing they can read, [and the goals of the Writing Block are to]

- See writing as a way to tell about things
• Write fluently
• Learn to read through writing
• Apply grammar and mechanics in their own writing
• Learn particular forms of writing
• Maintain the self-confidence and motivation of struggling writers” (P. M. Cunningham et al., 1999, p. 87).

The Working with Words Block is perhaps the most famous of the Four Blocks, for it includes work with the Word Wall (P. M. Cunningham, 1991), which can be seen in many early childhood classrooms. Phonics instruction is incorporated into this block, and “children learn to read and spell high-frequency words and the patterns that allow them to decode and spell lots of other words” (P. M. Cunningham et al., 1999, p. 123). Word families are explored. For example, the word family of “an” will include the words ban, can, Dan, fan, Jan, man, Nan, pan, ran, tan, van, Stan, bran, and Fran. Teachers display word families visually on the wall, earning for the display the title “Word Wall.” The goals of the Working with Words Block are to have the students

• Learn to read and spell high-frequency words
• Learn patterns used to decode and spell lots of other words
• Transfer word knowledge to their own reading and writing (P. M. Cunningham et al., 1999).

The Self-Selected Reading Block, originally called the “real books block” (P. M. Cunningham, Hall, & Defee, 1991, p. 569), includes students’ readings of books they have personally selected and the teachers’ readings of books and stories aloud to them, an
important component of children’s regular instruction (Hintikka, Landerl, Aro, & Lyytinen, 2008; Lane & Wright, 2007).

Interviews with the other five first-grade teachers at Allgood Elementary School revealed that the majority of their time was spent in these four different, often discrete blocks, using big books and their basal readers during the roughly 30 minutes of guided reading instruction. The self-selected reading and the writing segments of the Four-Block concept are relatively self-explanatory, and the “working with words” segment employs mainly direct phonics instruction. Cunningham’s Word Wall, which focuses on word analogies, word games, and worksheets, often makes up the lion’s share of this segment.
CHAPTER THREE
RESEARCH METHODS

“A fundamental consideration is your philosophical orientation.”

(Merriam, 1998, p. 3)

Collection and Analysis of Qualitative Data

This dissertation study involves interpretive research, a search to understand the processes and lived experiences that took place in Ms. Bing’s classroom during reading lessons. Of such interpretive research Merriam says:

[E]ducation is considered to be a process and school a lived experience. Understanding the meaning of the process or experience constitutes the knowledge to be gained from an inductive, hypothesis- or theory-generating (rather than a deductive or testing) mode of inquiry. (Merriam, 1998, p. 4)

According to Yin (2003), case studies are the preferred strategy for research when one poses how or why questions, when the researcher has little control over the events, when one is investigating a real-life phenomenon, and when the focus behaviors can not be manipulated by the researcher (Yin, 2003, p. 6). A case study is, therefore, the preferred method for this current body of research, based on Yin’s philosophy, in that this current research meets each of Yin’s criteria. I sought to determine how Ms. Bingo's methods of singing while teaching reading affected her students’ reading achievement and attitudes. I sought to determine why she has used these methods for many years. I had little or no control over events that transpired in Ms. Bing’s classroom. I focused on the contemporary phenomenon of teaching reading through the inclusion of singing and chanting, and I observed occurrences that I could not manipulate. Yin would call this
study an *explanatory* case study, a form of research to be used when *how* and *why* questions can be better answered with operational links that need to be traced over time rather than with descriptions of mere frequencies or incidences (Yin, 2003, p. 6).

One component of qualitative research that is often in dispute is that of “theory-first or theory-after” procedure (Wolcott, 1992). While Yin (2003) demands theory-first research in all case studies, Wolcott advises the researcher to allow “time to grow into a posture that fits your interests and talents and permits you to be as natural as the settings and situations you are trying to describe and understand” (Wolcott, 1992, p. 43). Wolcott admits, however, that theory can provide an external scaffolding as a base from which a deductively-oriented researcher can “reach out and connect...” (Wolcott, 1992, p. 25). Goetze and LeCompte advise qualitative researchers to “build toward theory from observations and intuitive understandings gained in the field. In contrast to deductive researchers who ‘hope to find data to match a theory, inductive researchers hope to find theory that explains their data’” [(Goetze & LeCompte, 1984, p. 4) as cited in (Merriam, 1998, p. 7)].

These contradictions in ideology are indicative of other ambiguities that saturate the practice of qualitative research and that researchers have for over 40 years tried to ameliorate. In order to be as specific as possible, I have attempted to draw from the literature on qualitative research the best practices for this particular dissertation study. As *naturalistic inquiry, interpretive research, field study, participant observation, inductive research, case study, and ethnography*—terms often used interchangeably under the umbrella of qualitative study (Merriam, 1998)—become more widely accepted
as legitimate forms of research, more specific recommendations are being put forth by researchers for standardizing the various aspects of such work. While some of these suggestions may help increase the validity and reliability of such studies, they may also restrict some of the latitude that is inherent in qualitative work. One of my goals, however, was to work within the framework of established practices.

Yin (2003) distinguishes case study from ethnography and grounded theory by his insistence that theory must precede research in a case study, purporting that the complete research design must embody a theory of that which is being studied and, more important to this current research design, that such a theory will facilitate data collection. Although agreeing that theory-first is important, Sutton and Staw (1995) maintain further that because there is such disagreement among researchers as to the meaning of theory, it often becomes difficult to develop a strong theory in the behavioral sciences [(Sutton & Staw, 1995) as cited in (Merriam, 1998)]. Auerbach and Silverstein (2003) maintain that theory is simply a description of a pattern that one finds in the data, apparently supportive of a theory-after philosophy of qualitative research.

Determining that the more logical route to data collection in this current study was to work from a theory-first stance, I found it equally important to be open to the possibility of the emergence of divergent or opposing theory. As Wolcott admonishes, one must not “forgo opportunities to explore other forks leading to other major branches” (Wolcott, 1992, p. 26) of the metaphorical tree of research. Likewise, Auerbach and Silverstein admonish, “So don’t worry if you find your ideas changing as you analyze
your data. It’s a common occurrence in data analysis, and a sign that the process is going well” (Auerbach & Silverstein, 2003, p. 33).

Beginning on September 6, 2005, and continuing until November 30, I spent two mornings per week as a non-participant observer (Fraenkel & Wallen, 1993) in Ms. Bing’s first grade class, collecting data by observing reading lessons and taking field notes regarding the content, implementation, and effects of these lessons—the behaviors and dialogue of the teacher and students.

Bogdan and Biklin (1992) divide field notes, which they call “the mainstay of qualitative research” (Bogdan & Biklen, 1992, p. 107), into two parts, the descriptive part and the reflective part. I took care to notate diligently the descriptive part and to include regularly the reflective part.

Heeding advice from Yin, I began the classroom data collection process from the posture of a theory--expectancy theory of motivation, which states that “the effort that people are willing to expend on a task is the product of two factors:

- The degree to which they expect to be able to perform the task successfully if they apply themselves (and thus the degree to which they expect to get whatever rewards that successful task performance will bring), and
- The degree to which they value those rewards as well as the opportunity to engage in the processes involved in performing the task itself” (Brophy, 2004, p. 18).

Vroom (1964) expresses the theory in terms of three distinct factors: valence, instrumentality, and expectancy--a different way of saying the same thing.
While I initially viewed classroom behaviors through the lens of expectancy theory, I also attempted to record as many of the classroom behaviors as possible in the event that future analysis and/or retrospection might point toward a different theory. I did not record, therefore, only those behaviors that dealt specifically with expectancy theory. While the underlying concept of self-efficacy in reading and its effects on students’ levels of valence and instrumentality were explored in the classroom setting, they were explored with the understanding of a genuine necessity to be open to the possible emergence of other significant ideas and themes.

Before I could enter Ms. Bing’s classroom to collect data, this process required the seeking of permission from the research director and research committee of the Grayson school district, the principal of Allgood Elementary School, Ms. Bing, and the Institutional Review Board of the university. This was an involved and time-consuming process, particularly the balancing of the time line with regard to the two different review boards. Permission was eventually granted, with restrictions put in place by the school district above those of the university—no video-tapes were to be made in the school and no audio-tapes could be made unless all students’ parents consented. These restrictions were made with regard to the privacy of the students. Their privacy was respected, as no tapes of any kind were made. Other privacy concerns of both the university and the school district regarded the handling of data: all identifying information was stripped from data; classroom observation notes were written on a laptop computer and the files password protected; and pseudonyms were assigned to all participants and institutional entities.
The first meeting with the principal of Allgood Elementary School and Ms. Bing took place during the first week of school. Obtaining their signatures on consent forms, I also presented them with consent forms for the other people in the school who would be affected. The principal suggested that the students’ forms be sent home with them the following week, and Ms. Bing complied. This delay of one week caused data collection to begin later in the school year than I had hoped, for it took a couple of weeks of additional time to collect the necessary parental signatures before I could be allowed to collect data. My first visit to the classroom did not take place until September 6, therefore, although school had been in session since the middle of August. An interview with Ms. Bing supplied background information regarding the first weeks of her reading instruction, however.

Field trips, teacher illness, play practices, and vision screenings interfered with some of the scheduled observations, but I was able to observe the children during 18 visits, approximately two hours per visit. Interspersed with the observations were interviews and informal chats with Ms. Bing and interviews with the other first grade teachers, the music teacher, and the school’s principal, instructional coach, and reading specialist. Simultaneously, I kept a running preliminary analysis of the field notes, which helped provide foci for my subsequent classroom observations.

Qualitative Analysis

Concurrent with data collection, I transcribed, studied, and coded field notes, emphasizing for the most part the strategies of the constant comparative method, which
involves comparing one segment of data with another in order to establish differences and similarities.

Credibility was an important ingredient in Ms. Bing’s teaching methods, as she felt that earning and maintaining the trust of her students were necessary for maintaining the integrity of her program. The following comments, made by Ms. Bing during an interview prior to the beginning of my classroom observations, relate to goals she had established for the beginning days of school.

August 23, 2005--Ms. Bing's comments

“I want these children to go home on the first day of school believing that they are readers!” Mrs. Bing spoke emphatically.

“There are three main goals I want to achieve on the first day of school.

1. I want to teach the children the routines of this classroom so that we can transition quickly and smoothly between activities and through procedures.

2. I want to establish my behavioral expectations.

3. I want the children to go home thinking, ‘I can read!’

“We will sing some songs at the beginning of the day to get the children’s brains going. We also sing after lunch and at the end of the day. We sing silly songs at times just to get the children involved and focused. We do movement with our singing when it is appropriate, for movement is important to children; and I intersperse singing when we are changing activities or when I want to get their attention. I try to talk very little, because children tend to tune out adult talking after they hear it so much. They always
Ms. Bing’s first sentence reinforced the appropriateness of the starting point of my qualitative data analysis as that of the construct of self-efficacy in reading.

From this interview I gained a great deal of insight into what I would subsequently see in Ms. Bing's classroom, and all of it was encouraging. Because the first sentence that Ms. Bing imparted to me in her initial interview spoke so emphatically of her desire to have her children go home from school on the first day seeing themselves as readers, it was evident that my initial prediction of the importance of self-efficacy in Ms. Bing’s classroom deserved the primary place in my initial comparisons. Her demeanor in the interview appeared to be one of genuine affection and concern for her children, and she established an immediate sense of trust—as a knowledgeable and caring teacher, organized and willing to work hard to do what she felt to be best for her students.

From the vantage-point of children’s self-efficacy for reading, I entered Ms. Bing’s classroom, armed with laptop and curiosity. Even though Ms. Bing’s initial comments offered a substantial amount of information about her classroom and about her teaching and even though they helped to direct my focus during the first of my 18 visits, it was not difficult to discern one potentially confounding variable, a pleasant one but potentially confounding nonetheless: the effectiveness of Ms. Bing's overall personal demeanor. I soon knew that it would be difficult, if not impossible, to tease out the role
that singing played in her successes as a reading teacher in contrast with her other
attributes.

Ms. Bing surely promoted a happy classroom atmosphere, and her students
appeared happy to be in attendance each day. Her class of 23 students—12 girls and 11
boys—was a demographically diverse group of children. Three of the children were
classified as Asian, one as Hispanic, five as Black, and fourteen as White. One of the
White children was from Russia, and one was from Germany. The German child was
only five years old and had only recently begun to learn the English language. Her
knowledge of the reading of English at the beginning of the year was limited to the
recognition of most of the letters of the alphabet. All three of the Asian children were
from homes where English was a second language, and one child’s mom spoke very little
English at all. A number of children lived with single moms, several others with their
moms and step-fathers, while some students moved frequently back and forth between
the homes of their mothers and fathers. While SES information was not available, it did
not require diligent observation to conclude that the students’ families ran the gamut of
economic levels. There were poor children who lived in government housing, wealthier
children of professionals who lived in high-end subdivisions, and middle SES children of
blue-collar workers. A school of around 750 students, Allgood Elementary School had
been in existence for almost 20 years, and it had traditionally reflected this same type of
economic and ethnic standing. Several of the teachers had been employed at Allgood
since its inception, and Ms. Bing was one of them, having been recruited to the school by
the founding principal. Prior to her employment at Allgood, Ms. Bing had taught at
another school in Grayson School District for three years, although her teaching career had spanned 29 years prior to the time that I began to research her teaching methods. She retired from teaching at the end of the 2006-07 school year.

Ms. Bing had been using smiley faces throughout her classroom for a number of years, and they helped to create a warm atmosphere. In addition to the bright yellow color they added to the environment, other primary colors decorated the room, especially in the form of reading squares where the students sat as they listened to books being read and as they read aloud their journal entries, sang songs, and did their morning activities of counting lunch orders, discussing the calendar and weather information, counting the number of days they had been in school for the year, and practicing math facts, such as even versus odd numbers and counting by tens, fives, and twos. The Reading Square, as I dubbed it, was actually more of a rectangle that was made of interlocking, brightly-colored squares of rubber-like material. Each child was assigned to a particular square, and there was a method to the assignments so that stronger readers sat by weaker readers and more effective listeners sat by less capable listeners.

There were reading prompts and books all around the room. Ms. Bing's personal library, which she had been building for at least 29 years, was enormous and took up a large portion of the space. The rest of the room was used efficiently so that at no time was there ever a feeling of being crowded, even though the classroom was not particularly large. Desks were arranged mostly in groups of four, and children were assigned to desks based on group dynamics, as collaborative work was encouraged.
Group arrangements were changed as warranted so that different children were able to work together as teams throughout the year.

Only in Ms. Bing's first grade class was there a reduction in the enrollment of students during the time of my visits, as she lost four students. (One other first grade lost one student who subsequently returned to the school.) All four children moved from government housing to a home of their own, so there were mixed feelings regarding their moves. It was clear that Ms. Bing was upset each time a child moved away. In some of the instances that I witnessed, it was also clear that the students possessed potentially dramatic academic problems on which Ms. Bing had gotten a pretty good handle and with which she was helping them to achieve success. In three of the situations, I was personally disappointed to see the students leave, for all three were exceptional singers—leaders in the singing portions of the daily routine—and it was through singing that they appeared to gain self-respect and the respect of the other students. Moving them to a school and classroom where they would not have such opportunities to sing surely appeared to be a potentially detrimental move for both their academic and emotional well-beings. Two of these three students were engaged and on-task almost exclusively during singing time only.

A description of some of the challenges that Ms. Bing faced with her students that autumn of 2005 can be discerned in the following entry that I made into my journal of personal reflections.
October 6, 2005

Analysis of the classroom observations shows early on that if there is to be success with this reading program, it will be likely due in great part to the fact that the students are engaged when they are singing their text. This class is a most unusual mixture of students in that a large majority of them appear to have severe auditory perception problems. Either they are unable to listen, either what they hear never makes it accurately into their brains, or either their development/maturity levels are delayed to a point that is not typical of first grade students. It is amazing to see children who appear to pay attention to what is being said and done but who also appear to deflect all oral instruction rather than to absorb and process any of it. It is so mind-boggling that I intend to study auditory perception disorder as soon as I finish this present research, and I have already bought a couple of books related to this topic. I hope that I can at least get some idea of what is or is not going on in the heads of some of the students I’ve been watching.

These are sweet, sweet children who, I believe, DO want to learn and DO want to succeed, and I also believe they are doing the best they are currently capable of doing, whether their limitations are intellectual, developmental, perceptual, or purely behavioral/conditioned. I do not know how MB can maintain her sanity when almost everything she says and does appears to slide right off most of her children without ever penetrating their gray matter. Of course, there is a small number of children who are exceptions to this description, but most of the very many first-grade classes I have taught over my lifetime have had more than just a very few students who appeared ready and
capable of learning what has been classified by the experts as first grade material. I do hope that this is an unusual group of students and not a sign of things to come, although as environmental factors decrease in quality, perceptual difficulties may well increase significantly in frequency and scope.

Rick poses a particular dilemma. The first time I saw him, I thought he was someone’s little brother who had come to visit his older first-grade sibling at school that day. He missed the first few days of school due to illness, which seems to have become a common occurrence for him, so I did not know who he was when I saw him at school for the first time. A tiny child, I would have thought him to be about three or four years old. His maturity level does not appear to be much, if any, higher than three or four years, either. He is a very loving and sweet child who demonstrates significant processing problems. He also gives new and deeper meaning to hyperactivity and attention deficit. I have no doubt that he was a preemie and that his problems may be due in large part to developmental immaturity. Whatever his past, however, his present behavior is a real problem. What is a teacher to do with a child who truly seems to be doing his very best but also seems to be almost completely incapable of doing what is being required of him by public education? It is a puzzle to me as to why he is in first grade, for he is certainly not developmentally ready. I believe he moved to this area just before school started this fall, so even if his kindergarten teacher had begun a testing process of some sort, there probably was not time to follow through with it in his former school. I wonder if Ms. Bing will refer him for testing. I have taught hundreds, or perhaps thousands, of students in my 30-year teaching career, much of it spent as an itinerant elementary music teacher,
and I can truly say that I have never seen a first-grade student more developmentally unprepared for first grade than Rick. It is interesting to see how the other children react to him. They do not want to sit in the Reading Square with him, for it is nearly impossible to pay attention when sitting by him. Ignoring his antics requires more discipline than most first graders, indeed most adults, possess. It has gotten to the point, however, that they tend to ignore his wanderings around the room, for they must sense that he HAS to move. His desk is not located in one of the groups of desks, for his general agitation and lack of ability to pay attention make him detrimental to the budding work ethics of the other students. Ms. Bing is working with him as well as anyone can. She truly does seem to care about his development and his feelings. Occasionally he will come up with a brilliant answer to some question, and Ms. Bing and I will look at each other in amazement. There MUST be an above-average intellect at work, or else he would not be able to reason as well as he occasionally does. Until someone can get a bead on his other behaviors, however, I predict that he will be extremely frustrated, as will his classmates and teachers.

Most of the students quickly became accustomed to the daily routine, which seemed to be both an efficient way to begin the day and a source of security for the children, as they always knew what to expect when they walked into the classroom in the mornings. The first thing that greeted them was their almost-always enthusiastic, high-energy teacher. As they greeted her and put away their book bags into their cubicles, they gave to Ms. Bing any papers or assignments that were due, sharpened their pencils,
got out their journals, and set to work writing in them. While they were writing, one could hear the children greeting each other and asking each other how to spell words. I always thought that act to be rather humorous, because they used invented spelling. Perhaps they just needed a bit of help with their inventions.

While the students wrote in their journals, Ms. Bing had three objectives. First, she recorded any papers or homework that had been turned in. Next, she checked homework logs to make sure everything was in order. Last, but certainly not least, she, too, sat down to write in her journal. If students finished their writing assignments before time was called, they knew it was their job to read a book. If Ms. Bing had finished her writing assignment early, I expect that she would have read a book, too; but it seldom happened that she finished ahead of the deadline. When she thought the students had been given enough time to write an interesting story, she sang to them the cue that told them to bring their journals (and not their pencils) and come to the Reading Square. The cue was the song Good Morning, originally sung by Debbie Reynolds, Gene Kelly, and Donald Sutherland in Singing in the Rain. The children began to sing along, and the song focused them on the tasks at hand. Movement to the Reading Square was markedly more efficient than it might otherwise have been, for the children were singing and focused instead of chatting with each other and getting off task.

The other five first grade classes at Allgood Elementary School held their reading lessons during the first part of the day, and they were required by the Grayson School district to use the Four Blocks method of literacy education. Originally developed in one first-grade classroom during the 1989-90 school year (P. M. Cunningham et al., 1991)
and piloted in 16 first-grade classrooms during the 1990-91 school year (D. P. Hall, Prevatte, & Cunningham, 1995), the *Four Blocks* method was created in an attempt to reach the diverse learning needs of students of different school populations and varying learning challenges. “The first goal was to meet the needs of children with a wide range of entering literacy levels without putting them in ability groups” (P. M. Cunningham et al., 1998, p. 653).

While two of the first-grade teachers at Allgood Elementary School followed the *Four Blocks* outline very closely, others created variations on the themes of the four segments of instruction. There were many things they did relatively the same way in literacy instruction, however. The incorporation of the use of basal readers, large amounts of writing, read-alouds, self-selected reading, phonics instruction, and the Word Wall could be found in all six first-grade classrooms at Allgood Elementary. What was unusual about Mrs. Bing’s class is that the main portion of her guided reading block was sung!

Ms. Bing began her day with the Writing Block, which consisted of each child’s writing as much of a story as possible in his or her journal about something that had actually happened to him or her. The children then went to the front of the group and read their stories to the class, with assistance as needed from Ms. Bing, for she described herself as being very good at “reading first-grade writing.” At the beginning of the year the children used a karaoke microphone as they read. Ms. Bing stated that her purposes in using the microphone were so that the class could hear even very soft-spoken children as they read and to provide a fun atmosphere, for she found that almost all children love
to hear themselves when they speak into a microphone. She maintained that the fun aspect of using a microphone often helped shy children to be less inhibited about “performing” in front of the group. Such did appear to be the case.

When the Writing Block was finished, children scurried back to their desks to prepare for the Guided Reading lesson, which consisted in Ms. Bing’s class of getting ready to sing and chant! At the beginning of the year, the children learned songs that became the mainstay of their guided reading lessons for several weeks. While Ms. Bing played the songs on a tape or CD, she also tracked with her finger or a ruler the words she had written on a large chart. Until the children learned the songs well, she continued to track for them. As the children appeared to know how to sing the songs, she gave them songbooks in which she had placed the words of the songs in large print so the children could begin to track their own copies of the text with their own fingers.

Ms. Bing’s choices of songs promoted a positive classroom atmosphere and were also suited to particular phonics-related ideas that she wanted to lift from the text (Thompson, Mckay, Fletcher-Flinn, Connelly, Kaa, & Ewing, 2008). Between songs and chants Ms. Bing asked the children questions about particular words—what they were, how they sounded, what rules they followed when they sang those words, etc. Such songs included Good Day, Sunshine; Morning Has Broken; Lazy Mary, Will You Get Up?; Oh, What a Beautiful Morning!; Wake up, Toes!; and Put on a Happy Face. Additionally, she used songs from a series of books written and recorded by Steven Traugh (Traugh, 1993a, 1993b, 1993c, 1993d), which include titles such as Big Black Bugs, The Crazy Cook at the Corner Café, Cecil Found Ten Cents, and My Dog Dingo.
The books provide black line masters that can be duplicated for classroom use. Each book emphasizes specific phonics principles through fun and engaging songs or chants.

On each day that the children learned a new song, Ms. Bing created for every child a book that had the title of the song on the front cover along with the caption “Illustrated by ____.” (See Appendix G.) Each page of the book was captioned with a line of the song, and each line of each song was allotted a page. The children’s job was to illustrate each page, and it was important to illustrate exactly what the page said. Although drawing creativity and artistic latitude were encouraged, it was important for the children to follow the text carefully. If the page said something about pink clocks, for example, it was important that the drawing include more than one clock and that all of the clocks be pink. Ms. Bing assessed comprehension through questioning and through analyses of the children’s drawings in their individually-illustrated books. Ms. Bing circulated among the children as they completed their illustrations and helped them to understand the text. This segment of instruction took place either immediately before or after the “Working with Words” session.

Ms. Bing incorporated her “Working with Words” session as children played games with words, worked with word families and the Word Wall, alphabetized words, had short phonics-based tests, and chanted and sang phonics rules, spelling words, and word families. Examples are shown in Appendix E.

The fourth block of “Self-Selected Reading” took place throughout the day, as children continually selected books from Ms. Bing’s voluminous personal collection. Parent volunteers came into her classroom to help with this process so that books could
always be accounted-for. Occasionally the children would select books for Ms. Bing to read aloud to the class, and occasionally the whole class would hold a sustained silent reading session. Ms. Bing also employed read-alouds on during the study of academic content areas.

From the perspective of self-efficacy in reading, I collected data in Ms. Bing’s first-grade classroom during their reading instruction. Being ever mindful of the possibility that other factors could emerge from their daily instruction that might have a greater effect on their reading achievement and attitudes toward reading than did their levels of self-efficacy, I observed not only their Guided Reading Block of instruction in which they sang and chanted text but also their Writing Block and Working with Words Block from Patricia Cunningham’s Four Blocks framework for reading education (P. Cunningham, Hall, & Sigmon, 2001).

As I typed page after page of notes from classroom observations, I attempted to document both teacher and student behaviors and dialogue that could potentially produce an analysis of the instruction and learning that took place daily during reading time in Ms. Bing’s classroom. As soon as possible after each session I both transcribed the notes into a more readable form and highlighted the portions of my observations that appeared to connote an emotional construct or an instructional technique or strategy. To the right of each highlighted excerpt of the field notes I annotated the emotional construct or instructional technique or strategy that appeared to be in play within that particular highlighted behavior or dialogue. I asked Ms. Bing to read these field notes and my
annotations and to validate or correct their accuracy. She gave a 100% confirmation to my notes and these preliminary analyses.

Upon completion of the classroom observations and corresponding field notes, highlighting, and coding, I removed portions of the field notes that did not contain highlighted excerpts. The remaining text is what Auerbach and Silverman (2003) call relevant text.

I extracted specific code words from each of the interpretive entries regarding the emotional constructs and instructional techniques represented by the behaviors and dialogue in the relevant text. Frequently occurring code words included encouragement, praise, compliment, engagement, on-task, singing, song, chanting, fingerpointing, phonics, feedback, procedure, routine, modeling, practice, decoding, comprehension, movement, etc. Some of the code words appeared directly in the relevant text, and some of them represented my interpretation of behaviors and dialogue. Berg calls these codes manifest content and latent content, respectively, taken from surface structure information (taken directly from the source) and deep structural meaning (taken from interpretive analysis), respectively (Berg, 2007). Examples of manifest content include code words such as fluency, fun, thanks, and consonants. Examples of latent code words include encouragement, engagement, feedback, on-task, and phonics. Examples of code words that appeared in both categories include fingerpointing, fluency, singing, and expression.

I compiled a list of keywords from the codes of the relevant text and then counted them to get an idea as to which codes appeared with the most frequency. (See Appendix
B.) Although I was aware that the frequencies of code words had the potential to belie their level of importance, their frequencies did give an indication of how common the different themes were.

Further study of the relevant text and of the code words pointed to the fact that all of the code words, both manifest and latent, and all of their corresponding excerpts of relevant text fell into two domains, those that related directly to reading instruction and those that related to instruction in general. I set out to tease apart the two.

After several readings of the field notes, five major categories of codes clearly emerged, which Miles and Huberman (1994) would call *intellectual bins*—affect, instruction, music, integrated arts, and classroom management. I collapsed these intellectual bins into three instructional domains—reading instruction strategies, general instruction strategies, and motivational components, and classified particular categories within these domains. The next steps of analysis involved the sorting of the behaviors, dialogue, and other observations into the above categories. Once this task was completed, I aligned the relevant text with my research questions, and synthesized theoretical narrative to summarize what I had learned about my research questions. I found that the answers to my research questions lay in the trichotomy of reading instruction, general instruction, and motivational components.

Interviews of Ms. Bing, the other five first-grade teachers, the music teacher, the school’s reading specialist, instructional coach, and principal were reduced to relevant text and then condensed further to provide methodological information about reading
education in the first grade at Allgood Elementary School, specifically regarding the implementation of the Four Blocks Method of Literacy Instruction.

Collection and Analysis of Quantitative Data

Quantitative data consist of the results of a standardized test of reading (STAR) and an attitude survey (ERAS). Data were collected on both an experimental group, Ms. Bing’s class (children receiving reading instruction through singing and chanting), and a control group (children receiving traditional reading instruction).

The Children

The experimental group, in Ms. Bing’s classroom, consisted at the beginning of the study of 23 students—12 females and 11 males; 14 Caucasians, 5 African Americans, 3 Asian American students, and one Hispanic student. By the end of the study four of these students had left the school, three of them African American and one Hispanic, all of them female.

The other five first-grade classrooms, the control groups, were similar in demographic construction. Group I had 20 students—8 females and 12 males; 14 Caucasians, 4 African-Americans, one Asian and one Hispanic student. Group II consisted of 21 students—9 girls and 12 boys; 13 Caucasians, 5 African-Americans, 2 Asian students, and one Hispanic student. Group III had 23 students—10 females and 13 males; 21 Caucasians, one African-American, and one Asian student. Group IV had 18 students—10 females and 8 males; 12 Caucasians, 3 African-American students, 2 Asian
students, and one Hispanic student. Demographic information was not provided for Group V, although it is known that there were 22 students in the class. Ms. Bing’s class lost one Hispanic and 3 African-American students during the time of the study. In the rest of the first grade classes combined, only one student left the school during the time of my observations, and he returned prior to the end of the study. Although SES information was unavailable, students in each class appeared to run the gamut of socioeconomic levels, from relatively poor students living in government housing to affluent students living in luxurious homes. There were no repeaters in the first grade, and only one student had an Individualized Education Plan for special education. This student was a member of the control group.

The Instruments

STAR Reading Program

Allgood Elementary School required that first grade teachers administer the *STAR Reading Test* several times each year in conjunction with its Accelerated Reader Program, a reading management program that Rodriguez (2007) estimates is currently being used in half the school districts in the United States. Published by Renaissance Learning Company, as is its companion *STAR Reading Program*, the *Accelerated Reader Program* provides software through which students earn points after reading books, the number of points based on the difficulty level of the books and the number of correct responses on the accompanying computerized quizzes. Results of the STAR are designed
in part to assist students and teachers in the selection of books on appropriate reading levels.

Original plans to compare scores for several different administrations of the STAR could be only partially realized due to the lack of availability of the scores for the school year 2004-05, however sufficient other data were collected to allow a comparison of results.

The STAR Reading Program is a computer-assisted program that purports to assess students’ reading abilities in 10 minutes or less and to assist teachers to guide your students to books that they can read without struggling, while still being challenged enough to strengthen their skills. It also helps you create instructional materials to present information at a level that your students are sure to understand. Knowing how your students compare to others helps you identify their own strengths and weaknesses, as well as any patterns of behavior that you can use to develop stronger skills in deficient areas. ("STAR Reading: Understanding reliability and validity," 2007, p. 2)

As a computer-adaptive program, the STAR Reading Program tailors each student’s test relative to his or her responses on each item. This procedure, called Adaptive Branching, allows each student to work at his or her own achievement level, purportedly saving time and motivating students, as the test is described as neither too hard nor too easy. The assessment consists of 25 items, which many students can answer in 7 or 8 minutes, according to the STAR Reading Program’s Technical Manual (STAR Reading Computer-Adaptive Reading Test and Database: Technical manual, 2006). Each of the text passage items was written to the following specifications:

1. Each test item consists of a multi-sentence paragraph, the second half of which
contains a sentence with a blank indicating a missing word. Four possible answers are shown beneath the sentence. The maximum number of words in a sentence for first graders is ten.

2. The student selects the answer that he or she thinks best completes the sentence based on the context of the paragraph. The correct answer choice will be the word that appropriately fits both the semantics and the syntax of the sentence and also the meaning of the paragraph. All of the incorrect answer choices will fit either the syntax of the sentence or relate to the meaning of the paragraph, but only one choice fits both conditions.

3. The paragraph provides context clues for students to use in determining the correct answer. Total passage length is approximately 30 words per paragraph for first graders with an anticipated reading speed of approximately 80 words per minute.

4. Answer choices for the text passage items are EDL Core Vocabulary words (Taylor, 1969), selected from vocabulary levels at or below that of the correct response.

Intended for use with students in grades 1-12 who have a 100-word or more sight vocabulary, the STAR Reading Program gathers data in three different ways:

- It provides estimates of reading comprehension using students’ instructional reading levels (IRLs) and identifying their current developmental levels in reading.
• It provides a means for tracking students’ progress longitudinally, from first through twelfth grades.

• It assesses reading achievement relative to national norms.

Several different types of scores are reported from the results of the STAR Program, but it was the *Scaled Scores* that Allgood Elementary School received, and these are the scores that are compared in this study.

Scaled Scores (SS) are reported when the STAR Reading test converts test results to a common scale. First, each student’s location on the Rasch ability scale is estimated, based on the difficulty of the items administered and on the students’ right and wrong answers. Second, the Rasch ability scores are converted using a table called “Item and Scale Calibration.” Scaled Scores can range from 0 to 1400. [Rasch analysis is a method of translating scores across similar functional ability assessments, enabling the comparison of functional ability outcomes of different instruments (Velozo, Kielhofner, & Lai, 1999).] This set of scores comprises the comparison scores for this dissertation study. STAR Reading was normed in the spring of 1999 in four geographic regions—Northeast, Midwest, Southeast, and West, using public and nonpublic schools; high, average, and low socioeconomic levels; and approximately 30,000 students from 269 schools that represented 47 states in the United States. Table 3.1 shows reliability data from scores of the first-grade students who were involved in this process.
Table 3.1: Reliability Figures for STAR First-Grade Norming Procedure

<table>
<thead>
<tr>
<th></th>
<th>Norming Sample</th>
<th>Test-Retest Sample</th>
<th>Alternate Forms Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>Generic Reliability</td>
<td>Split-half Reliability</td>
</tr>
<tr>
<td>Grade 1</td>
<td>2,703</td>
<td>0.92</td>
<td>0.089</td>
</tr>
</tbody>
</table>

("STAR Reading: Understanding reliability and validity," 2007, p. 6)

Generic reliability was determined by using the formula

\[ 1 - \left( \frac{\text{error variance}}{\text{total score variance}} \right) \]

and by substituting the average of the individual student error variances as the error variance term and the variance of the students’ ability estimates as the best estimate of total score variance. Generic reliability was the first test performed. Split-half reliability was next calculated.

The split-half reliability tests were performed in three phases:

1. The test was divided in two, and scores were calculated for each half.
2. The correlation was calculated between these two sets of scores, thus estimating the reliability of a half-length test.
3. The Spearman-Brown formula was used to estimate the reliability of the full-length test.

Because the test contains an odd number of items, *split-half* scores were based on the first 24 items of the norming test, one-half of the scores based on the odd-numbered items and the other half based on the even-numbered items. The correlations between the two sets of scores were corrected to a length of 25 items, the number of items on the actual norming test, and split-half reliability estimates were calculated.
The test-retest study varied somewhat from the traditional approach to test-retest reliability in which students take the same test twice with a short time interval between administrations. The STAR Reading test-retest study used different tests during the two administrations by avoiding the use on the second administration of any items the student had encountered on the first administration.

In the alternate forms reliability study students took both a STAR Reading 2.x test (the newer version of the test) and an original STAR Reading 1.x test, some of them taking 2.x first and others taking 1.x first. The scores on the two administrations were correlated and taken as estimates of alternate forms reliability.

Standard Error of Measurement (SEM) indicates the precision of a given score by describing the extent to which the score would be expected to fluctuate due to chance. STAR Reading software computes the SEM for each student. In the norming sample of 2,073 first-grade students, the average scaled score SEM was 37, the 5th percentile scaled score SEM was 5, and the 95th percentile scaled score SEM was 72 ("STAR Reading: Understanding reliability and validity," 2007, p. 8).

The validity of a test is the degree to which it actually assesses what it claims to assess, and information regarding both internal and external validity is important. STAR Reading scores were compared with more than 12,000 students’ scores on such tests as the California Achievement Test (CAT), the Comprehensive Test of Basic Skills (CTBS), the Iowa Test of Basic Skills (ITBS), the Metropolitan Achievement Test (MAT), the Gates-MacGinitie Reading Test (GMRT), the Stanford Achievement Test (SAT) and several statewide tests. Correlations for first grade are shown in Table 3.2. An asterisk
denotes correlation coefficients that are statistically significant at the .05 level.

Correlation coefficients were computed during the norming phase in the spring of 1999.

NCE refers to the *normal curve equivalent* scores, which are derived from the STAR test and which describe the readability range from which the STAR Reading Program recommends that students should select books.

Table 3.2: Correlations of First-Grade STAR Scores with Other Tests Administered to First-Graders During Norming Phase, 1999

<table>
<thead>
<tr>
<th>TEST</th>
<th>STAR Scores used</th>
<th>n</th>
<th>r--Correlation coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAT</td>
<td>NCE</td>
<td>93</td>
<td>0.80*</td>
</tr>
<tr>
<td>SAT</td>
<td>NCE</td>
<td>68</td>
<td>0.79*</td>
</tr>
<tr>
<td>ITBS</td>
<td>NCE</td>
<td>40</td>
<td>0.75*</td>
</tr>
<tr>
<td>SAT</td>
<td>Scaled</td>
<td>11</td>
<td>0.89*</td>
</tr>
<tr>
<td>Summary</td>
<td></td>
<td>212</td>
<td>0.81</td>
</tr>
</tbody>
</table>

("STAR Reading: Understanding reliability and validity," 2007, pp. 10-11)
Prior to the spring, 1999 norming phase, STAR Reading had been correlated with these and other tests, and the results are as shown by Table 3.3.

Table 3.3: Correlations of First-Grade STAR Scores Prior to the 1999 Norming Phase

<table>
<thead>
<tr>
<th>Test</th>
<th>DATE</th>
<th>STAR Scores used</th>
<th>n</th>
<th>r</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAT</td>
<td>Fall, 1998</td>
<td>NCE</td>
<td>4</td>
<td>0.83*</td>
</tr>
<tr>
<td>GMRT</td>
<td>Fall, 1998</td>
<td>NCE</td>
<td>60</td>
<td>0.64*</td>
</tr>
<tr>
<td>MRT</td>
<td>Spring, 1998</td>
<td>NCE</td>
<td>4</td>
<td>0.63*</td>
</tr>
<tr>
<td>SAT, 7th ed.</td>
<td>Spring, 1998</td>
<td>Scaled</td>
<td>11</td>
<td>0.73*</td>
</tr>
<tr>
<td>SAT, 8th ed.</td>
<td>Spring, 1998</td>
<td>Scaled</td>
<td>8</td>
<td>0.94*</td>
</tr>
<tr>
<td>SAT, 9th ed.</td>
<td>Spring, 1998</td>
<td>Scaled</td>
<td>13</td>
<td>0.73*</td>
</tr>
<tr>
<td>SAT 4th ed., version 3</td>
<td>Spring, 1998</td>
<td>Scaled</td>
<td>14</td>
<td>0.76*</td>
</tr>
<tr>
<td>Summary</td>
<td></td>
<td></td>
<td>150</td>
<td>0.75</td>
</tr>
</tbody>
</table>

("STAR Reading: Understanding reliability and validity," 2007, pp. 12-14)

Using pilot study data, the overall estimate of the validity of STAR Reading, grades 1-12, is reported by Renaissance Learning, Inc., to be 0.72 with a standard error of .005. The overall true validity is estimated to lie within the range of 0.71 to 0.73 with a 95% confidence level. Subsequent to the 1999 norming phase, additional studies have been conducted relative to the validity of the STAR Reading 2.0 (Bennicoff-Nan, 2002; Sadusky & Brem, 2002), and the results have shown overall correlation coefficients at least as high as those of the studies conducted in 1998 and 1999 by Renaissance
According to its report of December, 2007, the U. S. Department of Education found that the STAR Reading program meets its standards in all areas of review: Reliability, Validity, Alternate Forms, Sensitive to Student, Improvement, AYP Benchmarks, Improving Student Learning or Teacher Planning, and Rates of Improvement Specified ("IDEAs that work," 2007).

Although I had hoped to collect STAR Reading scores from multiple years of administrations in Allgood Elementary’s first grade classes, scores were available for only the school years 2005-06 and 2006-07. These scores provided useful information, however, which will be discussed in Chapter Four.

The Elementary Reading Attitude Survey (ERAS)

Germane to the research on first-graders’ reading attitudes, the Elementary Reading Attitude Survey (ERAS) (McKenna & Kear, 1990) has been widely used in reading classrooms. Created and normed in 1989 by Michael McKenna and Dennis Kear for grades one through six, the ERAS is published in The Reading Teacher, a professional journal that has allowed the survey to remain in the public domain (McKenna & Kear, 1990). Its twenty items regarding children’s attitudes toward the subsets of recreational reading and academic reading can be administered in unison to an entire class in approximately 30 minutes and require that students respond to each item simply by circling an image of Garfield the Cat, who is pictured as very happy (4 points),
a little bit happy (3 points), a little bit sad or angry (2 points), and very sad or angry (1 point). McKenna & Kear have developed specific directions for administration so that scores can be standardized across classrooms, thereby increasing reliability. Examples of questions on the survey are as follows:

**Recreational:**
How do you feel when you read a book on a rainy Saturday?
How do you feel when you read a book in school during free time?

**Academic:**
How do you feel when your teacher asks you questions about what you read?
How do you feel about doing reading workbook pages and worksheets?
(McKenna, Kear, & Ellsworth, 1995, p. 956)

Variables derived from test instruments are said to be reliable only when they provide stable and reliable responses over a repeated administration of the test (Santos, 1999). Cronbach’s alpha (Cronbach, 1951) is based on the reliability of a test relative to other tests with same number of items and measuring the same construct of interest (Hatcher, 1994). McKenna and Kear (1990) tell us that Cronbach’s alpha was calculated at each grade level for both subscales, recreational and academic reading, and for the composite score. The reliability coefficients ranged from .74 to .89 (McKenna & Kear, 1990, p. 638). There were only two instances where the coefficients were not .80 or higher—in the recreational subscale for grades one and two. The authors of the survey attribute this finding to the possibility that young children’s attitudes toward leisure
reading may grow with corresponding increases in their decoding abilities and with their increasing use of reading as a pastime.

Validity was tested through three variables for the recreational scores and one variable for the academic scores, and the relationship between the recreational and academic scores was then correlated. The recreational data included 1) whether students had access to a public library and whether or not they had a library card, 2) whether students had currently checked books out of the library (limited to students whose teachers did not require them to check out books), and 3) whether students reported watching an average of less than one hour television per night or watching more than two hours of television per night.

Results of the first survey showed the library card holders had significantly higher recreational scores \( M=30.0, p<.001 \) than non-cardholders \( M=28.9, p<.001 \), indicating “evidence of the subscale’s validity in that scores varied predictably with an outside criterion” (McKenna & Kear, 1990, p. 639). In the results of the second test, the mean scores of the two groups varied significantly, and children with books they had checked out from a library scored higher \( M=29.2, p<.001 \) than those who had not checked out books \( M=27.3, p<.001 \). Thirdly, the recreational mean score for children who did not watch as much television was significantly higher \( M=31.5, p<.001 \) than the mean for the group of students who watched more television \( M=28.6, p<.001 \), indicating that their amount of television watching varied inversely with their attitudes toward recreational reading.
Validity of the academic subscale relied on a comparison of students’ academic scores to reading ability, as categorized by their classroom teachers. “Mean subscale scores of the high-ability readers \[M=27.7, p<.001\] . . .significantly exceeded the mean of low-ability readers \[M=27.0, p<.001\] . . .evidence that scores were reflective of how the students truly felt about reading for academic purposes” (McKenna & Kear, 1990, p. 639).

Correlation between the academic and recreational scores was 0 .64. Factor analyses were also conducted on the two subscales. “Taken together, the factor analyses produced evidence extremely supportive of the claim that the survey’s two subscales reflect discrete aspects of reading attitude” McKenna & Kear, 1990, p. 639).

The authors of ERAS took their normative scores from the results of a national administration of the survey in 1989 \(n = 1815\). Table 3.4 displays the means and standard deviations of the results for attitude toward recreational reading, and Table 3.5 displays the means and standard deviations of the results for attitude toward academic reading. McKenna and Kear note in their report that missing data points resulted in a total number less than the sample size (McKenna, Kear, & Ellsworth, 1995, p. 947).
Table 3.4: Means (and Standard Deviations) of Attitude Toward Recreational Reading

<table>
<thead>
<tr>
<th>Grade/Gender</th>
<th>All ability levels and ethnic groups</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/Boys</td>
<td>30.0 (6.0)</td>
</tr>
<tr>
<td>1/Girls</td>
<td>31.9 (5.2)</td>
</tr>
<tr>
<td>1/Total</td>
<td>31.0 (5.7)</td>
</tr>
</tbody>
</table>

(McKenna, Kear, & Ellsworth, 1995, p. 947)

Table 3.5: Means (and Standard Deviations) of Attitude Toward Academic Reading

<table>
<thead>
<tr>
<th>Grade/Gender</th>
<th>All ability levels and ethnic groups</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/Boys</td>
<td>29.2 (7.3)</td>
</tr>
<tr>
<td>1/Girls</td>
<td>30.9 (6.3)</td>
</tr>
<tr>
<td>1/Total</td>
<td>30.1 (6.8)</td>
</tr>
</tbody>
</table>

(McKenna, Kear, & Ellsworth, 1995, p. 947)

Allgood Elementary School’s six first-grade teachers administered the ERAS in September, 2005, and again in January, 2006. Students signed their answer sheets with numbers that had been assigned to them by their teachers, and their anonymous answer sheets were then turned over to me for scoring. In one classroom the children put their actual first names on the first set of answer sheets, and this set of scores eventually had to be discounted.

STAR Reading Program data in this study consist of the following:

- Three administrations for each first grade class, taken at the beginning, middle, and end of the school year 2005-06;
Two administrations for all first grade classes, taken at the beginning and end of the school year 2006-07.

Elementary Reading Attitude Survey data for this study consist of the following:

- Two administrations for five of the six first grade classes at Allgood Elementary School, taken at the beginning and middle of school year, 2005-06;
- A third administration for Ms. Bing’s class, taken at the end of the school year, 2005-06.

Once quantitative data had been collected and a preliminary analysis had been calculated, the findings (the mean difference scores of each class) warranted a second look at the classes. Because STAR Reading scores for the school year 2004-05 had been unavailable, as had demographic and attendance information for 2005-06, I applied to the school district in the summer of 2006 for permission to collect this body of information for 2006-07. Permission was granted, and this information was made available to me in May of 2007. Due to somewhat curious findings in the preliminary analysis of the ERAS scores, I applied for permission to administer the survey again during the 2006-07 school year, but my request was denied.

Repeated measures analyses of the quantitative data were calculated in these three stages:

- The interaction of the first and second administrations of ERAS,
• The interaction of STAR Reading scores for the beginning and end of school year 2006-2007,

• The interaction of STAR Reading scores for all three administrations in 2005-06.

Validity of This Study

External

By describing as accurately as possible the characteristics of the people, settings, and variables that define the conditions of my research and by carefully documenting the strategies that Ms. Bing employed in her teaching of reading, I have attempted to make this study as generalizable to other populations as possible.

Internal

“The drawing of correct conclusions based on the data obtained by use of an instrument is what validity is all about” (Fraenkel & Wallen, 1993, p. 139). In order to maximize the eventuality of drawing correct conclusions from my observations and interviews, I followed Maxwell’s checklist for validity, discussed in Chapter Two.

• **Intensive, long-term involvement**—On-site involvement occurred two mornings per week from September until December.

• “**Rich**” data—Descriptions of observations and interviews were as thorough as possible.

• **Respondent validation** (member checks)—Ms. Bing read and approved all field notes and their original coding. Once summaries of interviews were transcribed, I asked the interviewees to read and then to corroborate or refute my summaries. I
received corroboration from all interviewees except for one first grade teacher. She did not refute my summary, however; she simply did not respond. Additionally, the principal augmented the comments she had made during the interview by explaining more thoroughly in writing.

- **Intervention**—The fact that portions of the study may be changed by the participants merely because the study is being performed should be recognized and accounted for by the researcher. I was vigilant in the regard of not allowing my presence in the classroom nor any behaviors over which I had control to occur that might have changed the course of the study, and I was simultaneously on guard for such occurrences. To the best of my knowledge, no intervention occurred. As I sat at the side of the classroom, the students had no physical access to me, although I was able to see and hear their activities. They occasionally smiled at me, but they were so accustomed to having visitors in their classroom that my presence attracted very little of their attention.

- **Searching for discrepant evidence and negative cases**—Such action was a part of the continuous data analysis.

- **Triangulation**—Triangulation was represented in the classroom observations and the interviews I conducted and in the quantitative data garnered from the ERAS and the STAR Reading scores. Measures for strengthening reliability included member checks of the classroom observations and interviews and an independent audit of qualitative data analyses.
• **Quasi-statistics**—These data took the form of the true statistical data garnered from the *ERAS* and the *STAR Reading* scores.

• **Comparison**—How does one data unit differ from another? (Maxwell, 2005)—This action occurred as the constant comparison method was employed in the collection of data.

To Maxwell’s checklist, I have added his caution regarding bias and the subjectivity of the researcher and will now explain as fully as possible my own subjectivities as they relate to the data I have collected.

**Researcher Biases and Study Limitations**

It is possible as a researcher to keep an open mind while gathering data, and I had little difficulty doing so. The only biases of which I am aware originate out of my personal history as an elementary music teacher and a former choral director. Perhaps the most difficult part of my job as participant observer was denying myself the pleasure of interacting with the students on anything more than a very superficial basis. I grew to feel true affection for the students and developed a deep regard and respect for Ms. Bing, as well. Early in my teaching career I set as one of my goals to see my students in their best light, and I conditioned myself to do so. Such well-ingrained conditioning is not easily extinguished, nor would I want it to be extinguished; therefore I must admit that my views of the children and Ms. Bing were possibly colored by this bias.

In the same regard, one of my greatest pleasures throughout life has been the thrill of watching children who are enjoying the act of singing, and enjoy it these children did!
I do not believe that this bias interfered with data collection or analysis, however. It simply made my work that much more enjoyable.

I made no assumptions as I entered this research, but early in my field observations, I realized that there would be difficulty, if not impossibility, involved in separating the effects of Ms. Bing’s teaching strategies from the potentially confounding effects of her personal appeal and skills of interaction with people and ideas. Through qualitative analysis I have attempted to determine what effected the results of this study as opposed to who affected them.

Reliability of This Study

Reliability, as it pertains to replicability, is not typically a concern of qualitative researchers, particularly in the performance of case study, as there are not likely to be subsequent replications of the case study in question.

In qualitative studies, researchers are concerned with the accuracy and comprehensiveness of their data. Qualitative researchers tend to view reliability as a fit between what they record as data and what actually occurs in the setting under study, rather than the literal consistency across different observations. (Bogdan & Biklen, 1992, p. 48)

Lincoln and Guba refer to reliability in qualitative research as the dependability or consistency of the results of the study (Lincoln & Guba, 1985, p. 288). It was my goal to describe as accurately as possible the behaviors of the participants in this study and to analyze them as reliably as possible. Substantiation of the accuracy of my collection of data was provided by the teachers and principal with whom I worked, and an independent auditor studied and confirmed my qualitative data analysis.
Ethical Considerations

All entities involved in this study are represented by pseudonyms—the people, the school, the school district, etc. All participants signed statements of confidentiality in which it was made known to them that any identifying information regarding the people, school, or district involved would be held in confidence. All identifying information was stripped from test and survey scores. Plans had been made that if any parent refused consent for his or her child, I would avoid mention of that child in my reports, but all parents did consent. I have made every effort to maintain strictest confidentiality, and I strove to the highest degree to make my presence in the classroom as unobtrusive as possible so as not to affect classroom behaviors or activities.
CHAPTER FOUR

RESULTS

“I want these children to go home on the first day of school believing that they are readers!” (Ms. Bing, 2005)

Ms. Bing’s first grade class at Allgood Elementary School was slightly larger than Allgood’s other five first grade classes. Table 4.1 shows the demographic make-up of five of the six first grades. Such information was not available for Control Group 5, although it is known that there were 22 students in that class.

Table 4.1: Demographics of Allgood Elementary’s Six First Grade Classes in 2005-06

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<th>Girls</th>
<th>Boys</th>
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<th>Asian Americans</th>
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The socioeconomic status of the students ran the gamut from families who lived in upscale, affluent subdivisions to blue-collar neighborhoods to government housing projects.

I visited Ms. Bing’s classroom 18 times between September and December and wrote about what I witnessed during three of the four blocks of literacy lessons she and her students experienced each day: the Writing Block, the Guided Reading Block, and the Working with Words Block. The pages of notes I took and the annotations, called
The code words, that I made with regard to these notes were winnowed down to include only the portions of text that were most closely related to the teaching and learning that took place. The remaining information is called relevant text.

Qualitative Results

Careful data analysis suggests that all of the code words, both manifest and latent, and all of their corresponding excerpts of relevant text fall into three domains:

- Reading instruction that incorporates singing and chanting,
- Effective general instruction,
- Affective, motivational constructs (particularly students’ engagement and self-efficacy levels).

By categorizing classroom behaviors and dialogue in relation to these three domains of reading instruction, general instruction, and motivational constructs, I found many keys to the effectiveness of Ms. Bing’s teaching methods.

This chapter describes Ms. Bing’s methods of teaching reading to her first-graders and analyzes the ways in which their singing and chanting interact with traditional reading education, with her effective teaching practices in general, and with her students’ interests and levels of engagement. The description begins with a typical morning’s instruction from the Writing Block, Guided Reading Block, and Working with Words Block, portraying ways in which Ms. Bing managed her students and conducted her literacy education. This description is followed by analyses of the three domains of
instruction that emerged from the qualitative data: reading education, general education, and affective constructs. Key strategies are below identified in boldface type.

A Typical Morning’s Instruction

The Writing Block: Good Morning and Good Work!

While the children have been writing in their journals this morning, Ms. Bing has been collecting homework and lunch money, taking attendance information, meeting with parents who have walked their children into the classroom, and doing any number of housekeeping tasks that devour a teacher’s time. The children have been busy, thinking about what they want to write and helping each other with the invented spelling they use in their stories. Once Ms. Bing’s logistical duties are finished, she will sit down at her desk and write stories in her own journal about something that she has experienced. She will read these stories to her first-graders during journal-reading time, for modeling is an important part of her teaching. Her students’ favorite stories involve her exploits with her granddaughters. When she feels the children have had sufficient time to write interesting entries of their own, she begins to sing.

“Good morning, good morning. Hope you smile the whole day through. Good morning, good morning to you! Good morning, good morning. The sun shines bright, and we’re all right. Good morning, good morning to you.”

When Ms. Bing sings this paraphrase of a tune from the movie Singing in the Rain, the children recognize this song as their signal to join in singing as they pick up their journals, push their chairs under their tables, and migrate toward the Reading Square. Ms. Bing is accomplishing the use of singing as a behavioral cue. Behavioral cues
constitute an important part of effective classroom management, which is, in turn, an important component of effective teaching (Pressley, Wharton-McDonald, Allington, Block, & Morrow, 1998). “Children hear so much adult talk that they soon tune it out. They always listen to information that is sung, however,” Ms. Bing explained.

Once the children have arrived in the Reading Square, Ms. Bing assesses their mental and physical conditions. Are they calm and ready to work? If so, they begin their Writers Block. If not, they sing or chant, the song or words determined by whether the students need to wake up or to calm down. Our Class is Red Hot! is a favorite cheer that accomplishes the mission of inspiring confidence, love of reading, and both physical and mental arousal:

Ms. Bing: Our class is what?
Class: Red Hot!
Ms. Bing: Our class is what?
Class: Red Hot!
All: Our class is R-E-D, red H-O-T, hot; once we start we can't be stopped!
RED HOT!!! Wheee! (waving hands in the air) RED HOT! (waving hands in the air) Whee! RED HOT! Wheeee! (hands waving in the air)
(Lick thumb and put on hips, then make a sizzle sound) ZZZZZZ....

If the children need calming, they may sing the Barney Song from a television show: “I love you, you love me; we’re a happy family. With a great big hug and a kiss from me to you, won’t you say you love me, too?” (Tune: This Old Man). Once again, mission accomplished: singing has been used to prepare the children, both physically and mentally, to learn. An important secondary goal is accomplished through the Barney Song, too: learning to think and act as a cooperative community.

One by one, children arrive at the “Author’s Spot,” a version of “Author’s Chair” (Graves & Hansen, 1983) where the children are given a microphone and are asked to
read the entries they have written in their daily journals. Discussions follow their readings, and Ms. Bing asks questions, both for the purpose of showing personal interest and for helping students improve their writing. Students are encouraged to ask questions, too, and to make comments about other students’ writing. Respect for each other’s work is not only encouraged, it is required.

The children use invented spelling (Clarke, 1988), which allows them to spell words as they hear them. Snow et al. report that invented spelling assists students in their awareness of the smallest units of sounds (phonemes) (C. E. Snow, Burns, & Griffin, 1998).

A variation on “interactive writing” (N. Hall, 2000; Henry & Wiley, 1999), a type of writing experience that involves teachers and students collaboratively composing a story about a shared experience, is employed by Ms. Bing to tailor her Writing Block specifically to the daily writing needs of her individual students. Researcher Cicalese (2001) found that emergent readers and writers are more successful when they practice their skills through such interactive writing, an activity that provides what she calls a kind of “playful and motivating setting” (Cicalese, 2003, p. 4), and Ms. Bing does intend this activity to be playful and motivational.

*The Writing Block Becomes the Reading Square*

One unique characteristic of the Reading Square was that Ms. Bing had a red rocking chair in which she sat while children read. It was reminiscent of a study by
Dolezeal et al. (2003) in which one of two teachers identified as highly engaging had a rocking chair in her classroom.

One important piece of furniture in Ms. Hackett's classroom was her rocking chair. During many of our visits, Ms. Hackett was seated in the chair either reading a story to her students, having an informal class meeting with them, or conducting a small-group lesson. This chair seemed to be one of the focal points of the room where the teacher and students bonded. (Dolezal, Welsh, Pressley, & Vincent, 2003, pp. 251-252)

The rocking chair did appear to give Ms. Bing an approachable air and seemed to inspire trust in her as in a parent. The children appeared to trust her love for them and, consequently, her assessments of their work.

Henry and Wiley (1999) have found through their work on interactive writing that the teacher’s attitude toward assessments of students’ needs influences how children respond to their own errors and to each other’s errors. Ms. Bing’s attitude was always one of encouragement, particularly during the Writing Block. Although Ms. Bing and her students did occasionally write stories together in a literal interactive fashion, based on experiences the class as a whole had shared, time at the Reading Square more typically involved children’s sharing of personal experiences they had encountered individually, with subsequent feedback and questions from Ms. Bing and the other students regarding details of their experiences and particulars of their writing. Although students began to interact more frequently and confidently as the school year progressed, they originally interacted through the answering of Ms. Bing’s questions and their agreement with her assessments of the writing.

Ms. Bing: This is an incredible journal entry, Uri, especially for the 11th day of school! I wanted to listen to that! What made it so special, Uri? Yes, lots of details. There were so many details that they made me drool! Girls and boys,
what did he talk about that made me drool? What was one thing we wanted to know that he didn’t tell us? Right you are, class! We wanted to know where he went camping. We don’t know where you went, Uri. Your story is great, and we all really want to know as many details as you can tell us about your trip.

Ms. Bing: Another incredible journal entry about your trip to Carowinds, Walt! Unbelievable! I could read every word you wrote in your journal, too. Great job!

Ms. Bing: Rhonda has a wonderful beginning sentence, a lot of details in the middle, and a great ending sentence. These are three important things about every story. Rhonda did all these things, and she’s been in the first grade only 16 days. That’s incredible!

Not only did Ms. Bing exploit journal-reading time for its opportunities to encourage the children in their reading and writing, but with each incidence of encouragement she also provided **specific feedback about what the children had done correctly.** This action increased substantially the encouragement factor of her words while simultaneously teaching the children exactly what they had done correctly. Additionally, when suggestions were made for improvement, they were typically preceded by a statement describing something the children had done well.

Ms. Bing: Terry had a lot of details, and he has taught us a lot about going to camp. It would be good to try not to use one word over and over, though, Terry, as you did the word *fun.*

Ms. Bing: Uri, your entry is wonderful, and your book publishing is incredible. I’m afraid that no one besides me heard you read, however. You need to practice reading those great journal stories more loudly.

Jason announced, “You said to practice at home writing in our journals, and my mom bought me a whole journal.” Ms. Bing threw Jason a kiss and replied, “Please give your mom a kiss because that is a great thing for her to do!”

“Sonya, you did a very good job with your journal entry today.” Turning to the class, she announced, “One reason Sonya is learning so much in first grade is because she is such a great listener! Uri told us that time is everything; you can never get it back. Sonya is not wasting ANY time!” Returning to Sonya, she
spoke softly, “The space goes at the top of your page,” and pointed to the top margin in Sonya’s journal.

Ms. Bing’s encouragement to Sonya was even more valuable than it might seem, for not only was Sonya the youngest child in the class, but having moved at the age of five to Allgood Elementary School from Germany, during the summer between kindergarten and first grade, Sonya was a novice at speaking English as well as writing it. She knew some of the English alphabet when she began first grade, but she had to work very hard, often practicing her journal entries at home the night before and then re-writing them in class the next morning.

While encouraging students in their academic work, Ms. Bing also took advantage of opportunities to teach them self-discipline, along with a sense of the importance of self-regulation and responsibility.

Ms. Bing: Ann, are you ready to read?
Ann: I wrote only one sentence.
Ms. Bing: Well that will be recess time for you, because I saw you wasting your precious time during journal-writing time. As Uri tells us, time is everything! You can never get it back.
Ms. Bing: (turning to Anton) Thank you, Anton, for listening so wonderfully.

A potentially negative classroom situation had been turned into a positive one, and without further ado, Ms. Bing turned back to the other children’s writing.

A few minutes later Ann asked to be allowed to read her journal. Although she still had not written a story, she nevertheless wanted to read. Ms. Bing allowed her to take the Author’s Spot, and Ann proceeded to “read” her mostly unwritten story:

Ann: I like school because Bing’s bookworms are red hot. They also sing and play. In my class I have many friends. We went to the park.
Ms. Bing encouraged her story creation: The first part of your story is awesome! That first part was good stuff! High five! You keep doing stories like this, you’ll get better and better and better and you’ll be so good you won’t be able to stand yourself! Now the stuff on your page, I can’t read it, but your story is awesome!”

Ms. Bing did not address the fact that Ann had actually begun telling two different stories, for at the moment she deemed it more important that Ann feel good about having merely created a story rather than being criticized for its inadequacies. Ms. Bing had reinforced Ann’s successive approximation of the goal of writing stories.

Ms. Bing liked to connect her students’ stories with literature they had read. One such instance occurred on the day that Lindsay wrote about getting her nails painted. Ms. Bing remarked that it was just like the day Junie B. Jones got her nails polished. The children’s text gave Ms. Bing opportunities to personalize the information and to help students feel connected to literature they read throughout the school day.

Perusal of children’s written text gave Ms. Bing an opportunity to assess their levels of phonological awareness (hearing the sounds that go together to make words) (Frederickson & Wilson, 1998) and phonetic understanding (knowing the sounds of letters and how to put them together to make words) (Archibald, 2003; B. Fisher, 1995; Hammill & Swanson, 2006; Jeynes, 2008); their understanding of the concept of word (Bialystok, 1986; Darrell Morris, 1981; D. Morris, 1983, 1993; D. Morris & Henderson, 1981; Paris, 2001); and the conventions of writing, such as spacing of letters and words, capitalization, and punctuation (Cicalese, 2003; DeFord, 1980; Graves, 1994; Paquette, 2007). It was not difficult to assess which children had achieved an effective concept of word, because such children put appropriate spacing in their journal entries while other
students wrote merely a long string of letters. Journal-reading time thus served multiple purposes.

The use of a microphone during journal-sharing also served more than one purpose. First, the use of a microphone presented an opportunity for motivation through fun. Second, soft-spoken children could project without effort so that children at the back of the Reading Square could hear them. The first step in teaching the children to project when speaking before a crowd, it was a non-threatening strategy that provided scaffolding (Gredler & Shields, 2007) until the children were confident enough to project on their own without the assistance of the microphone. Pressley et al.(2002) maintain that in scaffolding their students, effective teachers “provide just enough support so the student could begin to make progress on a task but not so much as to be doing the task for the student” (Pressley, Roehrig, Bogner, Raphael, & Dolezal, 2002, p. 5). During children’s presentations in the Author’s Spot, Ms. Bing frequently provided scaffolding and encouragement for her children, not only in their creativity, actual writing, and the reading of their creations, but also in their verbal projection.

Projection was an important skill to be learned in Ms. Bing’s class, for much of the work her students did during their reading lessons the first few months of school would culminate in a play to be performed on the last day of school prior to the winter holiday. By teaching the children in the Reading Square to project their voices and to speak distinctly, confidently, and with inflection and expression, Ms. Bing provided the scaffolding that would be needed to prepare them to present their winter play, for everyone in the class would have not only speaking and acting parts but also singing
parts. Confidence, projection, and clear enunciation were therefore of special importance to Ms. Bing’s students.

In sum, non-fluctuating components of the journal-reading time included encouragement paired with specific feedback; suggestions for improvements, typically made in the form of questions; additional questions designed to determine the listeners’ comprehension and to show personal interest in both the story’s subject matter and in the student’s life; whole class participation; and scaffolding for dramatic and confident presentations and for the eventual inclusion in their writing of standard spelling, punctuation, capitalization, addition of titles, and essay format. Ms. Bing encouraged self-regulation and personal best work, and her lessons in respect extended from self-respect to respect for other people (“If you are being respectful to other people, they will be respectful to you. It works both ways.”) and respect for materials, as she often stressed that her students should take particular care of their bookbags (“Please do not leave hazardous materials lying around on the floor.”) and of their journals. “After all,” she frequently said, “you want your journals to last until you are fifty-six,” which was her own age.

*The Reading Square Acquires a New Purpose*

Once all the students had read their journal entries and had been encouraged in their efforts, each child did a 180-degree turn on his or her floor mat so that everyone could face the calendar, which was hung on the wall opposite the wall they had been facing. The children who were in the back of the Reading Square were now located in the
front of the Calendar Square. Although a much smaller amount of direct reading
instruction took place during calendar time, it nevertheless presented opportunities for the
integration of valuable competencies that had the potential to influence reading
acquisition: student leadership, critical thinking skills, self-efficacy for reading, and
further encouragement. Examples are as follows.

**Student leadership:** A different student was chosen each day to be the class
leader. Responsibilities of the daily leader included leading the line when the class went
to lunch, recess, or related arts; assessing the lunch count (although Ms. Bing always
double-checked this count); setting the calendar with the correct month, day, year, and
weather-of-the-day icon; and being the teacher’s assistant for the day.

**Self-efficacy for reading:** “All Bookworms say this with me: Today is Tuesday,
September 13, 2005. Erika, aren’t you a bookworm? [Erika had been inattentive.] All
bookworms again: Today is Tuesday, September 13, 2005. Yesterday was _________
(children filled in the blank), tomorrow will be _________.” By simply calling her
students “Bing’s Bookworms” and by having a bookworm as the class’s mascot, Ms.
Bing instilled in them the idea that they could read.

**Critical thinking:** “As we do our weather graph, let’s decide if today is sunny,
cloudy, or rainy. We’re beginning to run out of sunny pictures to put on our graph, but
that could be a good thing. Why do I think that could be a happy thing? Yes, if we run
out of sunny pictures, that means we’ve had lots of sunny days, and that’s a happy thing
after all the rain we had this summer.”
Self-regulation and purposeful use of time: “Look at Helena. She’s ready, and Vannah’s ready. These are children who are not wasting precious time! Those who are not ready are not wasting just their own time—they are wasting everyone’s time. See… Anton is ready and Walt is ready and Erika is ready and Jason is ready. . .”

The Guided Reading Block: Sing We and Chant It!

“If you’re ready and you know it, move with me. If you’re ready and you know it, move with me. If you’re ready and you know it, then your quiet feet will show it. If you’re ready and you know it, move with me.”
(Tune: If You’re Happy and you Know It”)

From the Calendar Square all the children began to move quietly to their seats, singing along with Ms. Bing as they walked. They were ready—for singing time!

When I first entered their classroom, the children were singing from songbooks that Ms. Bing made for them, but at the very beginning of the year, prior to the start of my visits, they had sung from lyric-filled charts on the wall toward which Ms. Bing pointed with her finger, a ruler, or a pointer. While some of the children were still finding their songbooks and opening them to the correct page, Ms. Bing asked questions about the first song, Big Black Bugs Bouncing Balls on Bobby’s Bed (Traugh, 1993a).

“What kind of word is baseball? It is a special kind of word. Yes, it is a compound word. Thank you for that answer, Marty. Who can find a short word in that song?” She called on a number of children who could not answer her question. She did not comment if a child made a wrong guess but instead went on to another child and another until someone finally gave a correct answer. Walt finally said “black,” and John finally said “bat.” “Perfect!” She exclaimed. The children sang Big Black Bugs and
tracked with their fingers the words of the songs in their songbooks. This **finger point reading** (L. Ehri & Sweet, 1991; Reutzel, 1995), also referred to as **fingerpointing and fingerpoint reading**, became an important strategy in the reading education of Ms. Bing’s children.

Ehri and Sweet call fingerpoint reading an advanced form of “pretend reading” (L. Ehri & Sweet, 1991, p. 444). They explain that fingerpoint reading that is designed for use with basal readers requires that teachers read and re-read Big Books (books that have been enlarged so that the text and pictures are visible to the whole class—in Ms. Bing’s case Big Charts of song lyrics), pointing to each word as it is read. They maintain that the purposes of this type of reading are that children will see that text is read from left to right, that children can begin to understand concepts of print:--how print corresponds with speech (so they can eventually recite and fingerpoint read their own smaller versions of the Big Book),and that children will begin acquiring a repertoire of sight words.

Morris and Henderson (1981) hold that children’s abilities to fingerpoint reflect their levels of understanding of the **concept of word**. They maintain that children have achieved a concept of word when they can correct fingerpointing errors they have made on two-syllable words after having figured out that there has been a mismatch between the sounds they are hearing (and saying) and the letters to which they are pointing. At this level they can also learn new words by fingerpointing (Darrell Morris, 1981; D. Morris, 1983; D. Morris & Henderson, 1981). In Morris and Henderson’s study, children learned to recite a poem, which they subsequently fingerpoint-read, and then they were asked to
try to read selected words from the text. If a selected word were buried within a line of text, some children identified it by “re-reading” the memorized line up to that point, while more advanced students could actually point directly to the correct word. Ehri and Sweet (1991) describe the amount of reading knowledge that is needed for a child to fingerpoint: knowledge of the alphabetic system and how to recognize the way that printed words correspond to initial sounds in spoken words, thus allowing the reader to distinguish words in a line of memorized text. Morris (1989) discovered that children achieve proficiency with initial consonants before they understand fully the concept of word, supporting Ehri’s and Sweet’s claim that they may need to know beginning sounds before they can be successful in fingerpoint reading.

The children’s level of success in fingerpoint reading gave Ms. Bing an accurate assessment of their knowledge of concepts of print, initial consonants, concept of word, phonemic segmentation, and sight words. With an eye toward the students’ songbooks and fingers as they sang and pointed and with subsequent questioning of the students regarding words in the text, Ms. Bing continually assessed each child’s level of ability in these areas. No worksheets were necessary, and no grades had to be assigned to the children’s work as they sang, chanted, fingerpointed, and displayed their levels of phonetic and phonological awareness.

Ms. Bing: When I ask you to look at a word, I want you to point to it. Look at candy. Every child in the room should have your finger on it. What sound do you hear at the end of the word candy? [phonological awareness] What letter makes that sound? [phonetic understanding] When the y makes the long e sound, is it a consonant or a vowel? Right! So when it makes the sound in candy, is it a vowel or a consonant? What did I tell you about ys at the end of a word? Yes, Uri, you’re exactly right! John, I need for you to point. Ann, I need for you to point.
Walt apparently understood through these vicarious examples that he needed to point, too (A. Bandura, 1977), and he began to do so, as did the rest of the children in the class.

While chanting the poem *The Crazy Cook*, Ms. Bing instructed, “Put your fingers on hamburgers. It has three syllables. That means you can clap three beats in the word. It also tells you how many vowel sounds there are.” Ms. Bing modeled the clapping of the syllables in hoagies, hot, watermelon, and Stephen, and the children imitated her. Such lessons in phonics instruction were embedded throughout the singing and chanting sessions.

When the class began to sing *Luckless Lucy Lost Her Locket*, Ms. Bing commented, “If you’re not pointing at the words, then you are not reading. If you’re just saying the words and looking up into the air, then you’re not reading. You must look at the words if you want to read.” A vocabulary lesson was needed as the children sang the word ledge. The children appeared eager to know what the word meant so they could understand where it was that Lucy first found her lost locket (on the ledge).

Comprehension and vocabulary lessons were, therefore, also embedded in the singing and chanting sessions.

The class continued with the songs *Many May Moo, Nanny Goat Nellie, My Silly Sister Sally, Virgil the Vulture, Wanda Waved at a Wombat, Dexter Likes to Exercise, and Quinton Asked Quincy*, fingerpointing and participating with almost total engagement and large amounts of enthusiasm. As the singing session continued, Ms. Bing continued to intersperse phonics lessons, vocabulary lessons, encouragement and corresponding specific feedback, mnemonics, and lessons in personal responsibility.
**Phonics** is a method of teaching reading, according to Ehri and Nunes:

Whereas [phonemic awareness] is a specific skill that involves manipulating sounds in speech. . .phonics programs may or may not include explicit instructions in [phonemic awareness]. Typically, phonics programs teach students how to use grapheme-phoneme correspondences to decode or spell words (Ehri & Nunes, 2002, p. 113).

While working with the song *Quinton Asked Quincy*, Ms. Bing questioned, “What letters does *qu* use to make its sound? I ask you this question every day. You may use your brains if you want to.” She asked every child in the room, and not one child could state that the answer is *kw*. “Rosie, what word has a short *u* sound? Correct, *but* is one. Another one, Uri? Correct, *run* has a short *u* sound. Yes, Marty, *rust* has a short *u* sound, and I hadn’t even thought of that one.”

On a different day when the children sang *Morning Has Broken*, the phonics lessons revolved mainly around the use of the ending *-ing*. “There are a lot of *ing* words in this song. Can we find them? What does *ing* say? What’s the difference in *springing* and *singing*, Helena? Walt, will you point to these words on the chart, please? *singing* and *springing*. Who can tell me the difference between the words?” No one could answer her question. “How many of you can see? If you can see, if your eyes work, you should be able to see the difference in *singing* and *springing*.” Ms. Bing went all around the room trying to find a child who could tell the similarities and differences. “Both words have two *ings*.” Finally, she got most of the children to see that the words begin with different sounds, *s* and *spr*, but it took time, patience, and several different approaches to do so.
Vocabulary lessons (along with scaffolding and the dignifying of incorrect responses by supplying specific feedback)—“I’m going to point to this word. Please tell me what it is.” Ms. Bing pointed to with, and most of the children could not tell her what the word was. Kitty finally read the word. Ms. Bing often chose very simple sight words and called on students who didn’t generally perform on a high level in other areas of reading but who she felt would know these easy words. Their success in reading these sight words (O’Connor, 2007) usually gave Ms. Bing a chance to compliment them, but on this particular day most of the students could not identify even the simplest words. When one child said that shine was sleepy, instead of telling the child that he was wrong, she asked, “Why can’t this word be sleepy?” Her questioning technique kept the student from being embarrassed at having given the wrong answer and simultaneously encouraged the student to think critically and describe his reasoning, which she continued to scaffold until he arrived at the correct answer. Although her plan for giving encouragement in this instance did not turn out to be what she had hoped, she still took advantage of a teachable moment. While her method of embedding phonics instruction among the songs and chants did include phonemic awareness, it went further in helping her students decode and spell words.

Encouragement—“Let me tell you a story. There is a little girl in this class. She’s a reader—she can read a few words. She’s reading these words and trying, and she is giving her best effort. And I really appreciate Kitty’s working so hard and giving her best efforts, and I’ll bet she’s going to be a better reader because she is singing these songs.” She asked Kitty to read a very difficult line of song text. Ms. Bing knew she
could read it, not because Kitty could actually read all the words but because she knew how to sing it. Kitty’s success in “reading” that line appeared to be a great confidence booster for her. Kitty was a student who was given to rages and outbursts at any moment except during singing time. Being a capable and enthusiastic singer, Kitty was always engaged during singing time.

**Personal responsibility**—“Thank you, those of you who are paying attention, because YOU will be the ones who will learn. All I ask is that you try. I appreciate those of you who try!”

**Cooperative learning situations**—During the song *Wanda Waved at a Wombat*, Rick was lost. He could not even find the song in his songbook, so Sonya helped him. She found the song for him, took his hand in hers, and moved his fingers across the page. (Later Ms. Bing privately gave Sonya M&Ms for being so helpful.) Whether or not Rick learned anything about reading in that song session, he learned to accept help from friends.

An entry from November 6 speaks to the cooperative spirit that Ms. Bing fostered in her classroom:

Marty is sitting in front of Mitch. After each word, he turns his paper around so Mitch can copy his answers. Ms. Bing had just gotten through saying that because this is not a test, it is not cheating if you help your neighbor, as long as you can do it without talking. If this were a test, it would be cheating to do so. Marty knows that Mitch can’t do this by himself, so he is helping him, very inconspicuously. I doubt that anyone besides Ms. Bing and me even see what Mitch is doing.
The Working with Words Block: Give Me an A!

While singing and chanting occupied much of Ms. Bing’s Guided Reading Block, they also took a place of prominence in her Working with Words Block. The Working with Words Block is designed for phonics instruction, and in the other classrooms at Allgood Elementary School this block often centered on worksheets and drills. Ms. Bing’s class was different. Indeed, she practically eschewed the use of worksheets. In an entry on September 20, 2005, I recorded these words:

We could be doing worksheets, and instead I try to make it fun for you. Have you done any reading worksheets in here? No, I haven’t given you any worksheets. We sing instead of doing worksheets. Now, which would you rather do?

Working with Words heavily involves use of the Word Wall, and the first Word Wall activity I saw involved the incorporation of a game similar to Hang Man:

Ms. Bing: “I’m not going to just tell you what our word wall words are this week. You’ll have to guess. Our leader for today is John, and he will guess first. This is sort of like a hang man game. The first word wall word is this __ __ ___. Consonant, vowel, consonant. John, guess a letter that might be one of the letters in this word. Any letter in the alphabet.” John makes an incorrect guess.

Other students begin guessing until Helena says “C.”

Ms. Bing: “Right, Helena! You get to guess again. Let me tell you a secret. It’s best to guess the vowels first, because there are so few of them. What are they?” Susan guessed A.

Ms. Bing: “Yes, that’s it. Now guess what the last letter is, Susan. You get another turn.” Sarah guessed N.

Ms. Bing: “That’s right! Now, Susan, see if you can find a word on the Word Wall that you think says C-A-N.”

The Working with Words Block gave an important role to clapping and chanting, particularly as Ms. Bing led the children in clapping the letters in their focus words. The first Word Wall word they chanted was C-A-N. As they chanted the letters, they clapped with the consonants and snapped with the vowels, adding a physical dimension based on
the shape of the lower case letters. All vowels were snapped at a spot about chest high, but consonants that stood higher than the vowels when printed in lowercase letters were clapped about head-high, in a position higher than the vowels were snapped, and consonants that fell below “the line” on writing paper were clapped in a position lower than where the vowels were snapped, about waist high. The chant and movements for C-A-N became

\[c - a - n \text{ can; } c - a - n \text{ can; } c - a - n \text{ can; } c - a - n \text{ can.}\]

Because all three of these lower case letters sit on the bottom half of the line on writing paper, they were snapped and clapped linearly. When the word *can* was chanted as a unified word, the students held their hands out to signify that they were saying the complete word. Clapping and snapping for all the letters in c-a-n took place about chest high: Clap snap clap hands-out (repeated as the letters and word were chanted).

If the word were b-a-t, then the chant would be

\[b - a - t \text{ bat; } b - a - t \text{ bat; } b - a - t \text{ bat; } b - a - t \text{ bat.} \text{ (See Appendix E.)}\]

The snapping and clapping would be: clap head-high, snap chest-high, clap head-high.

hands-out, repeated three additional times along with the chant.

“I want you to think of one of our chunk words this week—*at*. Please say words that have our chunk in them.” *Cat, hat, bat, mat*—children called out words and then spelled them. As they spelled the words, Ms. Bing wrote them on a chart. When children named words that don’t have the *at* chunk, Ms. Bing tried to help them determine why the word didn’t fit rather than telling them they were wrong or directly telling them why the word didn’t fit.

“I have an *at* song I want us to sing.” (Tune: *A-Hunting We Will Go*)

Verse 1. AT says AT, AT says AT—(sing four words from the chart they just made of *at* words) AT says AT.

Verse 2. AT says AT, AT says AT—(sing the next four words from the chart they just made of *at* words) AT says AT.
Continue singing verses until all the *at* words on the chart have been sung.

A song that supplied **mnemonic** learning of information that needed to be memorized (in this case short vowels, their sounds, and examples of words that include them) and that was learned during the Working with Words Block appears in Appendix E. The lyrics are as follows:

Aaaa apple  
Eeeee egg  
Iiii Indian, the short vowels we do sing.  
Ah, ah, ah, ah, oxen, uh-- umbrella, too.  
Now I’ve sung my short vowel sounds, I’ve sung them all to you.

The next step of Working with Words generally included an activity that came as close as Ms. Bing seemed to dare of the inclusion of a worksheet.

Ms. Bing: I’m going to give you a half sheet of paper. On the edge of the page I want you to write the word wall words you see on the board and write the chunk words in the middle of the sheet of paper. Put your name on the top line, and I’m setting the timer for 4 minutes. Chunk words to write in the middle of the page are: *pig, dig, rig, big, jig*

Thank you for working really hard! Thank you for your neat handwriting!”

When you are finished writing your words, turn to the back of the page and number like this--1 2 3 4 5--on the back. (She waited as the children finished their work on the front of the page and then turned over their half-sheets of paper.)

1. Write the [Word Wall] word that begins with the same sound as happy. (have)  
2. Write the [Word Wall] word that rhymes with wig. (big)  
3. Write the [Word Wall] word that is the opposite of out. (in)  
4. If you say this [Word Wall] word, it can ask a question. (who)  
5. If you are giving someone a gift, you might write this [Word Wall] word on the top of the card. Or on the tag for the gift. (to) This is a kind of hard one, too.

Although Ms. Bing constantly assessed the students’ work, diagnosing their difficulties and planning corrective instruction as needed, only in situations such as the one just described did traditional forms of assessment appear during reading instruction,
and only in such circumstances might the untrained observer have been able to realize that assessment was actually occurring.

Assessments typically took more authentic forms (Beimer, 1993; DiMartino & Andrea, 2007; Schnitzer, 1993; Valencia, 1994; Wiggins, 1990), one example of which involved a book entitled *Five Fat Fireflies*. Each day on which the children learned a new song during their Guided Reading Block, Ms. Bing made a book for each of them that included the lyrics of that new song. The text of these songs can be found in the books by Steven Traugh (1993). Ms. Bing made a book for each child for each song, printing one line of lyrics on the bottom of each page. The children’s objective was to illustrate each book.

Ms. Bing: Helena, can you read the title of this book? Right! That’s hard reading for a first grader. I’ll bet not many first graders can read that, but Bing’s Bookworms surely can!

As the children read each line and illustrated it, Ms. Bing required they show accurate comprehension in their drawings. Discussions about the words and meanings of the lines of text took place before the children began their drawings.

Ms. Bing: *Talking Tomatoes* is the name of today’s book. As you can see the first page says, ‘Talking tomatoes are telling the time.’ What are two *ing* words on that page? What is a CVCe word? [consonant, vowel, consonant, silent e] What would a talking tomato look like? What will you need in that picture besides a talking tomato? Right, a clock! Ann, would you please read the next page?

Ann: Talking tomatoes are counting to ten.

Ms. Bing: How are you going to illustrate that, Marty?

Marty: Draw a tomato with a bubble and 1 to 10 in it.

Ms. Bing: Great idea, Marty!
It may be difficult to comprehend that some first grader’s knowledge of reading could be practically nil, but when one looks at the fact that 9 of Ms. Bing’s students scored 0 on their initial administration of the STAR Reading Test, that two others scored in the 1st percentile nationally, that two others scored in the 3rd percentile and another in the 28th, it is not far-fetched to conclude that only 4 of Ms. Bing’s students possessed any workable degree of reading skills upon entry into her class. Indeed, it is unknown just how much of a deficit was displayed by the students who scored 0, as scores lower than 0 were not indicated by STAR output.

Although they are basic emergent reading skills, concept of word awareness as discussed by Adams, 1990), print awareness, and phonological awareness form a triad of skills that are necessary for the student to achieve in order for reading education to continue. As Justice and Ezell (2001) point out:

The literature provides descriptions of emergent literacy skills that are important prerequisites for conventional literacy ((M. Adams, 1990; Chaney, 1992; D. K. Dickinson & Snow, 1987; Mason, 1980; C. E. Snow, 1983; Teale & Sulzby, 1986). Several key areas include print awareness, word awareness, and phonological awareness. Print awareness refers to children’s ability to recognize the function and form of print and the relationship between oral and written language (Y. Goodman, 1986; Hiebert, 1981; Mason, 1980). Word awareness describes children’s ability to recognize words as discrete elements of both print and speech and to discern the relationship between written and spoken words (Bowey, Tunmer, & Pratt, 1984; Tunmer, Bowey, & Grieve, 1983). Phonological awareness describes young children’s ability to identify and manipulate the sounds of a language (Ball, 1997; Ball & Blachman, 1991; Lundberg, Frost, & Peterson, 1988). Skills across all three dimensions are acquired, for the most part, incidentally and gradually during the preschool period. (Justice & Ezell, 2001, p. 208)

It is safe to say that many of Ms. Bing’s students had not acquired these skills during the preschool period or even during the kindergarten period, and she was thus
required to teach them these emergent skills while simultaneously meeting the needs of three children who scored in the upper 90th percentile nationally on their initial STAR Reading Test. She met this challenge with masterful skill, and a large portion of this success rested on the back of her balanced and enthusiastic approach to reading education.

Key Components of the Domain of Reading Education

As can be seen in the previous sections, Ms. Bing’s reading instruction has many dimensions. The key components of this domain of her effectiveness will be discussed in this section.

**Balanced literacy.** Although an argument can be made that Ms. Bing’s class was a whole language classroom with embedded phonics, there was a deep study of phonics incorporated with the authentic literature she used, and a more precise description would be balanced literacy. As a host of reading strategies (S.A. Stahl, Duffy-Hester, & Stahl, 1998) was embedded in her teaching, Ms. Bing found that these strategies, along with her employment of singing and chanting in the place of basals and worksheets, culminated in a synergistic effect. Ms. Bing’s effective teaching characteristics, the association of reading and writing education during Journal Time, and the integration of arts education into reading education all combined to produce successful reading among her students. A description follows of her balance of the components of skills instruction.

Excellent elementary literacy instruction balances skills instruction, (e.g., phonics, comprehension strategies teaching) and holistic literacy opportunities (reading of
authentic literature, composing in response to text). balanced instruction really means a lot of skills instruction in the context of massive holistic teaching! (M. Pressley et al., 2002, p. 1)

While whole language instruction focuses on literature and learning words and comprehension through a literature context (K. Goodman & Goodman, 1982; Newman, 1985) and while phonics instruction focuses on the learning of phonetic skills in isolation (L. Ehri, Nunes, Stahl, & Willows, 2001; S.A. Stahl et al., 1998), balanced literacy provides a middle ground on which reading education can take place. Because phonics worksheets and explicit drills did not take place in Ms. Bing’s classroom, it may have appeared on the surface to be a whole language classroom, and a case could perhaps be made for the appropriateness of this nomenclature. Because phonics lessons were so frequently and purposefully embedded in the Guided Reading Block, however, a case could also be made that hers was a curriculum of balanced literacy.

An evolution of the definition of balanced literacy is reflected in an explanation by Au, Carroll, And Scheu (2001) that this process must include “The Six Aspects of Literacy”: ownership of literacy, reading comprehension, writing process, language and vocabulary knowledge, word reading and spelling strategies, and voluntary reading (Au, Carroll, & Scheu, 2001, pp. 4-7). Ms. Bing’s teaching did, indeed, include all six of these aspects of literacy, and with some students it was required that she start this process with very basic literacy understanding.

**Concept of word/word awareness.** Through the processes of fingerpointing and of writing in their journals, one could see a progression of the awareness of words that
emerged in the skills of children who were non-readers at the beginning of the school year.

**Fingerpoint reading.** Fingerpoint reading and an awareness of word develop in tandem, as fingerpointing skills become more accurate once the non-readers recognized that units of language call *words* do exist. The children’s recognition of words became more accurate as they tracked them on charts and in their songbooks. Word awareness in written language contexts is a necessary competency for beginning reading development, with the concept of word development through fingerpointing tasks comprising a key element of early reading instruction (Clay, 1979).

**Phonemic awareness.** The ability to focus on and to manipulate the sounds in words (Yopp, 1999), phonemic awareness has been shown to be the single most important predictor of a child’s success in learning to read and spell (K. E. Stanovich, Cunningham, & Cramer, 1984). Because phonemes are often difficult for the beginning reader to untangle in words, there has been debate about whether they should be emphasized in beginning reading education (Juel & Minden-Cupp, 2000). Ms. Bing’s work with rimes (rhyming syllables) and onsets (the beginning consonant sounds in words) as they naturally occurred in her songs, and her direct approach to phonemic awareness during Word Wall work helped the children to hear the sounds that occurred in the words they sang and read.

**Phonological awareness.** This category includes the sub-skills of word awareness, syllable awareness, rhyme awareness, and phonemic awareness. The singing of songs and chants that most frequently included rhymes, the chanting and clapping of
syllables, and the explicit phonemic analyses of words they encountered in their songs and chants aided in the acquisition of all of these sub-skills.

Phonological awareness is “the ability to reflect on and manipulate discrete segments of spoken language” (Guiney, 2002, p. 2). In the category of phonemic awareness lie the skills of word awareness, syllable awareness, rhyme awareness, and phonemic awareness. Although the terms phonological awareness and phonemic awareness are frequently interchanged, phonological awareness encompasses a range of skills that include phonemic awareness. There are approximately 41 phonemes in the English language: the smallest units of sound in the spoken language. Phonemic awareness refers to the ability to focus on and to manipulate these 41 sounds in spoken words. Ehri et al. (2001) list six different tasks that are considered to be examples of phonemic awareness.

1. Phoneme isolation, which requires recognizing individual sounds in words; for example, “Tell me the first sound in *paste.*” (/p/)

2. Phoneme identity, which requires recognizing the common sound in different words; for example, “Tell me the sound that is the same in *bike, boy,* and *bell.*” (/b/)

3. Phoneme categorization, which requires recognizing the word with the odd sound in a sequence of three or four words; for example, “Which word does not belong? *Bus, bun, rug.*” (rug)
4. **Phoneme blending**, which requires listening to a sequence of separately
spoken sounds and combining them to form a recognizable word: for
examples, “What word is /s/ /k/ /u/ /l/? (school)

5. **Phoneme segmentation**, which requires breaking a word into its sounds by
tapping out or counting the sounds or by pronouncing and positioning a maker
for each sound; for example, “How many phonemes in ship?” (3: /š/ /i/ /p/)

6. **Phoneme deletion**, which requires recognizing what word remains when a
specified phoneme is removed; for example, “What is smile without the /s/?
(mile). (L. Ehri, Nunes, Willows et al., 2001, p. 253)

Evidence from research shows that performance on tasks of phonemic awareness in
kindergarten and first grade can predict a student’s reaching achievement (Share, Jorm,
Maclean, & Matthews, 1984), and additional research points to the importance of overall
phonological awareness levels as predictors of success in early reading achievement (M.
Adams, 1990; Blachman, 1994; Wagner & Torgesen, 1987). Ms. Bing’s instruction
included ample opportunities for the development of syllable, rhyme, and phonemic
awareness.

**Repeated readings.** About the use of repeated reading, Chomsky is reported to
have said:

The procedure proved to be facilitating for slow and halting readers, increasing
fluency rapidly and with apparent ease. Successive stories required fewer
listening to reach fluency. . . the work provided in addition a heightened sense of
confidence and motivation. Within several months the children became far more
willing and able to undertake reading new material on their own. (Samuels, 1997,
p. 377)
The method of repeated readings is the reading of a short passage of text over and over until the oral reading of it become fluent. In a study involving at-risk first grade students, Ming (2007) found the practice of repeated readings to be particularly helpful in the development of fluency and oral reading skills. Additionally, Therrien (2007) found it to be more effective when combined with connected text. Samuels (1997) reports, however, that some teachers are reluctant to use the repeated readings method for fear students will become bored with repeatedly reading the same passages. Boredom was surely not a factor in Ms. Bing’s reading classes!

My reflections from the day I saw and heard the children singing “Mr. Bones” are as follows:

The vocabulary is really difficult, but these kids are learning it! Of course, not all the children are learning it all, but that’s part of the beauty of this exercise—each child can participate on his or her own level. If they can’t sing the wordy verses, they can always jump in on the refrains because they are repeated so often.

Not only were words of songs repeated, but the songs themselves were repeated. Because the ultimate goal of reading education is comprehension, it might seem on the surface that repeated readings are all about fluency and not about comprehension. Such is not the case, however, as with each repeated reading the students become increasingly more fluent; reading becomes increasingly more automatic; less mental energy is needed for decoding; and, therefore, more brain power is available for comprehension (Samuels, 1997).

**Automaticity.** “[A]s children become quicker and more accurate, there are freed-up resources that can be used for improved comprehension” (Schwanenflugel et al., 2006, p. 518).
Rasinski observes:

Too many developing readers (a) make an excessive number of decoding errors while reading; (b) read words in text correctly but put such effort into the task that they exhaust their cognitive resources, which should be devoted to comprehension; or (c) decode words accurately and effortlessly but are unable to put them together in a way that adds appropriate and meaningful expression to their oral reading. The result of any of these manifestations is often poor comprehension, a decided lack of enthusiasm for reading, and a personal sense of failure. (Rasinski, 2006, p. 704)

Large doses of repetition in singing, chanting, and fingerpoint reading of text in Ms. Bing’s classroom led to automaticity in sight word recognition, in recognizing and analyzing Word Wall words, and in the memory of material that was learned through mnemonic devices, specifically chants and songs. Word Wall songs and songs such as the “Short Vowel Song” (Appendix E) helped children remember important phonetic information. Rasinski’s belief that instruction in accuracy, automaticity, and prosody should occur simultaneously in order to increase students’ reading fluency had observable allies among the effects of Ms. Bing’s methods of teaching.

**Fluency.** Fluency represents one of the most important skills that budding readers need, the lack of which often characterizes disabled readers. Fluent reading typically emerges between first and third grades (Kuhn & Stahl, 2003). Learning to read with fluency appears to be a daunting task, for many components of reading must be coordinated simultaneously (Ramp, 2007). These components include word recognition, the accessing of word meanings, selection of the correct meaning of the words, grouping words into grammatical units, generating inferences, and using reader knowledge to construct an understandable model of the text (Samuels, 2002). Non-fluent students could easily become stymied by the magnitude of the task. Oral reading fluency was repeatedly
practiced and achieved in Ms. Bing’s class, however, as children sang and fingerpointed. The singing and tracking of memorized text required that the children’s fingers (i.e., their eyes) move right along with the fluidity of the songs, and it did not allow for halting interpretation. Although some children achieved such fluency more slowly than others during individual songs, their high level of engagement inspired them to practice, practice, practice, and seldom during their Guided Reading block did the children read with anything less than fluency. While their fingerpointing may not have been perfect, their enunciation of the text was fluent.

**Prosody.** Prosody, a component of fluency, is defined by Yoshida as the melodic and rhythmic properties of speech (Yoshida, 2007). Dowhower defines it as “a general linguistic term to describe the rhythmic and tonal features of speech. . . Prosodic reading is the ability to read in expressive rhythmic and melodic patterns—educators call it reading with expression” (Dowhower, 1991, p. 166). Prosody is inherent in sung text, and a great deal of implicit prosodic practice took place when Ms. Bing’s children sang their reading text. More explicit instruction in prosody in Ms. Bing’s class took the form of the expressive reading of children’s journal entries and their spoken lines in the winter play. Prosody is an important component of fluent reading, and the increase in fluency through sung text simultaneously increased the prosodic skills of Ms. Bing’s students.

**Phrasing.** Watson and Gibson describe phrasing as a sub-classification of prosody, as follows:

An intonational phrase is a prosodic unit of speech that contains at least one syllable that receives phrasal stress (pitch accent) and ends with a boundary tone (Pierrehumbert & Hirschberg, 1990). Intonational phrases are often, but not always, separated by pauses, and the final word of the phrase tends to be longer.
than the same word would be in phrase-medial position. (Watson & Gibson, 2004, p. 714)

Here again, phrasing is inherent in sung text and, as such, provided ample opportunities for Ms. Bing’s students to practice this skill and to recognize phrases in their texts.

**Rhyme**—Researchers have found detection of rhyme to be an important component of phonological awareness (Lynette Bradley & Bryant, 1985; L. Bradley & Bryant, 1983; Peter Bryant & Bradley, 1985; P. Bryant, Bradley, Maclean, & Crossland, 1989; P. E. Bryant, MacLean, Bradley, & Crossland, 1990; MacLean et al., 1987).

DeMoulin (2001) found that the personalization of text and the inclusion of rhyming keeps a child focused on the material and increases the number and effect of repetitive readings. He also determined that children are more engaged when rhyming is involved, as the sounds are appealing to the ear. He maintains that the rhyming patterns and meter of the text increase children’s focus time by capturing their attention. He concludes that

- Children are intrigued by sentence tempo and flow of words;
- Children become actively involved with rhyming patterns;
- Rhyming helps children identify word families;
- Children love rhyming designs because the sounds are appealing to the ear.

(DeMoulin, 2001, p. 117).

Bryant and Bryant found that

sensitivity to rhyme [is a] developmental precursor of phoneme detection, which, in turn, plays a considerable role in learning to read. Sensitivity to rhyme also makes a direct contribution to reading, probably by helping children to group words with common spelling patterns. (Bryant & Bryant, 1990, p. 437)
Words with common spelling patterns are referred to as analogies, such as those used daily in the Working with Words Block. A child who learns to read can will also be likely to read ban, Dan, tan, ran, fan, and other words that fall into the an word family or analogy. Although words such as beak, bead, bean, and beat are also considered to be analogous because of their beginning sounds (onsets) and rhyming vowel sounds (rimes), the analogies that end with a rhyme seem to be more useful in the process of learning to read. Goswami calls this a shared-spelling ending (Goswami, 1993).

**Rhythm.** Rhythm is the driving force that underscores all the chants and songs performed by Ms. Bing’s class. Rhythm also occurs in the spoken word. Bolton purported that it is “so universal a phenomenon in nature and in physiological activity and underlies so completely speech” as to be a “fundamental activity of mind” (Bolton, 1984, p. 146). Among the activities that are highly rhythmical he includes pulse, respiration, walking, and speech, with speech being the activity that distinguishes us as humans.

Speech becomes rhythmical not simply by sounds succeeded by pauses but also by the regular recurrence of strongly accented sounds in a series. Aside from the simplest shout or exclamation of joy or pain, all vocal utterances are primarily rhythmical. Every word that contains more than one syllable consists of strong and weak syllables. These accents occur upon every other syllable in varying intensity or at most the accented syllables are separated by two unaccented syllables. As regards vocal utterances, they can be considered from four different aspects—their regular succession, intensity, pitch, and quality.” (Bolton, 1984, p. 156)

**Choral readings.** Choral readings are oral readings that are done in unison. Anyone who has tried to get several students to read in unison has found that there are as many different performances as there are readers, and seldom do their words actually
occur at the very same time. Singing of text can provide a true unison, however, as all students ideally sing all words at the same time and with the same rhythm. Students are forced to sing fluently lest the rest of the class leave them behind. Robert Kay calls this activity “the easiest and most effective way of learning to read” (Kay, 1991, p. 12). One of the positive attributes he points out is that no child ever need be singled out and forced to perform a solo oral reading in front of his or her peers, for he or she is never alone in the spotlight. The spotlight is always shared.

**Shared reading** takes two forms. The first form of shared reading that children are likely to experience in their lives is that of their parents or other adults reading to them, sharing with them the print and pictures of the book that is being read. This activity takes place in the Guided Reading Block, as Big Books are often used in a shared reading experience. *Shared reading* is also used synonymously with *choral reading*. When Bunucci et al. (1997) researched the use of shared reading in a kindergarten class, they incorporated the use of Big Books and also song and poem text that was written on charts for the children to follow. They found that shared reading sessions increased phonemic awareness, helped to instill pride in reading and helped “even the less capable [reader] to feel triumphant” (Bunucci, 1997, p. 31). Although Ms. Bing’s major use of shared/choral reading involved song charts and song books, she integrated read-alouds and shared books throughout the day for the purposes of content material, entertainment, change of pacing in the classroom, and purely for an integration of the love of literature.

**Mnemonics.** “Song is a wonderful way to remember information” (McPherson, 2000). Wallace (1994) discovered that some songs are better than others at helping folks
to remember. While a complex song can be used if its tune is very familiar, songs that typically help us remember have simple tunes with a lot of repetition, especially when they are being used with first-graders. This is the kind of song that Mrs. Bing used. The words should be closely tied to the tune, and Ms. Bing’s words and tunes did tie together. Her “Short Vowel Song,” and the songs she and her students sang to help them remember word families, along with the lyrics of the songs they used from Steven Traugh’s series (Traugh, 1993a, 1993b, 1993c, 1993d), gave ample opportunities for words and phonics ideas to be encoded with music (Samson & Zatorre, 1991), increasing the strength of the encoded information (Crowder, Serafine, & Repp, 1990).

Key Components of the Domain of General Instruction

Ms. Bing is an effective teacher, displaying characteristics outlined by Protheroe (2004) in her synthesis of research on effective teaching and by Pressley et al. in their 1990s studies regarding exemplary first-grade teaching and exemplary first-grade teachers (M. Pressley, Allington, Wharton-McDonald, Block, & Morrow, 2001; M. Pressley, Rankin, & Yokoi, 1996; Michael Pressley et al., 1998; Protheroe, 2004; Wharton-McDonald, Pressley, & Hampston, 1998).

It must be stated at the outset, therefore, that Ms. Bing was an exemplary teacher and that her methods and strategies of teaching were inextricably interwoven with her personality, experience, and teaching instincts. As a base for her reading education, Ms. Bing demonstrated underlying effective characteristics and habits that promoted student
achievement and positive attitudes. The most pervasive of these characteristics and habits that appeared during my classroom observations are discussed.

**Encouragement combined with specific feedback.** Ms. Bing almost constantly encouraged her students, extending beyond the scope of their reading achievements. Not only did she consistently direct many encouraging words toward her students, she typically did so in tandem with specific feedback about what the students had done or were doing correctly. During journal reading time, Ms. Bing said of Walt’s story about going to the skating rink, “You put spaces between your words. You used sounds to write your words. You stayed on the subject, and you put lots of details. You did an excellent job!” To Kitty she commented, “I just love watching you sing and look at those words! Thank you for working really hard and thank you for the neat handwriting you did in your journal this morning!”

One morning Uri wrote and read to the class a story about his recent piano recital. Ms. Bing exclaimed, “He’s putting periods and uppercase letters!” His entry was exceptional. He described the songs, how well everyone played, and how, because the recital lasted so long, he played with his Gameboy while some of the other performers played the piano. After the recital was over, they played hide-and-seek and then had food. “It was good!” He read with great inflection! He described the six desserts that were served at the reception that followed the recital. Ms Bing explained to the class and then directly to Uri: “What a detail person Uri is! And what a memory he has! Good job, Uri! Now, be careful not to start your sentences with *and*.”
Occasionally there was that rare moment when Ms. Bing gave a compliment with no specific feedback. Sometimes such feedback was not necessary, however, such as the time when she remarked to the whole class, “You guys are getting to be so incredibly special! I get up in the morning and get excited because I get to come teach you students first grade!”

**Personal responsibility.** While encouraging her students to do their best academic work, Ms. Bing also encouraged them to work toward self-discipline and a high level of personal responsibility. Ms. Bing never “babied” her children, and she talked to them in the same way that she talked to adults. She quickly made the students aware that they were responsible for taking care of their both themselves and their personal property.

Thank you for holding your journals in your laps and not tearing them up. You’ll have to take care of them to be able to keep them until you are 56 years old.

There’s some hazardous material on the floor. (It was a bookbag.) I hope I don’t trip and fall.

If you don’t listen and look, what’s going to happen? You’re not going to learn. Right. Thanks for answering my question, Halton.

**Teachable moments** (Leicester, 1990; McAloon, 1992). Definition: “moment of educational opportunity: a time at which a person, especially a child, is likely to be particularly disposed to learn something or particularly responsive to being taught or made aware of something” (“Encarta world English dictionary,” 2007). Pressley et al. might refer to some of these lessons as “mini-lessons,” as they recalled that during their visits to the classrooms of exemplary teachers these teachers “seemed to monitor their students carefully to detect which ones needed a mini-lesson and when they needed it” (M. Pressley et al., 2002, p. 5). Au et al. define mini-lessons as follows:
Mini-lessons are a form of teaching, demonstration, and sharing that allows the teacher to focus on an area of student need (rather than on the next skill listed in a workbook), give students the information they require, and let them apply what they have been taught as they read and write. Mini-lessons can be taught by the teacher, a student, a group of students, or they can be a collaborative effort by the whole class. (Au et al., 2001, p. 83)

One such mini-lesson-whole-class-teachable-moment occurred when Ms. Bing was recovering from a severe headache. In an attempt to help the children understand what it was like to have such a headache so they could learn compassion and so they could help her and each other by being on their best behavior when she was sick, Ms. Bing wrote a story on the board entitled *killer headache*. Together, she and the students corrected the mistakes in the story. It presented effective use of a planned teachable moment.

`killer headache
yesterday was a terrible day for me i had a terrible headache i got it at lunch but waited too long to take my medicine by the time school was over i was really sick two meetings later i was feeling like going to the hospital i had a massage but it did no good i went to bed but no good i had to sit up in bed because when i put my head flat it hurt too much i sat up all night and took a few cat naps this morning i took more medicine and it finally did the trick my headache is gone but i feel really bad i hate migraine headaches`

Many teachable moments occur spontaneously, and such educational opportunities frequently occurred in Ms. Bing’s classroom. Embedded phonics education frequently came about as a result of such moments. After one such session I noted, “The children think they’re just having fun singing. For most of them it hasn’t yet crossed their minds that they are simultaneously learning phonics and sight words.”

One day Erika’s journal entry was entitled, “I Have a Question.” After Erika’s reading of this entry, Ms. Bing queried the class, “Did Erika ever tell us what her
question was? No, you’re right. She didn’t.” Ms. Bing then asked further, “Do you know what a question is?” From the responses she received, it was obvious that the children did not know, so a lesson about questions ensued. This lesson had not been on her agenda for the day; but Ms. Bing realized that it needed to be taught nevertheless, and she took advantage of this teachable moment.

On another day Ms. Bing decided that she wanted to get children to volunteer to sing the Word Wall words song in front of the class, and three students simultaneously raised their hands. They sang the song together. A vocabulary lesson about *trios* took place, then a lesson about *duets* and *quartets*. Vocabulary lessons, sometimes planned and sometimes spontaneous, were frequently interspersed within other lessons as such opportunities arose.

**Purpose.** Never once did Ms. Bing tell students to do something “because I said so.” Whenever possible, she told them the purpose behind their activities and her instructions.

As Lindsay read her journal, Ms. Bing went to the back of the room so that Lindsay would have to read more loudly. “I’m not picking on your guys. I’m just trying to get you to speak out. When you are in the play, you will have to project all the way from the stage to the back of the auditorium, so you need to get into the habit of speaking out.”

The checking of homework took an inordinate amount of time in the mornings, so Ms. Bing explained:

“Everyone look at me, and let me tell you how we can speed up the homework checking. If you do it the way I’m going to show you, then we can get through it very quickly, but if I have to go through all your stuff, then it takes me a very long time.” She then demonstrated how homework folders should look and how they should be organized. “You are the boss of your homework folder, and it does
only what you tell it to do. If you grip it like this (demonstration), things won’t fall out.”

About the writing of a poem about pumpkins, she said:

You’re going to write your poem on this piece of paper I am giving you, because we’re going to make books that look like pumpkins. You are going to make a book, it is going to be neat, you are going to learn the words, and it is going to be displayed out in the hallway for everyone to see.

She talked to the children about their speaking out when it wasn’t yet their turn to talk:

“I have to tell you these things because it’s my job and because I love you.”

Key Components of the Domain of Affective, Motivational Constructs

**Fun.** It must have been easy for the students to believe that Ms. Bing loved them, for she seemed excited to see them each day and frequently told them how much she enjoyed them and loved to teach them. Her high energy level helped portray her excitement and enthusiasm (Moschovaki, Meadows, & Pelligrini, 2007) for teaching and for her students. She appeared to make it her mission to help her students have fun as they learned, and this became a reciprocal goal.

Smiles are everywhere. The children are so proud of the work they are doing and are enjoying the silly songs they are singing.

Terry can really sing, and he enjoys doing so.

Ann is having a ball! The children are singing straight through the songs this morning, and they are enjoying it so much. They are also tracking and are engaged. It is great to see Daniel trying so hard. What good singers there are in this class! And they enjoy it so. It is heart-warming! There is nothing more beautiful than to see little children singing and having such a good time doing so.

Halton can really sing! He enjoys it, too. Ms. Bing is doing about as much for making singing cool as she is for teaching the children to read.
Engagement. Because the children were having such fun, there was almost total engagement during the Guided Reading Block (singing and chanting time). It was easy for Ms. Bing to dispense praise and encouraging words during this period of time, for the children were almost always totally absorbed in singing, chanting, and moving with the songs.

It appears to be easy to encourage everyone in this task, because they are all involved so well. They are having a ball! ALL children are on task ALL the time. Ms. Bing has a chance to go around the room and praise the children who are on task—which is all of the children.

With the exception of a few children who have gone to the bathroom or gotten up to blow their nose, these children have been on task 100% of the time. They are not doing it for my benefit, either, because they have hardly noticed that I am here.

All children seem to be tracking well. They love this singing. All students are on task, both singing and tracking.

Nanny Goat Nellie ate 99 Nuts and a Nectarine at Noon. Children are still on task and are tracking incredibly well. They are singing incredibly well, too. Songs are pitched well for children, with a small range. Easily accessible. One child got lost, looked at the location of her neighbor’s finger on his songbook, and got back on track.

The enthusiasm among the children is so exciting!

Halton is trying to sing/chant and eat his snack! He’s staying on task, however. How he’s doing it I don’t know.

One day Ms. Bing reported to me, “This is the only time all day long that everyone is on task. That is huge!” Indeed, it was huge, because this group of students was overall a particularly difficult group to keep on-task. Working with them outside of reading time must have been an exhausting endeavor for Ms. Bing, for many of them
displayed auditory perception difficulties and strong tendencies toward hyperactivity. Singing, chanting, and moving with music almost always captured their attention.

Perhaps the most remarkable account of full engagement took place with regard to Rick. Rick, the child who was off-task seemingly 100% of the time outside of Guided Reading, was estimated to be on-task and fully engaged about 95% of the time during the musical reading sessions. It was a time that Ms. Bing greatly enjoyed.

The children’s developmental immaturity emerged between songs, as they typically became inattentive, talkative, and wiggly in the short time it took for the recording with which they were singing to move from one song to the next. Frequently during this time, Ms. Bing would sing, “I’m looking and waiting and listening to see who’s ready to read and sing.” Or she would sing, (to the tune of Here We Go ‘Round the Mulberry Bush), “I’m listening for quiet, I’m listening for quiet, I’m listening for quiet, I’m listening for quiet, I’m listening for quiet, I’m listening for quiet in here.” Once again she had managed her students with behavioral cues of the singing variety and had therefore engendered a positive affect rather than a negative response to nagging, fussing, or admonishment.

**Positive atmosphere.** The positive atmosphere and affect in Ms. Bing’s class were a culmination of all of the above-described characteristics and activities. Smiley faces all over her room, her use of humor, silly songs, and dramatic readings combined with her enthusiasm and expectations of her students to make her class a fun place and to enable the children to enjoy being at school. After one of my early days in Ms. Bing’s class I made the following note.
I did not write nearly all of the encouraging words that occurred today. It appears that Ms. Bing does all she can to keep rhetoric positive. She focuses on the positive so as to keep “fussing” at the children to a minimum. The singing of instructions and cues is one way she can do this.

**Self-efficacy.** Because of the positive and trusting atmosphere in the classroom, Ms. Bing’s encouraging words and specific feedback, the fun-quotient and engagement value of the reading/singing/chanting sessions, and Ms. Bing’s expectations of her students, both explicit and implicit, the children appeared to feel free to experiment and to risk failure. If their failures were due to lack of trying, they were made fully aware of this by Ms. Bing. If they were trying, however, and they still failed, many times they were not even aware of “failure,” for Ms. Bing dignified their erroneous responses.

Rick, are you ready to read? Is this the right page? (Rick just looked at his journal.) Why don’t you practice some more in your brain? Just say it in your brain until you can say it out loud. Think in your brain the way that Junie B. Jones thinks in her brain (Park, 2001).

Ms. Bing worked hard to make her charges feel that they were readers, good students, and good human beings. There was no stigma attached to making mistakes, and this fact increased their willingness to try and to experiment without fear of a failure label. Ms. Bing’s convincing strategies for turning the children into readers did, indeed, increase their levels of self-efficacy for reading.

One such strategy was **whole group instruction** (P. M. Cunningham et al., 1991; D. Eder, 1981; Donna Eder, 1983). Allington argues that “good and poor readers differ in their reading ability as much because of differences in instruction as variations in individual learning styles or aptitudes” (Allington, 1983, p. 548), and his research shows that poor readers lack in the amount of engagement that good readers experience.
Cunningham (1991) reports that ability grouping helps to create poor readers, such as children in bottom reading groups, to become isolated and to be sometimes ostracized by the rest of the class. She writes of the dangers of fixed reading groups, maintaining that children who come to first grade without print experience but with an eagerness to learn to read will maintain their “I can do anything” attitude unless they are placed into bottom reading groups. Because Ms. Bing incorporated whole group instruction instead of segregating children with regard to their reading achievement levels, all students felt they were capable of performing on par with the rest of the class, and they maintained their “I can read” attitudes. These attitudes were bolstered by the fun aspect of reading time and the high level of engagement that ensued, and this high level of engagement increased reading skills, thereby further increasing the students’ levels of self-efficacy for reading. The cycle of achievement was strengthened. Success bred more success.

**Arts integration.** Arts integration has been found by many researchers to be a significant factor in helping students to increase learning in content areas, and especially so in reading (E. Adams, 2002; Andrews, 1997; Catterall, 2002; "Gaining the arts advantage: Lessons from school districts that value arts education,"; Godin, 1999; Goetz, 1999; Gould, 2000; "The National Arts Education Consortium,"). In Ms. Bing’s class there was almost constant arts integration in the form of singing and chanting, drawing, moving, and dramatic interpretations and presentations.

While Ms. Bing’s reading instruction was filled daily with singing, chanting, movement, dramatic readings, and the creation of visual art, of particular interest and motivational worth to the students and their parents was the promise of what had become
at Allgood Elementary School the traditional play at winter holiday time. Children knew that if they wanted to land a starring role in the play, they had to earn it by showing their abilities to project their voices in a dramatic and clear fashion, to work hard and persevere in a task, to read and learn their lines, to follow directions, and to sing with enthusiasm. There was even choreography involved in the annual musical production, so being able to move with music and to remember the choreography was also an important skill for the students to display.

Ms. Bing’s curriculum is an example of what Bresler (1995) might call holistic, that is “addressing the needs of the whole child, including cognitive, physical, moral, affective, and spiritual dimensions” and a product of reverse infusion, that is “integrating a particular subject across the curriculum” (Bresler, 1995, p. 31). In her case, Ms. Bing infused music, visual art, drama, and movement throughout her reading program, which culminated in December with a grand pulling-together of all of the children’s reading work up to that point. Creative writing was even included, as the children wrote stories about the play and created invitations for friends and family to come to school and enjoy the play. Although integration of the arts did not become a common educational term in America until the 1990s, Ms. Bing appeared to be ahead of her time, having begun the tradition in the early 1980s of teaching reading through singing and chanting and movement and drama and of having it climax in a grand holiday performance.

Were Ms. Bing’s methods of teaching reading effective? The quantitative data tell the rest of the story.
Quantitative Results

ERAS

ERAS scores for all classes dropped from the September administration to the January administration (Table 4.2). ERAS scores dropped significantly for both Bing’s class and the control classes, as can be seen in Table 4.1. Table 4.3 shows that there was not a significant difference between the number of points that the scores of Ms. Bing’s students decreased when compared with the decrease in the number of points from the control groups, represented by the time by group interaction.

Table 4.2: ERAS Descriptive Statistics: Mean (Standard Deviation)

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>ERAS1</th>
<th>ERAS2</th>
<th>ERAS3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bing</td>
<td>18</td>
<td>56.00 (11.4)</td>
<td>33.78 (10.0)</td>
<td>65.93 (12.0)</td>
</tr>
<tr>
<td>Control</td>
<td>75</td>
<td>65.83 (12.5)</td>
<td>37.00 (15.0)</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>

Means are calculated from a possible score of 80 on each administration of ERAS.
Based on her personal curiosity and concern, Ms. Bing administered the ERAS to her students again in May, and the mean score increased significantly, 32 points, between January and May, as evidenced by a t-test (Table 4.4). Ms. Bing reportedly requested that her colleagues in the first grade administer the ERAS to their students in May, as
well, so that she could get an indication as to whether this kind of change represented a
trend among first-graders or whether it indicated simply a mutation in her class; but a
third administration did not take place in the other classes.

Table 4.4: T-test of ERAS Time 2 and Time 3 for Bing’s Class

<table>
<thead>
<tr>
<th>Effect</th>
<th>Mean</th>
<th>t</th>
<th>df</th>
<th>Sig (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ERAS 2-ERAS 3</td>
<td>33.27</td>
<td>6.027</td>
<td>14</td>
<td>.000</td>
</tr>
</tbody>
</table>

STAR Reading Program

Because I was allowed to procure STAR Reading scores for two school years, 2005-06 and 2006-07, and because the first grade treatments with regard to reading
education were generally the same in 2006-07 as they had been when I observed Ms.
Bing’s class in 2005-06, I combined the scores for these two years in my first STAR
analysis in order to increase the power of the statistical inferences. This combination
gave an $n$ of 33 in the music-treatment group and 204 in the non-music control group
(Table 4.5). A repeated measures analysis of variance was conducted as a way to
determine the interaction of time (from the administration of STAR in September to the
administration in April) and teacher, Bing vs. Control.
Table 4.5: STAR Descriptive Statistics for Combined Years 1 and 2: Mean (Standard Deviation)

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>STAR1</th>
<th>STAR3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bing</td>
<td>33</td>
<td>140.18 (126.0)</td>
<td>317.69 (157.2)</td>
</tr>
<tr>
<td>Control</td>
<td>204</td>
<td>122.65 (104.8)</td>
<td>261.10 (135.7)</td>
</tr>
</tbody>
</table>

As shown in Table 4.6, there exists a significant difference (alpha = .05) between the amount of improvement in the scores of Ms. Bing’s students and the amount of improvement in the scores of the students in the other classes.

Table 4.6: Repeated Measures Analysis of Variance for STAR Time1 and Time 3

<table>
<thead>
<tr>
<th>Effect</th>
<th>F</th>
<th>Hypothesis df</th>
<th>Error df</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time</td>
<td>122.218</td>
<td>1</td>
<td>94</td>
<td>.000</td>
</tr>
<tr>
<td>Time * group</td>
<td>5.994</td>
<td>1</td>
<td>94</td>
<td>.000</td>
</tr>
<tr>
<td>Group</td>
<td>7.017</td>
<td>1</td>
<td>94</td>
<td>.000</td>
</tr>
</tbody>
</table>
Figure 4.2.

Comparison of the difference in change of STAR scores

A comparison of means of all three administrations of STAR in the first year (Figure 4.3) shows Ms. Bing’s mean STAR scaled score increasing a total of 38 points more across the school year than did the other first grade classes’ mean score (Table 4.7).
Table 4.7: STAR Descriptive Statistics: Mean (Standard Deviation)

<table>
<thead>
<tr>
<th>Group</th>
<th>STAR I</th>
<th>STAR II</th>
<th>STAR III</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>Mean (s.d.)</td>
<td>N</td>
</tr>
<tr>
<td>Bing</td>
<td>33</td>
<td>140.18 (126)</td>
<td>18</td>
</tr>
<tr>
<td>Control</td>
<td>204</td>
<td>122.65 (104.8)</td>
<td>95</td>
</tr>
</tbody>
</table>

In Table 4.8 a repeated measures analysis of variances shows that the differences in improvement of STAR scores are indeed significant (alpha = .05).

Table 4.8: Repeated Measures Analysis of Variance for STAR Time1, Time2, and Time3

<table>
<thead>
<tr>
<th>Effect</th>
<th>F</th>
<th>Hypothesis df</th>
<th>Error df</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time</td>
<td>122.218</td>
<td>1</td>
<td>94</td>
<td>.000</td>
</tr>
<tr>
<td>Time * group</td>
<td>5.994</td>
<td>1</td>
<td>94</td>
<td>.016</td>
</tr>
<tr>
<td>Group</td>
<td>6.317</td>
<td>1</td>
<td>94</td>
<td>.014</td>
</tr>
</tbody>
</table>

Figure 4.3 shows that the amount of difference in Ms. Bing’s scores in 2005-06 increased at a rate higher than that of the control group, and Table 4.9 reveals that the differences between STAR 1 and STAR 2 were smaller than the differences between STAR 2 and STAR 3 for both groups. This statistic might suggest that more learning took place in both groups between January and April than took place between September and January.
Figure 4.3: STAR Scores for 2005-06

Table 4.9: Differences in Mean Scores for STAR 1, STAR 2, STAR 3

<table>
<thead>
<tr>
<th>GROUP</th>
<th>STAR 1</th>
<th>STAR 2</th>
<th>STAR 2-STAR 1</th>
<th>STAR 3</th>
<th>STAR 3-STAR 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bing</td>
<td>140.1818</td>
<td>215.1778</td>
<td>74.3996</td>
<td>317.6905</td>
<td>102.5127</td>
</tr>
<tr>
<td>Control</td>
<td>122.6520</td>
<td>169.2316</td>
<td>46.5796</td>
<td>261.1208</td>
<td>91.8892</td>
</tr>
<tr>
<td>Total</td>
<td>125.0928</td>
<td>176.5664</td>
<td>51.4736</td>
<td>270.3867</td>
<td>93.8203</td>
</tr>
</tbody>
</table>
Because it is indicated that Ms. Bing’s reading instruction, in terms of STAR Reading scores, was significantly more effective than were the combined efforts of the other first grade teachers at Allgood Elementary School, the task becomes one of determining how Ms. Bing and her students achieved this kind of success.

If Ms. Bing had not possessed myriad characteristics of an effective teacher, would her strategies for reading education have been as successful? Obviously, we will never know the complete answer to this question. Judging from the fun that her students had during their singing and chanting sessions and from the level of engagement they achieved during these times, however, we might well speculate that their efforts would have been maximized, as would their resultant test scores. Fortunately for the students, they were able to take advantage of the full range of skills that Ms. Bing possessed, not the least of which were her creativity and her love of music!
CHAPTER FIVE

FINDINGS

“Brain research tells us that when the fun stops, learning often stops, too.”

(Willis, 2007, p. 1)

Conclusions of This Study

“I want these children to go home on the first day of school believing that they are readers!” Ms. Bing emphatically made this declaration about the affective and instructional conditions she wanted her children to achieve on the very first day of first grade, and it was ultimately to be both affect and instruction that contributed to the students’ reading achievements and attitudes toward reading.

Self-efficacy beliefs regarding reading in the first grade can be defined as the students’ individual judgments about how well they can read. Bandura (1977) maintains that one’s efficacy expectations provide the base upon which one determines what activities are to be chosen, what effort will be expended, and for how long this effort will continue. He recognized four sources for one’s level of self-efficacy: past experiences, vicarious experiences, verbal persuasion, and arousal, with past experience being the most important of these determinants. There exist three agencies that exert social force upon one’s level of efficacy: the family, peer pressure, and school (Pastorelli et al., 2001).

Three constructs that are often confused or conflated with self-efficacy are self-esteem, self-concept of ability, and locus of control, and in order to discuss the students’
levels of self-efficacy, the distinction must be made among them. Self-efficacy relates to the “expectations” portion of Vroom’s VIE theory, which states that motivation is a function of how much one values a given goal (valence), whether one thinks that the tasks one is performing will actually lead to the achievement of that goal (instrumentality), and whether one thinks that he or she is capable of successfully performing those particular tasks (expectation) (Vroom, 1964). A student’s level of self-efficacy for reading will be determined, therefore, by how much he or she thinks that he or she is capable of performing the tasks that will lead to the act of reading. If students have a high level of confidence in their abilities to perform these tasks successfully, then they have a high level of self-efficacy for reading. Conversely, if they have a low level of confidence in their abilities to perform these tasks successfully, then they have a low level of self-efficacy for reading.

In contrast, self-esteem refers to one’s feelings of self-worth, and one’s level of self-efficacy in a particular activity need not correspond with one’s overall feelings of self-worth. Self-concept of ability is a more global assessment of one’s overall abilities and is not necessarily related to one’s level of self-efficacy for a particular task. For instance, one can have a high self-concept of one’s overall academic ability but be well aware that he or she is a terrible speller; thus such a person has a high self-concept of ability and a low self-efficacy for spelling. Locus of control is determined by whether one thinks he or she is controlled by his or her own actions (internal locus of control) or by forces outside himself or herself (external locus of control).
Studies have shown that children’s self-efficacy beliefs do influence the development of their cognitive competencies (Schunk, 1985a, 1985b, 1996). Research has also shown that children’s levels of motivation and academic achievement and their mastery of different academic materials are indeed affected by their self-efficacy beliefs (Albert Bandura, 1993; Chapman, Tunmer, & Prochnow, 2000; Schunk, 1991; Zimmerman, 1995).

Ms. Bing sought to help her students maintain a high level of confidence in their abilities to read, and therefore she sought to help them achieve a high level of self-efficacy for reading. Her declaration of this goal was the first bit of data I collected in this dissertation study, and from it sprang the framework for my research.

Hours of classroom observations revealed that Ms. Bing was an effective teacher as indicated not only by my careful analysis as an experienced teacher and observer of teachers but also by studies such as Wharton-McDonald et.al (1998) and Pressley et al. (2001). Ms. Bing also displayed characteristics enumerated by Protheroe (2004) in her synthesis of research on effective teaching and by Pressley et al. in their studies in the 1990s regarding exemplary teaching and exemplary teachers (Pianta, Belsky, Vandergift, Hours, & Morrison, 2008; Pressley et al., 2001; Pressley et al., 1996; Pressley et al., 1998; Protheroe, 2004; Wharton-McDonald et al., 1998).

Protheroe (2004) highlights an important conclusion of a meta-analysis of effective teaching strategies that was conducted by Wang et al. (Wang, Haertel, & Walberg, 1993) when she writes that “classroom instruction and climate had almost as much impact on learning as students’ aptitude” (Protheroe, 2004, p. 58). Because the
climate of a classroom is set in motion by the teacher and because the positive climate in Ms. Bing's classroom was evident, she scored high marks in this particular category of teacher effectiveness.

Referring to the First-Grade Studies of the 1960s (Bond & Dykstra, 1967), a benchmark study that sought, unsuccessfully, to determine definitively the best method of teaching beginning reading, Pressley writes that the “impact of particular programs varied greatly across research sites and projects. One version of this conclusion was that the teacher mattered more than the particular reading program” (M. Pressley et al., 2001, p. 14).

The nature of Ms. Bing’s personality and teaching fell in line with the findings of Ruddell (1997), who investigated the characteristics of influential literacy teachers. Studying teachers who were nominated by formers students, colleagues, and administrators as outstanding in their effectiveness, Ruddell concluded that effective teachers do the following:

- Monitor students carefully and provide correct and effective feedback
- Are deeply knowledgeable about how to teach literacy
- Assist their students’ intrinsic motivational levels
- Are warm, flexible, sensitive, and have a high energy level
- Possess and display enthusiasm about learning
- Are truly concerned about their students
- Make learning relevant to their students in a personal way
- Engage the students in discovery learning. (Ruddell, 1997)
Wharton-McDonald found in 1996 that a cluster of characteristics was typical of effective teachers, all of which were revealed to be typical of Ms. Bing, as follows:

- Instructional balance (a combination of approaches with many opportunities for authentic reading and writing as well as explicit instruction in the basic skills)
- Instructional density (the integration of multiple goals into a single lesson)
- Extensive use of scaffolding
- Encouragement of self-regulation
- Thorough integration of reading and writing activities
- High expectations for all students
- Masterful classroom management
- Awareness of purpose of practices (Wharton-McDonald et al., 1998, p. 127).

A synthesis of the above studies, along with an earlier study by Pressley et al., 1996, describes characteristics and practices of effective first-grade reading teachers as follows:

- Teachers with the most engaged and best performing students were superb classroom managers, with the result that there were few disciplinary encounters because the students were so engaged with academics.
- The best classrooms were filled with the message that “you can be a reader.” They were very positive places, fostering student reading and writing in many different ways.
• The best classrooms were exceptionally well balanced with respect to explicit, systematic teaching of skills, holistic reading, and writing experiences. Skills typically were practiced as part of real reading and writing.

• Teachers monitored students carefully, providing assistance to them as needed—just enough support so that the students could get back on track but not so much that the teacher was doing the work for the students.

• The density of academic activity was very high. . . with the various activities interconnected. . .there was clear integration of literacy and content learning.

• Excellent classroom management

• Positive, reinforcing, cooperative environment

• Balance of skills instruction and whole language: teaching of skills, literature emphasis, and much reading and writing

• Match of accelerating demands to student competence, with a great deal of scaffolding

• Self-regulation encouraged

• Strong connections across the curriculum.

Ms. Bing, her instruction, and her classroom did exemplify all of the characteristics enumerated above, and once I had watched her teach for several months, I felt certain that her students must have been coming close to achieving as much as they possibly could. I relied on quantitative data analysis to inform me as to whether or not my interpretations were correct, and then I relied on qualitative data analysis to tell me how the children’s achievement may have been accomplished.
According to the results of the ERAS, children in all of the first-grade classes at Allgood Elementary School came to the first grade with relatively positive attitudes toward reading, scoring an overall mean of 64 out of a possible 80 points (80%). By January, however, their attitudes had become more negative, dipping to an overall mean of 36 out of 80 points (45%). While Ms. Bing’s class’s mean score did not drop as low as the others’, a repeated measures analysis of variance showed that the difference was statistically insignificant. When Ms. Bing gave the survey a third time to her students in May, she discovered that their mean score had increased significantly, up 32 points (from 34 in January to 66 in May), with an increase of 12 points between September (54 points) and May.

It must be noted that one item on the ERAS had the potential to skew the results of the scores of Ms. Bing’s students:

Figure 5.1. Question #12 from ERAS.

12. How do you feel about doing reading workbook pages and worksheets?

(McKenna & Kear, 1990, p. 632)
(Used with Permission)
During the time that I was in her classroom, I never saw Ms. Bing use a workbook page or a worksheet. She reminded her students that she let them sing their reading lessons instead of making them do these kinds of activities. It was not surprising, therefore, that the class’s mean score on Question #12 was 1.7 on the first administration, the lowest score of all the items, and it was 2.4 on the third administration, the next-to-lowest item-score on that administration. (The lowest score occurred on Question #8, “How do you feel about reading instead of playing?”) It was surprising, however, that the mean score of Question #12 on the second administration of the test in January was 3.5, the highest score of any item on the survey.

The upswing in May’s survey scores among Ms. Bing’s students may be at least partially explained by one of the other first-grade teachers. In an interview with Ms. Lowenstein, a possible explanation was voiced:

About half this year’s class had a bad attitude toward reading until around April. Their confidence level has been very slow coming because so many of them were so slow to learn. Around April they finally realized that they were reading, and that inspired them to read more. Reading more assisted them in becoming better readers, and the cycle of success was finally in operation. When this happened, their attitudes toward reading increased.

Ms. Lowenstein’s class scored higher on Question #12, and an explanation for this phenomenon may be found in the same interview:

I do use worksheets from the workbooks to reinforce high frequency words and to help children learn to fill in the blanks. Some children really enjoy doing the worksheets. Perhaps it is because they have tangible evidence of the work they have done that makes them feel like they have accomplished something.

Similarly, Ms. Bing postulated that the dip in attitude scores among her students from September to January may have occurred due to the fact that her children had come
into first grade with a positive attitude toward reading and with eagerness toward learning how to read. By January they had discovered that the improvement of their reading skills takes work, and perhaps they weren’t too excited about working so hard. Once their skills improved and reading became less labor intensive, they began to enjoy reading and to have a more positive attitude toward it. It would have been interesting to have been able to determine if the other first grade classes’ attitudes toward reading also improved by the end of the year.

Analyses of the STAR Reading tests gave a clear indication that something in Ms. Bing’s teaching made a statistically significant difference. While the 2005-06 mean scores increased from 110 in September to 317 in April in Ms. Bing’s class—a jump of 207 points, the corporate mean scores in the other first grade classes increased from 117 to 261—an increase of only 144 points. This discrepancy represents a statistically significant difference. In the three tests that were administered in September, January, and April of the 2006-07 school year, the mean score in Ms. Bing’s class increased from 84 to 215 to 325, an overall jump of 241 points, while the means of the other first-grade classes increased from 101 to 166 to 244, and overall increase of only 143 points.

Is it possible to untangle the results of Ms. Bing’s teaching methods from the results of her overall teacher effectiveness so as to determine explicitly the differences that singing and chanting made in the reading achievements of her students? Obviously, it is not possible to do so from the current study. What is possible to achieve, however, is an accurate indication of the roles these factors played in her students’ successes, which were reinforced by Ms. Bing’s overall effectiveness as a teacher.
A picture is worth a thousand words. No, a picture is worth much more that a thousand words! Figure 5.1 represents many pages of field notes from classroom observations and numerous administrations of the STAR Test and the ERAS, in conjunction with innumerable hours of study and analysis. It tells the story of Ms. Bing and how her reading methods of singing and chanting paid dividends in higher test scores and increased attitudes toward reading.

Figure 5.2: Findings of This Study
Under an over-arching and ever-present umbrella of a *positive classroom atmosphere*, Ms. Bing employed continual *encouragement followed by specific feedback* and the *interjection of encouragement prior to criticism* to help build her students’ perceived levels of self-efficacy for reading. Whether this habit resulted from conscious effort or from automaticity achieved through 29 years of teaching (or a combination of the two), its effectiveness stands nevertheless. Under the terms of *expectancy theory of motivation* (Vroom, 1964), there must exist in the student a feeling of “I can do this work” before the student will be motivated to try. Motivation to try is one of the inspirations for student engagement in any task.

Ms. Bing enlisted help in providing inspiration in the forms of singing and chanting during her Guided Reading Block, for singing and chanting carry inherent performance motivation in the forms of rhymes, rhythm, and prosody, which lead to both physical and mental *arousal*. Scientists are learning that a measure of arousal is necessary in order for learning to take place, particularly as it concerns the part of the brain known as the amygdala, the brain’s center of emotions. Positron emission tomography (PET) and functional magnetic resonance imaging (fMRI) scans allow scientists to watch the workings of the brain while different activities are being experienced or performed by their subjects. Use of these scans has shown that activity in the amygdala during encoding is highly correlated with the amount of long-term recall of emotionally arousing material (Steidl, Mohi-uddin, & Anderson, 2006).

Along with a state of arousal come interest, heightened awareness, attention, and a state of *flow* (Small, 1996). Defined as an “optimal experience, characterized by high
involvement, deep concentration, intrinsic motivation and the perception of high
challenges matched by adequate personal skills” (Vitterso, 2001, p. 141), the term flow
was coined by Csikszentmihalyi (1990) to refer to one’s experience of highest fulfillment
and engagement. Custodero also speaks to engagement and flow:

Engagement in tasks whose challenges invite a person’s best efforts generates flow. To sustain this optimal experience, skills must improve to meet new challenges, and in turn, challenges must improve to continue attracting enhanced skills, thus creating an ideal learning situation. This dynamic interaction, also known as emergent motivation (Csikszentmihalyi, 1978) is self-perpetuating: As an individual’s skill level improves through practice, challenges must become increasingly complex. The first criterion for flow experience, therefore, is that skills and challenges must match, and they must be high. (Custodero, 2002, p. 4)

Custodero’s description brings to mind the first contingency set forth in the “Matthew
effect,” which is discussed by Stanovich (1986), Walberg (1983), Merton (1995), and
Jesus: “For unto every one that hath shall be given, and he shall have abundance; but from him that hath not shall be taken away even that which he hath” (Gospel according to St. Matthew 25:9). The first contingency states that if one has, then one will receive more, and Custodero describes above how this outcome occurs. Through the physical and emotional arousal of music Ms. Bing helped her students to achieve the Matthew effect’s first contingency of the conquering of increasingly more difficult challenges.

Triumph over challenges must be considered as one reason that the attitudes of Ms. Bing’s student toward reading improved between mid-year and the end of the school year. As the students mastered more difficult material, their enthusiasm for reading increased. As their enthusiasm for reading increased, so, most likely, did the amount of reading they did outside their required texts. Research indicates that past achievement predicts the amount of reading a student will do (Anderson et al., 1988). Reading
educators further maintain that the amount of reading students accomplish is predicated on their amount of reading achievement, and, thus, amount of reading and reading achievement create reciprocal causation. As the amount of reading increases, achievement increases even more. As achievement increases, the amount of reading increases even more (A. Cunningham & Stanovich, 1997).

Wigfield et al. hold that the amount of reading children do during the fall of the year is predictive of the amount of comprehension they will achieve by spring (Alan Wigfield, Guthrie, Tonks, & Perencevich, 2004). Because reading without comprehension is moot, their contention makes it even more important that children be motivated to read often and to read well. Because engagement is, therefore, a necessary component of learning to read, the finding that the physical and mental arousal of Ms. Bing’s children led to a high level of engagement takes on increased significance. Guthrie and Wigfield state:

Our view is that literacy engagement is the aim of education. We want students to be able to read and want to read. The practices of a literate society depend on positive motivational dispositions as well as highly developed competencies. Further, we believe that literacy engagement cannot be acquired unless it is experienced. Our expectation is that extensive opportunities for engagement in literacy practices in school are the optimal means for reaching the goal of literacy engagement for all. (J. Guthrie & Wigfield, 1997, p. 9)

Not only are extensive opportunities for engagement an important facet of effective reading instruction, but also essential is the fact that students take advantage of these experiences, that they become as fully engaged as possible. Such was the case in Ms. Bing’s classroom.
Reis (2001) states that one of the most remarkable results of a study she performed in which singing was incorporated into the language lessons of ESL students involved two of her students, Nick and Alex, who “responded so positively to early reading skills only when music was a part of the equation” (Reis, 2001, p. 15). Not only did they receive the benefit of engagement through this activity, but their expressive language skills were strengthened “as singing and chanting gives children a chance to practice language” (Reis, 2001, p. 18). The practice of language is beneficial to all first-graders, for it increases their phonemic awareness and consequently their reading skills. Ms. Bing’s students had daily opportunities to involve themselves in such activities, and they took full advantage of them. On the first day that I visited Ms. Bing’s class I reflected:

It appears to be easy to encourage everyone in this task, because they are all involved so well. They are having a ball! ALL children are on task ALL the time. Ms. Bing has a chance to go around the room and praise the children who are on task—which are all of the children.

On September 22 I wrote:

When the children pay attention, they can read [trade] books. Their main problem is paying attention. There is a real attention deficit in this class, but every child is engaged when they are singing their song texts. It’s truly remarkable!

Three of the children in Ms. Bing’s class, Kitty, Anecia, and Rick, remind me specifically of Nick and Alex. Not only did Kitty fail to pay attention during most of her daily instruction in all subjects, she frequently exhibited rage. Anecia did not exhibit rage, but neither did she engage in learning except during singing time. Because Anecia was such a superb singer, she enjoyed this activity and was fully on-task. Kitty, too, was an
excellent singer whose disposition and personality could turn on a dime when singing began.

Kitty is a talented singer. I hope that her love for singing will carry her through. She had to be called down MANY times today for inattentive behavior, but when she was singing, she never once failed to be on task. Back to Kitty—when she starts singing, her entire attitude seems to change. She pays attention, sings, is happy. She’s doing well.

Kitty’s attitude really changed after the singing session. Amazing! Music is therapy as far as she is concerned.

It was not unusual for Ms. Bing to break out in song when Kitty had a melt-down, because Kitty would then begin to sing with her and would consequently forget her rage. Singing was a far more effective and positive antidote to her rage than a confrontation would have been.

Similarly, my field notes mention Rick many times, but, with only a few exceptions, either his name is linked in my notes to the phrase *off-task* or else I have described some inappropriate behaviors that he was exhibiting:

Rick is just sitting in the chair, staring around the room.

Rick is turning around in circles at the front of the class. Rick is wearing his journal on his head. He’s standing at the front of the room as though he’s ready to read, but he surely hasn’t practiced in his brain yet.

It seems that Rick hasn’t done any better since I was here last week. He appears to be in another galaxy.

I finally found Rick. He went to get his snack. He’s playing with his snack instead of doing Word Wall words.

When singing time arrived, however, even Rick was on task:

Okay, the children are singing from their song books now. EVERY single child is on task. Each child is tracking in his or her song book. Every child is singing.
Obviously, the children felt that they were capable of singing; that they *could* sing.

Bandura (1977) would call this attitude their *efficacy expectation* for singing, or their belief that they could accomplish that task. Bandura proposes that individuals’ efficacy expectations are a major determinant of activity choice, willingness to expend effort, and persistence. When they think they can accomplish a task, people are more likely to choose to do it, continue working on it when they encounter difficulty, and ultimately complete the task [(A. Bandura, 1977) (as cited in A. Wigfield, 1997, p. 16)].

Wigfield (1997) states that students’ levels of valuation of the task of reading may be one of the most important predictors of how much they will engage in reading activities. He cites several components of this type of *subjective task value*:

- **Interest** value—how much the individual likes or is interested in the activity
- **Attainment** value—the importance of the activity
- **Utility** value—the usefulness of the activity.

To this list I would add *entertainment* value—a correlate of interest value: how much fun a student anticipates when participating in the activity. It was primarily the entertainment value that kept Ms. Bing’s students consistently engaged in singing and chanting and simultaneous fingerpointing.

Because Ms. Bing’s children were all capable of singing, chanting, and fingerpointing, and because they were almost fully engaged almost all of the time during Guided Reading, they were therefore focused on their own, individual work and unable to monitor the successes or lack of successes of their classmates. This fact increased the achievement successes of the weaker and less capable students, as they appeared, at least
superficially, to be keeping on task with their peers and to be as successful as their peers. By appearing as successful as their peers, they did not experience failure, even if they were merely fingerpointing memorized words rather than actually reading the text as they sang.

The children’s levels of self-efficacy were increased by their perceived successes and perceived lack of failures. Children are more likely to read frequently when they feel efficacious toward reading, and the large number of books in Ms. Bing’s classroom and school library provided ample opportunities to choose and to read books on their instructional and entertainment levels, books they could read with success.

Ms. Bing’s encouragement assisted the children in the acquisition and maintenance of their high levels of self-efficacy for reading. The motivational aspects of her encouragement and the social ramifications for the children’s perceived successes in reading must not be understated. Schunk found the following:

[A]s students work on tasks, they evaluate their learning progress. Positive perceptions of progress substantiate their self-efficacy for learning, which in turn sustains motivation and learning. As teachers observe students’ progress they model corrective instruction based on students’ demonstrated skills (Schunk, 1999, p. 221).

Vacca maintains that the construct of self-efficacy for reading is “less concerned with the text comprehension strategies. . .than with their judgments of what they can do” (Vacca, 2006, p. 56). Their judgments of what they can do are synonymous with their perceptions of what they can do, and such perceptions mold their levels of self-efficacy.

Ms. Bing’s encouragement, followed by specific feedback, was in keeping with Schunk’s research findings and Vacca’s belief. Students were able to perceive successes
as a result of these methods of correction. They were therefore able to consider themselves to be successful and to view themselves as readers. Their high levels of self-efficacy in reading kept them motivated to read. There was no stigma attached to making mistakes, and this condition increased their willingness to try and to experiment without fear of acquiring a stigma of failure.

Another important strategy that bolstered the students’ feelings of efficacy for reading was whole group instruction (P. M. Cunningham et al., 1991; D. Eder, 1981; Donna Eder, 1983). Allington argues that “good and poor readers differ in their reading ability as much because of differences in instruction as variations in individual learning styles or aptitudes” (Allington, 1983, p. 548), and his research shows that poor readers lack in the amount of engagement that good readers experience. Cunningham (1991) writes of the dangers of fixed reading groups, maintaining that children who come to first grade without print experience but with an eagerness to learn to read will maintain their “I can do anything” attitude unless they are placed into bottom reading groups. Because Ms. Bing incorporated whole group instruction instead of the segregation of children with regard to their reading achievement levels, all students felt they were capable of performing on par with the rest of the class, and they maintained their “I can read” attitudes. These attitudes were supported by the fun aspect of reading time and the high level of engagement that ensued, and the high level of engagement increased reading skills, thereby further increasing the students’ levels of self-efficacy for reading. The cycle of achievement was strengthened. Success bred more success.
Allington (1983) maintains that the “holding power” of an activity—its ability to attract and maintain students’ interest and attention—may be more important than the actual content of the instruction. Conversely, students will not learn without engagement, which is predicated by attention, which is strongest when preceded by interest. Schiefele (1991) distinguishes between individual interest, “a relatively enduring preference for certain topics, subject areas, or activities” and situational interest, “an emotional state brought about by situational stimuli” (Schiefele, 1991, p. 302). It would appear that singing the text of songs in Ms. Bing’s class met the requirements of both definitions.

The students’ continued engagement in reading, combined with other dimensions of Ms. Bing’s teaching, paid off in increased achievement. Not only did the students perceive themselves as readers, they were readers! Their persistent engagement in reading activities consequently turned them into even better readers.

Increased reading skills and corresponding increases in feelings of self-efficacy resulted in increased engagement in literacy activities, which resulted in even more increases in reading skills and feeling of self-efficacy, which resulted in even more engagement in literacy activities. Thus was set in motion a cycle of successes, leading to increased reading achievement and more positive attitudes toward reading.

In addition to the melodies of the songs, rhythm and prosody helped to keep the students engaged. They also contributed heavily to the acquisition of fluency skills, identified by the National Reading Panel as a crucial component in successful reading instruction (NRP, 2000). Fluency in reading includes three main elements: “accurate reading of connected text at a conversational rate with appropriate prosody or
expression” (Hudson, Lane, & Pullen, 2005, p. 72). Allington (1983) cites five reasons why some students achieve fluency while others do not:

- **Lack of exposure to fluent reading models**
- **The good reader syndrome.** Good readers are more likely to get positive feedback at school and are more likely to be encouraged to read with expression and to make meaning from text. The converse is true for poor readers.
- **Lack of practice time.** Good readers generally spend more time reading and therefore become better readers. Poor readers spend less time actually reading.
- **Frustration.** Good readers are exposed to more text at their independent reading level, whereas poor readers frequently encounter text at their frustration level. Consequently, poor readers tend to give up because they make so many errors.
- **Missing the "why" of reading.** Good readers tend to view reading as making meaning from text, whereas poor readers tend to view reading as trying to read words accurately (R. Allington, 1983).

Ms. Bing’s sung and chanted text eradicated all five of the above-stated conditions that possessed the potential to cause her students to fail to practice fluent reading:

- All reading text in the Guided Reading Block was performed fluently, and all students performed fluently in unison.
- All students obtained positive and specific feedback, both from their reading/fingerpointing of text and from Ms. Bing.
- All students seemed motivated to spend time engaged in reading and therefore to become better readers.
• No students appeared frustrated by a less-than-good reading level, because all students used the same text in Guided Reading Block and all students appeared to read it without errors.

• Although Ms. Bing questioned the students and had them draw pictures to demonstrate their comprehension of text in her Guided Reading Block, students spent more time simply playing with their reading text than they spent in explicit attempts to read words accurately.

Reis (2001) called the discovery of playing with text an epiphany in her teaching. “Music made the children excited about a book, about the words on the page, about language. This was play for them and yet learning as well” (p. 19).

Dean (2005) offers a similar point:

By connecting play with academics, a low-risk environment permeates the classroom. Children focus on play as a process and feel safe, thus taking risks in order to grow. By providing literacy tools and building structures within the centers, children immerse in academics in a natural, meaningful way (p. 15).

When the children were playful, interested, and self-efficacious, they engaged in the activity of singing and fingerpointing, and consequently they learned to read. “When children believe they are competent and efficacious at reading, they should be more likely to engage in the activity” (Wigfield, 1997, p. 16). Fluency resulted in part from the playfulness of rhythm and the inclusion of prosody.

Dowhower’s (1991) interesting description of prosody as “fluency’s unattended bedfellow,” is followed by the admission that although many reading educators consider prosody, called expression by some, to be an important part of reading fluency, few researchers have attempted to study the issues, preferring, instead, to investigate fluency
by quantifying *rates* of words in oral reading and the *numbers* of words accurately identified. While rate and accuracy are two ingredients of fluency, Dowhower feels that the third bedfellow, prosody, has been largely left out. Since her writing in 1991, the number of studies relating to prosody has increased (Rasinski, 1994; Schrieber, 1991; Thompson, Schellenberg, & Husain, 2003; Weber, 2006; Yoshida, 2007), but it is still one of the most difficult concepts to teach to children, partially due to the fact that prosodic meaning can be different for individual readers:

> A prosodic reader segments the text into meaningful units... marked by appropriate prosodic cues such as pauses, varied duration of those pauses, the raising and lowering of pitch, lengthening of certain vowel sounds, and emphasis of certain words. (Dowhower, 1991, p. 166)

Dowhower lists six markers that are related to expressive reading:

- Presence or lack of pausal intrusions,
- Length of phrases between pauses,
- Number of appropriate and inappropriate phrases,
- Durations of final words of syntactic phrases,
- Change of pitch at final punctuation marks,
- Stress or accent.

Because all of Ms. Bing’s Guided Reading text was performed orally and because all of the above factors were pre-determined by virtue of the rhythms and tempi of the chants and the addition of melodies to texts to create songs, her children performed each piece of guided reading with correct prosody. Although Ms. Bing explicitly taught prosody when
directing the children in their holiday play, it was, for the most part, taught implicitly in reading class through the texts of the songs and chants.

Dowhower contends that prosody has not been given due attention. She feels that prosody’s role in children’s acquisition of literacy skills is perhaps more important than educators realize. One strategy she recommends to aid in the acquisition of fluency is repeated readings. Samuels (1997) describes three levels of word recognition skills that accompany repeated readings. The student is essentially a non-reader on the first level, which Samuels calls the *nonaccurate* stage. At the second level, the *accuracy* stage, the student recognizes printed words but has to spend so much effort on decoding them that the reading is slow and has little expression or comprehension. On the third level, the *automatic* stage, the student will read with expression and comprehension, and speed is an indicator as to whether the student has reached this level of automaticity (Samuels, 1997). All the text for Ms. Bing’s Guided Reading Block was read repeatedly as children sang and chanted. As far as the children were concerned, there never seemed to be enough of their repeated readings to satisfy them, as they went through the stages that Samuels has described. They achieved prosody through built-in rhythms and musical phrasing, and they simultaneously achieved word recognition through their fingerpointing of the text.

As rhythm and prosody led to fluency, rhyme simultaneously led the children to phonetic learning, the study of which Ms. Bing embedded into their singing sessions. Although rhyme has been found to influence positively the early acquisition of reading skills (Gambill, 1999) and although it has been studied more widely with regard to
nursery rhymes than instructional text (Bryant et al., 1989; MacLean et al., 1987; Susan, 2005; Tegos, 1992; Wedhoff, 1995), it is perhaps best known among first-grade reading teachers as one of the staples of Cunningham’s Word Wall. Analogies at the end of words, called end analogies by Goswami (1992) are the defining factors in the categorization of words as they are assigned a position on the Word Wall. (For example, all words in the “an” family are placed in the an category on the wall: an ban, can, Dan, fan, Jan, man, Nan, pan, ran, tan, and van.) In a study of five- to seven-year-olds, Goswami found a significant relationship between rhyming and end analogies but did not find a significant relationship between rhyming and beginning analogies (Goswami, 1990). While Ms. Bing’s students worked with the Word Wall and end analogies during Working with Words Block, they also sang songs that reminded them of which words belong in which family.

Rhyme was an important part of the phonics work that Ms. Bing incorporated into her singing and chanting sessions, during which she also asked children the sounds of letters, worked with alliteration (Please put your pigs in the pen by the pepper patch please. Please put your pretty pink pigs in the pen so their perfume won’t make me sneeze. Pink, pink, pink. We like pink.), helped children put words from their songs into the correct Word Wall categories, helped them find words in their songs that made specific sounds or fit specific phonics rules, syllabicated words, explored phonological awareness, and discussed and sang rules of phonics. Embedded phonics instruction was a crucial part of her instruction, often accomplished through rhyme.
While children sang and chanted and lifted phonics activities from their song texts, Ms. Bing required that they continually fingerpoint, helping them to read and helping her to assess their progress. Fingerpointing was a crucial part of their engagement, and it increased their fluency. There was a reciprocal relationship between fingerpointing and fluency, as increased fluency in actually reading the text, as opposed to their merely pointing to memorized text, also increased the efficacy of their fingerpointing. These important activities were reciprocally related to their levels of engagement, as increased successes in fingerpointing and fluency prompted increased engagement, and increased engagement prompted increased successes in fingerpointing and fluency.

As singing and chanting gave way to fluency through the practice of rhythm and prosody and as they gave way to phonics acquisitions through rhyme and embedded phonics instruction, they also gave way through arousal, fluency, and fingerpointing to engaged reading. As engaged reading reciprocally affected fluency, fingerpointing, and increased self-efficacy, all roads led to comprehension in reading (as confirmed by the children’s significant increase in scores on the STAR Reading tests). Not surprisingly, increased comprehension led to even more increases in self-efficacy, increased reading achievement, and more positive attitudes toward reading (as measured by the third, final administration of the ERAS to Ms. Bing’s students).

In summary, the primary findings of this research suggest that Ms. Bing’s methods were significantly effective in the classroom, as indicated by answers to the original research questions. Singing and chanting were the foundations of her instruction.
and of her classroom management. Singing and chanting led to heightened engagement, which led to increased self-efficacy, which led to further practice, which led to increased performance and more positive attitudes, which led to heightened engagement. The cycle repeated, and the results built upon themselves.

Although it may not be possible to tease out the effects of any individual component of Ms. Bing’s methods of instruction, it is not difficult to observe that the whole of her instruction is greater than the sum of its parts. Interactions among the elements present in her classroom may be too complex to identify completely, but they all work together—and work together well, as the quantitative data indicate.

Knowledgeable teachers can create highly effective teaching methods, tailored to their students, within a larger framework (such as Four Blocks), and such programs, integrated at all levels, are more powerful as a whole than is any one of their parts.

Responses to Research Questions

- **What are the main components of Ms. Bing’s methods of teaching reading?**

  Singing and chanting; physical movement; invented spelling; interactive writing; children as authors; encouragement followed by specific feedback; constructive criticism and suggestions for improvement preceded by encouragement; phonological awareness; phonetic understanding; phonemic awareness; integration of drama (projection, inflection, expression—prosody); connection to literature; promotion of student leadership, critical thinking, self-regulation, and purposeful use of time; embedded phonics; vocabulary lessons; cooperative
learning; high level of engagement; high levels of self-efficacy for reading; musical and kinesthetic mnemonic devices; authentic assessments; integration of visual art for creative and comprehension purposes; exploitation of teachable moments; statement to children of the purposes for the activities they performed and assignments they completed; fun; enjoyment; positive atmosphere predicated on positive interactions with the students; whole group instruction; balanced literacy; fingerpoint reading; repeated readings; automaticity; fluency; phrasing; rhyme; rhythm; choral readings; shared readings.

- **How were Ms. Bing’s methods implemented in the classroom?** Singing and chanting of text during the Guided Reading Block produced high levels of arousal and, consequently, of engagement among the children, which, combined with Ms. Bing’s encouragement and instruction, reciprocally brought about high levels of self-efficacy for reading. The presence of rhythm and prosody in the songs contributed to reading fluency, which enjoyed a reciprocal upswing with fingerpoint reading, which enjoyed a reciprocal relationship with increased engagement. The use of rhyme exemplified embedded phonics, from which Ms. Bing extrapolated integrated phonics lessons. The acquisition of phonetic understanding and fluency led to increased comprehension, which reciprocally benefited from and contributed to high levels of self-efficacy. Increased comprehension led to higher reading achievement and more positive attitudes toward reading.
• Were students’ attitudes toward reading affected by Ms. Bing’s methods of teaching reading? As measured by ERAS, the attitudes of students in Ms. Bing’s class toward reading increased dramatically from the beginning of the year to the end of the year, although there was a decline in attitudes in the middle of the school year.

• Were the achievement levels of Ms. Bing’s students affected by her methods of teaching reading? Ms. Bing’s children steadily achieved significantly more in their reading skills as measured by the STAR Reading program than all of the other five first grade classes.

• Did Ms. Bing’s methods of teaching reading appear to have any unique effects? If so, what were they? Without having made observations in the other first grade classrooms similar to those I made in Ms. Bing’s class, it is difficult to tell if all of the effects of her teaching are unique. One unique effect that is not difficult to determine, however, is that her children achieved significantly more in reading skills than the other first grade classes and that their attitudes toward reading increased dramatically.

• Did Ms. Bing’s methods affect students’ levels of self-efficacy in reading? While no quantitative determination has been made concerning the students’ levels of self-efficacy, powerful qualitative data suggest strongly that they made a significant difference.

• How might the strategies employed in Ms. Bing’s curriculum generalize to reading education in other classrooms?
Implementation of the singing and chanting of text is a simple matter. Appropriate songs must be selected—songs that are easily singable for first graders, can be easily memorized (with increasing difficulty as the year progresses and students’ reading skills increase), and demonstrate specific phonetic and phonological concepts. Children learn a few songs at the beginning of the year. While they are in the process of memorizing the songs and even after they have memorized the songs, they sing and track the lyrics as the teacher fingerpoints on a large chart (Big Book style). Once they have achieved some success in this activity, the teacher gives the children their own song books, containing the lyrics of the songs they know, and they fingerpoint their own books as they sing.

The next phase of singing and chanting involves the children’s creations of illustrations that express the texts of the songs and relate the children’s levels of comprehension of the text. Phonics lessons are interspersed between songs, and phonics rules are sung, chanted, and clapped. At some point in the year, these activities are brought together in the performance of a musical play that is built on parodies of the song tunes the children have learned.

The above-stated recipe for singing and chanting through the Guided Reading Block represents the easier part of the Bing Method of Teaching Reading. Much more difficult is the implementation of the remaining effective teaching characteristics, techniques, and strategies that assisted Ms. Bing well in making her students the most-improved first-grade readers in her school!
Suggestions for Future Research

Ms. Bing was an effective teacher who has now retired from the profession. Her personality, genuine affection and concern for her children, years of experience, and creative abilities worked synergistically to make her a master teacher. Her insights into the integration of arts into her classroom could be considered to have been ahead of her time. The most effective strategy she incorporated into her reading instruction was surely the singing of songs and chanting of poems that she used instead of basal readers and Big Books during her Guided Reading Block. It is hoped that the effectiveness of Ms. Bing’s methods, signified by the findings of this study, will help bolster the credibility of schools and administrators whose academic curricula call for arts integration, particularly that of music; for Ms. Bing showed us just how effective such an inclusion can be.

It is regrettable that a third administration of ERAS was not conducted for all of the first grades at Allgood Elementary School at the end of the 2005-06 school year and that three administrations were disallowed during the next school year. Such data could have shed valuable light on a possible trend in levels of reading motivation throughout the first-grade year. Herein lies potential for future research, as three or more administrations of an attitudinal survey on any grade level, spread across the school year, could yield data that would shed light on the possibility of such a trend.

A longitudinal study of Ms. Bing’s students could have provided additional insights into the long-term effects of the increase in reading attitudes, self-efficacy, engagement levels, and reading achievement of her students. Do the children carry these accomplishments into their futures, or do these effects cease when the singing and
chanting stop? An experimental study is possible wherein the treatment group could be taught in the manner of Ms. Bing. Valuable data could be gained by following these students through elementary school and into middle and high schools and by tracking their achievement levels in comparison to students taught in more traditional manners.

One of the limitations of qualitative research is that it is not typically replicable, and it is sometimes not even generalizable. By implementing Ms. Bing’s methods in an experimental first-grade class and then gathering and comparing data regarding reading achievement and student attitudes with comparable data gathered from a control group, one could come as close as is likely to be possible to replicating this first-grade study and generalizing this study to other, similar situations. By continuing to administer reading tests and attitudinal surveys to the students as they advance in school, one could garner additional quantitative information in a longitudinal manner.

What would be the effects of integrating sung or chanted text into the reading lessons of older students? Might these strategies be as helpful to older students as they are to beginning readers? If so, how? Songs and chants (typically performed as raps) are already used to provide mnemonic assistance to older students, but could regular use of sung or chanted text be helpful in improving reading skills of older students or increasing the comprehension and retention of text, such as that of reading in different content areas such as science and history? The implications for research and for the inclusion of singing and chanting are limited only by the imaginations of teachers and students.

This study shows that the integration of singing and chanting into daily reading lessons can help students to achieve more highly in reading and to have a more positive
attitude about reading. What are the chances that such achievement in skills and attitude will transfer to other subjects or to students’ attitudes toward school in general? Could improved attitudes toward reading translate into improved school attendance? Could a long-range result of such reading education bring about a lower high school drop-out rate? Perhaps future research could answer these questions.

As research catches up with theory and as empirical data point toward the efficacy of multiple encodings for the retention of academic skills and knowledge, it is hoped that classrooms such as Ms. Bing’s will proliferate and will make every school a place where children are led to believe in themselves and their abilities and to engage fully in the tasks of learning. In the words of William Purkey, “Our schools should be the most inviting places in town” (Purkey, 1984), and this research shows that daily singing and chanting sessions could surely help to make them so.

Postlude

As the saying goes, “The proof is in the pudding,” and it appears that Ms. Bing created some important pudding in her classroom and on the stage in her school. One such outcome is represented by the following occurrences.

On October 11 my field notes state:

Is there any hope for Rick? He’s picking his nose through the whole song. I think Ms. Bing has done all she can do by moving him away from the rest of the class so that at least he doesn’t distract the other students. He’s not that far away, but far enough so that he has to make an effort to distract other students. He’s an enigma. He appears to be bright, but he’s never clued in. What to do with the other 22 very needy children when he requires almost constant attention?
A different picture emerged in January, as I reflected upon the following incident:

I returned to Ms. Bing’s classroom for just a few minutes at the end of the semester to carry more copies of the *Elementary Reading Attitude Survey*. The children were so warm and hospitable! One of the first changes I saw was that Rick was sitting with the rest of the class and was no longer relegated to sitting by himself on the edge of the room. I hoped that this was a sign of some level of maturity for Rick, and I remarked about how excited I was to see him sitting with the other students.

Ms. Bing came over to his desk and announced that “the class has a new Rick.” With that she pulled out a book, opened a page at random, and asked Rick to read to me. He read every word with precision and skill—and vast amounts of pride!

“What in the world happened?” I asked. Ms. Bing replied that one day a new Rick suddenly came into the classroom, and the new Rick could read and listen and take part in class activities. I hope the outcomes of Rick’s story continue to be so positive! Beaming with excitement, Rick said only one thing directly to me: “Did you see me in the play?” My guess is that his award-winning dramatic and musical performances and the accolades that followed helped to birth his belief that he IS capable of succeeding. Success breeds success breeds success breeds success. . . It does appear that Ms. Bing and her methods of teaching reading have been successful on many levels.

This particular pudding seems to have jelled very well.
APPENDICES
Appendix A

Definitions of Terms

1. Reading—the *Literacy Dictionary* devotes almost two pages to its definitions of reading, presenting a long discussion and 20 definitions of the term. As pertains to this paper, the term *reading* will be used in a manner consistent with definition #3: “the perception and comprehension of written messages in a manner paralleling that of the corresponding spoken messages” (Harris & Hodges, 1995).

2. Literacy—the processes of reading and writing. Au, Carroll, and Scheu (2001) list six aspects of literacy within the whole curriculum framework:
   a. Whole literacy curriculum—regards the engagement of students in the “full process of reading and writing”
   b. Reading comprehension—the ability to construct meaning from and to respond to text, using background knowledge as well as printed information—an interactional interchange among the reader, the text, and the situation or social context in which the reading occurs
   c. Writing process—using print to construct meaning and communicate a message
   d. Language and vocabulary knowledge—concerns the students’ abilities to understand and use appropriate terms and structures in both spoken and printed English
   e. Word reading and spelling strategies—are necessary for fluency to occur
Voluntary reading—students select the materials they want to read in order to fulfill their own goals, not merely to meet requirements of their teachers and/or other adults (Au et al., 2001, pp. 4-6).

3. Balanced literacy education—an instructional curriculum through which attention is given to all six of the above-mentioned aspects of literacy (Au et al., 2001).

4. The next five terms and their descriptions are recorded in the manual that accompanies the STAR Early Literacy assessment ("STAR Early Literacy: Understanding reliability and validity," 2006) (not to be confused with the STAR Reading Test, which was administered in this study), page 2:
   a. General readiness—Before children can learn to read words and, eventually, connected text, they must first gain basic familiarity with print. This includes the structure of printed words and the roles they play (Adams, 1990; Snow, Burns, & Griffin, 1998; Trelease, 1995).
   b. Graphophonemic awareness—An awareness of the relationship between letters and sounds, which prepares students to understand the alphabetic principle and eventually to understand letters grouped to form words (Adams, 1990).
   c. Comprehension—Successful readers can draw meaning from connected text. Without comprehension, reading is a passive activity without purpose (Anderson et al., 1988).
d. **Structural analysis**—After children have a basic understanding of words, they can then deepen that understanding by learning to find, manipulate, and build words (Adams, 1990).

e. **Vocabulary**—Successful readers can recognize both high frequency and irregular words and understand them in context. A student’s level of vocabulary development is strongly associated with his or her ability to comprehend written material (Adams, 1990; Anderson, 1996; Nagy & Herman, 1987; NRP, 2000; Snow et al., 1998).

5. **Attitude**—individuals’ feelings about reading, which influence how much they involve themselves in reading and how they relate to their motivation for reading (A. Wigfield, 1997)

6. **Automaticity**—fast, accurate, and effortless word identification (Hook & Jones, 2002)

7. **Decoding**—“analyz[ing] spoken or graphic symbols of a familiar language to ascertain their intended meaning. Note: To learn to read, one must learn the conventional code in which something is written in order to decode the written message. In reading practice, the term is used primarily to refer to word identification rather than to identification of higher units of meaning” (Harris & Hodges, 1995, p. 55).

8. **Embedded phonics**—“In this approach, children learn vocabulary through explicit instruction on the letter-sound relationships during the reading of connected text, usually when the teacher notices that a child is struggling to read a particular
word. Letter-sound relationships are taught as part of sight word reading. If the sequence of letter-sounds is not prescribed and sequenced, but is determined by whatever words are encountered in text, then the program is not systematic [phonics] or explicit [phonics]” (NIFL, 2007).

9. Fluency—“Fluency is the ability to read a text accurately, quickly, and with proper expression and comprehension” (NIFL, 2007). A reciprocal relationship exists between fluency and comprehension (Talada, 2007).

10. Grapheme—a unit (a letter or letters) of a writing system that represents one phoneme (a single sound) ("What is a grapheme?," 1999)

11. Motivation—1) internal state or condition that activates behavior and gives it direction; 2) desire of want that energizes and directs goal-oriented behavior; 3) influence of needs and desires on the intensity and direction of behavior; 4) the arousal, direction, and persistence of behavior (Huitt, 2001)

12. Orthography—the method of representing the sounds of a language by written or printed symbols ("Orthography," 2008)

13. Phoneme—the smallest units comprising spoken language. English consists of about 41 phonemes. Phonemes combine to form syllables and words. Phonemes are different from graphemes, which are units of written language and represent phonemes in the spellings of words (L. Ehri, Nunes, Willows et al., 2001)

14. Phonemics—a branch of linguistic analysis that consists of the study of phonemes ("Merriam-Webster online dictionary,” 2004)
15. Phonetic—“1 a: of or relating to spoken language or speech sounds b: of or relating to the science of phonetics 2: representing the sounds and other phenomena of speech: as a: constituting an alteration of ordinary spelling that better represents the spoken language, that employs only characters of the regular alphabet, and that is used in a context of conventional spelling b: representing speech sounds by means of symbols that have one value only c: employing for speech sounds more than the minimum number of symbols necessary to represent the significant differences in a speaker's speech” ("Merriam-Webster online dictionary," 2004)

16. Phonological-- the science of speech sounds including especially the history and theory of sound changes in a language or in two or more related languages ("Merriam-Webster online dictionary," 2004)

17. Phonics—1) the letters or symbols used to encode a language’s spoken components (Venetzky, 1999), which are written symbols; 2) teaching the relationships between letters and sounds and how to use this system to decode and recognize words (Mesmer & Griffith, 2005); “‘Phonics’ merely refers to various approaches designed to teach children about the orthographic code of the language and the relationships of spelling patterns to sound patterns” (Stahl, 1992).

18. Synthetic phonics—a part-to-whole phonics approach to reading instruction in which the student learns the sounds represented by letters and letter combinations,
blends these sounds to pronounce words, and finally identifies which phonic
generalizations apply (Harris & Hodges, 1995)

19. Whole language instruction—“an entire philosophy about teaching, learning, and
role of language in the classroom. It stresses that language should be kept whole
and uncontrived and that children should use language in ways that relate to their
own lives and cultures. In the whole language classroom, the final product—the
“answer”—isn’t as important at the process of learning to define and solve
problems. Whole language advocates believe that the ideal classroom is a child
centered one in which students enjoy learning because they perceive that the
material has meaning and relevance to their lives” ("Merriam-Webster online
dictionary," 2004). Learning to read is not merely learning to recognize words; it
is learning to make sense of texts. In the whole-language program there is no
separate phonics instruction (Gursky, 1991).
### Appendix B

#### Code Word Frequencies

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Frequencies of Code Words in Specific Domains

Please note that although some words belong in more than one category, they have been relegated to the category with which they aligned most frequently in the relevant text of the field notes.

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Appendix C

Components of Qualitative Domains

I. Reading Instruction
   A. Preparation for learning:
      1. Singing for behavioral cues
      2. Singing and movement to prepare children to learn
      3. Singing to help children learn to think and act as a cooperative community
   B. Writing Block:
      1. Children as authors
      2. Invented spelling
      3. Questions that provide assessment, instruction, improvement, personal interest, fun
      4. Encouragement followed by specific feedback
      5. Constructive criticism preceded by encouragement
      6. Embedded assessment of phonological awareness, phonetic understanding, concept of word
      7. Integration of drama: projection, inflection, expression
      8. Lessons in respect and responsibility
      9. Connection to literature
   C. Calendar time:
      1. Student leadership
      2. Self-efficacy for reading
      3. Critical thinking
      4. Self-regulation and purposeful use of time
   D. Guided Reading Block: singing time
      1. Embedded phonics
      2. Vocabulary lessons
      3. Continued encouragement
      4. Personal responsibility
5. Cooperative learning community
6. High level of engagement

E. Working with Words Block
   1. Clapping syllables
   2. Spelling words with chanting, clapping, and snapping
   3. Singing as a mnemonic device
   4. Authentic assessment

F. Comprehension
   1. Visual art
   2. Questions

II. General Instruction
   A. Encouragement combined with specific feedback
   B. Specific feedback preceded by encouragement
   C. Personal responsibility
   D. Exploitation of teachable moments
   E. Stated purpose

III. Affective, motivational constructs
   A. Fun and enjoyment (arousal) leading to engagement
   B. Positive atmosphere
   C. High level of self-efficacy for reading
   D. Whole group instruction
   E. Arts integration
Appendix D

Examples of Songs in the Students’ Songbooks

Good Day, Sunshine
Morning Has Broken
Lazy Mary, Will You Get Up?
Oh, What a Beautiful Morning!
Wake up, Toes!
Put on a Happy Face
She’ll Be Coming ‘Round the Mountain
He’s Got the Whole World in His Hands
Mrs. Murphy’s Chowder
Mail Myself to You
Rockin’ Robin
Head and Shoulders
My Dog Rags
Old Chisolm Trail
Hey Dum Diddley Dum
La Bamba
Michael, Row the boat Ashore
Ghost Riders in the Sky
Ol’ Texas
There’s a Little Wheel A-Turning in My Heart
Lavendar’s Blue

The Bus Song

The Desperado

Fooba – Wooba John

Rig-a-Jig-Jig

Sandwiches
Appendix E

Examples of Songs That Teach Phonics

The Short Vowel Song. Sung by Mr. Sing

A a a apple, ē ē ē ēgg.

I i i Indian, The short vowels we do sing!

O o o oxen, ū-umbrella, too.

Now I've sung my short vowel sounds. I've

sung them all to you!
The Chant for Spelling b-a-t

b-a-t bat; b-a-t bat; b-a-t bat; b-a-t bat.

The AT Song

1. A-T says "at." A-T says "at."

Cat rat bat and fat, A-T says "at."

2. A-T says "at." A-T says "at."

Mat hat vat and sat, A-T says "at."
Appendix F

Examples of Pages from the Holiday Play Songbook

“Oh What A Beautiful Morning”

Oh, what a beautiful morning
Oh, what a beautiful day
We’ve got a beautiful feeling
Everythings going our way.

There’s a bright happy sparkle in your eyes
There’s a bright happy sparkle in your eyes
The children are waiting so happy with glee
And they’re watching and hoping that you they will see.

Oh, what a beautiful morning
Oh, what a beautiful day
We’ve got a beautiful feeling
Everythings going our way.

All the world is awaiting you, Santa
Throw your bags on the sleigh and get going
The reindeer are harnessed; They’re ready to fly
And the elves work is finished
It’s up to you now.

Oh, what a beautiful morning
Oh, what a beautiful day
We’ve got a beautiful feeling
It’s going to be a great Christmas Day,
Oh, what a great Christmas Day!
"Rise and Shine"

Rise and shine
The world's been turning
And everyone is waiting
Rise and shine, it's your big day
The children soon will be waking.

Rise, you've got work to do
Shine, spread joy around
Rise and show your love
All around the world
Oh, rise you've got to get busy now
Shine, spread joy around
Now's the time to rise and shine.

Rise and shine
Children are calling
And this is what they're saying
Rise and shine, your friends are waking
It's time for work and playing

Rise, you can't sleep now
Shine, it's that time
Rise and show your love
All around the world
Oh, rise you've got to get busy now
Shine, spread joy around
Now's the time to rise and shine.
"Wake up Santa Claus"

wake up Santa Claus
wake up Santa Claus
wake up Santa Claus
It's Christmas Eve,
And you sound asleep
If you don't wake up, you're in trouble deep
There are kids sleeping in their beds
With visions of sugar plums dancing in their heads

wake up Santa Claus
wake up Santa Claus
wake up Santa Claus
The clock if broke,
We cannot fix it now.
We tried to wake you up, we can not figure how,
To get you up and on your way
In your bed you seem to want to stay.

wake up Santa Claus
wake up Santa Claus
wake up Santa Claus
We've not much time,
We're getting desperate here
We've tried every way we know and now we fear
You'll miss your trip, you can't make it up.
We're in a fix and all we've got to say is
Wake up Santa Claus (X's)
"Lazy Santa"

tune: Lazy Mary

Lazy Santa will you get up?
Will you get up? Will you get up?
Lazy Santa will you get up?
Will you get up today?

Oh, no Santa - He won't get up
He won't get up. He won't get up.
Oh, no Santa - He won't get up
He won't get up today.

Lazy Santa will you get up?
Will you get up? Will you get up?
Lazy Santa will you get up?
Will you get up today?

Oh, no Santa - He won't get up
He won't get up. He won't get up.
Oh, no Santa - He won't get up
He won't get up today.

Lazy Santa will you get up?
It's time to get up!
Appendix G

Examples of Books for Students to Illustrate
School
illustrated by

I go to school.

I am in first grade.

My school is Allgood.

I can read.

I am happy to be a Bookworm.
I Am Happy
illustrated by

I am happy.

I am happy I am.

I am happy I am a Bing's Bookworm.

I am happy I am _ years old.
Green
written by Bingi Bookworms
illustrated by

Grass is green.

Leaves are green.

Lettuce, pea, cucumbers, green beans, celery and broccoli are foods that are green.

Caterpillars are green.

Dollar bills are green.

Alligators, turtles and frogs are green.

Green, green, green... we like green.
Appendix H

Permission for Use

For Question #12 of ERAS:

Email, Monday, July 14, 2008

Kathy,
Of course you may reprint it! As you point out, you really don't need my permission.

Good luck with your study!

Mike

On 7/14/08 6:42 PM, "Kathy Cochran" wrote:

> Dear Dr. McKenna, I am in the last stages of writing my dissertation at
> Clemson University. My degree is in curriculum and instruction, and my
> focus area is reading education. The title of my dissertation is "The
> Effects of Singing and Chanting on the Reading Attitudes and Achievement
> of First Graders." I employed your ERAS to secure data regarding the
> students' attitudes toward reading, and I'd like to ask permission to use
> a portion of one question in my paper. I am attaching a copy of a portion
> of the page on which it will occur should you see fit to allow me to use
> it. I realize that you have graciously allowed the assessment to be held
> in public domain, however I want to ask your specific permission for this
> inclusion.

> Thanking you, I am
> Yours truly,
> Kathy Cochran

Michael C. McKenna
Thomas G. Jewell Professor of Reading
Curry School of Education
405 Emmet Street South
University of Virginia
Charlottesville, VA 22904
REFERENCES


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McKenna, M., & Kear, D. J. (1999). Garfield revisited: Unlimited extension of permission to copy the ERAS. *Reading Teacher, 53*(3), 244.


Willis J. (2007). The neuroscience of joyful education. *Educational Leadership, 64*, online version only. Retrieved July 11, 2008, from http://www.ascd.org/portal/site/ascd/template.MAXIMIZE/menuitem.459dee008f99653fb85516f762108a0c_?javax.portlet.tpst=d5b9c0fa1a493266805516f762108a0c_ws_MX&javax.portlet.prp_d5b9c0fa1a493266805516f762108a0c_journaltypheheaderimage=%2FASCD%2Fimages%2Fmultifiles%2Fpublications%2Felmast.gif&javax.portlet.prp_d5b9c0fa1a493266805516f762108a0c_viewID=article_view&javax.portlet.prp_d5b9c0fa1a493266805516f762108a0c_journalmoid=82ea15e4a1643110VgnVCM1000003d01a8c0RCRD&javax.portlet.prp_d5b9c0fa1a493266805516f762108a0c_articlemoid=b74b15e4a1643110VgnVCM1000003d01a8c0RCRD&javax.portlet.prp_d5b9c0fa1a493266805516f762108a0c_personlization=ASCD_EL&javax.portlet.begCacheTok=token&javax.portlet.endCacheTok=token.


