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# Program Fidelity and Teacher Decisions: A Case Study of the Renaissance Learning Program

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Program Fidelity and Teacher Decisions: A Case Study of the Renaissance Learning  
Program

By  
Jennifer D. Putnam

A Dissertation Submitted to the  
Gardner-Webb University School of Education  
in Partial Fulfillment of the Requirements  
for the Degree of Doctor of Education

Gardner-Webb University  
2011

## Approval Page

This dissertation was submitted by Jennifer D. Putnam under the direction of the persons listed below. It was submitted to the Gardner-Webb University School of Education and approved in partial fulfillment of the requirements for the degree of Doctor of Education at Gardner-Webb University.

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## **Abstract**

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This dissertation was designed to examine the degree to which the fidelity of implementation of the Renaissance Learning program impacts teacher instruction, as well as teacher perception of student reading motivation and achievement. The teachers at a western North Carolina elementary school used the Renaissance Learning program for over 15 years, with little training. The school's end-of-grade test scores in reading were below the state and district averages, indicating that many of the students were struggling readers. At the start of the 2010-2011 school year, the teachers attended a professional development seminar and were trained on the best uses of the program.

The researcher created a survey, conducted focus group and individual interviews, examined documents, and observed teacher practice at this school in order to determine the degree to which the Renaissance Learning program was being implemented with fidelity. In addition, the impact of school-wide change was examined, and teacher perceptions of student reading motivation and achievement were studied.

The results from this study led the researcher to conclude that the teachers first experienced an implementation dip, but that the implementation fidelity of the Renaissance Learning program was high. In addition, teachers perceived an increase in student reading motivation and achievement. The researcher's recommendations were for the school to pursue professional development on motivation theory, and to continue professional development on the many aspects of the Renaissance Learning program in order to maintain high fidelity standards.

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## **Chapter 1: Introduction and Problem Statement**

On any given day, students in many elementary classrooms are spending sustained amounts of time reading silently to themselves (Bryan, Fawson, & Reutzel, 2003). During this Sustained Silent Reading time, sometimes referred to as SSR, students are expected to read without interruption for a set period of time. According to Douglas (2009), the teacher's role during the 10 to 30 minutes of most required SSR programs is inconsistent. In some classrooms, the teacher silently reads a book of his or her choosing in order to model a love of reading, while in other settings, teachers use the time to complete paperwork or to conference with students.

Within these parameters, some students are actively engaged with the literature they are reading, while others are disengaged. Guthrie, McGough, Bennett, and Rice (1996) described engaged readers as motivated to read for a myriad of personal reasons. In addition, Gambrell, Palmer, Codling, and Mazzoni (1996) contended that motivation affects the degree to which students experience success in reading achievement. Their research indicated that highly motivated readers gained a wider exposure to literature during SSR, and had an increased amount of practice time with reading which, in turn, led to increased achievement. Likewise, Cheak and Wessel (2005) contended that students who are intrinsically motivated to read are more likely to spend greater amounts of time as engaged readers. In contrast, Hairrell, Edmonds, Vaughn, and Simmons (2010) made the point that unmotivated readers spend SSR time being unproductive and overwhelmed (Reutzel, Jones, Fawson, & Smith, 2008). Bryan et al. (2003) found that simply providing time for students to read silently did not guarantee that they would become engaged readers. Furthermore, researchers Kelley and Clausen-Grace (2006) discovered that many students were reading only a limited selection of genres during SSR

time, and had a poor view of reading. They also found that many students were choosing books either above or below their reading levels, were only pretending to read, and were unable to stay engaged during Sustained Silent Reading because they lacked strategies needed to monitor comprehension.

This lack of engagement may be linked to motivation. Guthrie, Wigfield, Metsala, and Cox (1999) reported that students who were motivated to read spent more time actually reading during SSR time. In conjunction, lack of motivation is frequently cited as being one of the reasons for students' low reading performances. In a later study, Guthrie et al. (2004) noted that struggling readers have a lower motivation to read than their higher achieving peers. In order to increase reading achievement, Edmunds and Bauserman (2006) recommended that teachers actively seek ways to enhance reading motivation for their students.

Gambrel-Risely (2006) also noted that using data to enhance instruction is an effective practice to assist teachers in raising student reading achievement. She reviewed several notable examples of school systems using personalized data to target students' individual weaknesses in reading. Her research cited the importance of drilling down into the data to understand specific discrepancies in learning, so that those skills can be retaught and reinforced. However, she quoted one administrator who cautioned that using data alone was not sufficient. Simply analyzing test scores to develop a creative way to deliver instruction will not necessarily maximize student performance on standardized tests unless the student is motivated to learn. "'We reinforce promoting that desire,' the administrator says. Nothing will work if the student doesn't believe in himself and knows he can do whatever he wants to do" (Gambrel-Risely, 2006, p. 38).

The Accelerated Reader (AR) program from Renaissance Learning is a research-

based reading software application system widely used in more than half of the schools across the United States. According to the Florida Center for Reading Research, one of Accelerated Reader's main goals is to motivate students to read (Johnson, 2006). The Renaissance Learning Company (2010), creator of the Accelerated Reader program, also contends that its program increases reading motivation, leading to an increased amount of time spent in successful reading practice which, in turn, leads to greater reading comprehension. Accelerated Reader, as part of the entire Renaissance Learning program, is designed for use in conjunction with literacy programs already being implemented in K-12 classrooms. Students are first given a STAR (Standardized Testing and Reporting) reading assessment, which gives a grade-equivalent reading score. Based on the test results, students then self-select literature from an Accelerated Reader collection that falls within a certain grade-equivalent range. Literature is assigned point values by Renaissance Learning based on the Advanced TASA Open Standard (ATOS) Readability Formula. Students take computer-based literal-comprehension quizzes, and are given points based on the number of correct answers given. Students receive immediate feedback on the number of correct answers and the number of points earned. Renaissance Learning provides a chart of recommended point goals for students based on their individual grade-equivalent levels and the amount of time they spend in Sustained Silent Reading at school. Periodically, students are given the STAR test again to determine growth in reading achievement. Grade-equivalent reading ranges are adjusted throughout the school year based on the results of the test. In addition to these elements, the Accelerated Reader program includes vocabulary development and literacy skills components.

There are contradictory findings in studies of the success of Accelerated Reader.

One of the reasons for the discrepancies may be the fidelity of implementation of the program. Within schools and individual classrooms, practices vary widely. Brisco (2003) noted that some schools offer extrinsic motivational rewards such as parties or prizes for earning a certain number of points. In other settings, teachers use the number of points earned when calculating students' reading grades or to give awards to students who have earned the most points. Renaissance Learning discourages the use of extrinsic rewards to motivate students to read (W. Isenhardt, personal communication, December 13, 2010).

### **Purpose of the Study**

According to conversations between the researcher and teachers and administration in the fall of 2010, the issue of struggling, disengaged, and unmotivated readers was paramount in a rural, low-performing, western North Carolina elementary school. Teachers at Brownville Elementary (a pseudonym) have been using the Accelerated Reader program for more than 15 years to motivate students to read, with varying degrees of success. However, the manner in which it has been used has been highly variable, with teachers in the same grade level even using the program differently.

According to the North Carolina School Report Card for the years 2008, 2009, and 2010, Brownville consistently had the lowest achievement scores on the North Carolina end-of-grade test for reading in the district. Tables 1, 2, and 3 show the breakdown of the reading scores in relation to both the district and the state.

Table 1

*Percentage of Students' Scores At or Above Grade Level on 2008 Reading EOG Test*

	Grade 3	Grade 4	Grade 5	Overall
School	37.1%	57.1%	45.5%	47.3%
District	55.6%	61.8%	59.1%	60.0%
State	54.5%	59.2%	55.6%	55.6%

Table 2

*Percentage of Students' Scores At or Above Grade Level on 2009 Reading EOG Test*

	Grade 3	Grade 4	Grade 5	Overall
School	53.2%	51.3%	68.4%	57.3%
District	69.4%	72.0%	71.6%	72.7%
State	65.5%	69.1%	68.5%	67.6%

Table 3

*Percentage of Students' Scores At or Above Grade Level on 2010 Reading EOG Test*

	Grade 3	Grade 4	Grade 5	Overall
School	53.8%	61.8%	53.1%	56.7%
District	72.5%	77.8%	76.6%	76.9%
State	66.4%	71.6%	71.1%	70.1%

The tables above illustrate the point that many of the students at Brownville were struggling readers and that this issue continued over multiple years. In all grade levels, the percentage of students who scored at or above grade level was less than both the district and the state percentages.



In 2009, 74% of the third, fourth, and fifth grade students were Caucasian, 10% were African American, 9% were Hispanic, 5% were multi-racial, and 2% were Asian (North Carolina Department of Public Instruction, 2010) (NCDPI). Brownville Elementary is located in a small, rural community, and there are no industries within a 10-mile radius. Many parents are unemployed. As a result, nearly 90% of the students are on a free or reduced lunch program. Table 4 compares Brownville Elementary School's free or reduced lunch percentages to the district percentages.

Table 4

*Comparison of Free or Reduced Lunch Data*

Brownville Elementary	District	State
90.0%	61.4%	65.1%

Data in Table 4 indicates that Brownville Elementary students had a much higher rate of free or reduced lunch than the other schools in the district.

At the beginning of the 2010 school year, Brownville teachers attended a professional development seminar on Accelerated Reader Best Practices. At this seminar, the term *fidelity of implementation* was defined in regards to the program. Specific recommended practices were explained, and a question and answer session followed. Subsequently, the staff was instructed to begin using the AR program with fidelity. Follow-up trainings at the school were conducted periodically in order to familiarize teachers with all aspects of the Renaissance Learning program. Support was offered to teachers who requested help with implementation, and the principal began monitoring its use with all teachers.

According to Gresham, MacMillan, Beebe-Frankenberger, and Bocian (2000), the

term fidelity of implementation was defined as the delivery of specific instruction in the way in which it was designed to be delivered. Nunnery and Ross (2007), in their research on the effectiveness of the Renaissance Learning program, found that students who attended schools where there was a high fidelity of implementation of the AR program had significantly higher reading achievement scores than students who attended schools where the level of fidelity of implementation was lower. Likewise, the JBHM Education Group (2009) recognized Five Essential Practices for struggling schools. In the first of these practices, the group advocated for a curriculum that is grounded in research and taught with fidelity to all students. As such, it was felt that a study of the way AR was being used to promote reading motivation and an analysis of its fidelity of implementation in this elementary school would be beneficial to all stakeholders.

The purpose of this case study was to examine the degree to which the Renaissance Learning program was implemented with fidelity in this elementary school. The effects of this implementation on teacher instruction was studied, as were the effects on student reading motivation and student reading achievement as measured by teacher perception and collected data from the Renaissance Learning program. The impact of specific SSR practices in the school, as they were defined within the Accelerated Reader program, was studied. The outcomes, both intended and unintended, were examined.

### **Researcher's Role**

The researcher, as an instructional coach, had an established positive relationship with the teachers and students at Brownville Elementary. There is a strong atmosphere of mutual respect between the researcher and the faculty. It is believed that the research process, as a whole, was facilitated through this positive relationship.

## **Research Questions**

For this study, the primary research questions were determined after extensive qualitative data were gathered on Brownville's Accelerated Reader practices.

The questions guiding this study were:

1. How have the changes in the implementation of the Renaissance Learning program at Brownville Elementary School affected teacher decisions and practices in regards to Sustained Silent Reading?
2. How have the changes in the implementation of the Renaissance Learning program at Brownville Elementary School impacted teacher perceptions of the Accelerated Reader program with regard to student motivation?
3. How have the changes in the implementation of the Renaissance Learning program at Brownville Elementary School impacted teacher perceptions of the Accelerated Reader program with regard to student achievement in reading?
4. What are teacher perceptions regarding the fidelity of implementation of the Renaissance Learning program at Brownville Elementary School?
5. How has the change process affected teacher attitudes about the Renaissance Learning program at Brownville Elementary School?

## **Chapter 2: Literature Review**

In order to fully understand the Accelerated Reader (AR) program within the broader research context, this chapter examines the literature related to Sustained Silent Reading, the critical nature of fidelity of implementation of school curriculum, the vital role data-driven instruction plays in increasing student reading achievement and motivation, and an understanding of the change process within schools. Each of these subtopics concludes with how the topic itself relates specifically to AR. In addition, a subsection explaining the rationale for case study methodology is included.

### **Sustained Silent Reading**

In the following sections, various aspects of Sustained Silent Reading are explored. The literature on the program is examined in terms of history and design, varied methodologies, teacher's role, effectiveness, motivation and achievement, and its use within the Accelerated Reader program.

**History and design.** Noting that one goal of any reading program is to develop a student's ability to read uninterrupted for a sustained period of time, Dr. Lyman Hunt, Jr., from the University of Vermont, suggested in the early 1960s that adding this uninterrupted time as part of the regular school day would be beneficial to reading instruction (Chua, 2008). By the 1970s, his ideas had infiltrated U.S. schools, and have been in widespread use since then (Bryan et al., 2003). The Sustained Silent Reading program has been called a variety of names; Chua (2008) and Robertson, Keating, Shenton, and Roberts (1996) reported that Hunt's original acronym for the program was USSR (Uninterrupted Sustained Silent Reading). However, the program has also been called DEAR (Drop Everything and Read), SQUIRT (Super Quiet Reading Time), FVR (Free Voluntary Reading), DIRT (Daily Independent Reading Time), FUR (Free

Uninterrupted Reading), ERIC (Everyone Reads in Class), and IRT (Independent Reading Time) (Chua, 2008).

**Methodology.** Although in most cases this reading time is supplemental to the direct reading instruction provided by the teacher, there is some controversy surrounding the specific method that teachers should use during SSR time. In fact, although many schools and teachers within these schools profess to take part in Sustained Silent Reading as a regular practice, specific elements within the program may look very different, depending on individual educational philosophies. For example, Robertson et al. (1996) studied the distinguishing practices of SSR time in primary classrooms. Their research indicated that there was a discrepancy between proclaimed principles of SSR and actual classroom implementation, even within the same schools. In addition, there have been conflicting studies on the effects of using SSR in the classroom, and differences of opinion over which aspects of Sustained Silent Reading may make it worthwhile. Myers (1998) reported that in the original model for USSR, the following guidelines were recommended:

1. Interruptions should not occur during the set aside reading time.
2. Teachers should model reading to students by reading themselves.
3. Students should freely choose their own reading material.
4. The set aside time of day for silent reading should be consistent.
5. A wide variety of reading materials should be available in the classroom.

However, the degree to which these guidelines have been followed varies widely. Loh (2009), in a 10-week study of 50 teachers who proclaimed to follow the USSR guidelines, found that most did not model reading during the set aside SSR time, although they proclaimed that modeling was an important part of the process.

Yoon (2002) agreed with the original guidelines of USSR, but argued that, in addition, a critical component of a successful SSR program is nonaccountability. Yoon (2002) further contended that students should not be held accountable for the books they read during silent reading time at school. Yoon's (2002) position was that one of the goals of a Sustained Silent Reading program is to spark interest in reading, and that holding students accountable for their free reading defeats this purpose. Other researchers agreed with this position. Gardiner (2005) stated that a simple log, in which a student records the titles of reading materials and pages read, is a sufficient accountability tool. In fact, he suggested that having students complete book reports or other work associated with their free reading choices is detrimental to their motivation to read.

Methe and Hintze (2003) disagreed with other analysts on the issue of accountability during SSR, and professed that some sort of accountability was necessary for the program to work effectively. While they did not support such items as graded book reports, they did argue that the following components of SSR programs were crucial for success:

1. Students should select their own interesting reading materials.
2. Teachers should provide brief, self-directed introductory prompts to which students respond.
3. Discussions should follow SSR periods.

Trudel's (2007) research also indicated that some accountability is a necessary component of SSR. She proposed that during silent reading, teachers should provide guidance in students' selections of texts, students should keep records and reflect on what they read, and teachers and students should participate in mini-conferences and discussions about the material being read. Further, Bryan et al. (2003) contended that

short, directed conferences with students who were reading in an SSR setting caused even the most disengaged students to stay on task with their reading. Akmal (2002) agreed that student-teacher conferences should be an integral part of SSR programs. In addition, he advocated for the use of grades based on the number of pages read during SSR time as a component of accountability.

The discrepancy in the research seemed to carry over to many classrooms. Nagy, Campenni, and Shaw (2000), in a survey of 69 seventh-grade teachers in Pennsylvania, found numerous interpretations of Sustained Silent Reading programs. For example, of the teachers who were surveyed, 65% believed that students should not be held accountable for what they read during SSR. However, the 35% who had the opposing position strongly agreed that assigning grades was an important component of SSR.

**Teacher's role.** The research on the teacher's role during Sustained Silent Reading has also been contradictory. Methe and Hintze (2003) were proponents of teachers modeling silent reading during SSR time. In a controlled study of third-grade students in a northeastern elementary school, they found that teacher modeling during SSR significantly increased on-task reading behavior. Cipiti (2010), in a study of reading motivation and on-task behavior during SSR, likewise found that teacher modeling during silent reading was an effective practice. Conversely, Manning and Manning (1984) studied three different models of SSR to determine the effect of each on student attitudes toward reading. Their research showed that peer interaction and teacher-student conferences led to significantly higher attitudinal scores for these students than for those who were involved in either no SSR program, or in an SSR program in which the teacher simply modeled silent reading. DeBenidictis (2007) found that adapting the traditional SSR program to include student-teacher and peer conferences created more enthusiastic

and capable readers. Trudel (2007) further reported that students tended to be more engaged during reading time when they provided reflections on what they had read. Her research indicated that engaging in discourse and discussion during reading time increased students' reading achievement. In addition, she found that using these techniques created more positive student attitudes toward reading. Parr and Maguiness (2005) concurred that having students discuss what they read during SSR led to more positive attitudes towards reading. Their research also indicated that conferences after SSR time allowed teachers to become more knowledgeable of the readers in their classrooms.

**Effectiveness.** It is no wonder that the strategies used to implement a Sustained Silent Reading program are so varied. The research itself is also contradictory. The National Institute of Child Health and Human Development (NICHD, 2000) examined previous studies of Sustained Silent Reading and concluded that there was no evidence that it was an effective practice in itself. *Put Reading First: The Research Building Blocks for Teaching Children to Read* (NICHD, 2001) stated that, “No research is available currently to confirm that instructional time spent on silent, independent reading with minimal guidance and feedback improves reading fluency and overall reading achievement” (p. 25). However, Krashen (2005b) strongly disputed the National Reading Panel’s claim. He cited numerous flaws in their research, among them the Panel’s reliance on short, year-long studies, the omission of many other studies that would have supported the use of SSR, and the Panel’s focus on SSR’s effect on fluency instead of on comprehension or motivation.

**Motivation and achievement.** Likewise, there continued to be controversy about the purpose of SSR. Some researchers claimed that increasing student motivation to read



is its main purpose, while others claimed that increasing reading achievement is its goal. Either way, despite the NICHHD's (2000) report, researchers have found positive consequences of using SSR at school. Yoon (2002), in a meta-analytic study of the research, showed that employing self-selection as a part of SSR significantly increased positive student attitudes toward reading. Chua (2008) used a time series design to compare student attitudes in leisure reading over a 12-month time period. The results of this study again showed that student attitudes toward reading were positively affected after being exposed to daily periods of SSR time at school. Parr and Maguiness (2005) also concluded that allowing students to exercise free choice in reading materials during SSR time motivated students to read for longer periods of time. Moreover, Jim Trelease (2001), noted author of *The Read Aloud Handbook*, stated that "Reading is a skill—and the more you use it, the better you get at it" (p. 107). To back up this claim, he cited a 1992 study completed by the International Association for the Evaluation of Educational Achievement in which more than 200,000 students from across the globe were compared. The results indicated that regardless of income level, children who read books for pleasure the most, and who were read to the most by their teachers, had the highest reading achievement scores (Trelease, 2001). Thus, the research suggests that students who are more motivated to read will read more, and that students who read more become better readers.

**Successful implementation.** Pilgreen (2000), in a review of 32 reading studies involving SSR, identified eight factors that successful programs had in common. Of these factors, some were considered distinct from the original guidelines:

1. Staff training;
2. Follow-up activities; and

### 3. Distributed time to read.

Pilgreen (2000) explained that staff training is an essential part of a successful SSR program, since teachers must understand and accept the importance and effectiveness of free reading in their classrooms before they begin to implement it. Additionally, she recommended follow-up activities for students. She reported that follow-up activities are different from accountability measures. Pilgreen (2000) contended that having students voluntarily share their feelings about the books they read, or having them create a product that promotes books read during SSR, are effective strategies that should be employed by teachers. Finally, she stated that reading for shorter increments every day instead of longer times on a few specific days during the school year is the most appropriate way to spend time in SSR.

**Accelerated Reader.** Despite the differences in implementation, Gardiner (2001) noted that all SSR programs, whatever their acronyms, shared these common features:

1. Students read freely;
2. Students read without interruption; and
3. Students read silently.

Allowing time for Sustained Silent Reading is an essential component of the Accelerated Reader program (Renaissance Learning, 2009). The same SSR principles reported by Gardiner (2001) are embedded in the implementation of Accelerated Reader (Renaissance Learning, 2009). However, Paul (2003), in his 72-page research report, *Guided Independent Reading*, cited the National Reading Panel's (2001) conclusion that SSR, in and of itself, is ineffective. Renaissance Learning (2010) defined Guided Independent Reading (GIR) as "a multistep process in which teachers help students choose reading materials that correspond to their current reading level, monitor students'

progress with such materials, and provide instruction to students as needed” (p. 8).

Paul’s (2003) report examined the Accelerated Reader records of over 50,000 students in first through twelfth grades in 24 states. The report listed eight findings from the research. The findings that specifically address the way SSR is incorporated into the AR program are listed here:

1. Using GIR, instead of unmonitored SSR, results in accelerated gains of reading growth for all students.

2. Increased time spent in GIR results in increased reading growth. However, the law of diminishing returns is in effect. Ninety minutes of GIR was not significantly more effective than 60 minutes.

3. The teacher’s role in GIR is vital to increasing reading growth in students.

Contrary to the National Reading Panel’s suggestion that reading ability was directly linked to the amount of reading practice in which a student engaged, Renaissance found that the teacher played a decisive role in the amount of time students spent reading (Paul, 2003).

Renaissance Learning reports that some of its previous recommendations have been changed due to the results of this research. For example, Renaissance Learning no longer recommends that teachers should guide students to more difficult reading material if they are averaging higher than 92% correct on AR tests. This practice was not supported by the research results. Instead, it was found that higher comprehension rates on AR tests were correlated with greater gains in reading achievement. As such, Renaissance Learning now recommends that teachers monitor a student’s ability to maintain an average of at least 85% correct on all tests, and that a significant portion of reading practice quiz scores should be 100% correct (Nunnery & Ross, 2007).

There are also conflicting studies examining the merits of the Accelerated Reader program. Krashen (2005a) studied the work of other researchers, and found flaws in their evidence that the program worked to increase reading achievement. He noted four components associated with Accelerated Reader: free reading time, availability of numerous books, comprehension quizzes, and rewards for reading. Krashen (2005a) contended that allowing students the time to read many books will increase achievement, but that using lower level comprehension tests and rewards for reading will not. However, Rodriguez (2007), in a study comparing participation in an Accelerated Reader program to scores on the California Standards Test, found that increased participation led to increased scores in reading comprehension. The U.S. Department of Education Institute of Education Sciences (2008) in the *What Works Clearinghouse* (WWC) report reviewed 35 studies of Accelerated Reader, but found only one study that met their strict evidence standards. This study, conducted by Ross, Nunnery, and Goldfeder (2004), was a randomized controlled trial that contained over 900 students and 45 teachers. Their results, which the WWC deemed as small, indicated that there was statistically significant evidence that the Accelerated Reader program had a positive effect on reading comprehension and general reading achievement. A later study conducted by the Magnolia Consulting Group (2010) sought to address the deficiencies in evidence standards noted by the WWC. Their carefully designed mixed method study was conducted over the course of the 2009-2010 school year and involved 344 students in Grades 1 through 4 from three different schools. The results of their research indicated that students, as a group, who participated in the Accelerated Reader program had significantly higher gains on the STAR Reading Assessment than students who did not use the program. Teachers in the study who used the program also frequently praised its

ability to keep students engaged in reading (Magnolia Consulting Group, 2010).

In examining the literature regarding Sustained Silent Reading and Accelerated Reader programs, it is evident that there is disagreement in the research on both topics. In addition, much of the research on Accelerated Reader is dated before Renaissance Learning conducted its own study of the program and subsequently changed some of its own recommended practices. It was therefore necessary to study how teachers in this school were implementing the SSR program in relation to AR in order to determine if they were effective in promoting both reading motivation and higher comprehension scores as measured by the Renaissance Learning program.

### **Motivation**

Motivation, by its very nature, is one of several critical factors helping students become engaged readers. Therefore, it was imperative that theories on motivation be examined in order to determine their roles in reading achievement.

**Self-determination theory.** Deci and Ryan's (2008) self-determination theory focuses on three aspects of human needs: competence, relatedness, and autonomy. This theory has many implications in education. According to Deci, Vallerand, Pelletier, and Ryan (1991), competence occurs when one is effectively able to meet optimal challenges. They asserted that students' feelings of competence can be increased when given performance feedback on challenges that are neither too hard nor too easy. The term relatedness refers to how connected to others one feels. Ratelle, Guay, Vallerand, Larose, and Senecal (2007) reported that teachers who foster relatedness have students who are more motivated to learn. Autonomy is the feeling that one is self-directed, or in control. Their research has shown that all three of these needs must be met in order for motivation to be sustained. It should be noted that both competence and relatedness as agents to

enhance motivation were found to be directly tied to feelings of autonomy. In other words, students who feel in control as opposed to feeling controlled are more likely to respond to stimuli that increase feelings of competence or relatedness which, in turn, increase motivation. Thus, autonomy, competence, and relatedness are interconnected in terms of their relationships to motivation.

Self-determination theory breaks motivation down into three subcategories: intrinsic motivation, extrinsic motivation, and amotivation. Students who are intrinsically motivated complete activities for the enjoyment and gratification of doing so. As such, intrinsically motivated students do not seek or expect rewards for completing tasks. Intrinsic motivation is associated with a deeper understanding of concepts, and perseverance with difficult tasks (Barkoukis, Tsorbatzoudis, Grouios, & Sideridis, 2008). Intrinsic motivation is directly linked to the flow experience, a term coined by Csikszentmihalyi in 1978. The term *flow* can be described as the experience of losing oneself completely in a task so that both time and self-awareness are temporarily lost. According to the theory of flow, the appropriate level of skill, challenge, and interest must be present (Csikszentmihalyi, 2000). Extrinsically motivated students, on the other hand, primarily complete tasks for the reward bestowed upon them, or to avoid punishment. Law (2010) noted that extrinsically motivated students are more apt to learn a concept superficially. Such students adopt strategies that allow them to complete a task, and thus be rewarded, but do not fully engage in approaches that would allow for deeper meaning of concepts. Amotivated students, by contrast, lack goals and do not seem to have a desire to complete a given task. Barkoukis et al. (2008) reported that amotivation has been associated with learned helplessness, wherein students refuse to complete a task because of a belief that they do not have the skills necessary to complete

it.

**Achievement goal theory.** Within the self-determination theory framework, other theorists have defined additional relevant components. Seifert (2004) recognized achievement goal theory as a student's motivation to achieve academic goals. He further delineated this theory by discussing two learning goals: mastery and performance. Students who seek mastery goals strive to understand difficult concepts and feel pride, satisfaction, confidence, and self-worth when accomplishing these goals. Intrinsic motivation is more closely associated with mastery goals. Students who seek performance goals, conversely, are more likely to pursue extrinsic rewards, and to focus on how others view their achievements. Performance-seeking students are more likely to show anxiety, boredom, or dislike of a task.

**Reading motivation.** Recently, reading motivation has become a topic with which many researchers have become increasingly involved. Guthrie et al. (2004) reported that students who are identified as intrinsically motivated to read, based on a Motivation to Read Questionnaire, read more frequently both in and out of school. In contrast, students who experience extrinsic motivation to read (i.e., rewards) read less and have lower comprehension scores than students who are intrinsically motivated (Wang & Guthrie, 2004). In fact, other researchers also denounced the use of extrinsic rewards such as money, prizes, or awards to motivate students. Deci et al. (1991) reported that numerous studies have shown that extrinsic rewards, while initially effective, have a negative long-term effect on intrinsic motivation. They asserted that extrinsic rewards are usually given in order to control a person's thoughts, feelings, or behaviors. However, the subject of the extrinsic reward often feels a loss of autonomy, leading to diminished intrinsic motivation. Moreover, Pitcher et al. (2007) noted that students who

do read regularly can quickly become apathetic towards reading if they believe that reading activities are personally unrewarding, uninteresting, or too challenging.

**Accelerated Reader.** Guthrie et al. (2004) stated that the results of their research showed that prepackaged instructional programs can have a positive influence on a student's intrinsic motivation to read. They also found that teachers themselves could influence the intrinsic motivation of students. Research conducted by Brem, Husman, and Duggan (2005) supported these conclusions. Their 3-year study of the Accelerated Reader program in a Title I urban elementary school focused on the effect AR had on standardized reading performance and student motivation to read independently. To determine Renaissance Learning's effect on motivation, the researchers used a modified version of the Patterns of Adaptive Learning Instrument (PALS), the most widely used instrument to measure student goal orientation (i.e., performance goal oriented or mastery goal oriented). Their findings showed that student mastery orientation remained high throughout the timeframe of the study. Moreover, student performance orientation decreased. The results of this research suggested that using the AR program can influence student motivation in a positive manner.

In fact, Renaissance Learning claims that motivation is one of its main goals as a reading program. In a statement regarding the company's beliefs on how Accelerated Reader affects motivation, the Renaissance Learning Company stated,

When students pass AR quizzes on self-selected books that are at their unique reading level, the success they experience sparks motivation to read more. The more students practice reading, the better they become, empowering them to tackle more challenging material. Nothing is more motivating than success. (W. Isenhardt, personal communication, November 23, 2010)



Mucherah and Yoder (2008), after conducting their own examination of reading motivation, also found programs encouraging intrinsic motivation to read. However, they warned against programs in which consistent rewards for reading are given. Instead, they advocated for the use of intermittent rewards to increase intrinsic motivation. This research is important because many researchers have claimed that the Accelerated Reader program promoted extrinsic motivation to read. For example, Everhart (2005) explained that extrinsic rewards such as toys, stickers, and prizes were frequently offered by many American schools to students who participate in the AR program. In fact, prior to 2003, school-wide AR stores were a motivational tool promoted by the Renaissance Learning Company. Items from the store could be “bought” with points earned from AR quizzes. Renaissance Learning has now discontinued its support of these extrinsic motivational tools. Citing a Guided Independent Reading study conducted by Paul (2003) for Renaissance Learning, the company stated,

Two reports, the Student Points Slip Form and the Top Point Earners Report, were taken out of the Renaissance Place versions of Accelerated Reader in 2004. This was a deliberate decision based on the *Guided Independent Reading* study. Renaissance felt that the Student Points Slip Form and the Top Point Earners Report often helped schools put too much emphasis on the accumulation of points for prizes. (W. Isenhardt, personal communication, November 30, 2010)

However, in using the self-determination theory as a guide, Renaissance Learning’s Accelerated Reader program now appears to have the components that would foster intrinsic motivation to read. Renaissance’s approach to Guided Independent Reading stated that students should read in their Zone of Proximal Development (ZPD), a theory proposed by Vygotsky (1978). According to Kjellin (2005), this theory states that

students have two important levels of which teachers should be aware. The first of these is the actual developmental level, and the second is the level of potential development. The difference between these two levels is the ZPD—the optimal span of what is known and what can be learned. Renaissance guidelines explain the importance of having students read books whose reading levels fall within their ZPD, defined as being neither too easy nor too difficult (Nunnery & Ross, 2007). In regards to reading motivation and self-determination theory, reading books within a student's ZPD should foster an individual's feelings of competence. In addition, Wigfield (1997) reported that “When children believe they are competent and efficacious at reading, they should be more likely to engage in reading” (p. 60). In accordance with the relatedness component of self-determination theory, Renaissance Learning also recommends that a daily “Status of the Class” be taken. This practice involves teachers conducting short (30-60 seconds), individualized conferences with students during Guided Independent Reading. The purpose of these conferences is to monitor success and to provide feedback on reading material (Nunnery, Ross, & McDonald, 2006). Finally, autonomy as a construct of Accelerated Reader is shown in its recommendation that students help set their own reading goals in regards to selected books, amount of time spent reading outside of school, and performance on reading practice quizzes.

Research on motivation theory clearly points to the importance of fostering intrinsic motivation and mastery goal performance through understanding of competence, relatedness, and autonomy. Programs encouraging intrinsic motivation to read may be beneficial to student attitudes toward reading. Moreover, Brem et al. (2005) noted that there may be a direct correlation between how students perceive the performance orientation of their teachers and their own performance orientation. In their study of

Accelerated Reader and student motivation, they found that the more performance goal-oriented students felt their teachers were, the higher their own performance goal-oriented scores were. These findings suggest that teacher attitudes can have a strong influence on student reading motivation. In the same vein, the degree of fidelity of implementation of the Accelerated Reader program may have a direct impact on reading motivation.

### **Fidelity of Implementation**

Rogers (2003) pointed out that until recently researchers found no need to study fidelity of implementation. It was assumed that those who implemented a new program would do so with fidelity and that they would imitate its use in the manner of those who had adopted it earlier. However, as it became more apparent that adopters frequently changed a program to fit individual needs, fidelity of implementation was perceived to be a necessary research question. Fidelity of implementation has been widely studied in the health field, and yet there are very few studies in which fidelity was the focus of educational program evaluation (O'Donnell, 2008; Ruiz-Primo, 2006). Nevertheless, according to the U.S. Department of Education Institute of Education Sciences (2008) in the *What Works Clearinghouse* (WWC) report, the effectiveness of a given intervention will depend largely on the adherence to the program's guiding principles. For example, the concept of reduced class size is cited as a program that, when carried out with fidelity, is shown to be effective. However, when there is a lack of fidelity, the efficacy of the program declines significantly.

Century, Rudnick, and Freeman (2008), after a comprehensive study of other researchers' definitions of fidelity, operationalized the definition as "the extent to which the critical components of an intended program are present when that program is enacted" (p. 202). O'Donnell (2008) reviewed the literature and found five components

of implementation fidelity: adherence, duration, quality of delivery, participant responsiveness, and program differentiation. Within education, adherence refers to the degree to which a program is being delivered as it was designed. Duration involves the amount of time a program is being used, while quality of delivery refers to how well intended methods and techniques are being implemented within the program. Participant responsiveness indicates to what extent the participants are involved in the program being implemented. Finally, program differentiation refers to the presence or absence of implementers' use of the unique program features setting it apart from other similar programs (O'Donnell, 2008).

Ruiz-Primo (2006) identified several factors that may affect fidelity of implementation. The first of these factors is the complexity of the program, including its total number of components and the ease of understanding the program's effectiveness. The amount of time needed to implement the program is also a factor, with more time being correlated to lower fidelity. In other words, programs that take longer to implement may not be used with fidelity. Conversely, a low number of mandated resources essential to the program's success, as well as the quality of the provided implementation manuals, are both linked to higher fidelity. Training and participant buy-in to the program are also critical components. Finally, supervision of program providers is cited as an essential factor in fidelity of implementation, especially when relevant feedback is given frequently.

Johnson, Mellard, Fuchs, and McKnight (2006) further expanded upon specific practices to aid in fidelity of implementation. Among the recommendations were to increase credibility by explaining how the program leads to improved outcomes, specifically define components of the program, clarify the responsibilities of individuals

using the program, construct a data system to measure individual parts of the program, employ a system of formative assessment, and institute measures of accountability for those who do not comply with the program's procedures.

**Accelerated Reader.** Magnolia Consulting Group (2010), in its Final Report for the Evaluation of Renaissance Learning's Accelerated Reader Program, addressed aspects of both Johnson's (2006) and Ruiz-Primo's (2006) research. In order to measure the fidelity of implementation of the AR program in three schools, the researchers conducted observations and interviews in order to document implementation practices. Additionally, the researchers asked teachers to complete an online implementation log. Their findings indicated that 96% of the teachers in their study implemented the program with high fidelity, although 51% of the participants indicated that implementing the program was somewhat to very difficult. Conversely, 44% of participants indicated that the program was somewhat to very easy to implement. Several teachers in the study signified that additional professional development would have been helpful, concurring with Ruiz-Primo's (2006) research. Teachers were polled as to their belief in the efficacy of the program and 100% of the participants reported that they wanted to continue the program the following school year. Since the findings of this study indicated that student achievement in reading increased significantly more than the reading achievement of students in the control group, the impact of fidelity of implementation cannot be ignored.

Based on the results of Paul's (2003) study, which indicated that the then-current standards of implementation should be revisited, Renaissance Learning made several specific changes to the implementation guidelines for Accelerated Reader in 2004. The company noted that they had moved away from recommending focusing exclusively on point goals. The points now served only as an indication of reading engagement, since

the more points a student earned, the more time the student had spent reading. The new implementation guidelines focused on the average percent correct on reading practice quizzes, since larger reading gains were associated with scores of 85% or higher (W. Isenhardt, personal communication, December 13, 2010).

These implementation changes were critical since they moved the program from rewarding students extrinsically to motivating them to become intrinsic learners. Without additional training, teachers who had been implementing the program for an extended time may have continued outdated practices. For these reasons, in order to research the effects of the AR program on reading achievement and motivation, it was necessary to study the degree of fidelity of implementation of the current program within the Brownville Elementary School context.

### **Formative Assessment and Data-Driven Instruction**

Margaret Heritage (2007), of the National Center for Research on Evaluation, Standards, and Student Testing, described formative assessment as a reciprocal process in which learning is continually being evaluated by both the teacher and the student. Based on the data gathered, instruction is then modified to best meet the needs of the pupil. Moreover, she identified four essential components of formative assessment: identifying the gap, feedback, student involvement, and learning progressions. Accordingly, within the context of formative assessment, she defined the term *identifying the gap* as the process of using a student's zone of proximal development to find the difference between what a student knows and what a student can learn. Feedback is then given to the student, helping guide the student in understanding his or her strengths and weaknesses. Heritage (2007) contended that this formative feedback positively affects both learning motivation and a student's belief in his or her abilities as a learner. The term *student*

*involvement* is associated with deliberate collaboration between the teacher and the student to set learning goals, as well as the development of student metacognition strategies to help meet those goals. Finally, the term *learning progressions* refers to the understanding of both where a student is on a learning continuum and how far that student should advance on that continuum. In addition, short-term goals, as they relate to a defined set of success criteria, are imperative. Using the success criteria allows both the teacher and the student to interpret and analyze the data so that the formative assessment process can begin again.

Black and Wiliam (1998) noted that formative assessment strategies positively and significantly affect achievement for students at all grade levels. In fact, after a comprehensive review of the literature, they pointed out that effective formative assessment use has the most benefit for the lower achieving students, while overall achievement increases with all students. Additionally, their research revealed some disadvantages to traditional, nonformative assessment methods. One issue is the negative impact that giving assessment without feedback seems to have on student self-efficacy. They contended that students who come to believe that they are ineffective in school soon simply stop believing that school is important. In addition, they also cited the disadvantages of the use of widespread summative assessment methods that encourage competition. These methods did not promote individual growth; rather, they led many students to a sense of learned helplessness. Conversely, the researchers asserted that using formative assessment with efficacy led to a sense of student ownership in learning by focusing on the specific element that was not understood, while allowing the student to recognize what he or she did not comprehend.

Student self-assessment is also a critical component of formative assessment.

Black, Harrison, Marshall, and Wiliam (2003) noted three criteria necessary for effective self-assessment: an understanding of the desired goal, a consciousness of the student's present position toward that goal, and a grasp of strategies that would allow students to close the gap between the two points. In addition, teacher-student dialogue is seen as an imperative component to formative assessment. It is this dialogue that allows students to express their own understandings, and for teachers to respond to them.

Cauley and McMillan (2009) named five classroom practices necessary for formative assessment to be implemented with fidelity. The first of these practices is to provide precise learning targets and clear examples of both strong and weak work by students. The researchers contended that having these learning targets strengthen student autonomy and mastery goals. The second practice is to offer precise, private feedback on student progress toward the learning targets. The researchers stated that concrete examples of the strategies needed to complete a task effectively help students to persevere and lead to feelings of competence. The third practice is to link student success to effort. Teachers who praise students for completing an easy assignment, who offer unrequested help when students are not struggling, or who consistently console students after a failure can lessen feelings of motivation in students. Conversely, feedback that focuses on the success of effort and exploration of alternative learning strategies has been found to be successful. The fourth practice is to inspire student self-assessment. This practice encourages autonomy by allowing students to take part in their own learning. The last practice is to assist pupils in setting realistic improvement goals, which are linked to high self-efficacy in students (Cauley & McMillan, 2009).

Rudy and Conrad (2004) explained that data-driven instruction includes gathering, analyzing, and interpreting data so decisions that facilitate student learning can



be made. As an integral component of formative assessment, they identified four important aspects of data-driven instruction: strong curriculum leadership, an emphasis on technology to disaggregate data, clearly defined performance indicators, and continuing professional development. Kadel (2010) further explained that successful technology programs used to mine collected student data should display real-time results, identify important learning patterns, and flag potential learning difficulties.

**Accelerated Reader.** Paul (2003) stated that Renaissance Learning's Reading Practice Database (RPD) is most likely the largest database ever amassed on student independent reading. He further noted that there are over 50 reports generated in real time accessible by teachers using the full Accelerated Reader program. These reports show data on individual students, groups of students, whole classes, schools, or school systems. In fact, Renaissance Learning's trademarked phrase, "Advanced Technology for Data Driven Schools" appears on the title of their 2010 booklet *Renaissance School Improvement*. The Progress Monitoring Report is one of many such reports identifying students who are in need of intervention strategies to help increase reading achievement. Several reports seem to go hand-in-hand with the research on formative assessment. For example, a report on a particular student's progress toward individual reading goals, when shared with that student, would theoretically facilitate identifying the gap, feedback, student involvement, and learning progression.

In addition, the teacher-student dialogue touted by Black et al. (2003) is a component of the Status of the Class strategy endorsed by Renaissance Learning. Allowing students a voice in their own goal setting with regards to how many points they will earn in a set time period is consistent with Cauley and McMillan's (2009) learning targets.

Research clearly identifies the effective use of formative assessment techniques as an important factor in student achievement. The Renaissance Learning Company (2010) claims that their program fosters “daily formative assessment” to bolster core curriculum and enhance differentiated instruction (p. 2). For these reasons, it was necessary to study the way data from Accelerated Reader was utilized by the teachers at Brownville Elementary.

### **The Change Process**

According to Tvedt, Saksvik, and Nytro (2009), change is an intrinsic component of all organizations. This change process, while granting individuals an opportunity to grow, may also bring expanded stress levels and uncertainty about new roles and expectations. Content and process are two aspects of change that need to be considered when initiating any organizational change. Content changes are driven by beliefs about mission or perceived problems. Content deals with the specific procedures to be changed. The process of change, on the other hand, applies to how change is implemented. Less successful change may be linked to the methods used to bring it about (Dahl-Jorgenson & Saksvik, 2005).

Rafferty and Restubog (2010) noted that communication with employees about the change process generally lessens resistance and improves cooperation in the change taking place. They further delineated change communication as formal or informal. Formal change communication approaches involve top-down information designed to convey knowledge about the change process or implementation procedures. Memos or general informational meetings are examples of formal change communication. By contrast, informal change communication is defined as “ad hoc efforts by leaders to communicate with employees about change, which are not carefully designed and

standardized by the organization” (Rafferty & Restubog, 2010, p. 1312).

Fullan (1993) listed eight lessons his research has identified as part of the change process:

1. Complicated change cannot be forced.
2. Change does not follow a straight line.
3. Problems will occur.
4. Premature visions and planning complicate the change process.
5. Both individualism and collectivism are important.
6. Organizations need both top down and bottom up strategies.
7. Organizations need to pay attention to outside forces as well as inside ones.
8. Each member of a school is a potential change agent.

In addition, Fullan (2009) cited the importance of collaboration among all change agents in order for successful change to be implemented. He explained that the collaboration is necessary to foster a sense of efficacy; when groups of people think through problems together and then find solutions, effective change takes place. Reeves (2006) found a similar trend in his research. When only a small number of educators at a school began a new effective practice, there was only a small effect on student learning. However, when 90% of the teachers began using the same practice, a sharp increase in the number of students scoring at the proficient level occurred. Fullan (2009) contended that interaction is a natural result of a majority of teachers in a school using the same innovation. This interaction and collaboration leads to even more effective practice. Further, Fullan (1999) asserted that continuous staff development is another necessary component of efficient change processes in schools. Teachers need more than exposure to new ideas. They need to understand how the ideas fit into the broader educational

context, and how to implement the ideas successfully.

**Implementation dip.** Fullan (2001) defined the implementation dip as a drop in performance and confidence as new changes are implemented, requiring new abilities and skill sets. The understanding that all successful schools, as they progress toward a new goal, will experience the implementation dip is a necessary component in comprehending the change process. Effective leaders appreciate that fear of change and lack of understanding of the skills necessary for the change to take place will be characteristics of those who are experiencing the implementation dip. Fullan (2009) further contended that before innovative ideas are put into place, there is always a period of confusion, misunderstanding, and stress. These feelings are replaced by excitement and confidence as purposeful change is eventually pursued, or unwanted change is accepted.

**Accelerated Reader.** The University of Oregon Center on Teaching and Learning in its 2009 document, *Big Ideas in Beginning Reading: The Building Blocks of Literacy, Curriculum, Instruction, and Assessment*, listed effective strategies to support a school-wide reading initiative. Among those listed are the explicit planning for the change process and the implementation of specific sustainability strategies. In addition, gathering explicit reading data, the use of benchmark assessment three times each year, and the celebration of reading successes are all recommended. Accelerated Reader is listed as one specific program to foster these reading initiatives. Paul's (2003) research on Renaissance Learning and the Accelerated Reader program coincides with these recommendations.

The degree to which the revised Renaissance Learning program was being implemented with fidelity was central to the change occurring at Brownville Elementary School. Examining the change process as it relates to Brownville Elementary School

was, therefore, imperative as teachers changed their implementation of the Renaissance Learning program. As such, it was necessary to study the factors hindering or helping the change process, and the beliefs the teachers held about the old and new program.

### **Case Study**

According to Creswell (2005), case study methodology is appropriate when the researcher recognizes a complex problem requiring deep exploration. Case studies allow researchers to gain a fuller understanding of the many aspects of a particular problem, and to analyze qualitative data through description and theme development.

Implementing the Renaissance Learning program with fidelity is a complicated process. As such, case study methodology is an appropriate method for studying teacher decisions as they relate to the program. Case study methodology will be examined in greater detail in Chapter 3.

### **Summary**

Brownville Elementary students and teachers were faced with the problem of low test scores on the North Carolina end-of-grade reading test. Implementing the Renaissance Learning program with fidelity was a strategy the school had undertaken to increase both student reading motivation and achievement. Sustained Silent Reading, data-driven instruction, motivational strategies, and formative assessment techniques were embedded within the program. In examining the effects of these strategies, the entire change process, including the implementation dip, were taken into consideration. The extent to which the program was used with fidelity drove the focus of this case study.

### **Chapter 3: Methodology**

Using the Renaissance Learning program with fidelity is a complicated process with many variables. The program entails the use of STAR testing, Sustained Silent Reading, data-driven instruction, and formative assessment. In addition, implementing the program with fidelity involved large, school-wide change. In order to examine the effects of this change on Brownville Elementary, a case study was conducted. Qualitative data was collected to gain a deeper understanding of the degree to which the Renaissance Learning program was being implemented with fidelity, and how the implementation affected the teachers and their perceptions of student achievement and motivation in reading at Brownville Elementary.

#### **Participants**

This study focused on a small, rural, low-performing school in western North Carolina. According to the North Carolina School Report Card (NCDPI, 2010), Brownville Elementary had 220 students in kindergarten through Grade 5. There were 21 teachers, two of whom had advanced degrees. There were no Nationally Board Certified Teachers employed. Nine teachers had less than 4 years teaching experience, four teachers had between 5 and 10 years of experience and eight had more than 10 years of experience. All the teachers were white females. Within the last 4 years, the school had been assigned three different principals. In 2010, the teacher turnover rate at this school was 17%, higher than both the district and state average of 11%. The tables below illustrate demographic information about the school.

Table 5

*Percent of Teachers with Advanced Degrees*

Degree	Brownville Elementary	District	State
Master's Degree or Higher	10%	35%	28%
National Board Certified	0%	5%	5%

Table 6

*Years of Teaching Experience*

Years of Experience	Brownville Elementary	District	State
0-3 years	43%	17%	20%
4-10 years	19%	36%	32%
10+ years	38%	47%	48%

Table 7

*Average Class Size*

Grade	Brownville Elementary	District	State
Kindergarten	12	17	19
Grade 1	18	16	20
Grade 2	17	16	19
Grade 3	14	16	20
Grade 4	14	17	21
Grade 5	18	17	21

Comparing Brownville Elementary data with state data reveals that although the school had a lower than average teacher to student ratio, as shown in Table 7, the teachers were much less experienced and had fewer advanced degrees, as indicated by Tables 5 and 6.

The school was historically one of the most transient in the county. However, with the demise of the surrounding furniture industries, many of the families who stayed are fourth and fifth generation community members. During the 2009-2010 school year, 74% of the students were Caucasian, 10% were African American, 9% were Hispanic, 5% were multi-racial, and 2% were Asian (NCDPI, 2010). The surrounding scenery in some of the Brownville Elementary school district is majestic, which attracted housing developments before the economy plummeted. Most families in those developments chose to send their children to one of the more prominent schools in the county, located within the city limits. In 2011, 90% of the students at Brownville Elementary were on the free and reduced lunch program serving economically disadvantaged families (B.



Arrowood, personal communication, December 6, 2010).

Each year, students in Grades 3, 4, and 5 are given an end-of-grade (EOG) test to measure achievement in math and reading. In 2010, more than 43% of Brownville Elementary students scored below grade level on the EOG test for reading, although nearly 82% were proficient in math (NCDPI, 2010).

All teachers in kindergarten through Grade 5 at this school have implemented the Renaissance Learning program. As such, all classroom teachers ( $n = 13$ ) were included in this study. The first step in data collection was to obtain the permission of the school principal and the district superintendent (Appendix A). The next step was to ask for the cooperation of the classroom teachers at Brownville Elementary (Appendix B). All respondent identities were kept confidential.

### **Research Design**

The research relating to Brownville Elementary is a case study. Creswell (2005) characterized the case study as an extensive analysis of a bounded system. He specified the term bounded to mean distinctly separated for research in terms of time, location, or physicality. According to Breslin and Buchanan (2007), case studies have a “rich history for exploring the space between the world of theory and the experience of practice” (p. 36). Further, case study methodology allows researchers to study complicated situations by looking at the *how* and *why* in a real life circumstance (Yin, 2003). The collection of qualitative data is the driving force behind the case study methodology. Creswell (2005) defined qualitative research as a type of educational research that depends on participant viewpoints. Further, in qualitative data collection, the researcher asks “broad, general” questions, records the data mostly as text, and then subjectively analyzes the responses for themes (Creswell, 2005, p. 39). Becker et al. (2005) explained that case studies are a

form of descriptive, qualitative research in which the researcher draws conclusions that relate only to a particular context, and are not generalizable to other situations. Instead, conclusions are based on thick, rich descriptions and exploration of themes discovered during the case study. Fitzpatrick, Sanders, and Worthen (2004) further noted that case studies focus on the case itself, and relate only to the specific situation being studied. They explained that this methodology is useful when the researcher wishes to describe a case in depth.

However, there is controversy surrounding the case study. As Flyvbjerg (2006) pointed out, some researchers feel that the case study is too subjective, and allows for too much free interpretation of results. Yet, in his counterargument, Flyvbjerg (2006) stated,

For researchers, the closeness of the case study to real-life situations and its multiple wealth of details are important...for the development of a nuanced view of reality, including the view that human behavior cannot be meaningfully understood as simply the rule-governed acts found at the lowest levels of the learning process and in much theory. (p. 223)

Stake (1995) agreed that subjectivity, rather than being the downfall of the case study method, is in fact essential. He stated that the descriptions and interpretations give the reader a more complete picture of the case, and add to its understanding. He advocated for the use of triangulation of data so that the reader of the research is able to recognize the multiple paths to the researcher's conclusions. Using case study methodology to examine the complex factors surrounding the fidelity of implementation of the Renaissance Learning program will allow the researcher to describe, in depth, the Brownville Elementary case.

### **Instruments, Procedures, and Data Collection**

In order to achieve an accurate, holistic depiction of the participants, it is necessary for case study researchers to employ a multi-modal approach. Among the most common types of data collected in case study research are documents, archival records, interviews, direct observation, participant observation, and artifacts (Becker et al., 2005). Creswell (2005) also supported the use of triangulation in order to increase the accuracy of case study findings. He defined triangulation as the process of authenticating data collection by using multiple sources to identify themes. Using a variety of data collection techniques (e.g., interviews, observations, document analysis, and surveys) allows the researcher to establish a report that is valid and reliable. In addition, member checking is a strategy used to ensure that accounts presented by the researcher are accurate. In this process, the researcher presents the findings to the study participants in order for them to validate the description, themes, and interpretations put forth (Creswell, 2005).

In accordance with accepted case study methodology (Creswell, 2005), teachers at this school were first given an online, open-ended survey (using SurveyMonkey) created by the researcher to determine past and current beliefs about the Renaissance Learning program, Sustained Silent Reading practices, beliefs about student reading motivation, use of formative assessment, and personal feelings about the changes in implementation of the program (Appendix C). Brace (2004) stated that open-ended survey questions are appropriate when the researcher is examining feelings, recollections of past events, opinions, and likes or dislikes. Questions on the survey were carefully designed to elicit responses based on chronology. The survey began by asking about the teachers' experiences with Renaissance Learning prior to the 2010 school year. It then logically moved into questions about the professional development at the beginning of the school

year. The last portion contained questions about their current beliefs and practices. The survey ended with basic demographic information needed for this study. Iarossi (2006) noted that waiting until the end of a survey to ask for demographic information allows respondents to become comfortable and have confidence in its intent.

The surveys were first field tested at another elementary school implementing many of the same changes in Renaissance Learning practices. A teacher from each grade level (kindergarten through Grade 5) was randomly chosen from this school to take the survey. According to Iarossi (2006), field testing is a critical step in the survey process. It provides much-needed information to the surveyor. For instance, it allows the researcher to determine the approximate amount of time needed for completion, and to evaluate the clarity of questions asked. Having a test audience helps the researcher to determine if the respondents understand the objectives of the survey and if essential issues related to the survey have been overlooked.

Modifications to the survey instrument were made based on the feedback from the field test. For example, instructions were included explaining that the survey would take between 30 and 60 minutes to complete. Two of the original questions only elicited yes or no responses; they were edited so that a more complete answer would be given when the survey was administered to the Brownville Elementary teachers. In addition, during the field-testing process, the researcher conducted a phone interview with each field-test participant immediately following the online survey. Participants were asked to elaborate on their survey answers. In this way, the researcher was able to cross check the answers on the surveys to determine if the questions on the survey led to similar responses as the phone interview. This process was a test of the reliability of the questions given. In addition, it allowed the researcher to validate the clarity of the questions.

Prior to beginning this research, the teachers at Brownville Elementary were given information concerning their role in the study. A meeting was held to explain the specifics of the overall plan for conducting the research, as well as the permission to opt out of the study at any time. Teachers were assured that their confidentiality would be maintained at all times. The next step was to administer the surveys to the teachers at Brownville Elementary through the use of SurveyMonkey. Teachers were given 10 days to complete the survey, and reminder emails were sent out every third day. Eleven out of 13 classroom teachers completed the initial Renaissance Learning Survey. All grade levels were represented, as evidenced by the demographic information provided within the responses. As surveys from Brownville Elementary were returned, the responses were analyzed for themes and coded. The researcher made use of the text analysis feature of SurveyMonkey to identify initial themes. Next, the researcher revisited the raw data to determine if additional themes should be identified. New codes were then created, and some responses were placed in multiple categories. In addition, some initial codes were combined after a third reading. Finally, an independent researcher was used to validate the coding process. The independent researcher was a former school administrator and a current doctoral student familiar with the coding process. The survey results helped the researcher determine which topics were important to explore in the next stage of the research process.

Seidel (1998) noted that qualitative data analysis is not linear. In fact, he stated that it is repetitive, recursive, and holographic. The researcher begins the process by noticing and recording information. Next, data is collected and sorted. Jorgensen (1989) explained that “Analysis is a breaking up, separating, or disassembling of research materials into pieces, parts, elements, or units” (p. 107). The researcher then looks for

patterns or categories, which can then be reassembled in a meaningful way (Jorgensen, 1989). The data may initially seem to be a web of baffling, unconnected accounts. However, the process of coding helps the researcher create order from the ideas presented (Charmaz, 1983). In addition, Seidel (1998) stated that it is necessary to repeatedly revisit the data, examining existing themes so that new discoveries can be made.

After the survey responses were analyzed, new interview questions based on the themes identified during the coding process were formulated. Following the survey, two focus groups, consisting of four teachers each, were interviewed over the course of 2 weeks. The focus group interviews lasted between 1 hour and 1 hour and 15 minutes. Teachers were randomly selected to take part in the focus groups based on the grade level in which they taught. The first focus group consisted of a kindergarten teacher, a first grade teacher, a second grade teacher, and an exceptional children's teacher who used the Renaissance Learning program individually with her students and also used it in conjunction with the classroom teachers. The second focus group consisted of a third-grade teacher, a fourth-grade teacher, and two fifth-grade teachers. Questions for the focus groups were based on previous survey responses, and were designed to gather more information concerning identified themes. According to Kitzinger (1995), focus groups are a common method used to gather data for research purposes. Focus groups differ from ordinary group interviews in that focus groups explicitly encourage communication and interaction with the group as a whole. This interaction is a specific part of the focus group methodology. Rather than the researcher asking one question in turn to each participant, group members are invited to talk to each other; sharing ideas and explanations, questioning one another, and expressing beliefs on others' points of view. The method is a particularly effective way for the researcher to delve deeper into the

knowledge and experiences of the group's members. It is also a useful way to discover why and how the members think the way they do.

In this case, the researcher hypothesized that primary grade teachers would have different experiences involving implementing the Renaissance Learning program with fidelity than upper elementary teachers. Since the primary grade teachers did not give letter grades, they had never tied grades to points earned in the AR program. Further, since many kindergarten, first-, and second-grade students are still learning to read, their teachers administered the STAR Early Literacy test as opposed to the STAR test given to those students who scored as Probable Readers. In addition, these students had less time to expect the extrinsic rewards historically given as part of the Accelerated Reading program. For these reasons, teachers of kindergarten through second-grade students comprised the first focus group. The second focus group consisted of teachers of third- through fifth-grade students. Recordings from the focus group sessions were transcribed so that all data could be examined accurately. Again, themes emerging from responses of focus group members were coded and analyzed. For further clarification, observations of teachers using the Renaissance Learning program were completed. Evidence of implementation fidelity, or its lack thereof, was noted based on published guidelines from the Renaissance Learning Company. In addition, documents from the Renaissance Learning Company were analyzed for evidence of implementation fidelity. Specifically, the Accelerated Reader Implementation Progress Report (Appendix D), the Customizable Progress Report (Appendix E), and the Accelerated Reader Observable Behaviors Checklist (Appendix F) were examined. Permission to use the documents in this study was granted by the Renaissance Learning Company (Appendix G). Finally, a teacher from each grade level (kindergarten through fifth grade) was randomly selected to take

part in an individual interview, lasting between 30 and 45 minutes each. Teachers who had participated in the focus group sessions were not included in the individual interviews. The individual interviews allowed the researcher to ask more in-depth questions about themes that were revealed in the focus group sessions.

Questions were based on findings from the observations, the document analysis, and the previous interviews. Further, to increase the internal validity and reliability of the study, an outside observer independently read through responses to surveys and interviews to determine if the identified themes were accurate. Using both SurveyMonkey and an outside observer helped to triangulate the data. As conclusions were drawn and interpretations were made, participants were asked to crosscheck the findings of the researcher. The use of multi-modal techniques triangulated the data in order to gain a more expansive understanding of the degree to which the Renaissance Learning program was being implemented with fidelity, and how this change affected instruction and teacher perceptions of student motivation and achievement at Brownville Elementary School.

### **Delimitations**

The researcher only studied the implementation of the Renaissance Learning program and its effects on this particular school. Further, other instructional reading practices, which may or may not have influenced students and teachers, were not studied.

### **Limitations**

It was necessary for the researcher to recognize that the research results would only be applicable to the particular school studied. No generalizations could be made in regards to the wider educational community. Although specific steps have been included to maximize the internal validity of the study, it was necessary to take into consideration



the possibility of researcher bias due to the nature of qualitative research methodology.

### **Summary**

Many of Brownville Elementary's students were struggling readers, as evidenced by their end-of-grade test scores. The Renaissance Learning program, which included Accelerated Reader, had been used for some time at the school. However, the 2010-2011 school year began with an emphasis on using the program with fidelity. Teachers were trained on the correct use of the program and all of its components. This large-scale change affected every teacher and student at the school. The purpose of this study was to examine the change process, the degree to which the Renaissance Learning program was being used with fidelity at this school, and the effects these changes had on teachers and their perceptions of student reading motivation and achievement.

## **Chapter 4: Findings**

The purpose of this study was to examine the broad impact of the change in implementation of the Renaissance Learning program at Brownville Elementary School, and how this change affected teacher perceptions of student motivation and achievement in reading.

### **Background**

The Accelerated Reader program was first implemented at Brownville Elementary in 1998. At the time, it was a stand-alone desktop software program. Brownville Elementary bought a single site license, and the software was individually installed on classroom computers. Data could only be accessed from the school, and it did not transfer with students if they left the school. In 2006, the district bought the upgraded Renaissance Place package, which included a new web-based platform. Data was housed off-site through the Renaissance server, which allowed teachers and administrators to access student data and run reports from any computer, as long as an ID and password were used. The upgraded version of Renaissance Place included thousands more reading practice quizzes, and the ability to have new quizzes installed nightly when the program updated itself. It also included many reports previously unavailable in the stand-alone version (A. Bradshaw, personal communication, April 26, 2011).

In addition, there were several new changes included in the updated Renaissance Place version. One addition was the Vocabulary Practice component. Although not all AR books had vocabulary quizzes associated with them, there were over 10,000 titles with vocabulary quizzes available. Vocabulary lists could be printed on special labels and attached to the inside cover of AR books for review before, during, and after reading. In order for Renaissance Learning to target a word from a particular book for vocabulary

practice, the word had to be used at least twice in the specific book, had to be essential for the comprehension of the book, and had to be at the reading level of the book or higher (Renaissance Learning Company, 2010).

After passing an AR quiz, students were prompted to take a Vocabulary Practice quiz if one was available with the specific book read. Words students missed were repeated twice more in subsequent Vocabulary Practice quizzes. Words students learned through the program were reviewed in the same manner. Teachers had the ability to run both a Missed Words Report, which showed students words they still needed to study, and a set of flashcards of the words students missed on vocabulary quizzes. According to the Vocabulary Practice manual, one purpose of the vocabulary quizzes was motivation: “Motivation is critical to learning new words, and students’ interest in words has a huge impact on how many they learn. Also, having control over the learning process increases students’ motivation and vocabulary growth” (Renaissance Learning Company, 2010, p. 1). The manual also suggested the utilization of the Words Learned Report as a way to increase reading motivation. This individualized, cumulative report listed all of a student’s learned vocabulary words as measured by correct responses on Vocabulary Practice quizzes.

Literacy Skills quizzes, which included teacher guides for over 900 titles, were also included in the newer version. These quizzes targeted higher-order thinking skills, and highlighted such literary elements as plot, theme, tone, genre, and persuasive language. The Literacy Skills quizzes were not associated with points, but could be used to help teachers with novel studies in the classroom.

The STAR Early Literacy Assessment was also an addition to the program. It was targeted towards students who were not yet reading proficiently enough to take the

original STAR assessment or the AR quizzes. This assessment was designed for administration to kindergarten, first-, and second-grade students who were just beginning to learn to read. Reports generated from the STAR Early Literacy Assessment determined if students were emergent, transitional, or probable readers. The reports also detailed how proficient early readers were in literacy skills such as general readiness, phonemic awareness, phonics, and structural analysis. Once students were identified as probable readers by the software, they were given a STAR assessment, and they moved on to reading AR books (Renaissance Learning Company, 2010).

Another addition to the Renaissance Learning program was the Home Connect feature. This feature allowed parents to receive an email every time their child took an AR quiz. The email gave the title of the book and the student's score on that book. It also allowed both parents and students to view the student's virtual bookshelf, which showed a picture of the covers of all books for which an AR quiz was taken. Scores earned on books were also available. Furthermore, by clicking on a link to the AR Bookfinder, parents and students could search for AR books by categories such as topics of interest, reading level, or genre (Renaissance Learning Company, 2010).

In addition to the changes with the software itself, implementation guidelines from Renaissance Learning had also been modified. According to a Renaissance Learning spokesman, a study conducted by the company found that the previous focus on points had been misguided:

One of the key findings of this study was that to successfully guide independent reading practice using the feedback provided by AR, teachers and students must focus primarily on the average percent correct scored on AR Reading Practice Quizzes. The higher the average percent correct, the higher the reading gains.

Prior to this study, there was a greater emphasis placed on points. While points are still important, their importance now serves as an indicator of reading practice time. In other words, the longer the book, the more points that a student earns, indicating the more time a student has been engaged in reading practice.

(W. Isenhart, personal communication, November 24, 2010)

Instead of using the points as the main goal of AR, Renaissance Learning's new emphasis was on students achieving at least an 85% average on AR quizzes, with a goal of having students move to a 90% average or higher. In fact, the program recommended an immediate intervention by teachers when students scored below an 80% on any AR quiz (Renaissance Learning Company, 2010).

In a 2007 document highlighting implementation benchmarks, Renaissance Learning identified practices that would be seen in classrooms advancing toward Model Classroom status. Among the recommendations was the use of a daily Status of the Class strategy. The manual noted that when the strategy was used successfully, teachers would comprehend that it was both a motivational and a progress monitoring tool. In addition, the manual recommended that, as a part of the Status of the Class strategy, teachers monitored student reading logs to ensure that students were reading within their ZPD, were scoring 100s frequently on AR quizzes, and were reading an appropriate number of pages daily.

Moreover, the document recommended that students routinely took both vocabulary quizzes and literacy skills quizzes when available; that students read within their ZPD, varying the level when appropriate; that the school itself had a scheduled time for SSR; and that teachers carefully reviewed data associated with the program to help students be successful in reading practice (Renaissance Learning, 2007).

Although Brownville Elementary acquired the newer version of Renaissance Learning after the changes in implementation guidelines had been adopted, no significant professional development was given to the teachers at that time. However, in 2009, the district came under new leadership. The new superintendent had previous experience with the Renaissance Learning program, and he initiated a push in implementation fidelity. In 2010, this push brought added professional development regarding Renaissance Learning practices.

The Renaissance Learning Company sent representatives to the district, and every elementary and middle school was trained in the new guidelines. Professional development began in August of 2010 with a 3-hour overview of the program, which emphasized the change in focus from points to comprehension, an explanation of how the STAR tests were used to determine students' ZPD levels, a summary of how students and teachers should collaboratively determine goals, a reiteration that Accelerated Reader points should not be tied to grades, and a mandate that extrinsic rewards be removed as motivational factors in the program.

In addition, teachers were instructed on the use of strategies to help students increase reading comprehension. One of the recommendations was that teachers implement the Status of the Class strategy, which included 30-60 second mini-conferences with students during scheduled SSR time. Teachers were instructed to circulate around the classroom to ask individual students questions to monitor comprehension of the book being read, and to make connections with the students about their books during those 30-60 second conferences. Students were to keep individual reading logs, on which they recorded the title of the book they were reading and how many pages were read. In addition, students were to record and graph their individual

scores on AR quizzes, and teachers were instructed to monitor the use of the logs and graphs. Additionally, teachers were told to keep a record of which students had been involved in conferences, so that every student had a conference at least once a week, and every day if possible.

Teachers were told that the changes in implementation would begin as the new 2010-2011 school year started. Principals were further instructed to monitor the use of the Renaissance Learning program in their respective schools.

At Brownville Elementary, the initial Renaissance Learning training was followed by periodic staff development throughout the school year. At each of the new trainings, different aspects of the program were explained and highlighted. Explanations were clarified and teachers were shown how to use a variety of reports associated with the program. In addition, data from the reports were explained more thoroughly so that teachers could use the data more efficiently.

### **Explanation of the Study**

The sweeping change associated with the new implementation practices of the Renaissance Learning program affected every student, teacher, and parent at Brownville Elementary. In order to more completely explore this change and its implications, a case study protocol was followed. Individual responses from an initial online survey were first analyzed for common themes and coded. The researcher revisited the collected data several times, combining and changing codes as deemed necessary, and an outside researcher was used to validate the identified themes. Two focus group sessions were conducted and recordings from the sessions were transcribed and studied for emergent or recurring themes. Six individual interviews were then conducted and recordings were again transcribed and analyzed for new and identified themes. All data were revisited

many times in the cyclical nature of the case study methodology (Stake, 1995; Yin, 2003). To further triangulate the data, observations of teachers using the Renaissance Learning program were conducted, and specific behaviors associated with high fidelity were documented on the Accelerated Reader Observable Behaviors Checklist (Appendix F). The data from the survey, the interviews, and from documents related to teacher use of the Renaissance Learning program will be discussed in this chapter. The findings from this qualitative study are presented in this chapter, which is organized into broad categories that loosely follow the literature review.

### **Sustained Silent Reading**

In order to gain a more specific understanding of past and current SSR practices as they related to the Accelerated Reader program within Brownville Elementary, questions dealing with this issue were asked in the initial survey, the focus group, and the individual interviews.

Eleven of the 13 classroom teachers at Brownville Elementary completed the initial online survey. The survey responses were anonymous; however, the demographic information provided indicated that one teacher from the primary grades and one teacher from Grades 3 through 5 chose not to complete the survey. The responses from the survey indicated that there was, prior to the 2010-2011 school year, a low level of consistency in school practice regarding the implementation of SSR. The lack of consistency in SSR practices was first mentioned in responses to the online survey.

In the initial survey, the following question was asked: “Prior to this school year, how much emphasis did you put on sustained silent reading? Describe what took place during this time in your classroom. Explain what you, as the teacher, did and what the students in your classroom did during this time.” Table 8 summarizes the identified



themes and the number of responses coded per theme.

Table 8

*Past SSR Practices: Number of Coded Responses per Theme*

Low Teacher Involvement	High Teacher Involvement	No Teacher Emphasis
4	4	3

Four of the 11 teachers initially indicated that they were not very involved with SSR prior to the 2010-2011 school year. One teacher wrote, “Students were reading, but I did not interact much except to pick books. They spent a lot of time picking books, probably more than reading” (Online Survey, March 6, 2011). A second teacher responded, “I think in the past, I was not as concentrated on meaningful reading, and was not as involved in their book choices” (Online Survey, March 11, 2011). One teacher noted her lack of involvement with SSR: “I did encourage and require a 25-30 minute silent reading period each school day. During that time students were required to read silently. During this time, I checked planners and wrote notes home” (Online Survey, March 7, 2011). These responses indicated that, although SSR did take place at Brownville Elementary prior to the 2010 school year, some teachers saw it as a passive activity.

Likewise, three teachers admitted that SSR was not a priority in their classrooms before the 2010-2011 school year. One survey respondent noted, “Prior to this year, honestly we read, but some days we wouldn’t get to it if I was trying to finish a lesson” (Online Survey, March 8, 2011). Another teacher wrote, “I didn’t used to do it, but I do like it now” (Online Survey, March 10, 2011). The third teacher explained her previous

practices regarding SSR: “I didn’t place any emphasis on SSR last year” (Online Survey, March 8, 2011). These responses from the survey underscored the diverse role teachers played during SSR time in their individual classrooms before the 2010 school year, and the lack of continuity in SSR practices at Brownville Elementary.

Highlighting the overall lack of consistency in teacher practices and beliefs prior to the 2010 school year, there were, conversely, also four teachers who previously took SSR time very seriously in their classrooms. One of those four responded, “SSR time was observed. Students read quietly while I read with students individually” (Online Survey, March 7, 2011). Another teacher replied to the question by noting that, “Last year, I put a lot of emphasis on SSR and it looked very similar to the way it does now. I held daily conferences with students regarding what they were reading, but I put very little emphasis on AR” (Online Survey, March 10, 2011). An additional respondent noted that she had always incorporated SSR time into her schedule, but that her view of the teacher’s role during SSR was again inconsistent: “I would sometimes model reading and other times pull students back to listen to them read” (Online Survey, March 8, 2011).

From the online survey results, it was apparent that although Sustained Silent Reading was a part of the Brownville Elementary school day prior to the 2010-2011 school year, there were differences in implementation practices within the classes. At least four teachers put a strong emphasis on SSR, while others put little or no emphasis on it. In addition, the teacher’s role during SSR varied widely. At least four teachers held conferences with students, but some read while students read. One teacher admitted to using the time to complete paperwork, and three teachers implemented SSR only if time permitted.

As part of the school-wide initiative to implement the Renaissance Learning program with fidelity, teachers at Brownville Elementary were trained in the role SSR played as a part of the Accelerated Reader program at the beginning of the 2010-2011 school year. To determine the extent to which teachers were following recommended practices, teachers in the focus group were asked to “Explain what is different in your classroom this year concerning Sustained Silent Reading.” More time set aside for SSR, a stronger emphasis given to SSR, and a new school-wide consistency were themes noted in their responses.

During the 2010-2011 school year, a new bell system was implemented. When it rang, the principal announced the beginning of SSR time. One teacher responded to this change by responding, “This year, everyone is reading at the same time” (Teacher C, personal communication, March 17, 2011). Another teacher replied, “More kids are engaged. Last year, I would allow kids to go to the library and exchange books [during SSR]. They spent their whole time doing that, and not really reading” (Teacher I, personal communication, March 18, 2011). A different teacher noted, “There is a big emphasis! Students read; I walk around and conference with them about the book they are reading” (Teacher H, personal communication, March 18, 2011). A second grade teacher said, “It is a huge component of the students’ education now. I am more aware of what my students are reading” (Teacher F, personal communication, March 17, 2011). Responses from the focus groups signified that a change in SSR implementation practices had occurred during the 2010-2011 school year. Responses pointed to the fact that both teacher and student behaviors during SSR were different from what they had been in the past.

These same themes were also evident in the individual interviews. All six of the

teachers who were individually interviewed gave responses that indicated their recognition of the fact that during the 2010-2011 school year, the entire school participated in SSR simultaneously. At the same time, teachers' perceptions of their roles during SSR appeared to be more defined. Five of the six interviewees mentioned that one change was using the Status of the Class strategy during SSR. When asked to expand on how SSR practices were different this year, one teacher commented,

Just the emphasis on actually getting it done. Making sure that everyone is sitting there, me checking on the performance of the students' 85% for comprehension rates. That's really good to have this year. The emphasis not being on the points, the emphasis more on them understanding what they are actually reading, which is the whole point. I didn't do that last year (Teacher L, personal communication, April 7, 2011).

Additional feedback was provided by Teacher G:

Everyone is still. They are at their desks; they're interacting with different books. I conference with individual students and just check if they are comprehending. I ask what they like about the book, what they don't like. I take the Status of the Class every day, without hesitation. I do like that. Especially when you get everyone quiet, and they don't see their friends walking up and down the halls. It makes a big difference (Personal communication, April 1, 2011).

One teacher described SSR time in her class this way:

A lot of reading. A lot of AR testing. The kids know that it's all about reading. The kids know there's no talking, no commotion. I'm seeing a lot more engagement. I walk around and talk to the kids about the books they are reading. They tell me about their books, and they get excited about it. I say, "Oh, you will

have to tell me how it ends.” So, I just use Status of the Class as encouragement, I guess. I think it’s working. They want to tell me about their books all day (Teacher E, personal communication, April 1, 2011).

A different teacher offered this perspective:

Last year, there was a lot more commotion. This year, it has been a lot different. I like it better this year. I used to sit down and discuss the book with the kids. And while we were over here talking, no one else in the class was really reading. So that’s what Status of the Class does. It’s just better this year, knowing what page everyone is on, knowing what they are reading, knowing if they’ve taken a test, or not taken a test. I am more aware of what they are doing this way. (Teacher J, personal communication April 7, 2011)

It was evident from focus group and individual interviews that teachers perceived the SSR practices as being more consistent at Brownville Elementary. Interviewees’ responses further indicated that teachers perceived SSR as a time for teacher-student interaction, rather than as a passive activity reserved only for students.

In addition to the survey and interviews, an Accelerated Reader Observable Behaviors Checklist (Appendix F) was used to record teacher and student behaviors during the time set aside for SSR at the school. Both the principal and the researcher were involved in collecting data with the checklist, a document created by the researcher as a way to further triangulate the data. The checklist was created from Renaissance Learning’s recommended best practices for AR. On 17 different school days during the time set aside daily for SSR, the principal or the researcher walked through classrooms and noted, among other behaviors, the instances of students silently reading. In addition, the checklist was coded if the classroom teacher was observed circulating during SSR

time, and if the teacher was observed holding 30-60 second Status of the Class conferences. Table 9 summarizes the number of instances that individual classrooms were engaged in Sustained Silent Reading. Table 10 summarizes the number of instances that teachers were observed using the Status of the Class Strategy. Additional information from the Accelerated Reader Observable Behaviors Checklist is summarized later in the chapter.

Table 9

*Observed Instances of SSR Taking Place in Classrooms during March 2011*

		Dates																
		8	9	10	11	14	15	16	17	18	21	22	23	24	28	29	30	31
Kindergarten																		
Class A		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*		*
Class B		*	*	*	*	*	*	*	*		*	*	*	*	*	*	*	*
Grade 1																		
Class C		*	*	*	*	*	*	*	*		*	*	*	*	*	*	*	*
Class D		*	*	*	*	*	*	*	*		*	*	*	*	*	*	*	*
Grade 2																		
Class E		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Class F		*	*	*		*	*	*	*	*	*	*	*	*		*	*	*
Grade 3																		
Class G		*	*	*	*		*	*	*	*	*		*	*	*	*	*	*
Class H		*	*	*	*	*	*	*	*	*	*		*	*	*	*	*	*
Grade 4																		
Class I				*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Class J		*	*	*	*	*	*		*	*	*	*	*	*	*	*	*	*
Grade 5																		
Class K		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Class L		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Class M		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*

*Note.* \* indicates classroom was involved in SSR at time of observation.

Information summarized in Table 9 indicates that during the timeframe in which data were collected, a majority of classes were consistently participating in SSR at the designated time each day. Overall, 94.5% of classes at Brownville Elementary were engaged in Sustained Silent Reading during the set-aside time period. Fifth grade had the highest percentage of SSR engagement, at 100% for the time period studied. This data

indicated a change in practice at Brownville Elementary. According to the collected data from teacher responses, SSR times were inconsistent prior to the 2010-2011 school year.

Table 10

*Observed Instances in March 2011 of Teachers Utilizing the Status of the Class Strategy during SSR*

		Dates																
		8	9	10	11	14	15	16	17	18	21	22	23	24	28	29	30	31
Kindergarten																		
Class A		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*		*
Class B		*	*	*	*	*	*	*	*		*	*	*			*	*	*
Grade 1																		
Class C		*	*	*	*	*	*	*	*		*	*	*	*	*	*	*	*
Class D		*	*	*	*	*	*	*	*		*	*	*	*	*	*	*	*
Grade 2																		
Class E					*	*	*	*	*	*	*	*	*	*	*	*	*	*
Class F		*	*	*		*	*	*	*	*	*	*	*	*		*	*	*
Grade 3																		
Class G		*	*	*	*		*	*	*	*	*		*	*	*	*	*	*
Class H		*	*		*	*	*	*	*	*	*		*	*	*	*	*	*
Grade 4																		
Class I				*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Class J		*	*	*	*	*	*		*	*	*	*	*	*	*	*	*	*
Grade 5																		
Class K		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Class L		*	*	*		*	*	*	*	*	*	*	*	*	*	*	*	*
Class M		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*

*Note.* \* indicates teacher was using the Status of the Class Strategy at time of walkthrough.

Table 10 data reveals that second grade teachers had the lowest level of implementation, with 5 overall days in which the Status of the Class strategy was not used. Conversely, there was only 1 day in fifth-grade classrooms in which the Status of



the Class strategy was not being implemented. Table 10 indicates that during the timeframe in which data were collected, 90.6% of the time teachers at Brownville Elementary were using the Status of the Class strategy during the designated time for SSR. Teacher comments indicated that this consistency in SSR practice did not occur before the beginning of the 2010-2011 school year.

The data signified that the Brownville Elementary teachers perceived Sustained Silent Reading practices had gone through a significant change during the 2010-2011 school year. A stronger emphasis had been placed on students actually reading during SSR, and the entire school read at the same time each day. Teachers perceived their role during SSR differently as well. The use of the Status of the Class strategy had become routine by March of the 2010-2011 school year. Classroom practices were much more consistent, as evidenced by both the teachers themselves and the Accelerated Reader Observable Behaviors Checklist.

### **Accelerated Reader**

Accelerated Reader, as a part of the Renaissance Learning program, had been used at Brownville Elementary since 1998. In order to determine teachers' perceptions of the changes that had taken place with the program during the 2010-2011 school year, the researcher studied the past practices and the current beliefs of the teachers who were using the Accelerated Reader program at Brownville Elementary.

During the Renaissance Learning Survey, the following instructions were given: "Describe the way you used the Renaissance Learning program in your classroom prior to this school year." Two significant themes initially emerged from the responses: confusion and tests. Table 11 summarizes the number of coded responses per theme.

Table 11

*Renaissance Learning Past Practices: Number of Coded Responses per Theme*

Confusion	Tests	Miscellaneous
3	5	3

Three of the 11 teachers' answers were coded as confusion. A teacher explained it this way, "Last year, Renaissance Learning was another assessment tool I was required to use in my classroom. I did not completely understand the entire purpose of Renaissance Learning and it was not a major priority in my classroom" (Online Survey, March 10, 2011). Another teacher reflected, "I assigned a book level and points for the 9 weeks. Students took the book back with them to help when testing. Not much teacher/student interaction. It was pushed, but I did not understand it" (Online Survey, March 6, 2011). The theme of tests was identified in five of the 11 responses. The theme was illustrated in these teachers' answers: "Before this year, I only used Renaissance Learning for students to take AR tests" (Online Survey, March 11, 2011); "I used it to check their comprehension with the AR tests" (Online Survey, March 7, 2011); "Students read 20 minutes each night for homework and tests were taken after each book was completed" (Online Survey, March 7, 2011). The majority of teachers either did not understand the program, or felt that its purpose was to test students after reading.

In the focus group and individual interviews, teachers were asked to elaborate on the identified themes. The word *points* was mentioned by teachers in both focus group sessions and in every individual interview. One teacher explained it this way: "I was new to AR, coming from kindergarten, and I had never been at a county that used AR. So, I just followed what everyone else did, and that was points, points, points, points, points"

(Teacher G, personal communication, April 1, 2011). Another teacher's comments expanded on this sentiment, "I mean, that *was* the emphasis. You were supposed to make your AR goal; you were supposed to get your points" (Teacher I, personal communication, March 18, 2011). A first grade teacher explained, "It was more about teaching these children to take tests on a computer and earn points than it was about any educational value" (Teacher C, personal communication, March 17, 2011). A third teacher clarified her perception, "It was mainly points. It was just hurry and take a test; hurry, read a book and take a test; and they didn't really get anything out of it. They were just trying to get their points up" (Teacher H, personal communication, March 18, 2011). The teachers' overwhelming perceptions that, prior to 2010, AR was mainly about the points students earned, was a critical finding and demonstrated their previous lack of understanding of recommended implementation practices.

In the initial survey, teachers were asked to "Name three words that would describe your feelings about the Renaissance Learning program (including Accelerated Reader) prior to this school year." Table 12 summarizes the number of coded responses per theme.

Table 12

*Feelings about Renaissance Learning: Number of Coded Responses per Theme*

Negative	Positive
10	1

Ten out of the 11 respondents provided words that were coded as negative. The word *frustrating* was given by three different respondents. The words *repetitive* and *points* were cited by two teachers. Other examples of negative words were "hated,"

“unfair,” “ineffective,” “annoying,” “boring,” and “wasteful.” Three teachers indicated that they did not fully understand the program with the words *confused* and *ambiguous*. (Online Survey, March, 2011). Conversely, however, one teacher answered the prompt with these three words, “I love it!” (Online Survey, March, 2011). Although this response was coded as positive, the use of present tense for the word *love* may have indicated that the respondent misunderstood the question. According to the results of the online survey, the majority of teachers at Brownville Elementary appeared to be unhappy with the AR program prior to the 2010 school year.

As a follow up to the survey, the focus group was asked this question: “Many survey respondents used words that were negative or synonymous with confusing to describe their use of Accelerated Reader prior to this year. Will you elaborate?” Once again, teachers reported that they perceived a lack of consistency with the use of AR. A kindergarten teacher responded, “Confusing in not knowing what the expectation was for the program, and why we were using it” (Teacher B, personal communication, March 17, 2011). Another teacher noted, “We didn’t have a school-wide vision” (Teacher H, personal communication, March 18, 2011). A fifth-grade teacher gave her insight, “I think we knew there was a lot to do with it, but we didn’t know how to do any of it, so that part was confusing. We knew how to let students take tests, that part of it” (Teacher M, personal communication, March 18, 2011). A lack of school-wide consistency in the way AR was implemented continued to be an apparent theme in other answers to the question.

There was never any clear direction as to whether they could read the book and use it to take the test or if they were supposed to read it and rely on their own comprehension. So, somehow, I felt like it got unfair. Some teachers were

allowing them to use the book, some were not. Some kids were not even reading the books. They were just flipping through and finding the answers. (Teacher K, personal communication, March 18, 2011)

Another focus group participant agreed. “I never liked that. I didn’t see the use in it. I thought it was a waste of time, because they could use the book and it didn’t seem like it was helping. They were totally cheating” (Teacher M, personal communication, March 18, 2011). Another teacher replied, “I saw the kids just flipping through the books to find the answers. They didn’t read it. They just learned how to do it” (Teacher H, personal communication, March 18, 2011). A final focus group member summed up her perceptions with this statement: “Before this year, there just wasn’t a lot of consistency” (Teacher N, personal communication, March 17, 2011).

The results indicated that the teachers at Brownville recognized both the lack of consistency in AR practices within the school, and their confusion over the correct way to implement the program. These realizations appeared to have manifested themselves into negative feelings over the entire Renaissance Learning program.

In order to gain a deeper understanding of the climate surrounding the AR program before the 2010 school year, the online survey asked this question: “What are your perceptions about how parents and students felt about Accelerated Reader, prior to this year?” Answers continued to overwhelmingly reflect the emphasis on points. Table 13 summarizes the themes associated with these responses.

Table 13

*Perceptions of Parent and Student Feelings about AR: Number of Coded Responses per Theme*

Points	Other
10	1

Ten of the responses once again referred to the emphasis on students earning points. One teacher shared her perceptions by writing, “Students and parents only cared about the points. They didn’t understand the whole concept. Also, parents thought it was the only measurement of their child’s reading ability” (Online Survey, March 7, 2011).

Another teacher stated:

Some parents found it frustrating because they found it hard to get their children to read to meet their AR points. And then, some parents thought it was great, especially when their child would meet their AR goal. I think the perceptions of students varied. The student who enjoyed reading enjoyed AR, but the students who struggled with reading didn’t really care if they met their AR points. (Online Survey, March 10, 2011)

A different teacher addressed her perceptions of student feelings toward AR “Some enjoyed getting points and being rewarded. Others felt stressed about the amount of points required” (Online Survey, March 8, 2011). The focus on making points continued in other responses. “They cared about making their goals and once they did, they didn’t have to read anymore” (Online Survey, March 11, 2011). Students just wanted to get on the computer to take their tests” (Online Survey, March 6, 2011). The one teacher whose response was not coded as *points* wrote, “They probably thought it did not help much” (Online Survey, March 8, 2011).

During an individual interview, teachers were asked to clarify their perceptions of teacher and student beliefs about the program. They were asked to “Elaborate on how you and your students felt about the AR program before this year.” Once again, all interviewees mentioned points. A teacher made this comment: “It was more about points, I think, in years past. Whoever got the most points would win. It wasn’t a learning tool; it was just a race to see who could get the most points” (Teacher L, personal communication, April 7, 2011).

The online survey results and the answers given in individual interviews reflected that teacher perceptions of student and parent attitudes in regards to the AR program were directly linked to the number of AR points the children earned.

Additionally, many teachers questioned the validity and the usefulness of the AR program before the 2010-2011 school year. In the survey, teachers were asked, “Prior to the 2010-2011 school year, did you believe that the Accelerated Reader program increased reading achievement?” Table 14 summarizes the responses.

Table 14

*Teacher Perceptions of AR and Achievement: Number of Coded Responses per Theme*

No	Yes	Undecided
6	1	4

Six teachers answered, “No.” A teacher elaborated, “No, I did not. I felt like it only offered surface based questions and was a waste of time” (Online Survey, March 10, 2011). The one positive response was, “Yes, I definitely saw where it would help build students’ comprehension” (Online Survey, March, 2011). Another teacher, who was undecided, answered:

Yes and no. The students who met their AR goals were successful readers, but the students who didn't seemed to struggle. Some students who didn't meet their AR goals still were successful on their reading tests. I honestly didn't make a connection, because I didn't really understand the connection. (Online Survey, March 6, 2011)

In the focus group session, teachers were asked why they had previously continued with AR, despite the majority's belief that it may not have increased reading achievement. One teacher's comment sums up all of the other respondents' answers. "We were told to. We didn't have much choice" (Teacher K, personal communication, March 18, 2011).

Prior to the 2010-2011 school year, teachers, students, and parents seemed to have been unilaterally focused on the number of points students were required to earn for a marking period. While most teachers at Brownville Elementary disagreed with this emphasis, teachers felt that using the program was compulsory.

Teachers were also questioned, through the online survey, about the changes that had taken place within Accelerated Reader at Brownville Elementary in 2010. The survey asked, "Which change in the Renaissance Learning program do you think has been the most significant? Why?" Table 15 summarizes the themes associated with the responses.

Table 15

*Significant Changes in Renaissance Learning: Number of Coded Responses per Theme*

Comprehension	Consistency
6	1



Eight of the 11 teachers' responses in the initial survey indicated that the shift from points to comprehension was an important change in the use of AR in the 2010-2011 school year. "I believe taking the emphasis off of the points has been the most significant. Now, many classes have the 85% club, and students are really trying to achieve at this level" (Online Survey, March 10, 2011). Another teacher commented, "The focus shift from points to percentage takes the pressure off the kids to meet their goals for the wrong reason" (Online Survey, March 11, 2011). A third survey response was, "Changing the focus from points to the percentage is important. They are focusing more on getting the higher percentage rather than reading for points" (Online Survey, March 10, 2011). It was clear from the majority of survey responses that teachers at Brownville Elementary felt the shift in focus from earning points to comprehending the reading material was a significant change.

Along with the emphasis shift, a newfound understanding of the program, resulting in a more consistent use, was another theme identified in survey responses: "This year, everyone is informed. Emphasis is not on the points, but on the 85% achievement or higher. Students now seem to understand the importance of reading and put forth a stronger effort" (Online Survey, March 6, 2011). Another teacher responded, "Everyone is using it, except Pre-K" (Online Survey, March 7, 2011). A final teacher had this comment, "Just the fact that everyone is informed has helped the way AR and the Renaissance Learning program are being used" (Online Survey, March 10, 2011).

Teachers' comments showed that they also recognized the importance of the entire school consistently using the program in the same way. Focus group participants were asked to "Discuss the changes in the Renaissance Learning program this year." Responses continued to echo the themes already identified.

I like the shift from points to comprehension. I like not having the pressure with my struggling readers. Before, the number of points seemed too high for the kids.

It's different than it was. The number of points is lower this year, so they end up exceeding their goal. I like it. I think it's better. (Teacher N, personal communication, March 17, 2011)

A second-grade teacher agreed, "Yeah, now they are reading to understand. They know they have to read to understand versus reading just to get points" (Teacher F, personal communication, March 17, 2011). Another teacher concurred. "That is our ultimate goal, to get them to understand what they just read. It's not word call anymore" (Teacher C, personal communication, March 17, 2011).

Data gathered from Brownville Elementary attested to the teachers' beliefs that there had been a significant change in the way the Accelerated Reader program had been implemented at the school. Teachers noted that a higher level of consistent practice had been observed, and that an important paradigm shift had occurred. Teachers and students were no longer focused on the number of points needed to meet a goal. Instead, the expectation was that students would work toward a greater understanding of the material being read. Collected responses indicated that teachers viewed this change as positive.

In order to measure any changes in beliefs on the efficacy of the Accelerated Reader program and its relationship to reading achievement, teachers were questioned about their perceptions of AR since the new implementation standards had been utilized. In the online survey, the teachers were asked, "Do you currently believe that the Renaissance Learning program increases reading achievement?" Table 16 summarizes the responses to this question.

Table 16

*Renaissance Learning and Achievement: Number of Coded Responses per Theme*

Yes	No
10	1

In direct contrast to their views on the AR program prior to 2010, 10 of the 11 respondents' answers indicated that they currently believed AR had a positive effect on reading achievement: "I have seen growth in most of my students' comprehension levels, and they are taking vocabulary tests, too!" (Online Survey, March 7, 2011). Another teacher responded, "I believe it increases reading achievement more than it used to. I have seen tremendous growth from my students, and I believe AR is an important component of my reading program" (Online Survey, March 11, 2011). A third response indicated the same sentiment, "I think students spend time reading the books more carefully now because they know that I expect them to make a passing grade on the test. I do think it helps overall comprehension of the text" (Online Survey, March 8, 2011).

However, in the focus group sessions, some teachers were cautious in their final decision on the program. They were asked, "90% of the survey responses indicated that teachers currently believed that AR increased reading achievement. Do you agree or disagree? Explain." One teacher seemed to clarify her thoughts as she talked through her answer: "I need to see a year of EOG scores to see. Well, I know it's helping; it's not hurting. I'm just questioning how much it is helping. I mean, it is helping; I know it is not hurting" (Teacher M, personal communication, March 18, 2011). Another teacher responded, "I think it helps some more than others" (Teacher F, personal communication, March 17, 2011).

According to the data gathered, the majority of teachers at Brownville Elementary did not support the use of the Accelerated Reader program prior to the 2010 school year, although it was used nonetheless. However, teacher perceptions of the program's ability to increase reading achievement were much more positive after the changes in implementation took place. Although some teachers were still guarded in their unilateral support, no teacher gave responses that were coded as negative.

To further triangulate the data involving Brownville Elementary's students' reading achievements, the researcher examined the Customizable Progress Report, a Renaissance Learning document which compared results of STAR data from assessments given at different dates. Table 17 summarizes the information found within the report.

Table 17

*Changes in Grade Equivalent Scores from the STAR Reading Assessment\**

Grade Level	June 2010	April 2011	Change
1	1.5	2.1	+0.6
2	1.8	2.6	+0.8
3	2.5	3.7	+1.2
4	3.7	5.0	+1.3
5	4.0	5.6	+1.6
Mean	3.1	4.4	+1.3

*Note.* \*As reported by the Customizable Progress Report.

The information appearing in Table 17 compares the Grade Equivalent scores given by the STAR assessment at the end of the 2009-2010 school year to STAR assessment scores in April of 2011. The report showed the mean growth of all students

who took both assessments. Scores from students who did not take either the June 2010 STAR assessment or the April 2011 STAR assessment were not included in the report. Students were expected to improve by 1.0 grade levels by June 2011, to indicate one year's growth in reading achievement. According to the report, the mean growth of all Brownville Elementary students had surpassed the 1.0 Grade Equivalent mark. In Grades 3 and 4, the mean growth had increased by 1.2 and 1.3 grade levels, respectively. In addition, the Grade 5 students' reading achievement scores increased by 1.6 grade levels.

### **Motivation**

Reading motivation, as a goal of the Renaissance Learning program, had been widely touted in Renaissance Learning's own training materials. The researcher, therefore, studied the perceptions teachers had about motivation as it related to the Accelerated Reader program, both prior to the 2010 school year, and during the 2010-2011 school year. In order to delve deeper into this topic, questions about motivation were addressed in the survey, the focus group, and the individual interviews.

To gather initial data, the survey asked the following question: "Prior to this school year, did you believe the Accelerated Reader program motivated the students in your class to read?" Ten of the 11 answers were coded as either negative or undecided.

Table 18 summarizes the results of the survey question.

Table 18

*Beliefs about AR and Motivation: Number of Coded Responses per Theme*

No	Undecided	Yes
4	6	1

The one teacher who responded positively wrote, "Yes. I would print out the

weekly reports so they could see and self-monitor” (Online Survey, March 8, 2011).

None of the other responses, however, were as positive. One response was recorded here: “No, not really. Students always wanted to earn points, but tried to take test after test on stories they didn’t understand. They were unable to wrap their minds around the concept of reading and why it was actually important” (Online Survey, March 8, 2011).

Another teacher provided this insight: “Not really. It was all about how many points can I get and can I make my goal for a prize? It was more about competition than reading” (Online Survey, March 8, 2011). A third respondent highlighted the reasons she was undecided about how AR affected reading motivation. “Students who enjoyed the challenge that AR provided were motivated. Reluctant readers felt inferior because of the race for points and reading levels” (Online Survey, March 6, 2011). It was clear from the survey responses that the teachers at Brownville had not been convinced, prior to the changes which had been implemented in the program, that the AR program motivated students to read more.

A theme of discouragement repeated itself in teachers’ reflections on prior AR motivation during the focus group sessions. Teachers were asked to “Discuss your feelings about reading motivation and AR.” A fourth-grade teacher reflected on past practices in the school: “The struggling readers who wouldn’t get their points wouldn’t get to go to that party, and they would work their tails off, and it just became a cycle of failure. One more form of discouragement” (Teacher I, personal communication, March 18, 2011). A fifth-grade teacher recalled, “In the upper grades, you would see the lower readers get discouraged, because they weren’t getting those points or those prizes, and then it was like, who cares?” (Teacher K, personal communication, March 18, 2011).

Another teacher had this comment: “For some students, yes, it motivated them. Others it

did the opposite by putting too much pressure on them, which discouraged them from reading. I want my students to associate reading as something positive, not as a chore” (Teacher F, personal communication, March 17, 2011).

Individual interviews provided additional insight into the teachers’ perceptions of motivation. Teachers were asked to expand on their perceptions of how the AR program motivated students to read. One interviewee answered,

The problem is that it motivated the high readers, the ones that were already going to be motivated anyway. The ones that could compete with themselves, they wanted to keep their average up, and read as many books as possible, and read the big books to get 13 points or whatever. But they could already read. So it didn’t help the kids who needed it the most. (Teacher G, personal communication, April 1, 2011)

Another teacher echoed these sentiments:

It was just to get points. I remember last year, it would get to the cut off, and then they would all go get their great big stack of books to try to meet their points. I mean motivation was there a little bit, but now they work towards it all month. Before, students might make it the first half of the semester, but then not the second half. Then, the next semester, they would be like, “I didn’t get it last time, so I’m not even going to try this time.” (Teacher J, personal communication, April 7, 2011)

Overall, teachers responded negatively in their perceptions of AR’s effect on reading motivation prior to the 2010 school year. Their responses indicated that, in fact, they believed the program discouraged reading motivation rather than encouraged it.

In the focus groups, teachers were further asked to discuss their feelings in

regards to the removal, in the 2010-2011 school year, of extrinsically motivating factors that were previously an integral part of Brownville Elementary's implementation of AR. The responses were overwhelmingly in support of this change. One teacher explained her growing disillusionment of the extrinsic rewards:

At the beginning, it seemed like a good thing to have an extrinsic AR store where you could buy with points. It seemed to encourage kids to read. But as time progressed, I didn't like it because it became all about the points. (Teacher F, personal communication, March 17, 2011)

Another teacher added, "At the time, I thought the parties were good, because I thought it would motivate them, and some kids it did. Some kids it did not. I think we should be focusing on the intrinsic rewards" (Teacher N, personal communication, March 17, 2011). A third teacher's perspective was recorded in this quote: "Last year, kids got rewarded if they got their points, and if they didn't, they got stuck in a room while other kids got to go do different things. It did bother me last year" (Teacher G, personal communication, April 1, 2011). Finally, a teacher recounted her students' attitudes toward the extrinsic rewards:

I even had kids say too, "We are just going to go down there and get popcorn for the reward anyway. I don't care if I make my points." Sometimes, it just depended on what the incentive was as to how motivated the kid was. (Teacher H, personal communication, March 18, 2011)

However, one teacher was not totally convinced that the removal of extrinsic rewards was a good idea: "I think that it is a good program, but I wish there was some way to reward the kids who are highly motivated to participate in AR" (Teacher I, personal communication, March 18, 2011). Teacher responses indicated that the majority were



pleased over this significant change in practice in regards to extrinsic rewards.

In individual interviews, teachers were asked, “Do you feel that the way you are currently using Accelerated Reader influences students’ intrinsic motivation to read?” All teachers indicated that they believed that current Accelerated Reader practices positively affected reading motivation. One teacher noted, “There are more motivated students, overall” (Teacher A, personal communication, April 3, 2011). A second-grade teacher’s comment mirrored this statement. “Mine just seem excited to tell me that they’ve made a 100. They’re like, ‘I made a 100!’ and I’m like, ‘Whoo Hooo! Rock on!’ It’s not so much the points, it’s getting a 100 on it” (Teacher E, personal communication, April 1, 2011). In another interview, a fifth-grade teacher replied, “I think because we are placing an emphasis on conferencing and talking about reading, that that’s getting them more excited” (Teacher J, personal communication, April 7, 2011). A different teacher had this comment to say:

Well, I think the kids are excited about reading. Once they learn they can do it, they want to take tests. I think AR has something to do with that because they love to go to the computer and take those tests, and tell me what score they made on them. Most of them are doing well. (Teacher D, personal communication, March 31, 2011)

One teacher had very strong feelings on the subject:

I definitely think it has made a difference. Now that they have more freedom to read what they want to read, they want to read more. The kids are not driven by points so much this year. It’s more about taking the test with success. And since they’ve had that success, they want to read more. So, I definitely think this way is more effective. This year, even the students who struggle in reading *want* to read.

This class loves to read. I had these students before, and that wasn't the case.

Their love of reading changed. I just get so excited! It's been a good year, a very good year for reading. I think this is working; I really do. (Teacher L, personal communication, April 7, 2011)

Another teacher reported, "I think the students do have intrinsic motivation to read this year. I can see their smiles shine from across the room when they make an 85% or higher" (Teacher C, personal communication, April 7, 2011).

The shift in emphasis from points to comprehension, the use of the Status of the Class strategy, and the removal of extrinsic rewards associated with students meeting their point goals appear to have had a positive effect on teachers' perceptions of the motivational power of the AR program.

Teachers were also asked in focus groups to "Give your perceptions of the students' attitudes on the changes related to motivation in the AR program." The majority of the teachers perceived that the students also felt positive about the changes. One teacher announced, "For the most part, I don't think they've missed it [extrinsic motivation]. I mean at the beginning, maybe, but now they haven't focused on it. (Teacher J, personal communication, April 7, 2011). Another teacher explained how the change affected her students.

I am kind of buying into the program in front of my students. At the beginning of the year, the kids would ask, "What do I get for it?" I would just say, "You get the joy of reading a good book." That was hard for them at first. It was books upside down, snickering behind their books. You know, work avoidance. But now, AR is a big deal. Before, it was something that they had to do. Now they want to do it. The ones that were the avoiders at the beginning of the year, they've found

that they love books. (Teacher L, personal communication, April 7, 2011)

The collected qualitative data indicated that the teachers at Brownville Elementary were feeling a growing sense of dissatisfaction with the extrinsic rewards associated with the Accelerated Reader program prior to the 2010-2011 school year. The current emphasis on intrinsic motivation was overwhelmingly perceived as a positive change in the program. The data gathered on teachers' perceptions of student attitudes toward reading showed that teachers believed that students were more motivated to read in the 2010-2011 school year, and that the removal of the extrinsic rewards was perceived as beneficial for the students.

### **Formative Assessment and Data-Driven Instruction**

When teachers were asked in the initial online survey to "Describe how you, prior to this school year, used the reports generated by Renaissance Learning," two themes emerged from their responses. Table 19 summarizes the themes identified from responses to the question.

Table 19

*Report Use: Number of Coded Responses per Theme*

Unused	Points
3	8

Three of the 11 teachers noted that they didn't use the reports at all before the 2010-2011 school year. One teacher wrote, "Truthfully, I didn't use them. I really didn't understand what they meant, and I didn't fully understand the program" (Online Survey, March 10, 2011). The remaining responses were all coded as *points*. One response was, "The only report I used was the AR Report, and I just used that to see the progress

students were making on their point goals, and to see if they were passing their tests” (Online Survey, March 8, 2011). Another teacher wrote, “Reports were used to calculate points” (Online Survey, March 7, 2011). The singular emphasis on points with the AR program was repeated in individual interview responses.

In an individual interview, a teacher noted, “I didn’t even know there were that many reports until that training!” Once again, responses indicated that before the 2010-2011 school year, teachers were either confused about the overall Renaissance Learning program or were focused solely on the points aspect.

During focus group sessions, teachers were asked to “Explain what is different in your classroom since last year concerning the reports that can be run with Accelerated Reader.” The use of vocabulary reports and increased parent involvement emerged as the main themes in their answers. Two teachers made the same comment in different focus groups. They said, “The vocabulary tests are the best” (Teacher F, personal communication, March 17, 2011; Teacher M, personal communication, March 18, 2011). Another teacher said, “I definitely love the vocabulary quizzes and the data the reports give me and the kids” (Teacher H, personal communication, March 18, 2011). From the data collected, it was clear that the teachers perceived the use of the vocabulary component in Renaissance Learning as a positive change. In addition, teachers mentioned that the reports increased parent involvement in the program. One teacher commented, “I love that parents can sign up to get an email each time a kid takes an AR test. I like that there are more ways to let parents know” (Teacher B, personal communication, March 17, 2011). A second teacher commented that, “Kids are excited to show their parents the reports, too” (Teacher I, personal communication, March 18, 2011). A fifth-grade teacher also liked the way the reports involved parents: “I like the

reports. It's another form of communication between the home and the school" (Teacher K, personal communication, March 18, 2011). Teacher responses pointed to their belief that involving the parents and students in the Renaissance Learning program was beneficial to all stakeholders.

In the individual interviews, the vocabulary reports again surfaced as a positive aspect of Renaissance Learning. "I really push the vocab tests. That has really been a big help" (Teacher L, personal communication, April 7, 2011). Another teacher commented, "I like the vocabulary!" (Teacher D, personal communication, March 31, 2011). A second-grade teacher noted that she utilized another aspect of the Vocabulary Reports: "The flashcards you can print are wonderful! I like that" (Teacher E, personal communication, April 1, 2011). Qualitative data collected from the Brownville Elementary teachers indicated that their perceptions of the vocabulary reports were positive. The teachers appeared to be embracing this aspect of the program.

The online survey further asked the Brownville Elementary teachers, "Do you currently use the data from Renaissance Learning?" One hundred percent of the survey respondents answered in the affirmative, and all responses dealt with formative assessment. One teacher elaborated, "I do use it. I use it to see my students' results in STAR reading, as well as vocabulary tests and AR quizzes. These reports help me to see what my students need and how I can help them" (Online Survey, March 8, 2011). Another teacher's comments echoed these sentiments, "I use it to show students their successes and also where they need to work. I work with the student to improve" (Online Survey, March 6, 2011). A third teacher wrote:

Absolutely! I use STAR assessment data every month to help target struggling students, as well as a guide to push every other student. I also use the AR data to

determine possible issues with stories. For example, if a student doesn't do well on an AR test, I discuss this with them. This allows me to see where the gap was, as far as comprehension. I can then target or re-teach certain skills, so that they may achieve next time. (Online Survey, March 10, 2011)

The answers to the survey indicated that the Brownville Elementary teachers had become much more aware of the data that Renaissance Learning provided, and that they were using the data to drive their instruction. One focus group member's comment corroborated the findings from the survey:

I like too, the reports we get with the vocabulary part. Like for my ELL students. So now that I understand that whole component, I can target a different area for some students. I like that, and that motivates some. You know, when you show the ELL students how many words they've learned. All of the students like the feedback. I've even had some kids complain when there wasn't a vocabulary test for a certain book. Last year, it was like, "Do I *have* to take this vocabulary test?" It was just another test they had to take. They like the fact that we are giving them handouts that show, "Look what you've learned!" (Teacher I, personal communication, March 18, 2011)

This teacher's comments reiterated the fact that prior to the 2010-2011 school year, teachers had not understood how to use the Renaissance Learning reports, or the data that the reports generated.

In order to gather more data on this topic, during individual interviews, teachers were asked this question: "Do you use the data to drive your instruction? Explain any changes that have occurred in your practice as the school year has progressed." Once again, answers showed that teachers had previously been unaware of the reports that were

available for use with the Renaissance Learning program. One teacher's response highlighted the way she now used the Vocabulary Reports:

For example, the vocabulary reports? I was amazed at how much my ELL students *didn't* know. So now, I find myself going over easy words that they may not understand. Before, I was like, "Oh, they'll know this word!" So now, I target easier vocabulary because the report pinpointed why they really struggled. Much more than I thought they did. (Teacher J, personal communication, April 7, 2011)

Another teacher explained why she liked using STAR Early Literacy: "STAR Early Literacy shows us that these kids need to work on this, and these kids need to work on that" (Teacher A, personal communication, March 31, 2011). Responses from teachers indicated that they had begun using the data generated from Renaissance Learning for formative assessment, with positive results. "I ask students this year to tell me where the error is if they don't pass an AR test. Last year, I wouldn't focus as much on what they missed; they just read the book again. Last year, they saw it as punishment. Now, it's a learning experience" (Teacher G, personal communication, April 1, 2011). A first-grade teacher explained how she and her teammate used the STAR Early Literacy as a formative assessment tool:

We are using that data to drive the instruction, you know? We find out that this group of kids needs to work on short vowels, and this group needs to work on long vowels. It gives you that information. It is very helpful; it helps pinpoint the gaps. (Teacher D, personal communication, March 31, 2011)

Another teacher provided an additional insight into the numerous reports available with Renaissance Learning: "It's extra work. But it is a *rewarding* extra. I mean, any

little thing you do is extra, but I think it's more beneficial, this extra work we are doing" (Teacher M, personal communication, March 18, 2011). Her response was met with this one:

Yeah, because it helps us to know where to guide our students, or how to help them, versus "I know he's a struggling reader, but I don't know what to do to help him." It gives you more input, or shows you right where their perfect level is, so you know how low you need to go, or how high you need to go to meet their needs. (Teacher H, personal communication, March 18, 2011)

Finally, a fourth teacher explained how she had changed the way she used the reports:

I go through and try to use new reports now. I actually go and find ones that we haven't used. That's how I found the Engaged Time Report. And I look at the 85%. I have so many more [students] who are at 85% now. I have a few who aren't yet, but being able to see that has been helpful to me as I plan remediation. I also show the reports to the kids. (Teacher J, personal communication, April 7, 2011)

Overwhelmingly, the teachers' responses were positive in regards to the data that was generated from Renaissance Learning. In addition, the majority of teachers were using the data in newfound ways to drive their instructional practices in relation to the Accelerated Reader program.

### **Fidelity of Implementation**

The degree to which the Renaissance Learning program was being used with fidelity at Brownville Elementary was central to the study being conducted. In order to determine the level of fidelity, as well as the teachers' perceptions of the correct use of the program, further questions were asked on the online survey, in the focus group, and in



individual interviews. In addition, the Accelerated Reader Observable Behaviors Checklist was once again utilized for evidence of teacher behaviors that were consistent with a high level of fidelity. Finally, documents associated with the program were analyzed to further triangulate the data.

In order to determine teacher perceptions of changes related to fidelity of implementation, teachers were asked in the online survey to “Describe the changes, this school year, which have taken place at this school regarding the Renaissance Learning program.” Table 20 summarizes the number of responses per theme.

Table 20

*Changes in Renaissance Learning Practices: Number of Coded Responses per Theme*

Formative Assessment	Stronger Emphasis
9	2

Two teachers mentioned that Brownville Elementary’s stronger emphasis on the Renaissance Learning program was a change at the school. A teacher reported, “There has been a huge emphasis placed on Renaissance this year. That’s different” (Online Survey, March 8, 2011). However, most of the responses indicated that the way the program was being used as a tool for formative assessment was perceived as a change.

Two of the online survey responses discussed how a student’s ZPD (as determined by STAR testing) was used to make AR more meaningful for students, as opposed to only allowing students to read books that were at a certain grade level:

The first change we have made is that the students’ AR goals are set based on their ZPD. We let students read books that fall within their ZPD and do not restrict them to books that are in their grade level. Also, we are more focused on

their percentage versus their points to ensure that they are reaching 85% or higher.

(Online Survey, March 8, 2011)

Another teacher explained how she incorporated the Status of the Class strategy into her SSR time, and the change in the range of book levels she allowed her students to read:

I go around doing Status of the Class now, meaning that I ask them what they are reading, and I ask them if they are enjoying the book. Sometimes I ask them what the setting is, and I will ask them who the characters are. I can usually tell if they are understanding the book. If it seems they aren't, I will look at the level of the book. I may suggest an easier book. I do let them go above their level if they are understanding. (Online Survey, March 11, 2011)

The theme of formative assessment was apparent in a different survey respondent's explanation of her perceptions of the changes:

I like it much more now that I understand how to use it as a tool to increase reading achievement in the classroom. I love the vocabulary component that I have learned about this year, and am excited to see the success my students are having using it. (Online Survey, March 11, 2011)

Another teacher reported,

I really like the monthly goals. It helps me keep a better check on students who are falling behind. I am happy to know how to use the reports and what they mean. I like the interaction with my students and I feel like they are reading more because of the encouragement. (Online Survey, March 6, 2011)

Two teachers felt that the use of the STAR Early Literacy Assessment for formative assessment was a change: "Using the Early Literacy program has helped to identify areas of weaknesses. Students are reading more, and instruction is a little more

informed” (Online Survey, March 7, 2011). A second teacher said, “I love the Early Literacy test. It really helps the younger grades to look at gaps students have, especially for the higher readers” (Online Survey, March 10, 2011).

In the online survey, teachers’ responses indicated that they felt that the program was now being used as a tool to help students learn. In addition, they reported that their understanding and use of the program had changed. The teachers’ focuses with the program appeared to have changed. Their responses revealed that they were now using the program as a formative assessment tool.

The responses of teachers in individual interviews at Brownville Elementary underscored the core changes in program implementation. Among the changes noted were a switch to teaching students the importance of reading for comprehension, the removal of extrinsic rewards for students who met point goals, the emphasis on using the Status of the Class strategy to monitor and motivate students, and the implementation of student record sheets. In the individual interviews, teachers were told:

Fidelity of Implementation is a term meaning to do something the way it was intended to be done. According to the survey responses, this year, there has been an emphasis on using Renaissance Learning with fidelity. Tell me your thoughts on this change.

All teachers interviewed responded in a positive manner in discussing the changes.

A third-grade teacher’s comments explained her thoughts on the school-wide push to use the Renaissance Learning program with fidelity, and illustrated the amount of change that had taken place in the school:

I think it’s good to have gone away from the points. I think it’s good to use it as a motivator to want to read. The emphasis is put on the comprehension, and that is

the most important thing. It's not read a book, and then take a test on a book that you are not comprehending. Making sure everyone is following the program the way it's intended to be followed has really changed a lot of teachers' perspectives in regards to AR and Renaissance Learning. There is a different atmosphere this year. Everyone stops what they are doing when that bell comes on, and the announcement is made that it is now time for SSR. Kids are not distracted anymore. Kids know what is expected of them. And by knowing the expectations, they can actually succeed. They start reading, and they know they need to conference before they go and take a test. So, I think it has really improved. Also, kids are not being punished because they didn't achieve enough points; they are being rewarded for maintaining the 85%, which is ultimately what we want. (Teacher G, personal communication, April 1, 2011)

Another teacher shared her thoughts on using the program with fidelity by commenting, I think that using it the way we were supposed to this year has increased the kids' motivation and achievement. I have seen a lot of growth. I am really excited. The children's focus has changed. They never say, "Oh I've got so many points," now it's like, "I got an 85, or a 90, or a 100!" It's like the points aren't really a part of it because I don't put as much emphasis on it. (Teacher L, personal communication, April 7, 2011)

A different teacher explained how her classroom practices had become more in line with Renaissance Learning's Model Classroom Best Practices. For example, her comments highlighted both her use of Status of the Class, and her students' use of the progress charts that Renaissance Learning recommends in trainings.

Last year, I conferenced with my kids at times, but I didn't keep a record, a check

sheet for Status of the Class. Last year, I didn't get to all my kids every week, but this year, I do. I get to every kid every week. I really like that. Sometimes I am at Barnes and Noble, and I will pick up books for them, because this year, I know their interests. I might remember some of the themes they are interested in. I love that, because I feel like I am more in the know this year than I was last year. The kids keep their records, too. Some of them really like seeing their progress. They will talk about it. Some of them really benefit from it. (Teacher J, personal communication, April 7, 2011)

Teacher responses clearly indicated that the majority perceived the changes in the Renaissance Learning program as both numerous and beneficial to student motivation and achievement. All teacher responses from the individual interviews were coded as positive in regards to the attitudes about fidelity of implementation.

In the online survey, teachers were asked to "Discuss the level of support you have received as implementation of the Renaissance Learning program has changed this year." Ten of the 11 respondents' answers were coded as strong support. Table 21 summarizes the number of responses per theme.

Table 21

*Level of Support: Number of Coded Responses per Theme*

Strong Support	Adequate Support
10	1

One teacher noted:

I feel like I finally know what Renaissance Learning is used for. If a question has ever arisen regarding data or assessments, I feel like I now have someone to ask.

Also, I feel like we are working harder as teachers to strive and meet/surpass our school goals. (Online Survey, March 11, 2011)

Another teacher's comments were similar: "Having someone show me the perks of using the program has certainly changed the way I use it, since I wasn't trained in the proper use and tools that come with it" (Online Survey, March 7, 2011). A third teacher replied, "The support level has been wonderful and frequent. The support and feedback I have received has made using Renaissance Learning easier, and now I see it as a wonderful resource" (Online Survey, March 9, 2011). One teacher's answer was not coded as *strong support*, but was succinct: "I feel the support has been adequate to meet the questions and concerns I have had" (Online Survey, March 7, 2011). Responses to the online survey indicated that most teachers felt that the support they had received with Renaissance Learning had greatly increased their ability to implement the program with fidelity. Also, the strong level of support appears to have had an impact on their overall positive perceptions of the program.

In addition to studying teacher perceptions of the fidelity of implementation of the Renaissance Learning program, the researcher also analyzed documents that measured the fidelity of implementation. The first document examined was the Implementation Progress Report, which provided the researcher with information on Brownville Elementary's use of the program.

According to the Renaissance Learning Company (2010), there are guidelines for determining high implementation fidelity. In its first year of use, a high level of fidelity within a school had been achieved if students scored 85% correct or higher on their AR tests, if the percent of students in a school who achieved 85% or higher was at least 70%, and if the engaged reading time per day averaged 30 minutes or higher. Tables 22, 23,

and 24 summarize Brownville Elementary's monthly Renaissance data.

Table 22

*Mean Percent Correct for All Brownville Elementary Students Taking AR Tests during the 2010-2011 School Year\**

Month	Mean Percent Correct
September	83%
October	84%
November	87%
December	88%
January	86%
February	89%
March	89%

*Note.* \*As reported by the Accelerated Reader Implementation Progress Report.

Information from Table 22 shows that in September, when initial changes in the Renaissance Learning program began, students at Brownville Elementary were averaging 83% correct on the AR tests that they were taking. Six months later, the mean had increased to 89%.

Table 23

*Percent of Brownville Elementary Students Who Scored At or Above 85% Correct on AR Tests during the 2010-2011 School Year\**

Month	Percent of Students Above 85% Correct
September	56%
October	59%
November	71%
December	71%
January	71%
February	84%
March	77%

*Note.* \*As reported by the Accelerated Reader Implementation Progress Report.

The information in Table 22 indicated that early in the school year, the percent of students at Brownville Elementary who scored at 85% or higher on AR tests was lower than Renaissance Learning's recommendations. However, in November, 71% of the students at Brownville scored at least 85% correct on their AR tests. This score has since consistently stayed above the 70% benchmark.



Table 24

*Mean Amount of Time Per Day Students at Brownville Elementary Spent Engaged in Reading\**

Month	Mean Number of Minutes
September	14
October	21
November	19
December	28
January	26
February	38
March	47

*Note.* \*As reported by the Accelerated Reader Implementation Progress Report.

Table 23 indicated that at the beginning of the school year, classes were not meeting the new implementation guidelines in regards to the amount of student engaged time. However, the data indicate that by February, Brownville Elementary was meeting the guidelines set forth by Renaissance Learning for high fidelity implementation.

In addition to the reports provided by Renaissance Learning, the researcher, in order to further triangulate the data, also analyzed the Accelerated Reader Observable Behaviors Checklist to determine if teachers were consistently using strategies that were indicative of high implementation fidelity. All teachers in Grades 1-5 were found to be using documents that were associated with high fidelity. Specifically, teachers were using a Status of the Class Record Sheet to ensure that they were meeting with all students at least once a week, and students were filling out daily reading logs and

graphing their percent correct from AR quizzes.

### **The Change Process**

The change in the implementation of past Accelerated Reader practices was massive, and required a paradigm shift from the teachers. The researcher, in order to study the effects of the change process at Brownville Elementary, examined the answers given from the online survey, the focus group sessions, and the individual interviews.

In the initial online survey, teachers were asked to “Name three words that would describe how you felt at the beginning of the school year, when you first learned about the changes in Renaissance Learning.” The online responses were coded as negative, positive, confused, and nervous. Because each teacher gave three responses, there were 33 total words. Some respondents’ words were all coded alike, and some respondents’ words fell into different categories. Table 25 summarizes the data associated with this question.

Table 25

*Initial Feelings on Changes in Implementation: Number of Coded Responses per Theme*

Negative	Positive	Confused	Nervous
7	16	3	7

Seven of the total responses were coded as negative. One teacher expressed her strong initial feelings about the changes by using the same word three times: “frustrated, frustrated, and frustrated!” (Online Survey, March 8, 2011). Other negative responses included “cumbersome” and “aggravating” (Online Survey, March, 2011). The word *confused* was used by three teachers. Responses that were coded as nervous included “apprehensive,” “concerned,” “vast,” “nervous,” “scared,” and “shocked” (Online

Survey, March, 2011). However, many responses about the changes were positive.

Words given in the survey that were coded as positive included “excited,” “encouraged,” “hopeful,” “eager,” “motivated,” “loved” and “positive.” Interestingly, some teachers’ responses indicated that they felt both confused and positive about the change, while one teacher’s answer indicated that she felt confused and negative about it.

In focus groups and individual interviews, teachers were given the list of identified themes from the initial survey, and asked to elaborate on them. One teacher answered:

At first, I was scared of the change, I was. Mostly because of the parents. Some parents, AR was all there was. They could handle a D or a C or whatever, but by gosh, their kids had better make their AR points. And so, you know, I was worried about that. When I felt that all that had changed, and the drive was different, I was worried about how people were going to receive it. So honestly, I was scared about it. I was like, “This isn’t going to work.” (Teacher M, personal communication, March 18, 2011)

Another teacher agreed that the change was difficult in the initial stages: “I felt frustrated and overwhelmed in the beginning” (Teacher C, personal communication, March 17, 2011). A third-grade teacher offered her perspective on the change process at Brownville Elementary:

The changes have been easier for me than for others. Mainly because I haven’t had it necessarily ingrained in me for a really, really, really long time. That has made my transition easier. And additionally, I am doing a lot of the same things I was doing, it’s just that the emphasis is different. I think it was hard for the kids initially; it was. I mean, they wanted their points. It was, “Have I met my goal?

Have I met my goal?" I would have to say, "Remember, we are focusing on the 85%, so yes, you have." Getting them to switch over was a little tricky, and parents had a hard time wrapping their minds around the whole deal. When they first initially presented this, it blew some of the older teachers' minds. I know, from the workshop we were in. They were like, "How are we supposed to do that? We don't have enough time in the day!" And, I think they were kind of scared. It was definitely hard for some of my colleagues. (Teacher G, personal communication, April 1, 2011)

It is clear from the collected data that the initial paradigm shift on AR practices was not an easy one for the teachers, students, or parents of Brownville Elementary. In order to determine how the teachers continued to perceive the changes in AR, the following online survey question was asked, "Name three words that would describe how you currently feel about the Renaissance Learning program and its components." Table 26 details the total number of responses per theme.

Table 26

*Current Feelings on Changes in Implementation: Number of Coded Responses per Theme*

Positive	Unsure
28	5

The majority of answers were coded as positive. Examples included "excited, motivated, curious," "pleased," "wonderful," "useful," "helpful," "informative," "encouraging," and "meaningful." In contrast, one teacher ignored the three word limit and answered, "Still on the fence, ask me after the EOGs" (Online Survey, March, 2011).

Nonetheless, from the responses gathered, it appeared that a shift in teacher perceptions had occurred.

To delve more deeply into this perceived change, focus group participants were asked, “Will you elaborate on your feelings on the changes in Renaissance Learning?” One teacher responded, “I am happy with the changes, and curious to see how the data goes with the EOG scores. I think the students are more excited about reading and I love it!” (Teacher K, personal communication, March 18, 2011). Another teacher had this comment: “I really like AR this year. I feel it is helping me focus on my students’ reading progress, and the reading resources they give are amazing!” (Teacher F, personal communication, March 17, 2011). A first-grade teacher added, “It’s much better than last year” (Teacher C, personal communication, March 17, 2011). A fourth-grade teacher gave her opinion: “I feel this program has benefitted me as a teacher. I feel the students are benefitting from the data the teachers have been collecting, and I think teachers are using it to ensure student success” (Teacher I, personal communication, March 18, 2011).

During individual interviews, teachers were also asked to discuss their current feelings about the changes that had taken place. A fourth-grade teacher explained how her feelings had evolved:

I was overwhelmed at first, but I don’t feel that way anymore. It took about a month, and then I started getting used to it, and I started using it. I like it now.

Parents like getting the email when their child takes a test. I love the vocabulary tests, and I print out the vocabulary list every 2 weeks so that the kids can study them. (Teacher J, personal communication, April 7, 2011)

A fifth-grade teacher elaborated on her perceptions:

I think excellence is expected this year. The ante has been upped like a million

percent. I thought it was going to be really, really difficult, but it has been really, really easy. I think it's better overall. I think it's wonderful, and it's easier. I feel almost like AR is fun. I think it's more beneficial than ever. (Teacher L, personal communication, April 7, 2011)

A different teacher expanded on her belief that the change was needed:

I knew something was wrong. But they [Brownville Elementary teachers] needed a county push. They couldn't be convinced. I think a lot of teachers thought it was a lot of extra work at first. But it isn't. I think the changes were a good thing. (Teacher A, personal communication, March 31, 2011)

A second-grade teacher was able to explain her thoughts on the entire change process this way:

I'm excited overall. And I think the trainings have helped. I had never really been shown how to use all the reports, how to connect the dots. So I think training is extremely beneficial. At first, it was like, "Ohhhhh, noooooo, change!" It was overwhelming. Now I am happy with the results. I feel much better than I did in September or October, when everything shifted. I understand how to actually use the program. I just wasn't involved with it last year, because I didn't have the ownership with it. Now that I have actually been shown the right way to use it, it's a better tool. I know how to monitor the students; I know how to look at their vocabulary reports; I know how to share it with parents. I am more knowledgeable, and that makes me better with it. (Teacher E, personal communication, April 1, 2011)

Additionally, another important issue regarding the change process came to light in the focus group sessions. Teachers reported that the incremental training sessions were

beneficial to the overall understanding of the program, and helped make the change easier. One teacher said,

I felt overwhelmed at the beginning. Sometimes, I still feel overwhelmed. I think to myself, oh no, that's one more thing that maybe I haven't been doing that I am supposed to have been doing; that I need to be doing. But if I had gotten all that training all at once, honestly, it would have gone in one ear and out the other. I would have just made sure that the kids were taking their tests, and that's it.

(Teacher I, personal communication, March 18, 2011)

Another teacher made a similar comment: "I liked having the overview at the beginning of the year, and then breaking it down periodically, and being asked, 'Hey, how are you doing with this?'" (Teacher F, personal communication, March 17, 2011).

Her response was answered with this comment from another focus group member:

Yeah, it was like, "Hey, try this report, or try this one." That was helpful because if you are given one report to use, then you are going to go back and use it. And then, if 2 weeks later, you are asked, "Have you ever thought about using this report," then you are more apt to go back and try that one. Whereas, if you were given them all at once, then you would get stuck on one and use it all the time. I mean, that's what I did last year. I found one report, and I used it all year. I didn't try anything else. (Teacher N, personal communication, March 17, 2011)

Finally, a teacher had this comment to make about her feelings of the changes, "I'd like even more training, but I am not as confused as I was at the beginning of the year"

(Teacher C, personal communication, March 17, 2011). Focus group interviews

suggested that incorporating short training sessions throughout the school year as a

supplement to the initial training was perceived positively by the Brownville Elementary

teachers.

In addition, responses from the online survey, the focus group sessions, and the individual interviews clearly pointed to a marked change in teacher perceptions of the implementation changes implemented at Brownville Elementary at the start of the 2010-2011 school year. As a whole, teacher attitudes shifted from confusion and frustration to acceptance and enjoyment of the program.

### **Summary**

At the beginning of the 2010-2011 school year, teachers at Brownville Elementary were given new training on the Renaissance Learning program. This training altered the status quo of the school, and resulted in changed instructional practices. Teachers began a school-wide practice of incorporating SSR into a set time in their daily schedules. In addition, the teachers' roles during the SSR time became more uniform. Qualitative data suggest that in the 2010-2011 school year, teachers consistently shared common practices in relation to SSR, and that the level of implementation fidelity was high.

The AR program, as a part of the Renaissance Learning program, was also affected by the changes at Brownville Elementary. Although before the 2010-2011 school year most teachers felt that the program was ineffective and even detrimental to students' reading motivation, they had continued using it in the way that had become normal at the school. Results from data collected showed that the teachers were now much happier with the program and felt that it was motivational to students. Furthermore, findings from the teacher responses, Renaissance Learning reports, and observational checklists pointed to a high level of fidelity in teacher practice in relation to AR. While the majority of teachers now believed that the program was an effective way



to increase reading achievement, some teachers were still undecided. However, an analysis of the reports available through Renaissance Learning seemed to suggest that students at Brownville had made more progress than expected in reading during the 2010-2011 school year.

The change process had a significant impact on the teachers at Brownville Elementary during the 2010-2011 school year. Many teachers perceived the change as negative at first. Those teachers who thought it was a positive step still reported that the changes, as a whole, were perceived as overwhelming to many others at Brownville Elementary. However, at the time of the study, attitudes and perceptions had shifted. Teachers viewed the changes as positive, and felt much more capable of using the entire Renaissance Learning program with fidelity.

## **Chapter 5: Conclusions, Discussions, and Recommendations**

### **Introduction**

The purpose of this case study was to examine teacher perceptions regarding the change in implementation of the Renaissance Learning program at Brownville Elementary School, whose students had historically performed poorly on the North Carolina end-of-grade reading tests. Qualitative data in the form of surveys, focus groups, individual interviews, observations, and document analysis were examined in order to study the impact of this change. At the outset of this study, the guiding question was, “To what degree is the Renaissance Learning program being used with fidelity and what effect does the implementation of this program have on teachers and students at Brownville Elementary?” However, the final research questions were refined after each stage of the qualitative study. As data were collected, it became evident that the research questions needed to be narrowed in order to delve more deeply into the Brownville Elementary case. Eventually, these research questions became:

1. How have the changes in the implementation of the Renaissance Learning program at Brownville Elementary School affected teacher decisions and practices in regards to Sustained Silent Reading?
2. How have the changes in the implementation of the Renaissance Learning program at Brownville Elementary School impacted teacher perceptions of the Accelerated Reader program in regards to student motivation to read?
3. How have the changes in the implementation of the Renaissance Learning program at Brownville Elementary School impacted teacher perceptions of the Accelerated Reader program in regards to student achievement in reading?
4. What were teacher perceptions regarding the fidelity of implementation of the

Renaissance Learning program at Brownville Elementary School?

5. How has the change process affected teacher attitudes about the Renaissance Learning program at Brownville Elementary School?

This chapter will include a brief summary of the study, an interpretation and discussion of the findings, and recommendations of the researcher. The findings are organized into categories which mirror the themes in both the literature review and Chapter 4, and recommendations regarding each theme are included in each section.

### **Summary of the Study**

Initial data for the study were gathered from the use of an online survey. Emergent themes were noted and questions for focus group sessions were created to examine the themes in more depth. Next, two focus group sessions were conducted. Primary grade teachers made up the first focus group, and third-, fourth-, and fifth-grade teachers were members of the second focus group. After responses were recorded, transcribed, coded, and analyzed, six teachers who had not participated in the focus group sessions were interviewed individually. Interviewed teachers represented each of the six grade levels (kindergarten through fifth grade). Their responses were again transcribed, coded, and analyzed for common themes. To further triangulate the data, documents created by the researcher, along with documents that were a part of the Renaissance Learning program, were analyzed for evidence of implementation fidelity and student reading achievement.

### **Interpretation and Discussion of Results**

**Sustained Silent Reading.** Data associated with this topic indicated that prior to the 2010-2011 school year, the teachers at Brownville Elementary School did not have a consistent vision regarding the utilization of SSR in the classroom. Practices varied

widely, and there was no school-wide expectation for the program. However, Brownville Elementary teachers were utilizing Sustained Silent Reading more consistently in the 2010-2011 school year, both in regards to the amount of specific daily time devoted to it, and in everyday instructional practices taking place during the set-aside period. New implementation standards followed by the teachers ensured that classes read, uninterrupted, for 30 minutes at the same time each day. Teachers also reported that they were routinely using the Status of the Class strategy. These findings were backed by observations recorded on the Accelerated Reader Observable Behaviors Checklist, which showed that during the study period teachers were observed using the strategy over 90% of the time. Data from focus group sessions and individual interviews demonstrated that Brownville Elementary teachers felt that there had been a much stronger emphasis placed on SSR, and that students were more engaged during Sustained Silent Reading than they had been during previous years.

These findings relate directly to the literature on Sustained Silent Reading. Gardiner (2001) noted that SSR programs should allow students to read freely and without interruption. Paul (2003) found that using the Status of the Class strategy resulted in more engaged readers. In addition, Pilgreen's (2000) research noted that having student-teacher interactions about the literature being read by students during SSR resulted in students reading more. The 30-60 second conferences conducted as a component of the Status of the Class strategy were in line with this research. Furthermore, data from the Magnolia Consulting Group (2010) study stated that teachers using Guided Independent Reading practices, which were a part of the Status of the Class methodology, reported more engagement and more excitement over reading. These results paralleled the perceptions of the Brownville Elementary teachers.

In addition to incorporating student conferences into SSR, the literature further supports the importance of consistent, uninterrupted, scheduled time for SSR (Myers, 1998). Interruptions during SSR were commonly reported as a problem at Brownville Elementary during SSR periods prior to the 2010 school year.

It is apparent that the changes in the SSR practices at Brownville Elementary have resulted in positive teacher perceptions of student engagement and excitement about reading. The teachers' roles during SSR, as well as the school-wide time set aside for SSR, seem to have had a direct impact on these positive perceptions.

**Recommendations.** The data shows that the new SSR practices taking place at Brownville Elementary are perceived as beneficial to students. For this reason, the researcher recommends that current SSR practices be continued at the school. Specifically, the set-aside time period for SSR should continue to be followed. In addition, it is essential that SSR continues to be free from interruptions. Teachers should also continue their use of the Status of the Class strategy, in which they hold mini-conferences with all students about the books they are reading. Teachers should continue keeping a Status of the Class record sheet so that it will be apparent if a student has not been involved in a mini-conference, and can be targeted for one as soon as possible.

Pilgreen (2000) noted in her research that staff trainings on SSR were imperative for successful implementation. The researcher further recommends that each school year begin with an overview of the implementation guidelines of SSR and its purpose in motivating students to read. In this way, all new staff members would also receive training, and all classrooms would be able to continue the same level of fidelity with SSR practices.

In addition, although as a case study these findings are not able to be generalized,

the researcher makes the same recommendations for schools in which similar inconsistent SSR practices are found. Specifically, a school-wide, uninterrupted time for SSR appears to be beneficial to students' reading engagement.

The researcher recommends further research on uninterrupted time for SSR. Specifically, a research study on the effects of the designated time of day for SSR on reading achievement and motivation would be beneficial. There is some research for the basis of the recommended study. Barron, Henderson, and Spurgeon (1994) reported that the time of day for reading instruction affects the mastery skills of students who were identified as below grade-level readers. The researchers reported that the mean growth in reading scores for below grade-level students who were taught reading in the afternoon was greater than those of a comparable group who were taught reading in the morning.

**Reading motivation.** Data from the online survey, the focus groups, and the individual interviews pointed to a marked change in teacher perception of student reading motivation during the 2010-2011 school year. Teachers reported feeling that prior to the 2010-2011 school year, the use of the Renaissance Learning program actually discouraged some children to read. However, teachers also reported that the students had been much more motivated to read since the changes in implementation practices had taken place. Overall, the teachers at Brownville Elementary felt favorable about the level of reading engagement taking place, and at the excitement children were showing about reading.

In addition, the way STAR assessments were used and interpreted by teachers may have had a positive effect on reading motivation. In the past, teachers used the STAR assessments to determine a specific reading level for students. AR points were assigned based on that level, and students were not allowed to read books below or above

that level. Student interest in a book or a series was not taken into account. Since the focus of the school was on earning AR points, even if a student was excited about the prospect of reading a particular book, it could not be read at school if it fell below the child's reading level as reported by the STAR assessment. However, in the 2010-2011 school year, teachers used the students' ZPD ranges (also provided by the STAR assessment) to inform students of their optimal reading range. Students were allowed to read anywhere within that range, and teachers were instructed not to discourage students from reading a book if it fell a little above or below their ZPD levels. Teachers told students not to focus on the number of points earned, but rather to focus on earning at least 85% correct on AR quizzes.

Gathered data from Brownville Elementary indicated that the teachers also believed that shifting the focus from points to higher comprehension rates was one factor responsible for the change in motivation. Teachers additionally noted that using the Status of the Class strategy allowed them to become more involved with what their students were reading, and that students seemed to be excited and motivated about discussing their books.

The literature on motivation corroborates the findings from this study. Teachers noted their changed use of ZPD ranges with students. Deci and Ryan's (2008) self-determination theory stated that competence, or the ability to meet optimal challenges, benefits motivation. Showing students their optimal reading range, and involving them in setting personal goals of an 85% comprehension rate falls in line with Deci and Ryan's (2008) research.

Data gathered from focus group and individual interviews also revealed that teachers believed that holding mini-conferences during SSR allowed them to feel more

connected to their students and what they were reading. Relatedness, or the connection one feels to others, is another aspect of self-determination theory, which Deci and Ryan (2008) purported increases motivation. The body of literature supports this belief. Ratelle et al. (2007) reported that teachers who foster relatedness have students who are more motivated to learn.

Finally, the changed practice of allowing Brownville Elementary students to self-select books to read within a much wider range may have increased their feelings of autonomy, the third aspect of self-determination theory. Autonomy is the feeling that one is self-directed, or in control. Feelings of autonomy have also been associated with higher degrees of motivation (Deci & Ryan, 2008). Students may have felt more in control of their own learning when they were allowed to read books based on their interests, instead of based on either a point value or a specific reading level.

In addition, the removal of extrinsic rewards associated with the previous implementation of the Accelerated Reader program was perceived as another positive change at Brownville Elementary. Fostering intrinsic, as opposed to extrinsic, motivation has also been shown in the literature to increase student enjoyment of tasks (Seifert, 2004). Data collected from the study indicated that teachers perceived that overall, students' enjoyment of reading had increased in the 2010-2011 school year.

**Recommendations.** The researcher recommends that Brownville Elementary continue its practice of allowing students the autonomy to choose the books they want to read, in order to foster motivation in reading. Likewise, the researcher recommends that teachers continue holding mini-conferences about books read, with the purpose of increasing students' sense of relatedness. Finally, the removal of the extrinsic rewards associated with Renaissance Learning has been perceived as beneficial to students at



Brownville Elementary. For this reason, the researcher further recommends that teachers attend professional development on motivation theory, and the roles extrinsic and intrinsic motivation play in that theory, so that this knowledge can be transferred to other aspects of learning at Brownville Elementary.

The researcher also recommends further research be conducted on the relationship between student motivation and reading achievement. Specifically, a study conducted to determine if highly motivated readers have higher reading achievement than students with low motivation to read would be beneficial.

**Formative assessment and data-driven instruction.** Data from this study indicated that most teachers at Brownville Elementary perceived the new Renaissance Learning implementation standards as having a positive effect on reading achievement. Despite this perception, some teachers were still unsure about the impact the program would have on the reading end-of-grade test scores.

An examination of the Implementation Progress Report from Renaissance Learning, summarized in Tables 21, 22, and 23, indicated that Brownville Elementary students had increased their comprehension rates over the course of the school year. In September of 2010, only 56% of Brownville Elementary students were averaging 85% on their AR quizzes. By the end of March 2011, 77% of the students were at or above that benchmark. In addition, the September report also noted that the average percent correct on any AR test was 83%. At the end of March, this number had increased to 89%.

STAR assessments also indicated an increase in reading achievement. As a school, Brownville Elementary students' STAR assessments showed that at the beginning of April 2011, the mean achievement level had increased 1.2 grade level points over the September 2010 benchmark assessment.

Interestingly, there was a difference in the amount of mean growth in reading achievement per grade level. As data included in Table 16 indicates, the mean growth for students in the first grade was less than the expected growth of 0.8 grade levels, while the mean score for students in second grade matched the expected growth. However, the mean growth for students in third, fourth, and fifth grade exceeded the expected reading growth for the timeframe studied. It appears from collected data that the reading achievement growth for the majority of students at Brownville Elementary had met or exceeded expectations. However, it is noteworthy that the mean growth for first-grade students was 0.2 less than expected. It may be that first graders, who are just learning to read, initially have a more difficult time with the complex steps needed to read from a computer screen and choose the correct answer from a comprehension-based question.

One reason for the success of the majority of students may be in the way the teachers at Brownville Elementary have learned to use the data provided with the Renaissance Learning program to drive their instructional practices. Teachers explained that prior to the 2010-2011 school year, they did not understand the full capability of the program to generate data, nor did they fully understand the reports they ran. Teachers stated that their instructional practices had changed, and that they were using the real-time data to target students who did not understand the reading material.

Data-driven instruction and formative assessment are both practices that are supported by the literature. Cauley and McMillan (2009) reported on important aspects of effective classroom practices related to formative assessment. Among the recommended practices were providing students with precise learning targets. Teachers at Brownville Elementary clearly explained to students that the Renaissance Learning goal for the 2010-2011 school year was to improve comprehension, which would be

considered successful if the average percent correct was at least 85% on AR quizzes.

Cauley and McMillan (2009) also explained the importance of offering precise, private feedback on student progress toward the learning targets. Brownville Elementary teachers noted the importance of holding the mini-conferences each day during SSR, and reviewing with students their AR scores. Student self-assessment was another strategy proposed in the implementation of formative assessment. Teacher interviews and researcher observations noted that students were graphing their individual progress toward their goal of making at least 85% correct on AR quizzes.

In the study, teachers frequently mentioned the use of Vocabulary Practice quizzes and reports. Teachers explained that they used the data from the reports to help students increase their vocabulary knowledge, and to show students exactly which words they had learned, and which words they still needed to master. Teachers perceived the Vocabulary Practice component of Renaissance Learning as beneficial to both reading achievement and motivation. It appears as if the teachers at Brownville Elementary are using the data effectively to both drive the instruction of the AR program, and to implement formative assessment techniques in their classrooms.

Kadel (2010) claimed that successful technology programs used to mine collected student data should display real-time results, identify important learning patterns, and flag potential learning difficulties. Teachers reported that they were beginning to use the reports associated with Renaissance Learning in precisely these ways.

**Recommendations.** The Renaissance Learning software allows teachers to print numerous reports and to gather a multitude of data on a school, grade, class, or an individual student. In focus groups and individual interviews, some teachers voiced their desire for more training on the available data within the Renaissance Learning program.

The researcher agrees with this suggestion. Although teachers reported using the data and the reports to a much greater degree in the 2010-2011 school year, research suggests that ongoing professional development is important for implementation fidelity.

In addition, the achievement data for the 2010-2011 school year suggests that AR may be an effective tool to increase reading achievement in Grades 2 through 5 at Brownville Elementary. Although teacher perceptions indicate that the Renaissance Learning program is effective in increasing reading achievement for first-grade students, the Implementation Progress Report shows that the mean growth for first-grade students was below the expected levels in March 2011. Observations of first-grade teachers indicated that they were following recommended implementation guidelines. For these reasons, the researcher recommends carefully studying the first-grade data over the next year to determine if using the AR program in first grade is an effective practice.

**Fidelity of implementation and the change process.** Data from this study indicated that teachers at Brownville Elementary had positive perceptions of the need for fidelity of implementation with the Renaissance Learning program. Before the 2010-2011 school year, the teachers at Brownville Elementary, by their own admission, were not using the Renaissance Learning program with fidelity. A lack of professional development led to differing practices and philosophies regarding the Renaissance Learning program.

Teacher responses acknowledged that the change had been difficult at first, but that incremental trainings throughout the school year had helped them cope with the enormity of the change. Some teachers admitted that the paradigm shift was not easy in the beginning, but that parents, students, and other teachers had eventually comprehended the purpose for the change, and had embraced it. In addition, many teachers reported that

they had begun to question the implementation practices of the AR program before the 2010-2011 school year, but felt as if they had no choice in using it. Fullan's (2009) research on the change process indicated that the Brownville Elementary teachers were experiencing the implementation dip associated with organizational change. The feelings of confusion, misunderstanding, and stress are normal components of this change, as are the eventual feelings of excitement and confidence.

The research on fidelity of implementation suggests that fidelity is paramount to a program's success. According to the U.S. Department of Education What Works Clearinghouse's (2008) *Accelerated Reader: What Works Clearinghouse Intervention Report*, adherence to a program's guiding principles will significantly affect its efficacy. In addition, Ruiz-Primo's (2006) research on fidelity of implementation noted that the more complex a program is, the less likely that it will be implemented with fidelity. Training and participant buy-in to the program are also critical components.

Teachers at Brownville Elementary had been using the AR program for more than 10 years, but had done so with little or no follow-up training. Interestingly, 62% of the teachers at Brownville Elementary have less than 10 years of teaching experience, and may have simply followed the status quo of the school in regards to AR practices. Gathered data indicated that many teachers had not fully understood the program. Others reported that they had learned how to read one report, and had used it exclusively for their data collection. A previous lack of training, coupled with the complexity of the entire Renaissance Learning program may have led to the low rate of implementation fidelity before the 2010-2011 school year. However, it appears as if staff training and teacher buy-in have resulted in the Brownville Elementary School teachers using the program with high fidelity. Documents analyzed as a part of this study corroborate this

finding. The Implementation Progress Report and the Renaissance Learning Observable Behaviors Checklist indicate that teachers are conferencing with students, that they are making high comprehension a priority, that they are encouraging students to have a high engaged reading time, and that they are successfully using data to drive instructional practices and to help struggling readers.

**Recommendations.** In accordance with accepted research on the change process (Fullan, 2001), the researcher recommends that additional, short trainings on the use of the Renaissance Learning program be scheduled for the 2011-2012 school year. The purpose of the trainings is to ensure that the fidelity of implementation continues to be a priority within the Brownville Elementary school setting. In addition, final results from the 2011 STAR assessments should be compared with 2011 EOG reading test scores to determine if the Brownville Elementary students' achievement levels continue to show improvement. As teachers become more empowered and comfortable with the use of the data, the researcher suggests implementing teams of teachers to review the Renaissance Learning reports to determine additional intervention strategies for struggling readers.

In addition, the researcher suggests further research be conducted to compare the reading achievement and growth of this school to a similar school using the Renaissance Learning program with lower fidelity to determine if there is a difference in overall scores.

### **Limitations**

The findings from this research study are only applicable to the particular school studied, and no generalizations can be made in regards to the wider educational community. Additionally, it is necessary to note that the researcher, as an instructional coach in the school, may be seen as an authority figure. Teachers, in focus groups or

individual interviews, may have answered questions in ways that they thought showed themselves or their use of the Renaissance Learning program more favorably.

Furthermore, although specific steps have been included to maximize the internal validity of the study, it is necessary to take into consideration the possibility of researcher bias due to the nature of qualitative research methodology.

### **Summary of Findings**

Findings from this study indicate that the teachers at Brownville Elementary School perceived the changes in the implementation of the Renaissance Learning program and the changes in SSR practices positively. These positive feelings may have been facilitated by additional short, incremental trainings throughout the 2010-2011 school year, in which teachers were given support on the use of the program. Teachers additionally perceived an increase in student motivation to read, which they attributed to the school-wide emphasis on using the program with fidelity, a switch from a focus on earning AR points to reading for comprehension, and the removal of extrinsic rewards associated with the program. Furthermore, teachers indicated that the data available to them through the Renaissance Learning program was used formatively, and that the data was used to drive instruction. Although most teachers perceived increases in reading achievement in the classroom, some teachers were undecided on the impact that Renaissance Learning would have on the end-of-grade test scores. Overall, the teachers at Brownville Elementary had embraced the changes in the Renaissance Learning program at the time of the study, and were using the program with a high level of fidelity. This change was not easy for all participants, but slowly evolved into a belief that the Renaissance Learning implementation guidelines were a valuable development in their understanding and use of the program.

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## Appendix A

### Informed District Consent

Dear Superintendent and Participating Principal:

I am currently working to complete a doctorate in Curriculum and Instruction at Gardner-Webb University. One of the requirements of the degree is to write a dissertation. I have chosen to research how implementing the Renaissance Learning program with fidelity affects teachers and their perceptions of student reading motivation and achievement. The elementary schools in the district are now using the complete Renaissance Learning program. I would like to focus on one of the elementary schools within the district for my field research. I am planning on conducting a case study using online surveys, focus group and individual interviews, teacher observation, and document analysis to gather data about the fidelity of the program and its effects on this school.

All collected information and all information concerning the school and school district will remain confidential and anonymous. The participation in this research is completely voluntary, but all teachers in grades kindergarten through five at the chosen school will be asked to participate to help the researcher gather more accurate data.

If you have any questions you may contact the researcher, Jennifer D. Putnam, by phone at (828) 437-3026 or by email at [jputnam@burke.k12.nc.us](mailto:jputnam@burke.k12.nc.us). Any questions regarding the research or requirements for Gardner-Webb University may be directed toward the chair of the dissertation committee, Dr. Sydney Brown at (704) 406-3019.

If all parties are in agreement of this proposed study, please sign below. Thank you for your time and your interest in this study.

Sincerely,

Jennifer D. Putnam

Doctoral Candidate, Gardner-Webb University

---

Superintendent Signature

---

Date

---

Principal Signature

---

Date

## Appendix B

### Teacher Permission Letter

Dear Teacher:

My name is Jennifer Putnam and I am a doctoral candidate at Gardner-Webb University. I am currently finishing the requirements for my degree by completing a dissertation researching the fidelity of implementation of the Renaissance Learning program and its effects on teachers and their perceptions of student reading motivation and achievement. I have chosen to focus my research on one particular school. You have been selected to participate in this study as a teacher at this school.

As a research participant, you will be asked to complete an online survey and take part in a focus group interview. You may also be asked to participate in an individual interview or be part of an observation during the Sustained Silent Reading part of your school day. All information collected will be completely anonymous and all responses will only be reviewed by the researcher. No teacher names or information will be collected or used for this study other than to state permission. No teacher names or information will be used in the research report.

Please respond to this letter by signing one of the following options.

\_\_\_\_\_ I agree to participate in the research study.

\_\_\_\_\_ I do not agree to participate in the research study.

Signature: \_\_\_\_\_

Thank you for your time. If you have any questions, you may contact me by email at [jputnam@burke.k12.nc.us](mailto:jputnam@burke.k12.nc.us) or by phone at (828) 437-3026.

Sincerely,

Jennifer D. Putnam

Doctoral Candidate, Gardner-Webb University

Appendix C  
Survey Questions

### Survey Questions

Thank you for completing the following survey on your experiences with the Renaissance Learning program. Please be completely honest in your responses, and answer each question as completely as possible. The survey should take between thirty and sixty minutes to complete.

1. Describe the way that you used the Renaissance Learning program in your classroom **prior to this school year**.
2. Name three words that would describe your feelings about the Renaissance Learning program (including the Accelerated Reader) **prior to this school year**.
3. What are your perceptions about how parents and students felt about Accelerated Reader **prior to this school year**?
4. **Prior to this school year**, did you believe that the Accelerated Reader program motivated the students in your class to read? Elaborate on your answer.
5. **Prior to this school year**, did you believe that the Accelerated Reader program increased reading achievement? Elaborate on your answer.
6. **Prior to this school year**, how much emphasis did you put on sustained silent reading? Describe what took place during this time in your classroom. Explain what you, as the teacher did, and what the students in your classroom did during this time.
7. **Prior to this school year**, describe how you used the reports generated by Renaissance Learning.
8. Describe the changes, **this school year**, which have taken place at this school regarding the Renaissance Learning program.
9. Which changes do you believe have been the most significant? Elaborate on your answer.

10. Explain how you learned about these changes in the implementation of the Renaissance Learning program.
11. Name three words that would describe how you felt **at the beginning of the school year** about these changes.
12. How much emphasis do you put on sustained silent reading **this school year**?  
Describe what takes place in your classroom.
13. Do you **currently** believe that the Accelerated Reader program motivates students to read? Elaborate on your answer.
14. Do you **currently** believe that the Renaissance Learning program increases student reading achievement? Elaborate on your answer.
15. Discuss your **current** beliefs about extrinsic and intrinsic motivation and the Accelerated Reader program.
16. Do you **currently** use the data from Renaissance Learning? Elaborate on your answer.
17. Discuss the level of support you have had as changes to the way the Renaissance Learning program have been implemented this school year.
18. Name three words that would describe how you **currently** feel about the Renaissance Learning program and its components.
19. What other thoughts, feelings, or beliefs do you have about the **current** use of the Renaissance Learning program at this school?
20. What grade level do you currently teach?

## Appendix D

### Renaissance Learning Implementation Progress Report





# Accelerated Reader™ Implementation Progress Report

1 of 2

Printed Monday, May 23, 2011 11:15:10 AM

 District: Renaissance  
 School: Elementary

Last Consolidated Date: May 23, 2011 2:51 AM

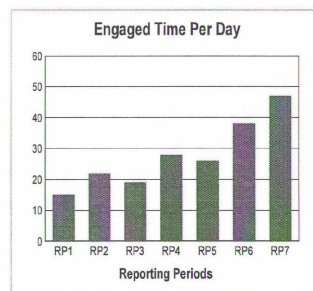
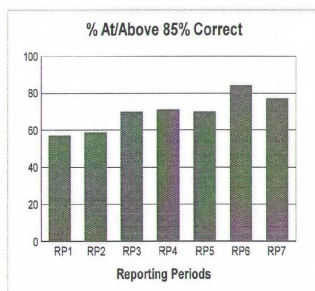
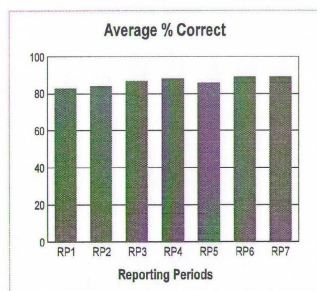
## Report Options

 Reporting Parameter Group: All Demographics [Default]  
 Reporting Level: School  
 Group By: School  
 RP1: 08/29/10 - 09/30/10 (September)  
 RP2: 10/01/10 - 10/29/10 (October)  
 RP3: 11/01/10 - 11/30/10 (November)  
 RP4: 12/01/10 - 12/22/10 (December)

 RP5: 01/01/11 - 01/30/11 (January)  
 RP6: 02/01/11 - 02/28/11 (February)  
 RP7: 03/01/11 - 03/31/11 (March)

School: Elementary

Grade	Average % Correct							% of Students At/Above 85% Correct							Engaged Time Per Day						
	RP1	RP2	RP3	RP4	RP5	RP6	RP7	RP1	RP2	RP3	RP4	RP5	RP6	RP7	RP1	RP2	RP3	RP4	RP5	RP6	RP7
Pre-Kindergarten	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Kindergarten	-	93	95	96	92	85	84	-	67	86	100	79	75	63	0	0	4	6	5	11	11
Grade 1	98	91	82	90	87	89	87	100	83	55	80	77	74	69	2	5	6	11	14	22	28
Grade 2	85	79	82	83	83	79	81	59	42	52	53	55	50	39	4	9	14	15	21	24	36
Grade 3	85	83	90	93	90	92	90	62	60	85	88	88	97	79	15	19	17	24	23	33	22
Grade 4	83	85	85	87	80	89	92	59	65	64	63	57	86	94	13	25	16	36	41	58	114
Grade 5	80	83	87	84	87	90	90	50	54	68	65	69	86	78	22	32	31	38	27	40	34
Summary	83	84	87	88	86	89	89	57	59	70	71	70	84	77	15	22	19	28	26	38	47



Average % Correct: Average score on Reading Practice Quizzes

% of Students At/Above 85% Correct: For a group, shows the percent of students who averaged 85% correct or above on quizzes. For a student, displays a dash (-).

Engaged Time Per Day: An estimate of the time students are engaged in reading practice. Displayed in minutes. It is based on a test score from STAR Reading™ or STAR Early Literacy™ and points earned in Accelerated Reader. Score not reported unless students were tested with a STAR assessment within the current or previous year.

## Appendix E

### Sample Renaissance Learning Customizable Progress Report



## Customizable Progress Report

1 of 1

Printed Monday, May 23, 2011 11:26:57 AM

Public Schools  
Elementary

Last Consolidated Date: May 23, 2011 2:51 AM

### Report Options

Reporting Parameter Group: All Demographics [Default]

Reporting Level: School

Group By: School

Data Reported As: Mean (Average)

### Elementary

Grade	STAR Reading™		
	May/June GE	April GE	Change
Pre-Kindergarten	-	-	-
Kindergarten	-	1.4	-
Grade 1	1.5	2.1	+0.6
Grade 2	1.8	2.6	+0.8
Grade 3	2.5	3.7	+1.2
Grade 4	3.7	5.0	+1.3
Grade 5	4.0	5.6	+1.6
Mean	3.1	4.4	+1.3

## Appendix F

### Accelerated Reader Observable Behaviors Checklist

## Accelerated Reader Observable Behaviors Checklist\*

Name of Teacher	Teacher circulates during SSR time	Teacher holds 30-60 second reading conferences with students	Teacher keeps Status of the Class Records	Students fill out daily reading logs	Students graph individual percent correct on AR quizzes
Teacher A					
Teacher B					
Teacher C					
Teacher D					
Teacher E					
Teacher F					
Teacher G					
Teacher H					
Teacher I					
Teacher J					
Teacher K					
Teacher L					
Teacher M					

\*Adapted from Renaissance Learning's Accelerated Reader Best Practices

## Appendix G

### Renaissance Learning Permission Letter



901 Deming Way, Suite 301  
Madison, WI 53717-1964  
Phone: (608) 664-3880  
Fax: (608) 664-3882  
[www.renlearn.com](http://www.renlearn.com)

February 28, 2011

Dear Jennifer Putnam:

The purpose of this letter is to grant you permission to use Renaissance Learning's materials in your research project, including reports from Renaissance Place Accelerated Reader.

If you have any questions about the research base for Accelerated Reader or any of our products, please do not hesitate to contact the Research Department, email [research@renlearn.com](mailto:research@renlearn.com).

Best regards,

Eric Stickney  
Director of Educational Research  
Renaissance Learning, Inc.  
901 Deming Way, Suite 301  
Madison, WI 53717-1979  
[eric.stickney@renlearn.com](mailto:eric.stickney@renlearn.com)  
(877) 988-8048, ext. 2009  
Fax: (800) 295-4985 or (608) 664-3882