IMPLEMENTING A STUDENT-REGULATED LEARNING TOOL IN READING:

A HEURISTIC CASE STUDY

A DISSERTATION IN
Education

Presented to the Faculty of the University
of Missouri-Kansas City in partial fulfillment of
the requirements for the degree

DOCTOR OF EDUCATION

by
TRACY PLATT

B.A., Chaminade University, 1994
M.Ed., Texas State University, 2000
M.Ed., William Woods University, 2006

Kansas City, Missouri
2014

IMPLEMENTING A STUDENT-REGULATED LEARNING TOOL IN READING:

A HEURISTIC CASE STUDY

Tracy Platt, Candidate for the Doctorate in Education Degree
University of Missouri-Kansas City, 2013

ABSTRACT

The use of a self-regulated learning tool can provide students with an organized and helpful avenue toward setting goals, creating action plans to meet those goals, and most importantly, reflect on the goals to monitor their progress. Then adapt or change the action plan where needed. Current research has suggested that the self-regulated learning model is an effective way to achieve desired academic outcomes. The purpose of this study was to examine the teacher's perceptions of and experience with the use of a self-regulated learning tool known as a data notebook in reading in fourth and fifth grade classrooms in a Midwestern suburban school. Six teachers of a fourth or fifth grade classroom were interviewed and observed, and documents were examined to gain an understanding of the experiences of these teachers and the use of this tool. The overarching question that was explored is: How do teachers' implement data notebooks to address the reading needs of their students. The sub-questions were: a) What are the fourth and fifth grade teachers' perceptions of the data notebooks that are used by students to monitor their own reading progress, (b) What are some of the ways that data notebooks are used by fourth and fifth grade students in monitoring their own reading progress, (c) How was the data notebook

strategy implemented and supported by the leadership in one Midwestern school district? This is a heuristic case study to gather an understanding of and articulate the experiences and perceptions of these teachers and the use of this self-regulated tool for reading known as a data notebook. The results determined that current pedagogical approaches should be changed to improve the educational experiences of learners and their use of a self-regulated learning tool for reading.

APPROVAL PAGE

The faculty listed below, appointed by the Dean of the School of Graduate Studies, have examined a dissertation titled "Implementing a Student-regulated Learning Tool in Reading: A Heuristic Case Study," presented by Tracy Platt, candidate for the Doctor of Education degree, and certify that in their opinion it is worthy of acceptance.

Supervisory Committee

Dr. Jennifer Friend, Ph.D., Committee Chair
Division of Educational Leadership, Policy, and Foundations

Dr. Loyce Caruthers, Ph.D.
Division of Educational Leadership, Policy, and Foundations

Dr. Donna Davis, Ph.D.
Division of Educational Leadership, Policy, and Foundations

Dr. Rob Leachman, Ed.D.
Division of Educational Leadership, Policy, and Foundations

CONTENTS

ILLUSTRATIONS

Figure Page

TABLES

Table Page

ACKNOWLEDGEMENTS

I thank God for giving me the perseverance and motivation to make it through this challenge. My many prayers and conversations with You helped me to understand that the timing of everything is just right.

To Jack, I am forever grateful. None of this would have been possible without your love, support, and encouragement. Thank you for the sacrifices that you had to make to help this dream come true.

To my mother, who never allowed me to give up. Thank you for your words of encouragement and constant prayers. Just knowing that you believed in me helped me to see the light at the end of the tunnel.

To Jake, Riley, Nick, Sarah, and Madi for the many times I have missed spending time with you or cheering you on during your many activities. I hope that my dedication to this project shows you that life has no limits, and that you have the power to accomplish anything you set your mind to.

To Dr. Caruthers, who spent endless hours on the phone and on the computer supporting me and never allowing me to throw in the towel. A thank you also goes to Dr. Friend, who has guided me in a direction I never thought possible and made my project more meaningful.

There are many people I am indebted to who have offered support, comfort, and encouragement throughout this project. Kay, Lisa, and Gina, who have been there for my children and my sanity. Mandy, who endured this challenge with me and provided texts and sometimes tears that reminded me I wasn't alone. Lastly, I am grateful to Denise. You have

been my rock and my solace through all of the ups and downs of this project, and without you I would never have been able to keep up at work. Your encouragement and support pushed me to finish even when I didn't want to, and I am forever grateful.

CHAPTER 1

INTRODUCTION

All students have the right to an education that prepares them for successful futures. They should have the skills and academic preparation to be successful in a career or a university. Unfortunately, while all states have developed and implemented standards as required under the Elementary and Secondary Act (ESEA), in many cases, under these standards, students have been shown not to reflect the knowledge and skills necessary for success after high school ("College and Career," n.d.). Many students need additional preparation to handle the increasingly higher expectations of postsecondary education, employment, or civic responsibility (Association for Career and Technical Education, 2010).

"The *No Child Left Behind* Act of 2001 was a landmark in education reform designed to improve student achievement and change the culture of America's schools" (U.S. Department of Education, 2003, p. 1). *No Child Left Behind* (NCLB) required that all students be "proficient" in reading by 2013-14, while demanding that *all* schools make adequate yearly progress (AYP) toward that objective. "Nearly half of the nation's public schools (an estimated 49%) did not make AYP in 2011, marking an increase from 39% in 2010 and is the highest percentage since NCLB took effect" (Usher, 2012, p. 2). The overall goal for all students to be proficient readers has not been met, and as NCLB federal law fades into history, schools are still struggling to produce adequate reading results. According to the National Assessment of Educational Progress (NAEP), the average fourth-grade reading score in 2011 remained unchanged from 2009, but was four points higher than in 1992. About two-thirds (67 %) of fourth-graders performed at or above the Basic level in 2009, and

one-third (33 %) performed at or above Proficient (U.S. Department of Education, 2011). These statistics are unsettling, as educational leaders continue to search for ways to provide an equitable education for all students and create more substantial gains in reading. Reading is the portal to knowledge and the avenue that allows individuals to become independent learners. For the purpose of this study, reading achievement was the focus when referring to student achievement; it is one of the most essential readiness skills. The ability to read is considered to be one of the best indicators of a child's potential to do well in school and after (Burton, 2011; Hernandez, 2011).

Research indicates that collective efficacy—a shared belief among teachers that they can help students succeed—has the greatest impact on student achievement (Goodwin, 2010). I observe the social context affecting the way teachers view the capabilities of their students and how teachers struggle to understand how to successfully manage a system that meets the needs of each and every student regardless of their background. As an elementary principal, I see the lack of motivation or engagement in reading planting its roots in the early years of education, as soon as the students become aware that they are struggling academically. This disengagement or lack of motivation is demonstrated through avoidance of tasks, lack of self-control, poor classroom behavior, and/or an overall depressive or sad mood. Educators must hold equally high expectations for affluent white students and poor and culturally diverse students, despite the disparity in students' backgrounds (Cole, 2008). Jensen (2013) states:

> If poor people were exactly the same cognitively, socially, emotionally, and behaviorally as those from the middle class, then the exact same teaching provided to both middle-class students and students from poverty would bring the exact same results. Children from poverty are more likely to struggle with engagement due to

> factors relating to health and nutrition, vocabulary, effort, hope, cognition, relationships, and distress (p. 24).

According to Pintrich (2003), emotions and motivation do not matter in terms of academic cognition, and the main factors that need to be understood are knowledge and strategies. This only reinforces the significance of teacher practices and the impact they have on students. Family income can be associated with student achievement, but school factors—teacher quality, school accountability, school choice—have bigger causal impacts than family income per se, according to a new analysis by Harvard's Program on Education Policy and Governance (Peterson, 2012). The socio-economic status is not the fault of a child, and public education has an obligation to all children to prepare them for a successful future. The International Reading Association indicates that all kids have a right to instruction designed with their specific needs in mind (Duke & Pressley, n.d.). I believe in the process of empowering students to take an active role in their future and teaching them how to continue this process throughout their life. Students should be involved in the process of their learning and be taught self-regulated learning skills.

Teachers in the 21st century must motivate students to attend to learning in environments that are dominated by external influences (Dean, Pitler, Hubbell & Stone, 2012). The process of self-regulating or setting goals and applying interests could have an impact on developing skills and motivation that will serve as tools to cultivate life-long learners. I believe that the process of self-regulating will become a prevalent strategy that educators will begin to see more in classrooms, and it will assist in closing the achievement gap in reading.

My experience with the use of self-regulating strategies began after high school graduation—a graduation that almost did not take place. As a student who had little motivation and low self-confidence, I was given hope for a successful future by using self-regulating strategies. After failing in my first year of college and struggling to find a decent paying job, I enlisted in the U.S. Military, where I was taught self-regulated strategies that for the first time made me feel successful. I learned the process of setting goals, creating plans to meet those goals, and the satisfaction of gaining a positive self-image. These self-regulating strategies began with physical activities, but as I gained confidence in myself, I enrolled in college courses and used these same skills which made me successful academically for the first time.

The Problem

Research has found that active involvement in learning, including setting meaningful goals, selecting appropriate and task-specific strategies, monitoring motivational levels, and adapting behaviors based on feedback are all activities that are positively related to learning outcomes (Moos & Ringdal, 2012). "Self-regulated learning has garnered a great deal of interest among academic researchers and practicing educators because it is a worthy objective for students of all ages in all disciplines" (Paris & Paris, 2001, p. 89). Successful readers tend to use self-regulating processes for learning (Almasi & Fullerton, 2012; Luke, 2006). This indicates a strong need for educators to investigate this area of self-regulation and the benefits it may have on reading achievement. Yet students have limited use of self-regulated learning strategies in reading (Zumbrunn, Tadlock & Roberts, 2011). Simply

stated, they have not learned how to become active participants in their learning process, and they lack the necessary skills or self-confidence to try.

By involving students at the elementary age in the process of using self-regulated learning tools, students will be taught to engage in valuable skills that will help them become life-long learners.

> Self-regulation refers to the primarily volitional cognitive and behavioral processes through which an individual maintains levels of emotional, motivational, and cognitive arousal that are conducive to positive adjustment and adaptation, as reflected in positive social relationships, productivity, achievement, and a positive sense of self. (Blair & Diamond, 2008, p. 3)

Processes such as setting goals and applying interests to those goals can develop skills and motivation that serve as tools to help instill an interest in their future, regardless of their background. This type of teacher practice forces a relationship between teacher and student that can provide high expectations, clear targets, and support at students' level that allows them to meet their individual goals. It also provides ways to gauge the progress of students and help monitor their progress to continue or alter instruction. These practices assist the teacher to hold students accountable and hone in on necessary skills to meet their specific needs in reading.

Historically, behavioral research was dedicated to changing behaviors, but lacked the emphasis on internal states for learning, such as thoughts, beliefs, and emotions. In the late 1970s the emphasis on behaviorism shifted to a cognitive approach (Anderson, Reder & Simon, 1995). What was becoming prominent was the perception that the environment played an important role for the learner. Theorists were recognizing that learners were not passive, but rather social, and that learning took place through observations of what they

were experiencing. Albert Bandura's Social Cognitive Theory emerged, clarifying that behaviors are learned. Bandura (1989) explained his theory through a triadic model that depicted how students learn through reciprocal interaction among personal factors, environmental factors, and behavioral factors. His work on the acquisition of behavior and observational learning has had and continues to have a significant impact on the field of education and learning. The notion that modeling plays a dominant role in socialization rests on Bandura's Social Cognitive Theory.

As educators venture into a new era of accountability with the use of Common Core Standards in education, they must take a close look at what strategies and teaching practices are most successful in the teaching of reading. For several years, educators have attempted to minimize the reading achievement gap, with only minimal success. For educational leaders, the goal is to understand the learning process so that we can help those who struggle. Researchers have found that students who possess more use of self-regulating skills tend to achieve higher results in academics (Dignath & Buttner, 2008; Morrison, Ponitz & McClelland, 2010), and one characteristic of successful readers is their use of self-regulating processes (Almasi & Fullerton, 2012).

Understanding the concept of self-regulated learning in reading is important in the development of the study of learners. Increasingly, learners are perceived to have more responsibility for their own learning. Research does exist on the use of self-regulated learning, but the participants of the studies are often college and post-secondary students, leaving a gap in the use of these strategies in an elementary setting (Matthews, Roberts &

Zeidner, 2004). This study will add to the body of self-regulated learning in regard to elementary age students.

Purpose Overview

A case study involves an in depth study of a particular issue through one or more cases in the context of a particular environment, situation, circumstance or other form of "bounded system" (Creswell, 2007, p.73) The use of heuristic inquiry allows the researcher to contribute personal experiences and insights to the study (Patton, 2002). The purpose of this heuristic case study was to understand teacher perceptions and experiences with the use of a self-regulated learning tool known as a data notebook in reading.

The unit analysis for this study was the teaching experiences and perceptions of the self-regulated learning tool in reading of elementary teachers in a suburban school district. Qualitative research is an effective design for this study as it allowed for the evolution of details necessary to truly discover the meaning and perceptions behind the use of this tool. Heuristic inquiry supported the exploration of teachers' perceptions and experiences of the data notebook while also giving the researcher an avenue to provide personal experiences.

The new Common Core State Standards being implemented by all state governments in the fall of 2014 brings with it a multitude of standards that will be incorporated into the teaching of reading. The challenge in using solely common core standards as a tool for reading achievement is that standards alone do not yield change in instructional practices; teachers need instructional strategies and teaching practices that engage students in their own learning processes. The data notebook requires teachers to model and assist students in processes such as goal setting and reflection to guide self-directed practices and self-

monitoring, which contributes to a higher motivation to learn (Zimmerman & Kitsantas, 1997).

Research Questions

This research was guided by the following overarching question and clarifying questions: How do teachers implement data notebooks to address the reading needs of their students?

1. What are the fourth and fifth grade teachers' perceptions of the data notebooks that are used by students to monitor their own reading progress?

2. What are some of the ways that data notebooks are used by fourth and fifth grade students in monitoring their own reading progress?

3. How was the data notebook strategy implemented and supported by the leadership in one Midwestern school district?

This research addresses gaps in previous research pertaining to self-regulated learning in younger students, as well as new research on an innovation known as the data notebook.

Theoretical Framework

The theoretical framework, also referred to as conceptual framework, is the actual ideas and beliefs that the researcher holds true regarding the particular phenomenon being studied (Maxwell, 2013). Camp (2001) defined theoretical framework as an explanation about a phenomenon. Merriam (2001) provided additional clarity by stating that a theoretical framework provides the researcher the lens through which to view the world. I framed the phenomenon of this self-regulated learning tool through the lens of Bandura's Social Cognitive Theory, and current research that supports the gaps that exist in studying

elementary-aged children and their use of self-regulated learning strategies. The problem presented in this research is the lack of self-regulated learning strategies that exists in some students who struggle as readers.

My personal experience as a struggling reader, as well as my experience as a reading teacher, stimulated me to address various assumptions for this qualitative study. First, there are many individuals who have become successful readers without self-regulated learning tools such as a data notebook. In other words, it is difficult to determine if self-regulating strategies (i.e., setting goals, creating action plans, or feedback) is what made them successful as readers in the first place, or if good teaching and a supportive home environment were the determining factors.

Second, the research proves that more than one strategy is necessary in providing students with what they need to succeed as a reader, and that one learning strategy may be appropriate for one learning situation but not another. Third, students learn differently and need different tools to assist them in reading, but any reading tool implemented in the classroom can be successful if there is a trusting and mutually respectful relationship between the teacher and student. Lastly, elementary-aged children need a significant amount of scaffolding and guiding of self-regulating strategies, because the demand for self-regulation requires higher metacognitive skills that younger students may not be capable of performing independently.

Learners can no longer be passively infused with information; they must be actively involved in the learning process and rearranging and recreating their existing knowledge with new knowledge. As mentioned previously, the notion of self-regulated learning can be

viewed through the lens of Bandura's Social Cognitive Theory. This is just one of the conceptual strands of the theoretical framework for this research. Within this theory is the importance of modeling, self-efficacy, and self-regulation and their effect on students' learning and achievement (Schunk & Zimmerman, 2007). Four additional conceptual strands drove the study: the historical perspectives on reading instruction and the achievement gap; models of self-regulated learning; self-regulating strategies with a tool for implementation; and the leadership to support this tool. The self-regulated tool is known as the data notebook, which is defined in this study as a self-regulated learning tool for reading. With a strong understanding of the social cognitive theory and how the conceptual strands support the use of a data notebook, this research will be quite useful in the educational field, as well as beneficial to the focus upon closing the achievement gap in reading.

An overview of social cognitive theory, which is the focus of this study, follows, as well as a brief overview of the historical approaches to reading that have led to a reading achievement gap. The new Common Core State Standards have forced educational leaders to look at strategies that prepare students for the 21st century and become active participants in their learning. For this reason, the notion of self-regulated learning is significant to this study and is also reviewed, as well as models and the self-regulated tool that this study explored. One last strand includes the types of leadership that support the notion of self-regulated learning.

Social Cognitive Theory

Albert Bandura, a social cognitive theorist, widely known for his reciprocal interactions model, suggests that humans are highly interactive and process information

continuously while interacting with the environment. The premise of his theory is that individuals possess a self-system that enables them to have a certain degree of control over their thoughts, feelings, and actions. This system allows individuals to learn from others, plan appropriate strategies, readjust strategies, regulate self-behavior, and reflect on their behaviors. Schunk and Zimmerman (2007) draw this concept as a visual in Figure 1.

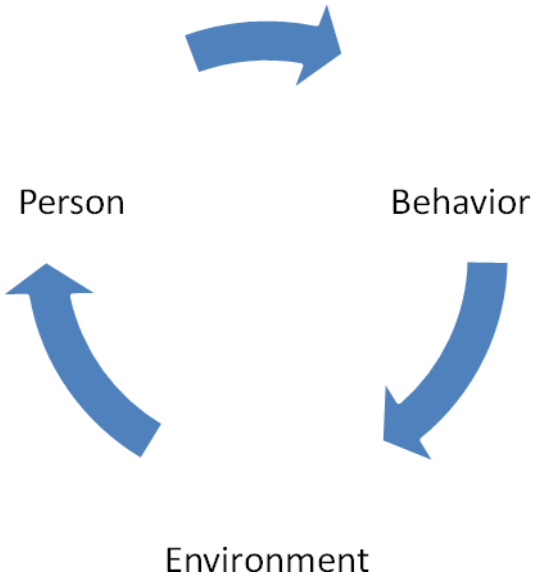

Figure 1. Bandura's Model of Reciprocal Interactions (Bandura, 2001).

This notion of reciprocal interactions, according to Schunk and Zimmerman (2007), illustrates how people can affect their behaviors and environments with their thoughts and beliefs. These are important processes that people use to exert control over their self-efficacy and self-regulation. The historical aspect of this theory emerged when Bandura (1997) began focusing on children and their aggressive behaviors. He and his colleagues discovered that the learner's perceptions, the value of modeling, and the learner's expectations in regard to

the consequence was extremely important. The framework for the Social Cognitive Theory is based on how people learn and how behavior is affected by the environment and personal initiatives. These aspects of behavior, the environment, and the person are all interacting to create learning for an individual. As the educational world attempts to narrow the reading achievement gap, this Social Cognitive Theory must be a foundation that is thoroughly investigated in order to piece together the many components of struggling readers. Next, a brief historical perspective on reading and the achievement gap will provide insight into how the U.S. has approached reading through the years.

Historical Perspectives on Reading Development and the Achievement Gap

The historical perspectives on reading and the achievement gap are important to the study of self-regulated learning to understand what approaches have been used and whether or not they were successful. Examining each era and the important events of the timeframe help educational leaders understand how the reading community functioned and continues to function today. According to Alexander and Fox (2004), there are four significant eras that depict common threads, both internal and external, that help to clarify historical perspectives on reading and what the future holds for reading achievement and addressing the reading achievement gap. The first era began with *The Era of Conditioned Learning* from 1950-1965. Important aspects of this timeframe included behavioral-based learning theorists such as John Watson and B.F. Skinner and the social learning theorists, such as John Dewey and Lev Semionvich Vygotsky (Alexander & Fox). The 1950s focus for reading was the "whole word approach," in which words were repeated on each page enough times for the students to remember them (Reyhner, 2013). The internal factors were a result of post-war aspects,

particularly the baby boomers. The next era, known as *The Era of Natural Learning,* ranged in time from 1966-1975. The internal factors of this era shifted the reading community (comprised of researchers and educational leaders) from reading as a pattern or memorization to a more in-depth look at understanding the language of reading (Fleusch, 2007). The external factors include the emergence of artificial intelligence and its effect on the reading community. The third era shifted from a focus on the mind to more social aspects. This era was known as *The Era of Sociocultural Learning* and ranged from 1986-1995. During this era the internal features focused on the environment and what it provided for readers, while external factors were social and cultural groups (Fresch, 2007).

Various theoretical movements were active during this timeframe including critical theory, postmodernism, and radical constructivism (Wood & Murphy, 2002). Reading practices became an important component across content areas as well. This was a time of discourse, and awareness of information conflicts became a focus for the reading community, which led to the next era and its focus on student engagement.

The next era, known as *The Era of Engaged Learning* ranges from 1996 to the present day. Reading and learning to read has been an important factor of this era and continues to be at the forefront of all learning. The internal factors of this era draw upon motivation and its effect on student engagement. External factors of high stakes testing continue to permeate in this era, while the government drives what is required of students to prove their achievement. Much research continues to surface regarding reading issues as educators seek to find ways to meet the needs of struggling and special education students.

The reading community and research on best practices for reading are fluid in nature and continue to challenge educational leaders. As the new Common Core State Standards emerge, pressure on schools is at its highest to ensure that all students not only succeed but that they are prepared for a career or college in the 21st century. Looking at the historical perspectives of reading development gives educational leaders a better understanding of the cause of the reading achievement gap and possible solutions for the future.

The practices of the teacher have shown to be the driving force of whether or not a student succeeds. The reading strategies they employ might be the answer to finally closing the gap. Using a self-regulated learning tool could assist schools in closing the reading gap.

Self-regulation

Along with self-efficacy, self-regulation helps to promote reading and writing achievement, and models can teach students self-regulation skills (Schunk & Zimmerman, 2007). According to Chung (2000), empirical research supports the notion that self-regulated learning correlates strongly with a student's academic achievement. Self-regulation is a process by which learners transform their mental abilities into academic skills (Zimmerman, 2002). All of society competes with the constant interruptions of computers, cell phones, music, television, and other distractions. Not all students have learned to self-regulate their academic studying, and they struggle with key processes, which, according to research, our underachievers present (Zimmerman, 2002). Educational reformers are forced to look at whether educational systems are graduating students who will be college and/or career ready. Self-regulating skills are an important part of developing this component of a life-long learner. Many of these skills are necessary regardless of the track (college or career) towards

which a person chooses to venture. Self-regulating skills involve the self-awareness, self-motivation, and behavioral skills to implement knowledge taught appropriately (Zimmerman, 2002). Not only are struggling learners lacking self-discipline in the methods of study, but they also need to be able to use processes that must be personally adapted to each learning task. Individuals who are self-regulated in their learning appear to achieve more positive academic outcomes than individuals who do not exhibit self-regulated learning behaviors. According to Paris and Paris (2001), research in educational psychology has encompassed and promoted self-regulated learning in classrooms. Paris and Paris go further to say that self-regulated learning is more likely to occur in classrooms that support and promote challenges for students, as well as employ reflective practices.

Data Notebook

There is universal agreement that reading is essential to success in our society (O'Neill, 2006). The ability to read is highly valued and important for social and economic advancement (Snow, Burns & Griffin, 1998). Various tools are available to assist teachers with improvement in teaching the area of reading, but few of them promote self-regulated learning. The data notebook is one tool that focuses on the use of self-regulated learning strategies to improve reading ability, which helps set goals and monitor progress to meet the goals. The philosophy behind the use of a data notebook is to empower students to become active participants in their learning. This strategy can be used with all students of all levels as a self-regulated learning tool. Each student has a data notebook in which he or she keeps track of his or her own learning, attendance, individual mission, and behavior. The notebooks contain individual goals, action plans, charts, and graphs to self-monitor progress,

objectives to guide setting goals, formative assessments created by grade level teams, individual feedback from teachers, and opportunities for communication with parents. These notebooks help the students manage their learning. It provides students with an ongoing, timely source of feedback, which is known to drive student achievement (Covey, 2008).

Marzano (2003) stated that when success in the classroom is defined in terms of competitive status with others, only a few students can learn. Marzano goes further to say that when individual growth is the criterion for success, then all students can experience success regardless of their comparative status (Marzano, 2003). Data notebooks represent only a single student's work. Students use it only to compare themselves individually against their own goals and previous scores. They are able to observe short-term goals they set for themselves, which are powerful motivators towards achieving long-term goals. According to one principal of a school in which the notebook was implemented in fifth grade classrooms, "It has become a powerful motivational tool for students and gave them control over the pace of their learning and documented their progress" (Covey, 2008, p. 61). The teachers and the students become co-producers of learning. The data notebook supports the philosophical view of self-regulating learning, and also provides a focus on the student's future as a life-long learner. These notebooks assist during parent-teacher conference because all of the data is collected in one area. This also helps the teacher see specific areas to work on with the child.

The Impact of Leadership on Self-regulated Learning

"Educators can create a learning environment that results in academic success by delivering effective instruction that challenges students and promotes self-management skills" (Schunk & Zimmerman, 1998, p. 185). Leaders across the nation rightfully struggle with how to meet the various needs of their students. The previous statements insist that the educators hold the key to possible solutions to meet varying needs. It is incumbent upon the educator then to guide students to becoming self-regulated learners and to become active participants in their learning as well. The need to facilitate self-regulated learning strategies must be supported by leaders that understand the necessary components.

An important underlying theme of leadership that supports self-regulated learning environments can be describe through the personal side of a leader (Sergiovanni, 2007). Each individual holds a certain role in the organization, and together, everyone's strengths will build and sustain the organization. A leader approaches this task comprising three important dimensions according to Sergiovanni: "one's heart, head, and hand" (2007, p. 19). The following provides a clear picture of what Sergiovanni means when referring to these three dimensions:

> The heart of leadership has to do with what a person believes, values, dreams about, and is committed to—that person's personal vision. The head of leadership has to do with the theories of practice each of us has developed over time and our ability to reflect on the situations we face in light of these theories. The hand of leadership has to do with the actions we take, the decisions we make, and the leadership and management behaviors we use as our strategies become institutionalized in the form of school programs, policies, and procedures. (2007, p. 20)

Leadership has a large impact on students and the strategies and tools used to help them succeed. There are various types of leadership styles; three that clearly have the necessary

components to support self-regulated learning environments are Transformational Leadership, Distributive Leadership, and Transformative Leadership. All three have various threads that create the type of environment most appropriate to support self-regulation and are discussed in detail in the literature review.

Although there are numerous studies on the self-regulated theory, there are currently no documented studies available regarding the use of a data notebook in reading in fourth or fifth grade classrooms. There are, however, some schools attempting to use them that have experienced some success. This is a new tool that has emerged in the field of education, and it continues to grow in popularity. This body of research will fill gaps in the areas of the importance of self-regulated learning by using a specific tool in an elementary setting.

Overview of Methodology

Qualitative methodology was employed to address the research questions for this study. Qualitative methods of inquiry allow the investigator to "delve deep into the subjective qualities that govern behavior" (Holliday, 2002, p. 7). Creswell (2012) maintained that there are five broad traditions of qualitative research upon which an investigator may base his or her study. They are narrative, phenomenology, grounded theory study, ethnography, and case study.

I elected to use a variant of phenomenology known as heuristic inquiry to draw on the lived experiences of six teachers whose students had been using a self-regulated learning tool in reading. "The primary question in heuristic inquiry is, "What is my experience of this phenomenon and the essential experience of others who also experience this phenomenon

intensely?" (Patton, 2002, p. 107). This type of inquiry allowed me to include my own experiences with the use of a data notebook.

The major technique utilized for this research was case study. Case study allowed me to establish patterns in the data through a cross-case synthesis as an analytic technique to study six cases that allowed different patterns to emerge. Patton (2002) stated, "The credibility of qualitative methods, therefore, hinges to a great extent on the skill, competence, and rigor of the person doing the fieldwork" (p. 14). As the researcher, I was the instrument, and my eyes and ears were the tools used to gather information about the phenomenon, and ultimately to make sense of what is happening (Maxwell, 2013).

An important element of this research design was to determine the number and type of samples that would be included. Criterion sampling and purposeful sampling were the procedures used in this heuristic case study to illuminate a specific theme or to gain insight about a phenomenon. Creswell (2012) indicates that criterion sampling differentiates the participants to allow maximum variation to occur. Maxwell (2013) contends that this purposeful sampling is important in a case study to justify the case in terms of the goals for this particular study.

Traditionally in a case study, Creswell (2012) indicates that the researcher selects a site or sites to study, such as programs, events, processes, activities, individuals, or several individuals. This study took place in an elementary school in a Midwestern suburban town. The community that this district serves is comprised mostly of Caucasian families from middle to lower income. The free and reduced lunch rate was at 47.3% for the 2012-2013 school year, but this percentage continues to rise each year. Student enrollment was 462 with

approximately 15-18 students per classroom. This site was chosen for this study because of the characteristics it provides relating to the dissertation topic on the use of data notebooks. The data notebooks are used throughout the entire school in every grade level with expectations that are consistent among all teachers and their processes and purposes for the use of the notebook in reading. Although these notebooks benefit all students, educators at this site have found them to be especially helpful when they work with students in low socio-economic subgroups.

Once I received approval from the SSIRB (see Appendix A), the research process at this site began. Consent forms were presented to the superintendent (see Appendix B), the school principal (see Appendix C), and all participants (see Appendix D). All consent forms were signed before any research was conducted. The sample size consisted of six teachers who utilize data notebooks in their classrooms for teaching reading. The population currently had three fourth grade teachers and four fifth grade teachers. These classroom teachers were invited to take part in this dissertation research study by their principal, who discussed the basic premise of the research topic. Once they had expressed interest in participating, I met with the group of seven volunteers to provide more detail and get consent from each of them. Six participants chose to participate, with the option to drop out of the study at any time.

Stake (1995) suggested that a case study should include multiple sources of information from which to gather data. Yin (2003) categorized these sources of data into six broad categories: documentation, archival records, interviews, direct observations, participant observations, and physical artifacts. This study employed interviewing, observations, and

reviewing documents which Yin (2003) delineated as three primary methods for collecting evidence. I utilized data triangulation through teacher interviews, classroom observations, and documents to include contents of the data notebook as well as reflections from the observations.

Although analyzing data in qualitative research can be a challenge, I followed the advice of Taylor-Powell and Renner (2003), who suggest three steps be taken after the data are collected. The first step is to get to know your data. As the researcher, I got to know the data by reading, rereading, and listening to the audio texts several times. The second step was to focus on analysis. The six basic phases in heuristic process of phenomenological analysis are: (a) initial engagement, (b) immersion, (c) incubation, (d) illumination, (e) explication, and (f) creative synthesis utilized to analyze the study data through a heuristic lens (Moustakas, 1990). Data then need to be organized into files (Creswell, 2012). I began to describe what I saw in the data and then classified that data in order to interpret it later. The third step was to organize the information. This stage was labor intensive as it involved categorizing the data and identifying themes.

DePaul (2000) brings a better understanding of qualitative research by stating that qualitative research does not try to discover something, but instead, it seeks to uncover. Thorne (2000) reiterates that phenomenological studies uncover or describe the nature of something rather than discuss stages or reasons behind an issue. I completed a heuristic case study in which I established patterns in the data through a cross-case synthesis. This analytic technique of studying six different cases allowed many different patterns to emerge. This

study had multiple cases, and it was classified as an embedded case study, in which the cases are split into multiple units of analysis.

Yin (2003) contended that there are numerous analytic techniques that can be applied to case study data: pattern matching, explanation building, time-series analysis, logic models, and cross-case synthesis. This study used cross-case synthesis to provide a detailed description of each case and themes within the case, and then also across the cases. The final phase provided data on what emerged from the phenomenon of the self-regulated learning tool used in an elementary setting. I followed the ideas from Moustakas (1994) to assist in completing the data analysis process for these interviews, but I used ideas from Miles and Huberman (1994) to assist in the enumerative coding of documents and observations.

Significance of the Study

Public education has promised every student an education that will prepare him or her for college or for a career, but without proper reading skills, this cannot happen. Failure to aggressively overcome educational inequalities in the U.S. can lead to larger gaps in our society, including lower graduation rates, higher rates of unemployment, incarcerations, substance abuse, and intergenerational poverty (Bergeson & Davidson, 2008; Symonds, Swartz, & Ferguson, 2011). Part of providing solutions to this educational disparity is knowing where the problem exists. With reading and writing as the foundation of formal education (Reeves, 2011), finding solutions to the lack of reading achievement should be top priority. Reading achievement is multidimensional, and the various dimensions should be examined and thoughtfully researched to determine past mistakes and successes to plan for the future. Research has confirmed that third grade reading skills and poverty influence high

school graduation (Hernandez, 2011). This longitudinal study by Hernandez also found that students who don't read proficiently by third grade are four times more likely to leave school without a diploma than proficient readers, proving the significance of reading achievement. The bottom line is that reading is an essential skill that is highly valued and significant for social and economic advancement.

In the educational field, empirical research has supported the long-held assumption that individual differences exist in how students learn (Moos & Ringdal, 2012). The search to find a strategy for educators to better understand these differences that exist in successful learners has led to dramatic change in pedagogy over the last 30 years. The construct of self-regulation, in conjunction with self-efficacy beliefs, or the belief that one is capable of performing a given task, has emerged as a central theme in the study of academic learning. Self-regulated learning theorists and researchers emphasize the need for research in educational psychology in general, and self-regulated learning in particular, to attend to the role of context in shaping students' conditions and motivations (Anderman & Anderman, 2000; Pintrich, 1994).

First, self-regulated learning is recognized as an important predictor of student academic motivation and achievement (Zumbrunn, Tadlock, & Roberts, 2011). This process, which includes planning, monitoring, and assessing their own learning, is something few students do naturally, but research has shown that self-regulated learners perform better academically than those who lack these skills (Schunk & Zimmerman, 2007; Zimmerman, 2008). Second, research has found that students who use self-regulated learning strategies also present higher levels of academic self-efficacy (i.e., confidence) and therefore present

higher academic success. Key components of self-regulated learning include how to empower students to exert some control over their learning so that they become more proactive, self-motivated life-long learners. The effect of self-regulated learning on student persistence and academic achievement has been an active area of research (Pintrich & DeGroot, 1990), but it generally includes focus only on college or postsecondary individuals.

If self-efficacy habits are formed early on, students will be more likely to persevere in the face of adversity and attempt goals that might otherwise have been pushed aside (Pajares, 2003). Few studies have investigated the self-regulated strategies of elementary school children (Chamot & El-Dinary, 1999). The gap in research has limited the available resources for reference. Furthermore, little attention has been devoted to students' use of self-regulated learning strategies in elementary schools. This study will help educators fill this gap and provide more insight into the use and importance of self-regulated learning in literacy.

Summary

Research has indicated that poor student motivation, use of ineffective strategies, and poor self-regulation are key factors contributing to low academic achievement in reading (Zimmerman, 2008). The intent of this research is to assist educators in addressing these issues and finding ways to help all students succeed and become life-long learners. Chapter 1 provided a description of the problem, the purpose of this study, researcher questions, theoretical framework, and a brief overview of the methodology. Chapter 2 provides a review of the literature, which contains five conceptual strands that support the theoretical framework in more detail. Chapter 3, the design and methodology, provides a detailed

description of this study's research design, the rationale for qualitative research, the major approach of phenomenology, and the philosophical tradition of case study, along with the setting and participants, sampling techniques, data collection and analysis plan. Chapter 4 presents the phenomena applicable to the self-regulated learning tool in reading and details of the participants' experiences. Finally, Chapter 5 includes a conclusion and recommendations for furthering this research topic.

CHAPTER 2

REVIEW OF LITERATURE

In the previous chapter, I discussed the motivation behind this study, its importance, and how it may benefit struggling readers and help educators close the achievement gap that still exists. The purpose of this study was to depict the fourth and fifth grade teachers' experiences with the use of a self-regulating learning tool known as a data notebook for reading. This chapter provides a review of relevant studies that provide a thorough understanding of the five conceptual strands significant to this study: Social Cognitive Theory, the historical perspective on reading development and the achievement gap; models of self-regulation and a tool for implementation; and lastly, instructional leadership that supports this type of self-regulated learning.

Social Cognitive Theory

The social learning theory proposed by Albert Bandura has become perhaps the most significant theory of learning and development. Bandura was born on December 4, 1925 in Mundare, Alberta, Canada. He was the youngest of six children, and his unique experiences as a child influenced his career as a social theorist. He was raised in a small farming town with just two classroom teachers, a circumstance he claimed forced him to take charge of his own learning (Zimmerman & Schunk, 2003). Bandura and his multi-aged classmates were forced to develop their own academic skills because the overworked teachers. This situation proved beneficial for the young classmates, though, as more than half the population of his schoolmates ventured on to further their education at a university. This was unheard of in small farm towns such as this during that time period.

All of the experiences Bandura faced during his early years inspired his interest of psychology. In 1946 he began college at the University of British Columbia in Vancouver. Under rather unusual circumstances, he signed up for a psychology class and found it intriguing. His journey into the field of psychology had begun. He graduated early and immediately began graduate studies at the University of Iowa, which at the time had a strong research team and faculty that consisted of Kurt Lewin and Kenneth Spence. During his graduate studies at Iowa, he followed closely the studies at Yale due in part to connections in the faculty.

Clark Hull, another influential psychologist, was working on social learning theories at the time. At the time, researchers sought to reconcile Freudian and Hullian perspectives. Bandura was not a strong supporter of the Freudian-Hullian perspectives, as he did not agree with the tedious trial and error learning. He believed that cultures transmitted social mores and complex competencies primarily through vicarious experience (Zimmerman & Schunk, 2003). This would prove to be vital link in his social theories. Bandura received a master's degree in 1951 and a Ph.D. in clinical psychology from the University of Iowa in 1952.

Bandura had the unique opportunity to work with many well-known theorists, but the one theorist pivotal to his career was Robert Sears. Sears invited Bandura to join the psychology department at Stanford University as an instructor. It was there that he met Richard Walters and began his research on aggression on young males. Bandura and Walters discovered evidence of the key role of modeling influences in these advantaged families, which they reported in a book entitled *Adolescent Aggression* (Bandura & Walters, 1959). The interesting evidence from this study contradicted the Freudian-Hullian assumption that

direct parental punishment would internally inhibit children's expression of aggressive drives (Zimmerman & Schunk, 2003). Bandura and Walters discovered that the boys were acting out their parents' hostile attitudes. This led to the well-known Bobo Doll experiment (Bandura, Ross & Ross, 1963), which proved that children would copy an adult role model's behavior. This was the birth of the belief that modeling was important in the world of learning, and it was Bandura's first major breakthrough in the world psychology.

Bandura's second breakthrough was the program of research on children's development of self-regulatory capabilities. Bandura (1977) felt that the principal causes of behavior resided in forces within the individual. His social learning theory places emphasis on the important roles played by vicarious, symbolic, and self-regulating processes. Many researchers at this time believed that behavior was formed by natural consequences of the behavior. Bandura proposed the notion that all learning resulted from directly experiencing other people's behavior. This is what is referred to as self-regulating. The theory began to emerge through the eyes and research of Albert Bandura but was known as the observational learning theory at first and later became the social learning theory (Bandura, 1977). This was the first model to focus on the understanding of how people learn through observation models.

Bandura identified three basic models of observational learning: a live model which involved a real person demonstrating the behavior; a verbal model, which involved a description to the individual on what to do; and a symbolic model, which involved a real or fictitious model exhibiting the behaviors in movies, books, films, or television.

This notion of learning was founded on the premise that all learning occurs in a social environment—an interaction between two things. This act of observing others' behavior helps people to acquire knowledge of rules, skills, strategies, beliefs, and attitudes. Consequences also play a role in these observations and would force or urge individuals to act in accordance with their beliefs concerning the expected outcomes of actions. Bandura struggled with the behaviorist viewpoint and proclaimed that environment causes behavior and/or behavior makes the environment. This meant that actions, behavior, and decisions are an outcome based on events that happened in the past. Bandura felt that there were limitations to laboratory settings and their outcomes. He also challenged behaviorist theories and the inability to account for the acquisition of new responses to situations. The Bobo Doll experiment mentioned above supported this notion, along with the fact that behavioristic theories only dealt with direct learning. They did not take into account indirect learning, which was when children would reenact behaviors they had observed. The social cognitive theory began to emerge taking into account the influences of direct and indirect learning.

This was a pivotal time for Bandura, who took responsibility for changing the name of this theory from Social Learning Theory to Social Cognitive Theory. Social Cognitive Theory defines learning as an internal mental process that may or may not be reflected in immediate behavioral change (Bandura, 1986). The name change gave immediate distance from the social learning theories that were popular at this time and gave new importance to the cognitive approach of creating one's own realities through self-regulating behaviors. The Social Cognitive Theory has four basic principles upon which this research study is based.

The first principle is that people learn by watching others' behavior and attitudes, and the outcomes of those behaviors. "Most human behavior is learned observationally through modeling: from observing others, one forms an idea of how new behaviors are performed, and on later occasions this coded information serves as a guide for action" (Bandura, 1977, p. 22). This statement supports the notion that traditional theories depict behavior as the product of direct experiences when in actuality, they all result from a vicarious nature.

The second principle is that learning is an internal process that may or may not lead to a change in behavior. Depending on the situation, individuals undergo internal changes that affect their behavior or vice versa from activities in the behavior that affect their environment. Bandura (1977) states that behavioral inhibitions can be induced by seeing others punished for their actions. For instance, when an individual observes a violent act they can be affected by it, but it may or may not change their behavior. This model can prompt others to behave or in some cases misbehave, depending on the outcome for the individual who is being observed.

The third principle is that behavior is directed toward goals. Bandura (1977) stated a man's superior cognitive capacity is another factor that determines not only how he will be affected by his experiences, but the future direction his actions may take. Goal setting is a central process in social cognitive learning (Bandura, 1986; Schunk, 1990). Goals allow an individual to visualize the preferred outcomes for their future and, most importantly, focus on an action plan to succeed in meeting those goals.

The fourth principle is that behavior eventually becomes self-regulating. Individuals can imitate, monitor, and evaluate their own accomplishments and makes adjustments as

needed to meet their goals. Bandura (1977) states, "By managing the stimulus determinants of given activities and producing consequences for their own actions, people are able to control their own behavior to some degree" (p. 3). This self-regulation assumes reciprocal causation among three influence processes: personal, environmental, and behavioral. This implies that a person is constantly interacting among cognitive, behavioral, and contextual factors. According to this reciprocal determination, self-regulation depends not only on personal processes, but also on the influence of the environment and behavioral events. The personal processes include factors such as goals, anxiety, metacognition, and self-efficacy. The behavioral processes include factors such as self-observation, self-evaluation, and self-perception, which have an effect on behavior. The environmental factors include factors such as the individual's social and physical environment. Each process will be addressed in the following subsections individually with the understanding that the processes work together and interconnect continuously, as Figure 2 displays.

Personal Processes

Within the triadic reciprocity, many areas factor into the personal processes, one of which is self-efficacy. Bandura (1997) defined self-efficacy as personal judgments of one's capabilities to organize and execute courses of action to attain designated goals. Within self-efficacy, there are four essential parts: a person's knowledge, their metacognition, their goals, and their affect. Knowledge and metacognition are closely intertwined with goals. An individual uses their knowledge and metacognition to make decisions about goals for themselves and their future. According Zimmerman (1989), Bandura had an effective strategy for reaching long-term goals involves setting intermediate goals that are based on

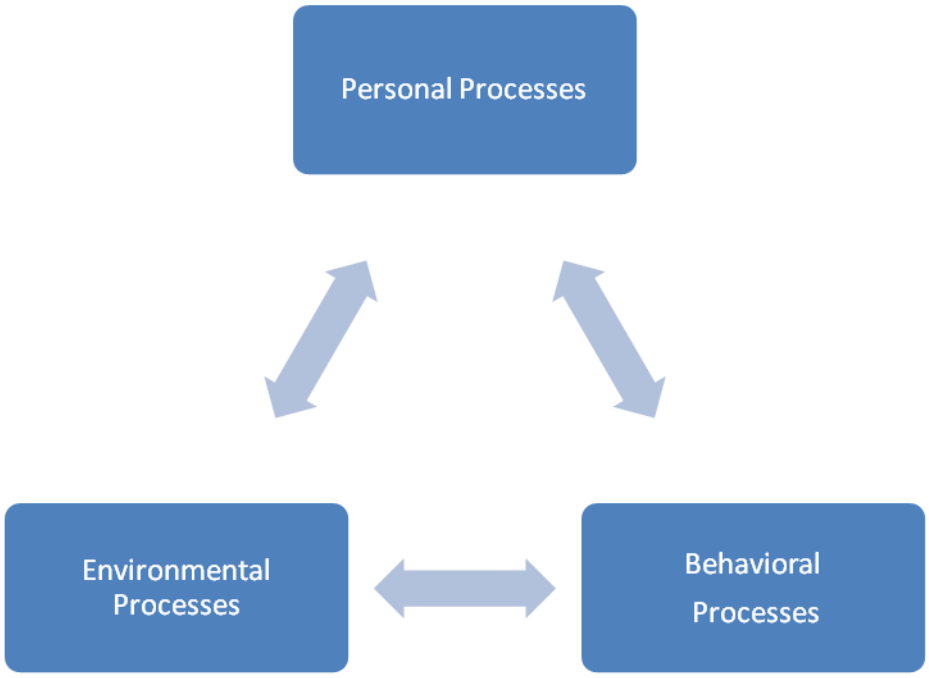

Figure 2. A Triadic Reciprocity for a Self-regulated Learner.

their specificity, difficulty level, and proximity in time. Affective states can influence the knowledge and metacognition as well. For example, if a student has anxiety about an upcoming test, it may obstruct various metacognitive processes, and the student may not be able to accurately show their knowledge even though they have prepared for the test. This "affective" state would impede the process and therefore would be instrumental in how the student may perform when taking a test.

Behavioral Processes

Within the triadic reciprocity, many areas factor into the behavioral processes as well. When two children are raised in the same home, they do not necessarily perceive situations in the same manner. The outcome of the way in which they react to a situation is a product of

their self-observation, self-evaluation, and self-perception. Their self-observation relies on their knowledge, metacognition, goal-setting, self-efficacy, and metacognitive planning, as well as behavioral influences (Zimmerman, 1998). Zimmerman asserts that self-observations refer to students' responses that involve systematically monitoring their own performance. This process of observing oneself allows the student to reflect on how they are progressing toward their goal.

Self-evaluation, however, requires a student to evaluate themselves in regard to a task or goal and to make necessary changes. Self-perception or judgment refers to a student's response that involves systematically comparing their performance with a standard or goal. In the context of the classroom, it is extremely important for the teacher to have a clear target or objective that the students use for their goal. "A target becomes a learning target only when students use it to aim for understanding throughout the lesson" (Brookhart, 2013, p. 14). Obviously, the outcome of both the self-observation and self-evaluation would affect the student's self-perception regarding the task. Unfavorable or favorable self-evaluations might cause less desirable or more desirable behaviors, supporting the notion of the triadic reciprocity. This can be a powerful tool for educational leaders as they come to understand these processes and how they affect the academic behaviors of students.

Environmental Processes

Lastly, within the triadic reciprocity, many areas factor into the environmental processes as well. For example, Pajares (2002) claims that social cognitive theory clearly emphasizes the importance of environmental factors in the learning process. This pertains to the human models that the individual is watching, believing, and noticing. Modeling is a

best-practice strategy that all teachers should be utilizing inside their classrooms. The research that supports this notion also includes social environments that affect the behaviors or cognitive abilities, such as the ability to move from a noisy room to a quiet room to study. The higher the self-awareness of a need to change the environment, the more successful students are. However, when students do not understand the impact of the environment due to the modeling that they have been exposed to, they may not be self-directed enough to problem-solve this issue.

Zimmerman (1989) stated that in the proposed triadic formulation, environmental, personal, and behavioral influences affect one another and therefore should be of interest to educators. Bandura's Social Cognitive Theory is important in this study, because it emphasizes the importance of linking personal processes, environmental processes, and behavioral processes to the outcomes in the academic world for students. Bandura also identifies key elements of the learning theory as self-efficacy and self-regulation, which are two important components to address individually. There are implications to both in the educational field. The following two sections further address each in relation to learning.

Self-efficacy is the students' belief that they have the "capabilities to organize and execute the courses of action required producing given [academic] attainments" (Bandura, 1997, p. 3). This is another important component to consider when honing in on what educators can do to support struggling readers. Many unaccomplished learners believe they cannot succeed in school (Pajares, 2003). Students with higher self-efficacy have more confidence in their ability to succeed in accomplishing a task. There are four sources from

Figure 3. Self-Efficacy in Relation to Learning.

which students get self-efficacy information: their task performance or enactive mastery, vicarious experience, verbal persuasion, and their physiological reactions or states. Margolis and McCabe (2006) believe that if educators emphasize only three of the four sources, that these sources will assist them in what to say and what to do with struggling learners to assist them in improving their self-efficacy.

According to Schunk and Zimmerman (1997), along with self-efficacy, self-regulation helps to promote reading and writing achievement, and models can teach students self-regulation skills. Self-regulation, according to Zimmerman (2002), is a process by which learners transform their mental abilities into academic skills. All of society competes with the constant interruptions of computers, cell phones, music, television, and other

distractions. Students often have not learned to self-regulate their academic studying and struggle with key processes that research indicates underachievers present (Zimmerman, 2002). Educational reform is forced to examine whether current systems are graduating students who are college and/or career ready. Self-regulating skills are an important part of developing this piece of life-long learning. Many of these skills are necessary regardless of which academic track a person intends to venture into. Self-regulating skills involve the self-awareness, self-motivation, and behavioral skills to implement knowledge taught appropriately (Zimmerman, 2002). Not only are struggling learners lacking self-discipline in the methods of study, but they also need to be able to use processes that must be personally adapted to each learning task. Individuals who are self-regulated in their learning appear to achieve more positive academic outcomes than individuals who do not exhibit self-regulated learning behaviors.

As mentioned numerous times in the literature, self-efficacy directs a focus on cognitive beliefs that are readily influenced by four types of experiences: enactive mastery, vicarious experiences, verbal persuasion, and physiological reactions. Figure 3 displays self-efficacy in relation to learning. Enactive mastery experiences are the most influential source of efficacy because they provide the most authentic evidence of whether one can muster whatever it takes to succeed (Bandura, 1997). In other words, students must be taught to overcome obstacles and challenges in order to be resilient and succeed at mastering these enactive experiences. Models have to be carefully considered by educators, because they play a significant role in this area.

The second type of experience is vicarious experiences. The process of observing the performance of others is important to the success of one's goals. Most human behavior is learned; human beings try to imitate while learning how to do a task. It may be something they have never done, or it may be something they are trying to master; either way they vicariously learn by watching those significant people around them, which in turn builds a strong self-efficacy.

The third type of experience that self-efficacy emphasizes is the verbal persuasion of others. Bandura felt that people could be motivated to do a task or try something they have never done by verbal praise from others who state that you hold the knowledge or capabilities to succeed. Going back to the historical perspective, Bandura did not feel that people are born full of information, but rather gain it through the environment. This verbal persuasion is another avenue of building a person's self-efficacy in relation to a task.

The last type of experience under self-efficacy is physiological reactions. These are the emotional responses, moods, or physical reactions that one endures in relation to tasks. If a student for instances gets very nervous before a test, he or she may develop a weak sense of self-efficacy and not perform well. By learning how to control these stressors and how to perceive them, students can build a stronger self-efficacy or tolerance.

The ability to read derives from many different aspects. Focusing on the social cognitive theory helps one conceptualize how reading proficiency begins. This theory offers an approach to child motivation and self-efficacy development. It explains the role of cognitive, self-regulatory, and self-reflective processes in human development and change in conjunction with human functioning (Bandura, 1986). Individuals are not simply shaped by

their environment and inner desires. Environmental influences, personal factors, and behavior help shape a person, and according to this triadic model, they in turn inform future actions and goals (Pintrich, 2006). In the social cognitive theory, research has outlined the prominent role of efficacy beliefs in regulating these processes as well as overall child development (Zimmerman et al., 2006). In this case, reading ability can be determined through personal influences, environmental influences, and behavioral influences. The next section will support this triadic reciprocity and provide two models that support self-regulated learning.

Historical Approaches to Reading Development and the Reading Achievement Gap

Learning to read has an impact on the development of skills in all academic areas and has an even more significant bearing on college and/or career readiness for any individual (Haynes, 2013). Examining the historical perspectives on reading and the important shifts in pedagogy is significant as educators continue to search for a viable avenue for reading success. As with any shift that occurs, there are internal and external conditions in the environment that lay a foundation. According to Alexander and Fox (2004), four eras provide historical context on the important factors that have brought society to where it is today regarding the way in which reading is viewed and taught. According to Foucault, it is important to understand the nature of each era and how the systems knowledge and power are established in order to transform current educational institutions (Jardine, 2005, p. 7). Three overarching philosophies drive these eras: there are physiological, psychological, and sociological frameworks that will be discussed further These frameworks also play a role in

understanding how the achievement gap for reading was established. The internal and external factors of each era altered the principles of the learner and learning. Following the review of historical context, the discussion will encompass leadership and the impact on student achievement, social cognitive theory, and models of self-regulation, self-regulated strategies, and a tool for implementation.

The Era of Conditioned Learning 1950-1965

The first era addressed in this research is the Era of Conditioned Learning, which ranged in time from 1950 to 1965 and was a time of conditioned learning. This era was an important time for the community of reading. Because of significant happenings and the movement to explore reading through a scientific approach (Alexander & Fox, 2004), conditioning became a more popular area in the world of research. John Watson had set the stage for behavioral based learning through his classical conditioning, but B.F. Skinner was even more significant with his theory of operant conditioning (Alexander & Fox). These forms of conditioning focused on how humans learn to behave which contributed to the way teachers were teaching children to read. The goal of cognitive psychology was to explain the mental processes that enable children to make sense of the environment (Samuel, 1983). The approaches focused only on the behavioral aspects until later in the era, when Jack Holmes, a cognitive researcher, added his cognitive processing perspective. His substrata-factor analysis for identifying the underlying factors for reading was the first cognitive perspective ever created (Tracey & Morrow, 2012). The cognitive or mental processes approach to reading finally came to fruition and changed the way reading was viewed and taught.

The focus on this cognitive perspective gave way to the constructivist approach, which proposes that a learner must be actively engaged in the learning process. The constructivist learning theory found that not all children learn the same way, and that teachers must choose different approaches in order to meet the needs of the various learning styles. This approach led to the teachings of John Dewey. Dewey was a significant philosopher and social reformist of this time. He believed that learning was a social and interactive process and that the historical approach of passive learning or more authoritarian teaching must be shifted to a learner who is a valued, equal, and responsible member of the community. He made significant progress in the pedagogy of this time.

Internal conditions that existed are worth noting because of post-war factors. One factor was the high birth rate, which led to the higher number of students entering public schools at the time (Alexander & Fox, 2004). This group, known as the baby boomers, changed the way the school community functioned. New research, which merged theory with practice, was necessary to accommodate the many students during this time and the reading struggles students were facing (Alexander & Fox). The 1950s reading focus was the "whole word approach," in which words were repeated on each page enough times for the students to remember them (Reyhner, 2013, Lemann, 1997). This new way of teaching reading was based on the repeat and control model that was grounded in the philosophy of training children to memorize sounds of letters and later words, that they would then produce through reading and writing. This notion of "conditioned learning" mirrors one of Foucault's many aspects that power and knowledge hold over education.

This was the era of *Dick and Jane* basal readers, which forced children of all races and socio-economic statuses to identify themselves with white middle class characters that were generated from the dominant culture. Jardine (2005) contends that this truth of knowledge permeates the economic and political happenings of the time, which provides conditions of its enforcement as the form of truth that brands it as "normal." Toni Morrison portrays this inequality in her book *The Bluest Eye* in the following passage:

> Pecola believes that if she had blue eyes, she would be loved and her life would be transformed. Meanwhile, she continually receives confirmation of her own sense of ugliness—the grocer looks right through her when she buys candy, boys make fun of her, and a light-skinned girl, Maureen, who temporarily befriends her, makes fun of her too. She is wrongly blamed for killing a boy's cat and is called a "nasty little black bitch" by his mother. She loves Shirley Temple, believing that whiteness is beautiful and she is ugly. (SparkNotes, para. 2)

This is a good depiction of marginalization, described through the lens of a young African American girl being taught to read using the *Dick and Jane* basal type reader. These erroneous beliefs or superficial concepts prescribed a regime of schooling that became the standard of this era.

Some external conditions included World War II and Sputnik, two extremely important conditions that forced Americans to review the world of reading in comparison to their foreign neighbors (Alexander & Fox, 2004). This was the age of scientific perspective, and the best practices for reading shifted from a phonics base to a whole-word touch and say philosophy (Reyhner, 2013, Lemann, 1997). There was a growing interest in reading research as educational leaders argued over a "one size fits all" approach to teaching reading. A controversial publication fueled this debate when Rudolf Flesch wrote his book *Why Johnny Can't Read* (Flesch, 1955). According to Hagar (2003), Flesch was implying that

educators were inadequately teaching the nation's children how to read and that the teaching technique used in our schools was all wrong.

It is important to note that social learning theory emerged in the 1960s and was developed by Albert Bandura (Bandura, 1988). He believed that children learned through observational learning and that children had many people in their lives who were influential in this process. According to social learning theory, students would observe behaviors, store the mental images, and later recreate what they had observed.

Another significant person of this era was Lev Semionvich Vygotsky, who developed social-cultural theory (Alexander & Fox, 2004). His theory was based on the idea that children learn through social interactions. Vygotsky's biggest contribution to the education field is the Zone of Proximal Development. ZPD is the in-between stage of being able to work on a task and complete it with help and being able to complete the task without any help. ZPD helped teachers figure out when children were ready for instruction on a particular skill.

Scientists and researchers were all significant contributors to the field of education during the era of conditioned learning, which had an impact on the teaching of reading. This period represented the beginning of a scientific approach to reading, and the world of research was honing in the physiological and environmental underpinnings of human behavior (Glaser, 1978). Due to this type of pedagogy, the processes and skills involved in learning to read could be clearly defined and broken down (Alexander & Fox, 2004). Reading in this era was a conditioned response that happened through the breakdown of parts. Relating back to the *Dick and Jane* model, this explains the objectifying effects that

act on power and knowledge to create erroneous beliefs, values, and practices that later surface in a child's self-image and acceptance into our society (Jardine, 2005). Themes for children while in school during this time frame depicted life styles that portrayed white picket fences and children with blond hair and blue eyes. The pressures of our culture normalized one culture and one culture only; white middle class. School regimes and creations of these norms determined what was taught, how it was taught, and when it was taught (Jardine, 2005). The socio-economic contexts clearly drive educational systems, and during this era it was evident that the acts of power and knowledge belonged to those in authority, which in this case were the educational leaders.

The Era of Natural Learning 1966-1975

The next era was known as the Era of Natural Learning, taking place from 1966 to 1975. Prior to this era, conditioned learning governed the reading world, but researchers were becoming frustrated with the lack of insight about how children formed sentences and linguists were at a loss about how to determine this as well (Farrell, 2012). In 1967 Jeanne Chall completed her magnum opus, *Learning to Read: The Great Debate,* which for the first time addressed content and classroom practices (Pearson, 2004). Interest in the human mind was on the rise (Flesch, 2007), but teaching practices were not yet of primary importance. The focus of this era moved from cognitive approaches to mental structures and processes that had advanced from the neurology and artificial intelligence realm. In other words, the shift went from studying the child's behaviors and the environment, to studying the child's mind.

The area of reading was gaining greater interest among linguists. A well-known linguist and cognitive scientist during this era of natural learning was Noam Chomsky (Pearson, 2004). He believed that knowledge originates in human nature and that the brain is a special learning device (Bates, 1999). Chomsky, along with others, drew on the inferences that language was incredibly complex and was acquired easily and naturally by children living in an environment in which they are simply exposed (not necessarily taught) the language of their community well before they experience school (Pearson). This information helps one to better understand the conflict that children outside the dominant culture experienced as their individual culture was so explicitly different from the one they engaged in on a daily basis; the normalcy of school was at odds with the normalcy of home life.

The shift to reading acquisition was a major one for the reading community, as it dramatically moved away from focusing on the behaviors of a reader to focusing on learning to read as conditioning (Alexander & Fox, 2004). The era of natural learning was heightened by the combining views of behaviorists and linguists. Reading at this time was to be a natural process where mental structures and processes took precedence over environmental conditions. Reading was no longer a pattern to be learned or memorized but rather a process of understanding and seeking to understand language-rich environments (Fleusch, 2007). During the 1960s and early 1970s there were large scale, systematic comparisons of various approaches to reading instruction, using objective measures of outcomes (Pearson, 2004). This era was the first in which there was government funding for reading research, although the results were not published until the next era (Alexander & Fox).

The significant internal factor of this time was the view that learners and learning involved not mental structures and processes but rather presumptions that a child's reading resulted from innate capabilities (Alexander & Fox, 2004). This was an important factor in the American classroom during this era. Even though there was a debate over how children were learning to read, there was little attention on what children were reading. The *Dick and Jane* primers were still the major resource for teaching reading. Children's minds were filled with the innocent world of Dick and Jane, which normalized the role of the white male with an absence of focus on race, class, and gender. This denigrated anything outside the realm of middle class white, forcing a view of anyone outside the white race as un-American and culturally and politically irrelevant (Werrlein, 2005). This notion of whiteness was what drove the educational world, which forced children of different cultures to disqualify knowledge based on their own heritage.

> Such disqualification is profound, not only because it excludes the child's answer, but also because it demonstrates that what *appeared* to be a question on the part of a teacher was not a question *about the topic named in the question* but, in fact, a question about the qualification (or potential disqualification) of the student. (Jardine, 2005, p. 28)

The world was focused on the innate capabilities of children and language learning. Linguists and psycholinguists heavily influenced the reading world (Fresch, 2007) adding to the fascination of the intricate workings of the mind.

The external condition that transformed this era was artificial intelligence developed by John McCarthy (Alexander & Fox, 2004), which was the driving force of the focus on the mind. McCarthy was a computer and cognitive scientist who branded the term "artificial intelligence" (Myers, 2011). The previous era was known as the "software" for the brain

whereas programming involved internal structures and processes. This era became the "hardware" for the brain when programming involved the existence of mental structures designed to perform the complex task of assimilating and integrating the particular linguistic cues provided by a given language community (Alexander & Fox). This artificial intelligence and the focus on neurology were on the forefront for the reading community. The focus was not on errors children made in reading but rather on trying to ascertain their meaning-making capabilities (Goodman & Goodman, 1980). The focus on the environment was important as it was what provided a child with their schema; but the research was geared now toward the meaning of the mind and how children were able to master this thing called reading. The pedagogy of this time and earlier provided little change in the role of the teacher and learner; the teacher continued as the dictator of knowledge and the student as the passive recipient of that knowledge (Pearson, 2004).

The Era of Information Processing 1976-1985

The Era of Information Processing and ranged from 1976 to 1985. The focus in this period was on the human mind, and government funding for this type of research was growing (Fresch, 2007). Centers began opening around the country dedicated to the cause of reading research and cognitive psychology relating to reading (Pearson, 2004). "This was causing uneasiness in the reading community, and questions about who was pushing forward and who was included in this basic research" (Vacca & Vacca, 1983, p. 383). In other words, the regimes in power controlled the disciplinary knowledge and power through which the truths would filter. Reading educators were arguing that instructional practices were not being considered and basic research was moving into an area of the unknown for many who

had supported the reading community. The cognitive scientists were forming their own theory about reading as an information processing theory. Reading at this stage was focused on prior knowledge and was still strongly supported by psycholinguistics and cognitive psychology (Pearson).

Much of the research was based on the teachings of philosopher Immanuel Kant, whose work was well known during this era. Kant contributed a great amount of information to the field of education and specifically reading and one's schema. His philosophy was that children were not born with a blank slate and that their thinking was based on prior experiences and knowledge. This caused a huge rift in the reading research community, which now aimed their focus on comprehension. "Ultimately, the construct of prior knowledge and its potent influence on students' text-based learning were enduring legacies of this era" (Alexander & Fox, 2004, p. 2). This was the day and age of government funding for any cognitive research on mental processes that one wanted to venture through. This was the time to "read to learn" rather than "learn to read." This text-based learning was a legacy of this period and changed the way society focused on reading instruction. The research world was seeking laws or processes that could explain how language interacting with symbols and how the mind formed some sense of knowledge for readers. A large amount of government spending was going into this research, and society was unsettled as this movement headed away from what they had come to understand, while moving toward unknown theories.

Louise Rosenblatt made a name for herself during this period as she fought to make the reading community understand that reading was an aesthetic process (Westbrook, 1997).

The paradigm shift in the teaching of reading occurred in the late 1970s when the text was viewed as an authority that focused on the relationship with the reader. Rosenblatt became known and became recognized for what many named the "transactional theory." During this era the reading community began shifting from a cognitive approach and focusing on schema to a more intricate process that takes place due to several factors, one of which was students' schema (Pearson, 2004). Other factors included students' perspectives, their attention to detail, and their elucidation of facts. Rosenblatt believed this process was less a mind matter and more a relationship matter, particularly in the realm of comprehension.

This era began with a focus on the workings of a child's mind but ended with a focus on reading to learn and a child's comprehension. Schema was the hot topic, along with getting back to the aesthetic value of reading for pleasure. Teacher practices were beginning to be discussed, and there was uneasiness in the reading community as it moved away from the whole view to the focus on individual students.

The Era of Sociocultural Learning 1986-1995

The Era of Sociocultural Learning ranged from 1986 to 1995, which moved away from information processing based theories and into an era of individualism for students. In the area of reading instruction, students were not performing with the total compliance of explicit teaching. Individual problems were arising, since students were at different levels and needed different approaches to meet the various learning styles. It became important to look at the contributions that the environment made on an individual's development, and there was more attention on social and cultural groups (Fresch, 2007).

The Vygotskian framework began to emerge, which examined the relationship between learning and development, including (a) social sources of individual development, (b) semiotic (signs and symbols, including language) mediation in human development, and (c) genetic (developmental) analysis (John-Steiner & Mahn, 1996). A new viewpoint was now present for the community of reading, which merged the literacy community with the reading community; what began to develop was a new methodology of literacy research (Alexander & Fox, 2004). This new methodology was more in line with the holistic and aesthetic school of thought in regard to reading. This shift, documented through several articles, showed that the behavioral orientation toward reading to the 1950s and 1960s was now fully abandoned in favor of a more integrated designation in the early 1990s (Alexander & Fox, 2004).

It became apparent during this time that the focus was on the process of learning rather than on the learning process. Learning was about social interactions. Political and cultural events inspired a broader acceptance and exploration of the aesthetic reading from the prior era. However, researchers found also that students held a variety of "knowledge," and not all of them were of benefit in the classroom. It was documented that the reading community felt that the concept of knowledge had no place in literacy, as it made readers resistant to the author's message (Fresch, 2007). For instance, strong opinions proved to be an issue in relation to texts or persuasive messages. Alexander and Fox (2004) contended that this conditionality of knowledge could arise from domain-specificity or task-specificity as well as social or contextual factors. This sociocultural perspective highlighted the fact that reading was moving even more in the direction of reading to learn rather than learning to

read. During the transition into the next era, it is important to note that technology was becoming increasingly prevalent in education.

The Era of Engaged Learning 1996-Present

The final era in this historical perspective is known as The Era of Engaged Learning, which began in 1996 and exists to the present day. The previous era left a change in perceptions about texts, readers, and the reading process itself. There was a growing presence of hypermedia and hypertext, and the reading community began to consider the nature and form of these nonlinear, less traditional forms of text (Alexander, Jetton & Kulikowich, 1995). Motivation theory was also emerging. Self-efficacy and self-regulation began to emerge as a social cognitive perspective on student learning (Schunk, 2001). The results focused on learners' motivation, which meant students were engaged.

Researchers continue to develop strategies that will help children learn to read and continue to develop their skills as they age. Strategies are now more interactive with technology, since children can use programs that track his or her progress as they work. Teachers are becoming authors and are sharing ideas and strategies that work in their classrooms. Schools are embracing reading and creating challenges such as "Million Word Readers" and "Read Like a Champion" to motivate children to read successfully. Society is now more aware of the importance of good reading skills, and more parents are becoming partners in their children's learning. There is an emphasis on early childhood education, and educators are able to implement programs at an early age to help children who are struggling with their reading.

The historical approach of reading development shows a significant path to self-regulated learning. This desire or need to teach students how to play an active role in their learning rather than being a passive bystander has changed the way we look at teaching and learning practices. This perspective tells a story of mistakes as well as successes that gives hope that educators can assist students to close the achievement gap that has existed for so long.

The Reading Achievement Gap

While it is important to look at the historical perspective of reading development and the characteristics of each era, it is also beneficial to investigate the historical perspective on the reading achievement gap to fully comprehend where we stand today. It is important to note the 1954 *Brown vs. Board of Education* case, in which the Supreme Court declared school segregation unconstitutional. This increased the educational expectations, along with the passage of the Elementary and Secondary Education Act (ESEA) in 1965, which focused on the inequality of school resources (Barton & Coley, 2009). Around this same time, the term *achievement gap* was first used in a public report in 1964 when the city of Chicago's Hauser Report asserted that "intensified educational opportunities for Negro boys and girls would result in a major closing of the achievement gap between group performances of Negro students and other groups of students" (Hauser, McMurrin, Nabrit, Nelson, & Odel, 1964, p. 20). Two short years later, the term was used again in the Coleman Report, which used "gap in achievement" to describe the variance in achievement between white and minority students (Coleman et al., 1966, p. 220). The term made its first appearance in an academic journal four years later, when Gwartney (1970) found a "widening achievement

gap between [whites and nonwhites] as the general level of education increases" (p. 878) in his piece on nonwhite/white income ratio.

Though the term *achievement gap* can be used in reference to multiple groups of students, "most studies and reports on the achievement gap have focused on differences in achievement test scores between White and African American students" (Anderson, Medrich, & Fowler, 2007, p. 548). "The difference between the academic performance of poor students and wealthier students and between minority students and their non-minority peers is commonly known as the achievement gap" (McCall, Hauser, Cronin, Kingsbury & Houser, 2006). Gaps in reading achievement have existed and still exist among various groups of students. Our society faces a utopian dissociation by pigeonholing these groups of students into programs and curriculums not adequately meeting their needs. Power and knowledge continue to set the bar for these students, while many continue to fail without any initiatives to help them improve. The nation's efforts to change this have been unsuccessful.

> Dating back to 1970s-1980s which was the first period of large gap reductions, scientific inquiry, involving some of the nation's most noted education researchers using databases and methodologies that permit making strong statements about how much the gap closing was due to some specific factors—but still account for only about one-third of it. (Barton & Coley, 2009)

Reasons for the achievement gaps are numerous but tend to run parallel to the income of a household. The income inequities that have risen over the past 30-40 years are one root cause and play a significant role in the achievement gap, along with the economy and social mobility (Reardon, 2013). Achievement gaps and the historical perspectives on reading development appear to be relevant to one another. According to Foucault, "each era has discernible rules and regularities, objects, concepts, and strategies used to constitute the body

knowledge for that era" (cited in Jardine, 2005, p. 87). It is notable is that regardless of the era, there has been and continues to be gaps in achievement. In other words, regardless of the body of knowledge the era was most notable for, that body of knowledge did little to decrease achievement gaps.

The next conceptual strand describes two models that teachers could implement to support self-regulated learning as a practice to assist in closing the reading achievement gap.

Models of Self-regulated Learning

Self-regulated learning is recognized as an important predictor of student academic motivation and achievement. In the previous sections, I discussed the historical perspective on the instruction of reading, including the era of information processing. During that period, focus on the notion of self-regulation began, and research was emerging regarding its benefits in the education field. Self-regulation can be fully defined as an active process, which relates to the self-generated thoughts, feelings, and actions that are planned and cyclically adapted to the attainment of personal goals (Kramarski, Desoete, Bannert, Narciss, & Perry, 2013). Self-regulated learning derived from social learning theory is grounded with Bandura's analysis in this dissertation.

In the previous section, I described in detail Bandura's Social Cognitive Theory, but it is also important to remember the basis for his theory on cognitive ability. Bandura believed that cognition involved knowledge and the skills for acting on that knowledge, with these cognitions changing over time as a function of maturation and experience (Grusec, 1992). The skills that Bandura refers to involved various domains. Environment also plays a significant role for the learners in this theory. One cognitive skill that Bandura felt was

important was the attention that a child must maintain in order to synthesize meaning. Grusec stated that children must transform observed material to symbolic form, first by using imagery symbols and then, as language develops, verbal symbols. Another cognitive skill is memory. It is important to note that children must be able to hold or store information that was observed or experienced in order to recall the information and formulate or drive their behaviors at a later time. Children must be able to monitor the outcome of experiences as well and use reasoning skills to refine or apply what they know to their behaviors for a specific outcome. This is just part of the Bandura's theory. Cognitive ability and developmental issues are important to note as children become self-regulated learners.

Self-regulated learning is controlled by an interrelated structure of influences that determines its development and sustainability (Bandura, 1997; Boekaerts & Cascallar, 2006; Zimmerman, 2008). Self-regulated learning for this dissertation relies heavily on Bandura's Social Cognitive Theory with a focus on self, behavior, and environment. There are two significant models also worth noting that were built on Bandura's theory and play a significant role in this study. They are Zimmerman's Social Cognitive Model of Self-regulation and Pintrich's General Framework for Self-regulated Learning. Bandura developed the foundation for both models, which explains the formation and purpose of self-regulated learning processes.

Zimmerman (1989) is a key theorist of self-regulated learning. Zimmerman defines self-regulatory learners as students who are metacognitively, motivationally, and behaviorally active participants in their own learning process. The foundation of his definition relies on Bandura's triadic reciprocity, which explains how personal, behavioral,

and environmental influences are used and are affected by the task. Zimmerman contends that there are three benefits to viewing self-regulation through a social cognitive view. First, the theory clarifies the personal self-regulating influences and the advantages of each. Secondly, the theory links these self-regulating processes to social or behavioral experiences. Thirdly, the theory identifies two key processes which self-regulating learners use: self-efficacy perceptions and the use of strategies. Zimmerman believes that these aspects of self-regulated learning are processes that can be modeled and taught and can have a major impact on students' self-efficacy beliefs and self-perceptions of learning.

When approaching the topic of a self-regulated learner, it is important to clearly define it. The approach by which a theorist views the definition establishes a foundation for their philosophy. In this section, I describe how Zimmerman defines self-regulated learners. Self-regulated learners approach a task very differently than students who are not self-regulated. Some characteristics of a self-regulated learner include being self-confident, poised, and quick-witted. According to Boekaerts and Cascallar (2006), these are students who have actually gained control over their own learning, which continues to be the ultimate goal, from a teacher's perspective, for all students. The basic premise lies in the fact that every student has the ability to use self-regulated strategies, if they are taught. A clear definition of a self-regulated learner is one that distinguishes two characteristics: (a) "Their awareness of strategies relationship between regulatory processes or responses and learning outcomes" and (b) "Their use of self-regulating strategies to achieve academic goals" (Zimmerman, 1989, p. 5).

Zimmerman's Self-regulated Cycle of Learning is a cyclical process. The process has three major phases, each with important components. The three major phases of the self-regulated learning cycle are forethought, performance or volitional control, and self-reflection. Each phase includes several self-regulating processes. Figure 4 illustrates Zimmerman's Self-regulated Cycle of Learning.

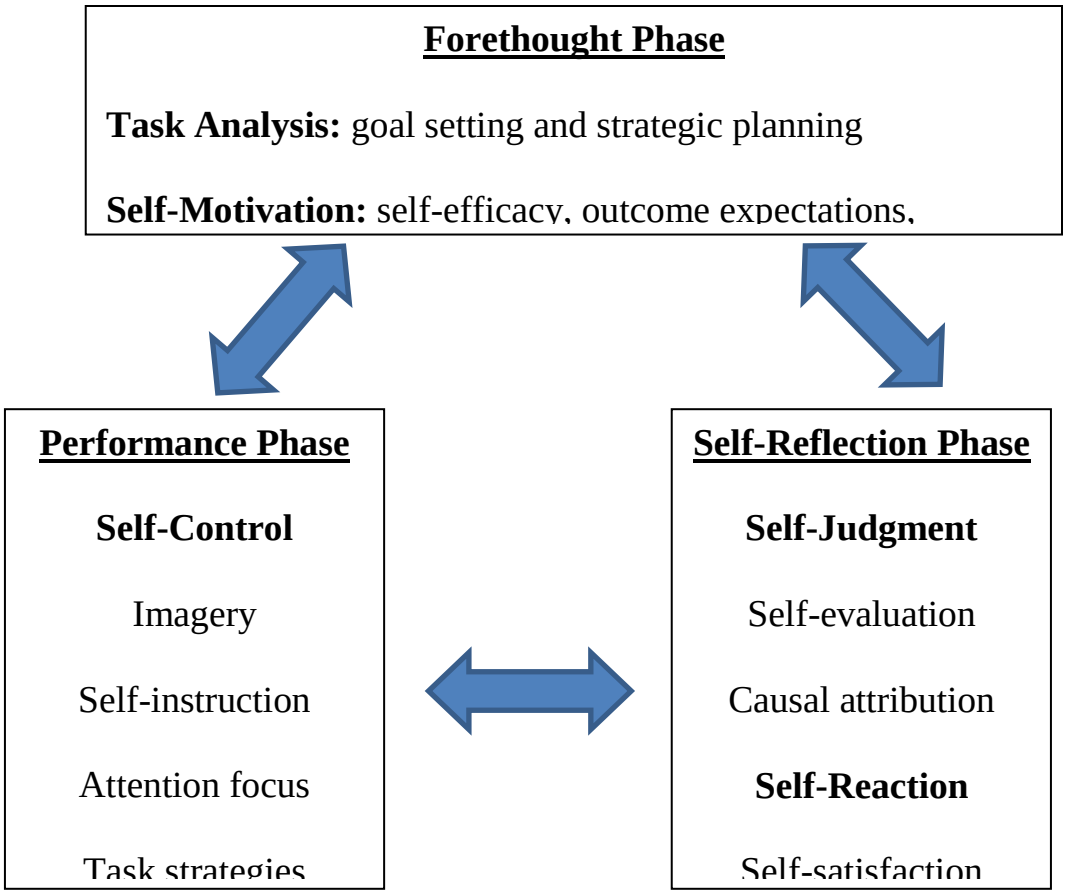

Figure 4. Zimmerman's Self-regulated Cycle of Learning.

The first phase of the Cycle of Learning is the forethought phase. This phase is the foundation for driving the individual to complete a task. It begins with determining what the student brings to the task; basically, their metacognition. This is the phase in which one outlines the specific outcomes for learning. The strategic plan includes learning strategies

and methods designed to assist the student in reaching the desired goals or targets. It is only logical then to address the motivational beliefs in this phase as well. This would include or be influenced by self-efficacy, outcome expectations, intrinsic value, and learning goal orientation. The components are described in detail as follows.

The first component in forethought is goal setting, which is an important process. Locke and Latham (1990) found that working toward a goal positively affects student achievement regardless of who sets the goal. This supports the notion that younger children, who are unable to appropriately chose goals due to the lack of metacognitive or developmental capabilities, can still use this powerful strategy. This component implies that strategic planning must be involved in this process so that the desired goal can be met. Using tools that allow students to set proximal goals for themselves has been proven to raise motivation and student achievement. This motivation is supported by Bandura's Social Cognitive Theory that introduced self-efficacy as a key component.

Self-efficacy is defined as personal judgments of one's capabilities to organize and execute courses of action to attain desired goals (Bandura, 1997). Linnenbrink and Pintrich (2002) further define self-efficacy as a learner's beliefs about their capabilities to do a task or activity. Skills are not mentioned in these definitions of self-efficacy according to Bandura, whose theory is more about an individual's thought process. Bandura (1997) explains, "In short, perceived self-efficacy is concerned not with the number of skills you have, but with what you believe you can do with what you have under a variety of circumstances" (p. 37). There is a correlation of high levels of self-efficacy to academic success (Linnenbrink & Pintrich, 2002). According to Bandura (1994), self-efficacy beliefs influence how people

think, feel, motivate themselves, and act. During this phase of self-motivation where self-efficacy exists, an individual's intrinsic interest in regard to a task plays a huge role. The student must value the task before he will put forth any effort. This is why it is important for teachers to make the process of setting goals meaningful to their students' real world. Without connections, students will not see a benefit in the learning. The forethought phase involves how the student, confronted by the given task, feels about himself, which leads to the value of the task and the desired goal. This becomes the outcome expectation.

The second phase of Zimmerman's Self-regulated Learning Cycle is the performance phase. This also has two specific components: self-control and self-observation. This phase requires the learner to focus their attention on imaging, choosing strategies, implementing a plan, and monitoring their performance (Zimmerman, 2002). The first behavior a student must exhibit is focusing their full attention on a given task. Bandura (1997) also felt strongly that this was important to the learner. Learners must remove any distractions, whether the distraction is another person or something in their environment. A self-regulated learner will remove themselves from a situation if necessary to focus on a task. Learners also need to be self-aware of what he or she needs, which moves into the second component in this phase. For instance, perhaps the learner is in need of a break or may need to turn off the radio in order to continue be able to devote attention to the task. Learners also need to monitor progress, which allows the learner to reflect and determine the necessary steps to complete the task. If, for instance, the learner has not been able to accomplish as much on the task as is needed, he might need to consider the working environment or re-evaluate the aspects that are keeping him from completing the task. He would redirect himself when necessary.

The third phase of Zimmerman's Self-regulated Learning Cycle is the Self-Reflection Phase. During this phase, learners reflect upon and evaluate the outcome of the task. There are two major components to this phase: self-judgment and self-evaluation. During self-judgment, learners must monitor progress by comparing themselves with past experiences, peers, the objective, or goal they wished to achieve. Learners must adjust plans and re-evaluate by thinking through the previous phases—especially the forethought phase— and their goals and strategic plans, and determine how well he or she stayed the course to meet the goal. During this phase, self-evaluation also takes place.

Feedback is an important process that happens during this time and can come from self, peers, or teachers. It can involve feeling self-satisfied or self-defeated, depending on the task, plans, goals, and previous self-efficacy beliefs. During this phase, learners who make comparative self-evaluations generally attribute causation to ability deficiencies, and this produces lower satisfaction and fear of repeating the task (Zimmerman, 2002). Learners with high levels of self-motivation who set tiered goals for themselves with process goals leading to outcome goals in succession, tended to plan learning efforts using strategies and this led to greater personal satisfaction (Zimmerman, 2002).

Zimmerman's intricate process of self-regulated learning is a cyclical process that feeds continuously through the phases reflecting back on processes and individual self-efficacy and perceptions. Zimmerman (1989) referred to this cycling back as a "self-oriented feedback" (p. 330). The purpose of feedback is for students to receive communication about their task while they are mindful of their learning targets and have time to act on it (Brookhart, 2008). Both self-assessment (internal) and teacher feedback (external) helps

students become self-regulating learners by controlling his or her learning. When teachers model necessary behaviors and teach students to use strategies to move them toward learning goals, students slowly build up stronger self-efficacy beliefs and self-perceptions regarding tasks. Currently Zimmerman's model of self-regulating learning is one of the most utilized models that guide self-regulated research.

Following is an example of a student using a self-regulated learning tool known as a data notebook for reading while transitioning through Zimmerman's model for self-regulated learning. Jack is working to perform a reading task. He is given a set of questions to use as he reads a selection from the grade level text. On Friday, Jack will be assessed on his knowledge about the details of this piece of literature. The teacher has given him some time to use his data notebook to prepare for this task. He has three days to read the story and answer the questions. There will be a test on the third day.

During the forethought phase, Jack would ensure that he understands what is being asked of him (task analysis) and begin setting some realistic goals for his task (planning). He would then begin to connect with his prior knowledge on the content with high levels of self-efficacy (if he was familiar with the content) or low levels (if he was unfamiliar with it) (self-motivation beliefs). This would determine his reluctance or motivation and could be a critical time for the teacher to scaffold and guide him on what to do if he lacks knowledge on the material. The outcome expectations and learning goal orientation could depend heavily on how the teacher or his peers interact with him on the task.

Jack will then begin to focus his attention on the task at hand and imagine task strategies or needs (self-control). At this point he will begin to self-observe (self-

observation) his behaviors to ensure that there is progress in terms of the task. For instance, he may turn off the radio that is a distraction so he can devote his full attention to completing the task. His last phase would be self-reflection, which would occur ever so often as he takes note of his progress (self-judgment) and determines if the path he is on is successful or if he needs to change his behavior in order to meet the task deadline. This self-reaction will cause him to feel satisfied or stressed, depending on how well he has stayed on course with his planning and whether or not this plan was a successful one (self-reaction). This brief overview of the phases of Zimmerman's model of self-regulation demonstrates a cyclical process that overlaps and intermingles continuously and quite possibly numerous times throughout a given task.

Another model that was founded on Bandura's Social Cognitive Theory and utilizes the same self-regulating techniques is Pintrich's General Framework for Self-regulated Learning. This model has four phases that drive self-regulation and are similar to Zimmerman's model. The phases include: (a) forethoughts, planning, and activation, (b) monitoring, (c) control, and (d) reaction and reflection. Table 1 depicts Pintrich's Model of Self-regulation. Each phase is discussed following the diagram.

During Phase 1, learners think and plan toward desired goals or targets. As they move through the four components of Phase 1, they begin with cognition by setting a goal and using their schema to connect to the task. Learners then move through the second component of motivation, which is generally done simultaneously during the connection and goal setting activity. These goals typically motivate the learner, which in turn allows him or her to behave differently or in an effort to meet goal expectancy. During Phase 1 of the

Table 1

Pintrich's Model of Self-regulation

Phases	Cognition	Motivation	Behavior	Context
Phase 1: Forethought, planning, and activation	• Target goal setting • Prior knowledge • Metacognitive knowledge activation	• Goal orientation adoption • Efficacy judgments • Perception of task difficulty • Task value • Interest activation	• Time and effort planning • Planning for self-observations of behavior	• Perceptions of task • Perceptions of context
Phase 2: Monitoring	• Metacognitive awareness and monitoring of cognition	• Awareness and monitoring of motivation and affect	• Awareness of monitoring of effort, time use, need for help • Self-observation of behavior	• Monitoring changing task and context conditions
Phase 3: Control	• Selection and adaptation of cognitive strategies for learning, thinking	• Selection and adaptation of strategies for managing motivation and affect	• Increase or decrease effort • Persist, give up • Help seeking behaviors	• Change or renegotiate task • Change or leave context
Phase 4: Reaction and Reflection	• Cognitive judgments • Attributions	• Affective reactions • Attributions	• Choice behavior	• Evaluation of task • Evaluation of context

(Pintrich, 2004, p. 390)

behavior component, learners spend time planning and self-observing behaviors and then move to the context component, where learners perceive whether the task is achievable and how to create an avenue for success.

According to Pintrich (2002), the three phases of monitoring, controlling, reacting, and reflection can occur simultaneously and can constantly return to Phase 1 and the reviewing progress. Phase 2 is monitoring. During this time, cognitive awareness is occurring, along with the monitoring of cognitive processes. During Phase 2, awareness and monitoring are occurring, but this time focusing on motivation and affect in regard to the task. During the behavior component, awareness of monitoring of effort, time, and need for assistance exists along with self-observations of behaviors. The last component of Phase 2 is context; during this time, monitoring or changing tasks occur as conditions change. These do not work dependently and must be thought of as a cyclical process.

Phase 3 is the control phase; during cognition, the learner is selecting and adapting cognitive strategies for learning and thinking. In Phase 3, students select and adapt strategies for managing motivation. The behaviors that are seen during this time include an increase or decrease in effort, a give-up attitude, or help-seeking behaviors. During the context component, the learner may change or renegotiate the task or change or leave the task.

Phase 4 is the reaction and reflection phase. During cognition, cognition judgments occur as well as attributions. During the motivation component, there are affective reactions and attributions regarding the task. One may also see specific behaviors in the context of the situation. In other words, the learner evaluates the situation and may reflect upon other activities that might help accomplish the task more efficiently in the future.

A student who uses a data notebook for reading and moves through the various stages of Pintrich's model illustrates Pintrich's model of self-regulated learning. Suppose the aforementioned student, Jack, is working to perform a reading task. Jack is given a set of questions to use as he reads a selection from the grade level text. On Friday, Jack will be assessed on his knowledge of the details of this piece of literature. The teacher has given him some time to use his data notebook to prepare for this task. He has three days to read the story and answer the questions. There will be a test on the third day.

During Phase 1, the forethought phase, Jack would monitor his understanding of the task (monitoring) and ask questions if he needs clarification. He would make connections to the text (cognition) by recalling what he knows about the subject, which will also spark motivation or interest depending on his schema (motivation), and will also determine his level of self-efficacy. He will either feel high levels of self-efficacy because he is familiar with the subject content or lower self-efficacy due to lack of knowledge on the topic. He will then begin to think through a plan for completing the task within a period of three days (behavior) and perceive whether he can manage it (context). He will begin to set some goals (i.e., read five pages each night and answer five questions) and also figure in extra time to research the topic if unfamiliar. His levels of self-efficacy and will affect his perception of the task. If this subject area is new to him, it will require extra research time.

The next three phases work in conjunction with each other and require some interaction from external factors for success. Each phase works simultaneously and dynamically as the student progresses through each areas of regulation. There are similarities

to Zimmerman's model of self-regulation. Just as Zimmerman's model is a cyclical process, so is Pintrich's model. These phases occur simultaneously and are inseparable.

Both models are grounded in Bandura's Social Cognitive Theory, which includes personal, environmental, and behavioral factors. Both Zimmerman and Pintrich's models are a representation of how teachers can support students with the self-regulated learning concept within classrooms. They are both cyclical processes that have similar phases and components that make up the areas of self-regulation that students transition through when given a task. These models are influential given the amount of research they have generated and further support this study on the use of a data notebook in reading.

Self-regulating Strategies

Self-regulation has played an important role on students and their motivation to learn, According to Zimmerman (1989), "Educational researchers have begun to identify and study key processes through which students self-regulate their academic learning" (p. 3). The process of self-regulation has gained considerable attention as educators attempt to meet the needs of all students around the nation and close the achievement gap. A pedagogical shift occurred around the new millennium from an outcomes-based approach to a more child-centered approach to teaching and learning. This time of differentiated learning and student centeredness is significant in the emergence of self-regulated learning. The workshop models that include individual conferences and small reading groups at a child's reading level are all ways that call upon self-regulating strategies. Boekaerts and Cascallar (2006) stated that self-regulated learning is not an all-or-none process or property of the system, but that it consists of multiple processes and components. Self-regulation involves various

aspects of the affective (feelings or emotions), cognitive (beliefs and perceptions), and metacognitive skills (memory or attention) (Flavell, 1979).

In the previous section, Models of Self-regulated Learning shed some light on what self-regulated learning is comprised of and models to support it. This section gives an overview of the important self-regulating strategies and tools that can assist teachers with their implementation. For a clear understanding of what self-regulation means, Table 2 shows authors and their definitions of self-regulation or self-regulating learners.

There is abundance of research regarding self-regulated learning. Weinstein, Husman, and Dierking (2000) discuss a strategic learning course that teaches students to use several phases to self-regulate an academic task. These phases included setting a goal; reflecting on the task and personal resources; developing a plan; selecting a potential strategy or strategies; implementing strategies; monitoring and evaluating the strategies and progress; modifying strategies as needed; and evaluating the outcomes to determine the future use of the strategies. Weinstein et al. state that before beginning the course, students completed the Learning and Study Strategies Inventory, which gave the instructors helpful information on improving student skills, motivation, self-regulation, and academic environment. This is an example of how self-regulating skills can be explicitly taught at the level of the individual in order to meet their particular needs.

Describing the self-regulating strategies that learners use to reach academic goals could shed light on how students form and maintain learning intentions, but it discloses little about and when students are engaged in learning (Boekaerts & Corno, 2005). Teachers should be familiar with the factors that influence a learner's ability to self-regulate

Table 2

Definitions of Self-regulation or Self-regulating Learners

Author	**Definition**
Bandura (1999)	Controlling our own behavior which is the foundation of self-esteem.
Brookhart (2008)	Self-regulation – the motivational energy students need to aim toward mastery in a lesson – requires an understanding of the learning target and the criteria for success (p. 59).
Flavell (1978)	Self-regulated learners become increasingly aware of their own personal knowledge states, the characteristics of tasks that influence learning, and their own strategies for monitoring learning.
Kramarski, Desoete, Bannert, Narciss, and Perry (2013)	Self-regulation can be fully defined as an active process, which relates to the self-generated thoughts, feelings, and actions that re planned and cyclically adapted to the attainment of personal goals.
Pintrich (2000)	Learning that is guided by metacognition.
Schunk (2000)	Self-regulation involves having a purpose or goal, employing goal-directed actions, monitoring strategies and actions and adjusting them to ensure success (p. 355).
Zimmerman (1989)	Self-regulated students are those who are metacognitively, motivationally, and behaviorally active participants in their own learning process.

and the strategies they can use to identify and promote self-regulated learning in their classrooms. In addition to self-regulation, motivation can have a pivotal impact on students' academic outcomes (Zimmerman, 2008). Without motivation, self-regulation is much more difficult to achieve.

It is important to gain insight into the motivation and perceptions of students to help educators do everything necessary to meet their needs. There are two tests that can be given to students that will provide teachers with an insight into both the motivation and self-perceptions of their learners. The first, known as the Motivated Strategies for Learning Questionnaire (MSLQ), was developed using a social-cognitive view of motivation and self-regulated learning (Pintrich, 2003). It is a measurement instrument to investigate the nature of student motivation and learning strategies used. It allows teachers and students a means of assessing their motivation, study skills, and strategies. Another test, the Reader Self Perception Scale (RSPS), measures how children feel about themselves as readers. Based on Bandura's self-efficacy theory, it gives insight into a student's self-efficacy beliefs in reading. Both tests can be used as tools to provide insight into students' specific needs, thoughts, and feelings about themselves as readers, and both support the notion of self-regulation.

Pajares (2002) believes that teachers should make self-regulatory strategies a focus of professional practice, as students who develop strategies early on persevere and self-perpetuate. This process will help students to develop self-regulating strategies in the earlier years and will be of benefit to them in the future. Zimmerman (1989) mentions 14 self-regulated strategies in his overview of self-regulated learning and academic achievement. I included eight of those strategies in this study: self-evaluation, organization and transformation, goal setting and planning, information seeking, self-monitoring, environmental structuring, rehearsing and memorizing, and seeking social assistance (Zimmerman). These strategies improve students' self-regulation using Bandura's triadic

model of personal, behavioral, and environmental processes. A closer look at each strategy is shown in Figure 4, Self-regulated Learning Strategies (Zimmerman, 1989).

In the sections that follow, I provide a brief overview of self-regulating strategies, an example of how these strategies may look when implemented in a classroom setting, and tools that might be used for the strategy. I have organized the strategies into three categories that are used by successful students and are grounded in the social cognitive theory which include personal, behavioral, and environmental processes. Personal categories refers to how a student organizes and interprets information. The behavioral category covers actions that the students takes. Environmental categories include strategies that require the student to seek assistance or structuring of the physical environment. A strong understanding of how to teach these strategies to students can make the difference between productive and counterproductive tactics.

Personal Processes

Organizing and transforming. This strategy allows students to compartmentalize or organize their knowledge into files so they can retrieve these files when needed. They include materials and behaviors such as graphic organizers, outlines, summary paragraphs, highlighting, flashcards, webs, diagrams, charts, graphs, and drawing pictures. Students utilizing this strategy may use a highlighter to color code important details of a text so that he or she can transform those details into a writing assignment. Students may also read a short excerpt and write a summary paragraph including important details to help them recall this information later on a test. This strategy needs to be taught explicitly, modeled with the students, and then practiced numerous different ways until the student can individually

organize and transform his or her material for recalling later. According to Zimmerman (1989), a statement indicating the student uses this strategy is, "I make an outline before I write my paper." Tools necessary for this strategy might include premade graphic organizers, webs, or graphs, along with frameworks for outlines or summaries, highlighting pens, index cards, and plain paper for the students to create their own materials.

Goal-setting and planning. This strategy allows students time to set goals specifically tailored to his or her needs or desires and to create an action plan for the goals. Higher self-regulated learners tend to set proximal goals or goals that are more specific, whereas lower self-regulators set lower academic goals or goals that are not specific to personal needs. Students implementing this strategy might have a test on Friday on a piece of literature that is 20 pages long, and may decide that they need to read four pages a night and fill out a graphic organizer to help them learn, study, and digest the material for Friday's test. The goal would be to be prepared for the test on Friday, and the action would be to read an allotted number of pages and fill out a graphic organizer to help comprehend the material. Zimmerman (1989) gave an example of what a student would say to indicate accomplishing this strategy: "First, I start studying two weeks before exams, and I pace myself" (p. 335). Tools used for this strategy might include goal-setting pages with action plans underneath. Once a student is aware of the process, they can create this goal-setting tool independently using the same procedures.

Keeping records and monitoring. During this strategy, students are reflecting back on past experiences in order to prepare for future tasks. This is a time to keep records of what information was missed or that students lacked in order to meet a goal, or the

information that is necessary to meet a specific goal. Monitoring of the goal is the review of their behaviors and how they positively or negatively affect the desired outcome. A student may take note of words they missed during a test, take detailed notes during lessons, collaborate with a teacher on what he or she should focus on for a given task, study with a peer, and get feedback on his or her knowledge while monitoring their understanding frequently. A student mentioning, "I took notes on the class discussions" is a good example of this strategy in use. Tools necessary for this strategy might include past assignments, rough drafts or portfolio assignments for later reflections, feedback from the teacher, and peer guidance.

Rehearsing and memorizing. Rehearsing and memorizing allow students to memorize material by overt or covert practices (Zimmerman, 1989). Students need strategies that assist them to recall information learned, and therefore will need to memorize and rehearse information to help retention. Students using this strategy might use flashcards to assist in retention and practice math facts. Similarly, a student learning a foreign language might write the English version on one side of the paper and the Spanish version on the other. Zimmerman (1989) notes a quote by a student preparing for a math test: "I kept writing the formula down until I remembered it" (p. 336). Tools needed for this strategy might include index cards, outlines of material for rehearsing, specific information needed for the task, and checklists.

Behavioral Processes

The next process involves focusing on academic behaviors in regard to self-regulated learning. These processes are important as students adapt or alter behaviors that help them become active participants in their learning process.

Self-evaluation. Teachers should encourage self-evaluation because self-assessment makes the students active participants in their education (Sloan, 1996). Students are comparatively evaluating what they knows and understand to what they would like or need to know for a given task. Self-evaluation is about understanding the student's own beliefs and misconceptions so that personal goals can be set and new information attained. Students who use this strategy show behaviors such as double checking their work before turning it in to the teacher, re-evaluating goals that did or did not meet expectations, rereading information to check the answer of a question, having peers double check work, and collaborating on steps in a math problem. These are some examples, but any behavior by which a student rechecks their decisions, actions, or behaviors would suffice as self-evaluating. Tools for this strategy might include reflective journals, goal sheets, and specific learning tasks.

Self-consequating. This strategy is the reward or punishment strategy. As humans it is natural for us to continue doing something that brings us great pleasure. In this case, students use reward systems to set up positive outcomes or consequences for negative outcomes to their goals. Students using this strategy might motivate themselves by celebrating with a night out for meeting their goals or arranging for a tutor if the goals were not met. Zimmerman (1989) quotes a student: "If I do well on a test, I will treat myself to a

movie" (p. 336). Tools needed for this particular strategy depend upon any necessary rewards or consequences the individual student places on him or herself in regard to the task.

Environmental Processes

The final process includes environmental factors which affect how a student accomplishes a task. These include how external factor such as teacher, parent, and peer feedback helps or assists them in altering their action plans to accomplish a task.

Seeking information. This strategy requires that a student seek out information regarding his or her related goal or task. This information can be written, verbal, or communicated, but must it be documented for later use. There are various different approaches to secure information for an assignment. A student displaying this strategy might be researching in a library, on the Internet, reading textbooks, or interviewing individuals to gather information, and then documenting the information for later use and recall. According to Zimmerman (1989), "Before beginning to write the paper, I go to the library to get as much information as possible concerning the topic" (p. 336). Tools necessary for this strategy might include access to a library or Internet, index cards or notebooks for scribing the information, and possibly an electronic device to record audio information if necessary.

Environmental structuring. This strategy requires that a student acknowledge the physical environment and how it might affect the successful completion of a goal. Students who are performing this strategy can be found rearranging the physical environment so it is more conducive for learning or removing distractions, such as turning off the television set or radio or going to a quiet place where there are no distractions. For example, Zimmerman (1989) gave an example of how a student might demonstrate this phase: "I isolate myself

from anything that distracts me like turning off the radio so I can concentrate on what I am doing" (p. 336). This strategy requires the learner to be cognizant of his or her atmosphere, as well as how it affects concentration or study habits. Students with lower levels of self-regulating behaviors tend to disregard this strategy and do not comprehend the importance of giving full attention to the task at hand.

Seeking social assistance. This strategy requires students to seek advice or assistance from others. Zimmerman and Martinez-Pons (1988) state that this strategy refers to seeking peer assistance, seeking teacher assistance, or seeking adult assistance when difficulties are encountered while performing a task. Typically, it is more challenging to ask peers for assistance, but that is part of this strategy. Students implementing this strategy solicit feedback verbally, either through journaling or written language, or by reviewing previous tasks and problem solving so they do not make similar mistakes. They make comments such as, "If I have problems with my math assignment, I ask for help" (Zimmerman, 1989, p. 336). This does not require any tools other than the student acknowledging the information they lack or need in order to perform a given task.

These strategies are fluid and can be used simultaneously in a cyclical process. Depending on what the task requires, the student will decide on which strategy or strategies they choose to implement. In the previous section, I addressed Zimmerman's Self-regulated Learning Cycle and Pintrich's Self-regulation Model. In the next section, I provide an example of how elements of these two models, through the use of a data notebook, can naturally support self-regulated learning.

A Tool to Implement Self-regulated Learning

In 2006, A.B. Combs Elementary was recognized as the Number 1 Magnet School in America after experiencing a sharp and sustained improvement in student achievement scores (Covey, 2008). Covey stated, "one of the key components for their success was a tool known as the data notebook" (p. 61). The data notebook is used by each student and provides a foundation for implementing the steps and procedures necessary to guide them in becoming active participants in the learning process. Students use their data notebook to record personal goals and academic goals and to chart their progress toward their goals (Covey, 2008). The philosophy behind the use of a data notebook is to empower students to become active participants in his or her learning process. It is a tool that supports self-regulated learning and provides organization and documentation of this process, which helps teachers and students stay accountable and focused on the learning goals.

The notebooks help the students manage their learning. Each grade level classrooms have a customized set of graphs, charts, and diagrams that are inserted into their notebooks and are kept up to date weekly to reflect their progress in reading. This provides students with an ongoing, timely source of feedback, which is known to drive student achievement (Covey, 2008). Marzano (2003) stated that when success in the classroom is defined in terms of competitive status with others, only a few students can learn. When individual growth is the criterion for success, then all students can experience success regardless of their comparative status.

The significant components of this notebook include contents of the notebook, self-awareness on the students' part, feedback and communication, and clear learning targets. The

notebook includes items such as mission statements, goals, action plans, formative assessment documents, graphs, charts, and self-monitoring items including feedback forms. Mission statements can provide motivation to learn by focusing on students' personal character traits and habits that will lead them to their future goals or a career. Self-awareness relates to the documents in the notebook that empower the student to be an active participant in their learning, such as setting goals and action plans to meet those goals. Teachers communicate the learning targets and provide feedback and communication about how to achieve their goals. In this data notebook, students will be provided clear learning targets for the assessment and objectives as well as feedback or communication to monitor his or her progress.

The Impact of Leadership

School reform has existed for many years and strong leaders are needed to make the many changes that come with it. Leadership can be the key to true change in a school. "Strong leadership is the decisive factor in driving the changes that are needed to get us to a better day" (Kloeber, 2009). Principals and teachers are the change agents and key to the future of education. Many educational leaders believe that leadership does not fit one specific definition but rather various perspectives and traits. For this research, the role of the leader is a purposive process which is inherently value-based.

The Concept of Leadership

Leadership is described as "direction-setting and inspiring others to make the journey to a new and improved state for the school" (Davies, 2009). Leadership can be the key to true change in a school. In studying high leadership capacity in schools, Lambert (2007)

found that the principal and teacher leadership play an important role. It is well established in the literature that the school leader plays an important role in the success of the school (Blankstein, Hargreaves & Fink, 2010; Kloeber, 2009; Sergiovanni, 2007). There are a multitude of factors that don't allow for the replication of successful leadership from one school to another, which makes the concept of leadership a complex one. Things such as demographics and socio-economic standards—to name a few—affect the needs of the building. Each school also holds its own innate set of norms and cultures.

School leadership plays an important role because school leaders have the power to substantially influence teaching quality, which affects student achievement. A 15-year study by Hallinger and Heck (1998) found that principals exercise a measureable effect on school effectiveness and student achievement. Although this indirect effect was relatively small, it was statistically significant in the belief that principals contribute to the effectiveness and improvement of schools (Hallinger & Heck). More current research reiterates these same findings: that the role of the school leader is a critical factor in the school effectiveness and improvement (Rice, 2010). The Wallace Foundation (2003) published a policy brief that found skilled leaders were needed to orchestrate the change necessary for every child to succeed. The goal for school districts of today is to hire strong leaders for both administration and teachers.

According the Sergiovanni (2009) there are four sources of authority that are equally important: bureaucratic, personal, professional, and moral. It takes creativity and a unique style to balance the four sources in a manner that does not neglect one or the other. According to Mazzeo (2003), research suggests that principals lack the skills necessary to

lead a successful school. With the multitude of skills and creativity needed, the concept of leadership has evolved in schools to a much more complex one. The difference between more effective leaders and their less effective colleagues is not what they know, but rather what they do (Whitaker, 2003). In other words, the behaviors of a leader are vital to the organization (Sergiovanni, 2007; Whitaker, 2003). This is often referred to as leadership with a moral craft or moral voice. Sergiovanni believes the morals and underlying beliefs of the leaders themselves plays a major role in how they lead. Not many scholars take an ethical and moral angle when discussing their theory. Sergiovanni is one scholar who tackles the ethical side of leaders and believes that educators must do more to teach the community of learners the importance of supporting the morals, values, and beliefs of the community.

Sergiovanni's concept of leadership has proven to be successful in many top organizations. Sergiovanni (1996) stated, "school leaders are exposed to literature in educational administration that is largely characterless" (p. xiii). Character is a trait that many scholars brush over in efforts to address other issues such as systems or policies. In *Rethinking Leadership,* Carl Glickman states, "Sergiovanni has challenged leaders to focus on how they lead their lives, how they prepare others for leadership, and how important it is to keep purpose at the center of decisions" (Sergiovanni, 2007, p. vii). Schools are special places and leadership in school systems should not be compared to that of the business or the corporate world (Sergiovanni, 1996). Because schools are unique, they require a leadership that is focused on teaching and learning (DePree, 1987; Dufour & Eaker, 1998). In a time of such high stakes accountability, shared decision making, and management in schools, and leadership in schools matters (Rice, 2010).

Louis, Leithwood, Wahlstrom and Anderson (2010) performed a 6-year study to identify the nature of successful educational leadership and how it improves student learning. This study reinforced that the role of a leader is an important aspect of student achievement. The role of a school leader has transformed in the past two or three decades, adding more requirements of the leader. The concept of leadership in a school has transitioned from a bureaucratic-managerial role to a multi-faceted role that requires skill, creativity, and a clear vision for the organization.

The Changing Roles of Principals and Teachers

The role of today's school principals and teachers is a quite different from what was required a few decades ago. Principals in the 21st century are constantly multi-tasking and shifting responsibilities to meet the various needs of their buildings (Trail, 2000). Teachers are not only expected to teach core academics, but they must also teacher manners, character traits, and social skills. Leadership can be known as an art (DePree, 1987). An artist must perfect their skills and foundations to create a masterpiece. This cannot be done overnight; it takes time to perfect. Leadership is no different. Leadership skills and the development of those skills require individuals to be reflective in their practice, which must be accomplished through their own learning (DePree, 1987; Sergiovanni, 2007). Therefore, efforts to improve school leadership are not unwarranted (Mazzeo, 2003). We must improve teaching and learning by first improving school leadership.

It is important to address the theory of leadership as it has evolved through the years. Sergiovanni (1996) states that the basic assumptions behind the theory of leadership cause a hierarchy for administrators that should shift its focus from top-down type leadership. In the

context of education, this authority is passed from the superintendent to a principal, and finally to the teacher-leader in the organization through mutual trust and guidance. Principals are not experts in all areas of schooling, and schools should rely on teacher strengths in the school setting to help it grow (Dufour & Eaker, 1998; Sergiovanni, 2007).

Some sources in the literature proposed that traditional theory of leadership should be challenged, and teachers should take on the responsibility for their own learning and professional growth to meet their goals and targets. That in turn would change the way a leader leads their organization. The leaders' role should be less "doing" for the teachers and more "helping" them do things for themselves. All of these actions would then help to create a new theory of schooling in which the teachers are part of their own professional growth. These responsibilities and accountability would then be shared among the leaders, rather than remaining top heavy without strong trust of leadership from within. This fosters a collaborative culture and community practices. Sergiovanni refers to this as "collective intelligence" (2004). This type of role is unheard of in the corporate world of leadership.

Studies on leadership undoubtedly argue that leaders must be "instructional leaders." But the shift of roles and responsibilities in the education field have moved past leaders as only instructional leaders. These leaders must do much more than lead instructional leadership; they must establish a clear vision, set values in the organization, create a mission, and establish morals. They must empower, motivate, and influence colleagues to move in the direction of the collective vision. This empowerment and influence can be a challenge of becoming a successful leader of an organization (Conger, 1989).

This brings us to the restructuring of the principals' role in schools today. Research shows the role of leadership in schools has changed. Because leadership has been shown to have an impact on student achievement, policy makers have had to rethink how to prepare school leaders. Leadership preparation programs have transitioned toward a dual focus on leadership skills and management training (Waters, Marzano, & McNulty, 2003). On top of this changing role, leaders must also constantly change according to the needs and goals of their organization. The accountability focus that impacts student achievement need to focus not only on the learning of the student but must also include a style of leadership that can empower teachers and build leadership capacity (Lambert, 2005).

Leadership Capacity

Leadership capacity is defined by Lambert (2007) as an "organizational concept meaning broad-based, skillful participation in the work of leadership that leads to school improvement" (p. 422). A school with high capacity leadership is one with trust and team efforts working together for the betterment of the group. According to Lambert's study on leadership capacity, schools with the following elements have positive gains for student achievement:

- Principal, teachers, as well as parents and students, as skillful leaders
- Shared vision results in program coherence
- Inquiry-based use of information to inform decisions and practice
- Roles and actions reflect broad involvement, collaboration, and collective responsibility
- Reflective practice consistently leads to innovation

- Student achievement is high or improving steadily (Lambert, 2007, p. 424).

In order to build leadership capacity, a leader must have a style that allows for a "collective intelligence" (Sergiovanni, 2001) and distributes that leadership effectively. The challenge of school reform is that it continues to challenge schools to keep up with the high stakes demands being put in place. Once leadership capacity is built within an organization, it is important to sustain that capacity. That fundamental shift can only take place when new ideas and practices are fully supported by members within (Dufour & Eaker, 1998). This implies that there must be a commitment from within the organization which begins with the leader. Only a strong leader that has perfected at least some of the necessary skills will succeed in this task. Leadership style then plays a role in the success of not only the school but also building leadership capacity within the school. The many facets of leadership would require a leader that could accomplish such tasks. Following are three types of leadership styles that would support a self-regulated learning environment.

Transformational Leadership

Transformational leaders enhance motivation, morale, and performance through mission and inspiration. They challenge leaders to understand their own strengths and weaknesses. A transformational style of leadership requires a commitment from its staff. They feel a sense of obligation and longing to see the organization succeed. This type of leadership has evolved over the years (Liontos, 1992). Leithwood (1992) finds that transformational leaders pursue three fundamental goals: (a) Helping staff develop and maintain a collaborative, professional school culture; (b) fostering teacher development; and (c) helping teachers solve problems more effectively.

The unique quality of a transformational leader is that they provide moral connections among all stakeholders including teachers, principals, parents, and students, which helps them become self-managing (Sergiovanni, 2007). Theories emphasize connections but transformational leadership is unique in that it creates a commitment through moral connections and obligation. The role of a leader must provide some source of empowerment or motivation to its followers. This moral leadership involves the emotions, values, and connections people make within and outside of the organization. Incentives are provided through transformational leadership for people to attempt improvements in their practices. These incentives are actually values. It is for that reason that sometimes transformational leadership can be referred to as value added.

Leithwood (2007) states that he and his colleagues have provided dozens of empirical studies to support the model of transformational school leadership and its success. He contends that accountability policies strengthen transformational forms of leadership (p. 193). Transformational leadership is only present when leaders and followers are united in pursuit of higher-level goals that are common among the entire learning organization. The goals may have started out as separate initiatives but have merged into a shared vision or new direction (Sergiovanni, 2009). It is then and only then that leadership can be distributed among the learning organization to share the load.

Distributive Leadership

Distributive leadership is more than delegating duties to a small group of teacher leaders. When a collaborative culture is set with trust, a clear vision and purpose, distributive leadership is a natural way to progress. This reaches beyond staff, students, and parents. It is

a bigger picture of hopes and aspirations for a greater cause. In order to position the organization at this stage, the organization must have evolved through several layers of preparation. Goals are clear and a sense of commitment and obligation are present to meet those goals with purpose and determination. "Leadership takes place as a community rather than an individual" (Sergiovanni, 2007, p. 117). The "collective intelligence" will allow for proper disbursement of individual talents and strengths. This intelligence belongs to the entire organization and is multi-faceted in nature. With this collective intelligence, the capacity for learning improvement is magnified greatly (Blankstein et al., 2010). According to Blankstein, "The promise of sustainable success in education lies in creating cultures of distributed leadership throughout the school community, not in training and developing a tiny leadership elite" (p. 231).

For distributed leadership to occur, relationships must be present. Leadership opportunities in this type of distributed leadership organization are not that of entitlement but rather a commitment of expertise. In *Rethinking Leadership,* Tannenbaum (1968, cited in Sergiovanni, 2007) states, "by designating leaders within the organization you increase control by giving up authority" (Sergiovanni, 2007, p. 114). This is uncomfortable for leaders and takes time to emerge. Leaders are in a role of power or authority and if true distribution occurs, the power is shared. Power has the capacity to expand, which is ultimately what is needed in schools when all members are focused on the improvement of student learning. Leithwood (1992) believes power should flow through other people rather than over them. If everyone is allowed to use their natural talents and skills in a way that is complementary to one another, job satisfaction and performance will be at its highest. This

power will then be disbursed among not only the staff within the school setting but also to parents, teachers, principals, and even students. This entire process is linked to the principal, which in turn affects teacher practices in the classroom. It is imperative that the principal be able to release control of the organization and allow new innovations to emerge in the interest of student improvement, even if they create difficulties for leaders (Blankstein et al., 2010).

Transformative Leadership

As the global economy changes dramatically, strong leadership styles capable of ushering fundamental changes is necessary. "Transformative leaders are interested in taking action and making a positive contribution in a rapidly changing world increasingly overwhelmed by social, political, economic, and environmental crises" (Montuori, 2010, p. 5). This type of leader reflects on the state of the world and its current issues as well as past mistakes and failures. Leadership paradigms have generally been based on dominate decision-making positions, mostly male dominate, which project a "power" or "being on top" mentality (Jahan, 2000). Jahan contends that one fundamental change in our society is with transformative leadership, which is grounded on the visions and practices of women's movements and organizations based on equality. This is transforming leadership in fundamental ways, shifting the vision of organizations to a commitment of equality, equity, and empowerment for the group as a whole (Jahan). Transformative leadership is grounded on thinking creatively about issues and learning and unlearning dimensions of leadership that have been unsuccessful. "This type of leadership is designed to address a world in transition

through the development of new interpretive frameworks, personal skills, competencies, and practices" (Montuori, 2010, p. 5).

For an educational leader, there are both internal and external conditions that need to be addressed. A transformative leader is someone who can guide, direct, and influence others to bring about a fundamental change both internally and externally. Transformative leadership's goal is to "transform" people and organizations in a literal sense—to change them in mind and heart; enlarge vision, insight, and understanding; clarify purposes; make behavior congruent with beliefs, principles, or values; and bring about changes that are permanent, self-perpetuating, and momentum building (Covey, 2010). This is a leadership style that creates valuable and positive change in its followers. A transformative leader focuses on transforming others to help one another, to work together as a team, and see the organization as a whole. In this type of leadership, the leader enhances the motivation, morale, and performance of the follower, group or team. Transformative leaders know that if they want to gain commitment and achieve high standards, they must be models of the behavior they expect of others.

Leadership that Supports Self-regulated Learning

Irvin and White (2004) noted, "Principals are called on to make a difference in the lives of their students, schools, and communities. To do so, principals must focus on learning, teaching, and improving student performance" (p. 24). In order to sustain an environment that supports self-regulation, the principal must instill in the teachers the necessary components that support self-regulation. According to Ponton and Carr (2000),

fostering self-regulated learning skills is not often considered from a pedagogical perspective.

Wehmeyer, Palmer, Agran, Mithaug and Martin (2000) conducted a national survey of teachers to gauge each teacher's knowledge and promotion of self-regulated learning. They found that just 60% indicated that they were familiar with the self-regulation construct. From the results of the study, it was clear that the role of the principal was to provide professional development to the teachers on the components of self-regulation while simultaneously implementing self-regulated strategies with staff to model these behaviors. Wehmeyer and colleagues concluded from their research that there are three barriers to providing instruction in self-regulation: (a) lack of sufficient training or information; (b) the need for teachers to learn self-regulating strategies through professional development opportunities; and (c) lack of authority for teachers to provide instruction in this area. The teachers cannot address these barriers alone, and the principal must adhere to the vision of self-regulation before this type of learning can take place.

The roles of leadership in a school setting are vital to the academic success of students. Teacher quality is driven by the characteristics as well as the set of values and beliefs in which the educators and their leaders hold. The three types of leadership previously mentioned have components that are necessary to support self-regulated learning, but it is clear that the role of the principal also is key to its success. The principal sets the direction, including elements of the school's vision, developing specific goals and priorities, and holding high performance expectations; are all necessary components of self-regulation at the building level. Developing staff include the dimensions of providing intellectual

stimulation, offering individual support, and modeling desirable professional practices and values. All of these components build and model self-regulation for staff, which in turn can provide that same environment for their students. The new approach to school administration includes a collaborative school culture, creating structures to foster participation in school decisions, and creating productive community relationships. This is the leitmotiv of effective leadership that will impact student achievement through the use of a self-regulated learning tool.

Summary

Research has found that students can be taught self-regulating skills, and through feedback from peers and teachers, self-regulatory skills improve. Monitoring is a key component, along with the students' perceptions of the learning process. It is the responsibility of educators to guide students on a path that will prepare them for a successful future. Teaching students self-monitoring, self-reflecting, and self-evaluating begins a process that they can utilize through school and their work. As discussed by Schunk and Ertmer (2000), educational research shows that children, adolescents, and adults can be taught self-regulated learning skills. The use of these skills improves learning, and as these skills are maintained over time, they generalize into new learning settings.

The purpose of this study is to depict teacher experiences of the use of a self-regulating learning tool known as a data notebook. This chapter provided a review of relevant studies that offer a thorough understanding of the four conceptual strands significant to this study: Social Cognitive Theory, The Historical Perspective on Reading Development, Models of Self-regulation, Self-regulation Strategies and a Tool for Implementation, and

Instructional Leadership. The next chapter provides the methodology plan and explains the methods and procedures that were used, as well as the sampling, data collection, and analysis procedures for the study.

CHAPTER 3

METHODOLOGY

The purpose of this heuristic case study was to gather an understanding of teacher perceptions and experiences with a self-regulated learning tool known as a data notebook. This study describes what teachers do in their classrooms to support self-regulated learning in reading. The unit of analysis was the teaching experiences and perceptions about the use of a data notebook of teachers in fourth or fifth grade classrooms in a suburban school district.

In most schools there is a limited use of self-regulating strategies to help students become independent readers who know how to set learning targets and develop action plans to monitor their learning. The data notebook is used by all students at the proposed research site which engages students in taking an active role in their reading achievement with the use of goal setting, action plans, reflections, and feedback. The experiences of these teachers will help the field of education gain a solid understanding of whether the data notebook is a useful tool for teachers to help students improve reading achievement.

Case study was used in order to reveal the perceptions and experiences of teachers who each represent a case. The use of heuristic inquiry allowed me to contribute my personal contributions with both reading and the data notebook. I wanted to know how teachers implemented data notebooks to address the reading needs of their students. The following sub-questions are formulated to address this central question: (a) What are the fourth and fifth grade teachers' perceptions of the data notebooks that are used by students to monitor their own reading progress, (b) What are some of the ways that data notebooks are

used by fourth and fifth grade students in monitoring their own reading progress, (c) How was the data notebook strategy implemented and supported by the leadership in one Midwestern school district?

In this chapter, I discuss the rationale for qualitative methodology including an overview of the heuristic inquiry process as a design element and case study as the major approach. My role as the researcher is described followed by other design elements to include where the study took place, participants and sampling techniques, data sources, and analysis procedures. I conclude with a discussion of the limitations and ethical considerations pertaining to this study.

Rationale for Qualitative Research

Patton (2002) describes qualitative methods as open-ended questions of people and observation of matters of interest in real-world settings in order to solve problems, improve programs, or develop policies. Methods of qualitative inquiry are significant enough to stand on their own as sensible ways to investigate what is happening in the human settings. Creswell (2012) defines qualitative research along with an emphasis on the design of the study and approaches to the inquiry:

> Qualitative research begins with assumptions and the use of interpretive/theoretical frameworks that inform the study of research problems addressing the meaning individuals or groups ascribe to a social or human problem. It begins with the use of an emerging qualitative approach, the collection of data, and data analysis that establishes patterns or themes. Finally, a report includes the voices of participants, the reflexivity of the researcher, an interpretation of the problem, and its contribution to the literature or a call for change. (p. 44)

Patton (2002) stated "qualitative designs are naturalistic to the extent that the research takes place in real world settings and the researcher does not attempt to manipulate the

phenomenon of interest" (p.39). This case study elicited data in a natural school setting, from several cases related to the teachers' experiences while working with students who were using a self-regulated learning tool for reading. I was sensitive to the participants' needs as well as the school in which the study took place so that I was not a disruption to students or staff in any way.

Groenewald (2004) stresses that educators need to "grasp a vast range of methodologies in order to select the appropriate design" (p. 2). It is a compilation of facts surrounding phenomena, the research question, data collection processes, and the final outcomes of data analysis. The research design for this study was heuristic case study, which focused on describing the individual experiences of teachers. The philosophical underpinnings are based on a constructivist approach that recognizes the importance of the subjective human creation of meaning but does not reject some notion of objectivity. This paradigm allows participants to tell their story and describe their view of reality. There are numerous types of reliable qualitative inquiries. The following subsections explain in detail the theoretical traditions that were utilized during the investigation.

Case Study

Stake (1995) and Yin (2003) provide two key approaches to case study investigations. The design of this study brought out the details from a participant's perspective. Yin (1994) describes exploratory, explanatory, and descriptive case studies, whereas Stake (1995) identifies three different perspectives: intrinsic, instrumental, and collective. The study utilized a descriptive case study to ensure that the topic of the study is thoroughly explored and the phenomena have been revealed. Both Stake (1995) and Yin (2003) base their

approaches to case study on a constructivist paradigm, where truth is relevant and it is dependent on one's perspective. For this investigation, a multiple-case study enabled the researcher to explore differences within and between cases, and employed the methodology of Robert Yin (2003).

According to Yin (2003), there are conditions that must be considered when determining the type of analysis one will employ in a qualitative study. Each condition of this study is addressed in detail. The first condition that must be satisfied in a case study is the "how" and "why" condition. This study examined how teachers were implementing the use of data notebooks and why their students were experiencing higher achievement in reading as a result of using data notebooks. The second condition is that behaviors cannot be manipulated for this study. In this case, participant behaviors were not controlled. The third condition is contextual conditions, because I believe they are relevant to the phenomena under study. This case study cannot be considered without the context of the classroom setting and the interactions between the teacher and students. Yin (2003) defines case study research as "An empirical inquiry that investigates a contemporary phenomenon within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident" (p. 13). After careful consideration of each condition, I determined that a case study was well suited for this investigation. The primary goal of this investigation was to encapsulate the full meaning and experiences of this self-regulating tool and the perceptions that teachers and researcher share. Therefore heuristic inquiry was utilized for the research and is described in detail next.

Heuristic Inquiry

Patton (2002) stated that when a researcher seeks to understand a "lived experience," the focus of inquiry can be almost anything, such as an emotion, a job, a relationship, or a program that suits the study. This facet of heuristic inquiry offers a research method that facilitates the collection of data and the development of an analysis based on the experiences and perceptions of teachers in helping students with self-regulating strategies in conjunction with the experiences of the researcher.

Moustakas (1994) described the meaning of heuristic as being derived from the Greek word heuriskein meaning to discover or find. This referred to the "process of internal search through which one discovers the nature and meaning of experience and develops methods and procedures for further investigation and analysis" (Moustakas, 1990, p. 9). Moustakas (1994) described the foundation of heuristic process is described as the researcher's internal search through which one discovers the nature and meaning of experience through discovery. The self of the researcher is present throughout the study increasing the depth of knowledge for new information. This type of inquiry is focused on discovering and illuminating human experiences with the research playing a specific role. This role of the researcher which draws on the relationships and connections between the study participants and the data is described next.

Role of the Researcher

In qualitative research, the key instrument is the researcher (Creswell, 2007). During this research I became obsolete as participants acted independently as if I did not exist. . Patton (2002) suggests that "heuristics is a form of phenomenological inquiry that brings to

the fore the personal experience and insights of the researcher" (p. 107).During the interview phase of this study, I informed participants that I was seeking their perceptions and experiences to help me discover the implementation of this self-regulating tool for reading. Sharing my insights and past experiences with participants took place during the interview phase of this study. This time allowed me to interact with the participants in an engaging manner to allow for addressing questions or expectations related to the study.

I served in the role of participant observer for this study (Patton, 2002). Grbich (2013) states that the first thing a researcher needs to do is to address whether the data collection will be overt or covert. While conducting observations, I had very few interactions as I immersed myself in the teaching practices regarding the self-regulating tool in reading. During this study, overt observations took place with research questions nearby to help guide the process. Brayboy and Deyhle (2000) state, "Intellectual distance allows the researcher to perform a proper analysis" (p. 165). Gathering information was the primary purpose during observations while interactions with the participants as a secondary purpose allowed for clarification of these observations and documents used for the study.

As the researcher, my main goal was to connect with the participants so that the data collection and research would provide details for a thick-rich study. I used the heuristic inquiry and data triangulation to allow the discovery of details about this self-regulating learning tool in reading. This allowed me as the researcher to "say something about" the data notebook used in reading (Patton, 2002, p. 229).

Design of the Study

Site

Traditionally in a case study, Creswell (2012) indicates that the researcher needs to select a site or sites to study, such as programs, events, processes, activities, individuals, or several individuals. The Midwestern K-5 elementary school chosen for this study is located in a Midwestern suburban area, which has been using the data notebook school-wide for at least three years to help guide and instill self-regulating strategies that help students become active participants in their learning. The use of the data notebook is one component of a program called *The Leader in Me*, which is based on *The 7 Habits of Highly Effective People*® by Stephen Covey. *The Leader in Me* is intended to produce transformational results such as higher academic achievement, fewer discipline problems, and increased engagement among teachers and parents. This program teaches children the power of living by principles, otherwise known as the *7 Habits*, that can ultimately guide their lives. The data notebook is but one component within this program that helps students become life-long learners. This school was one of eleven elementary schools. The use of this program or this self-regulating tool was not a district-wide strategy, but other elementary schools were piloting the data notebook or were in the beginning stages of its implementation. The *7 Habits* were consistently implemented at the chosen site, and the expectation was that every classroom in the building abided by these principles.

The demographics for the school for 2012-2013 were as follows: Caucasian 82.9%; African-American 0%; Hispanic 6.3%; Asian/Pacific Islander 0%; American Indian/Alaska Native 0%; free/reduced lunch 47.3%. Communication Arts scores on the Missouri

Assessment Program (MAP) for this school site have improved over the last three years. In 2011, scores were 38.5%, with an increase in 2012 to 45.1% and finally in 2013 to 53.9%. Although more than one factor contributes to academic success in reading, data notebooks implemented in this school have proved to be a positive factor in student achievement for communication arts.

Participants and Participant Sampling

An important element of this research design was to determine the number and type of samples that would be included. Yin (2003) maintains that multiple-case designs are likely to be stronger studies than those that only examine one case. The class sizes for the classrooms in this school were 15-18 students per classroom. This was intentional, and it was noted that the goal of the district was to keep the class sizes down in order to meet the needs of each and every student. I invited all fourth and fifth grade classrooms from the chosen site. The sample size for this study consisted of approximately six fourth and fifth grade classroom teachers. There were a total of seven teachers at the chosen site, three in fourth grade and four in fifth grade. This unit of analysis provided a rich variation to depict the entire experience as a whole and not that of just a single individual.

Criterion sampling was the procedure used in this case study to illuminate a specific theme or gain insight about a phenomenon. Patton (2002) states, "Criterion sampling is a logic of criterion to review and study all cases that meet some predetermined criterion of importance, a strategy common in quality assurance efforts" (p. 228). Criterion sampling was used with the following predetermined criteria for participants: (a) must hold a teaching certification at the elementary level, (b) must have at least one year teaching experience, (c)

must be utilizing individual student data notebooks in their classrooms for reading. Participants who met the criteria were selected on a voluntary basis and could choose to cease participation of the study at any time. Next, I describe the mandated guidelines for consent for this study.

In order to recruit these individuals, I began by obtaining permission from the superintendent of the school district. I did so by making an appointment with the superintendent to discuss the details of my study. After my presentation, I left a formal letter of authorization for the superintendent to sign and send back to me in a self-addressed, stamped envelope. Once permission was granted, I went through a similar procedure with the principal for the chosen site. I left a letter of authorization, along with a self-addressed, stamped envelope for the principal to sign before contacting any teachers. Once permission was granted from the principal, I provided information to the fourth and fifth grade teachers. I provided a formal letter of request for them to participate along with a self-addressed, stamped envelope for his or her response. The expectation was to solicit at least seven teachers in combination from fourth grade and fifth grade classrooms.

This was a multiple case study, with each participant serving as a single case. There was one unit of analysis for this research, therefore making the study a holistic multiple case study. This allowed a discussion of findings across all the teachers' interviews, observations, and documents. In the next section, these data sources and the production of data are explained.

Data Sources and Production of Data

Stake (1995) suggested that a case study should include multiple sources of information from which to gather data. Yin (2003) categorized these sources of data into six broad categories: documentation, archival records, interviews, direct observations, participant observations, and physical artifacts. This study employed interviewing, observations, and reviewing documents which Yin (2003) delineated as three primary methods for collecting evidence. I utilized data triangulation with these three sources for data consistency throughout the study.

Interviews

The purpose of qualitative interviewing is to capture how those being interviewed "view the world, to learn *their* terminology and judgments, and to capture the complexities of *their* individual perceptions and experiences" (Patton, 2002, p. 348). The major data source for each case were interviews with the teachers regarding their experiences and perceptions with their students' use of a self-regulating learning tool, namely individual student data notebooks used in reading instruction. Yin (2003) maintained that interviews are necessary sources of case study information. An in-depth interview took place during this study to gather the participants understanding and experiences with the use of the data notebook. I conducted follow-up interviews to clarify any questions or misconceptions.

An open-ended semi-structured interview took place. The purpose of this type of interview is not to get answers or to test a hypothesis; it is to better understand the experiences of those most affected by the phenomenon being studied (Seidman, 1998). The interviews targeted the feelings, thoughts, and intentions of participants through the use of an

interview guide (Appendix E). According to Patton (2002), an interview guide allows the researcher to focus on various questions and issues using a basic line of inquiry.

During these interviews, audio recordings and note taking were used in an attempt to accurately capture the participants' experiences. The IPad is protected by a password and participant names were not used. Pseudonyms were used from the beginning of this study and recordings were destroyed once the interview was accurately documented and approved by the participant. I highlighted critical points made by the participants which helped me during the transcription and coding process.

Observations

The second data source was observations of the participants. Observations are useful to research in a variety of ways and have become increasingly more popular in qualitative research in the educational field as a way of collecting information. DeWalt and DeWalt (2002) believe, "The goal for design of research using participant observation as a method is to develop a holistic understanding of the phenomena under study that is as objective and accurate as possible given the limitations of the method" (p. 92). Wolcott (2001) suggests that researchers ask themselves if what they want to learn makes the best use of the opportunity presented. Researchers' questions should be nearby to refer back to, which also helps to keep the focus of the observation on track.

Direct on-site observations were conducted a minimum of two times with each teacher during the course of the study for approximately 90 minutes during reading instruction while utilizing an observation guide (see Appendix F). I focused on the teacher's goal setting, documenting progress, and/or other self-regulating activities and engagements

regarding the use of the data notebooks for reading. I documented teacher behaviors and attitudes toward the usage of the data notebook and any interaction or feedback to the students from the teacher. Although interviewing served as the major source of qualitative data in this study, Patton (2002) suggests the need to conduct on-site observations to better understand the relationship between the phenomenon and the organization as a whole. If observations were made that included interaction with students, student names were not provided, nor did any direct conversations take place between the researcher and student. To gain an understanding of the context of the classroom, visual aids displayed, such as graphs or data, along with the overall environment, were described, excluding any student name.

Documents

The final data source was documents pertaining to the data notebook. Miles and Huberman (1994) posit that documents have significance and can inform about an organization and its importance. Patton (2002) also mentions, "Organizations produce mountains of records, both public and private" (p. 293). The organization in this study was an elementary school system. Grbich (2013) suggests reading documents to seek an understanding of the experiences of the participants in a phenomenological study. Documents come in all sizes and with all different types of content. For the purpose of this inquiry, I used several official documents.

The first document was a review of documents used inside the student data notebook from each classroom. These were forms that teachers provided to their students with emphasis placed on the important components of self-regulation (i.e., goals, plans to reach the goals, and reflection) in regard to reading. The forms were not filled out by students and

were copies of what the student was given to place inside their data notebook. This provided insight into the purpose of using a data notebook in fourth and fifth grade school settings for reading.

The second official document that I collected was a PowerPoint presentation used during a district in-service to help educate and prepare elementary teaching staff on the steps to implement data notebooks in their classrooms. In order to immerse totally into the experiences of these teachers and the use of a self-regulated learning tool in their classroom, it was important to gain an understanding of the data notebook and what it entailed. Research noted previously in the review of literature stated that this was a necessary component in the implementation of a successful self-regulated learning environment.

The third official document used for this inquiry was the reflection journals that these teachers completed during the research study after each of the observations (see Appendix G). These journals required the teachers to reflect on their experiences regarding data notebooks. The journals can be electronic, but due to confidentiality concerns, participants were required to print their responses and send them to the researcher by mail with a self-addressed, stamped envelope. Through these journals I hoped to gain a perspective on the teachers' thoughts and feelings regarding their experience with the data notebooks in reading. Teachers sent their journals to me by the target date specified at the time of each observation. Reflection journals are important tools, and in support, Pajares (2006) notes that self-reflection gives teachers the capacity to improve themselves, and to be purposeful and proactive about their practices.

I sought to encapsulate how the teachers implement the self-regulated learning tool. As Patton (2002) explains, the heuristic process of phenomenological analysis seeks to bring meaning to the lived experiences of a phenomenon; in this case, the teachers' perspective on a phenomenon. Six basic phases in the heuristic process are discussed in the next subsection. This process of inquiry, although tedious, allows for a new path to form by infusing the knowledge and experiences from both the researcher and the participants.

Data Management and Analysis

Data analysis began during data collection and was ongoing throughout the study (Merriam, 1998). The primary method of analysis for this study was the six basic phases of heuristic process of phenomenological analysis: (a) initial engagement, (b) immersion, (c) incubation, (d) illumination, (e) explication, and (f) creative synthesis, which was utilized to analyze the study data through a heuristic lens (Moustakas, 1990). According to Patton (2002) "heuristic inquiry is a highly personal process" (p. 486).

The interest and passion I have for reading achievement and the use of the data notebook drove this study. This is the first phase of phenomenological analysis known as the initial engagement. During this phase my personal experience and knowledge provided the basis and motivation for the investigation. After the initial drive to search for an understanding, the research moved into a second phase of analysis: immersion. Moustakas (1990) suggests that during this phase of analysis, the life of the researcher is completely focused on the topic of interest. I totally immersed myself into the experiences and realities of the participants as I interviewed, observed and explored pertinent documents pertaining to

the data notebook. At this time I lived and breathed the research questions in an attempt to truly understand the experiences and perceptions of the participants.

During the third phase of analysis, known as the incubation phase, I allowed the data to evolve and incubate by setting aside my personal experiences and knowledge to permit new discoveries and connections to take light. Incubation is a period that enables tacit and intuitive understanding about the question or phenomenon (Moustaksas, 1990). This is a time where the researcher comes to a new understanding of the data, adding to present knowledge and building or expanding on it.

The fourth phase develops closely with phase three as the researcher has somewhat of a breakthrough on the new ideas and discoveries after incubation. This phase is the illumination phase, which highlights the new discoveries while making sense of the combined data. During this phase, themes and patterns begin to emerge and take shape. This coding of analysis is tedious but is used to stay focused on the research questions found throughout the multiple sources of data (Grbich, 2013). "Codes are tags or labels for assigning units of meaning to the descriptive or inferential information of a study" (Miles & Huberman, 1994, p. 56). This process of grouping allowed me to narrate a thick, rich study connecting themes in a sensible manner.

The fifth phase of analysis is explication, which allows the researcher to describe the perceptions and experiences of the participants in a meaningful and organized manner. This phase describes new themes and components relevant to the questions and discoveries and "unfolding of experiences" (Patton, 2002, p. 487). The last phase, which brings the entire experiences and perceptions to a meaningful narrative, is the final phase known as creative

synthesis. Moustakas (1990) suggests "the researcher in entering this process is thoroughly familiar with all the data in its major constituents, qualities, and themes and in the explication of the meanings and details of the experiences as a whole" (p. 31).

In sum, I also drew comparisons between cases to generate an understanding about the use of this data notebook in each classroom as well as a solid understanding in the context of the school. Using multiple sources of data helped me depict a true meaning of and experiences with the use of this self-regulated learning tool in reading.

Limitations of the Study

Biases are brought into every study and likely inevitable. A researcher's biases, however, can actually add to the overall study. I brought a bias to this study on the use of a data notebook for reading because I knew the leadership of the chosen site.

A limitation was that participants in the study were drawn from the fourth and fifth grade teachers at only one Midwestern suburban school in Liberty, Missouri.

My subjectivity as an administrator who is familiar with the different ways to implement data notebooks might have been a limitation as well. It was important to establish the purpose and usefulness of this study, and to relay that information to the participants. The researcher's relationship with the participants might lack an authoritative feel, ensuring that the participants are comfortable sharing their experiences.

The reactivity with my participants was another area of concern. I was cognizant of how my presence might have influenced participants. As Maxwell (2013) states, "It is impossible to eliminate the influence, but it can be used productively if understood" (p. 125).

Participants must be willing and able to communicate their experiences without fear or intimidation.

The most notable limitation of this study was my novice status as a researcher and my ability to accurately capture the perceptions of six volunteers and their experiences with the use of a data notebook in reading. Through the use of a reflective journal, I utilized processes and procedures that allowed me to bracket my thoughts and openly communicate with the participants to elicit a true and accurate perception of their use of this self-regulating learning tool in the classroom.

A final limitation was the inability to use electronic communication. Because electronic communication is not secure, all communication was received by me as the researcher through stamped and addressed envelopes or in person. This presented a challenge in receiving the information from participants as readily, because U.S. mail is no longer the easiest and fastest method of communication.

Validity and Reliability

Lincoln and Guba (1985) stated, "Since there can be no validity without reliability (and thus no credibility without dependability), a demonstration of the former is sufficient to establish the latter" (p. 316). Validity and reliability are often viewed as quantitative methods, but the credibility of this study was dependent on the way in which I collected, analyzed, and interpreted the data with consistency across cases. According to Polkinghorne (2005), "The production of these data is not governed by a set of rules; the research has considerable leeway in the selection and process of developing these data" (p. 138). The reliability of the data depends on the integrity and honesty of the researcher. The design

method needs to be transparent to the reviewers, and to those who would use the findings in their practices. Miles and Huberman (1994) state, "The underlying issue with reliability is whether the process of the study is consistent, reasonably stable over time and across researchers and methods." (p. 278).

First, I addressed the notion of validity and reliability grounded in qualitative research by using a technique known as triangulation. My three data sources for triangulation were interviews, observations, and documents. Patton (2002) deems triangulation as a data source and an analytical perspective that increases accuracy and credibility of the findings. The triangulation method reduced potential threats to this study. Triangulation occurs with an analysis of data related to this self-regulated learning tool and provides confirmation of findings through the use of a matrix analyzing all three data sources across all cases. This triangulation provides evidence that the approach led to confirmation of the findings or a conclusion of results.

Next, I \addressed internal and external generalizability. The internal validity issues were mediated through pattern matching analysis, explanation building, and exploring rival explanations with input from participants. To address external validity, I conducted a multiple-case study based on replication logic which allowed the study to be implemented in various other sites. Finally, to address reliability conditions, I followed a designated protocol (the research design) and maintained organized, accessible electronic and physical databases.

In sum, reliability and validity were addressed through data triangulation, reflective practices, use of a single site with multiple cases, and finally by utilizing a thick, rich

description to truly discover the perceptions and experiences of these teachers using a data notebook in reading.

Ethical Considerations

Confidentiality was of utmost importance in this study. As the researcher, I was the only one with access to teacher responses or data of any kind. If a teacher chose to drop out of the study at any time, he or she would have been provided any and all documentation they wanted to view regarding the study that included them. No participant chose to leave the study. A letter was sent to parents (see Appendix H) indicating the purpose of this study and the intent to study only the teacher of the classroom and their experiences with the use of data notebooks. It also informed them that I would not use any students' names in my study. This letter provided the purpose of the study and the amount of time I would be observing their classroom, along with my name and telephone number if they had any questions. This letter was informational only and did not require a signature. All letters of consent, notes, or communication of any kind were stored on a university computer or campus central location to ensure proper data security and confidentiality measures were taken. This data will be saved for seven years after completion of the research. Participants were also assigned pseudonyms from the beginning, and actual names were not used in any part of the research.

Requirements as detailed by the University of Missouri-Kansas City (UMKC) Social Science Institutional Review Board (SSIRB) were utilized throughout the study. I followed all requirements and complied with the U.S. Department of Health and Human Service's regulations for human experimentation surveillance (1979). I had a supervisor of the university faculty who assisted me with the study to ensure the protection of human subjects

throughout my research. I also played a crucial role in protecting the rights and welfare of my participants as well as meeting the expected requirements. All documents and materials were maintained and protected under UMKC requirements. As a gesture of appreciation for their time and willingness to provide information for the study, each participant was provided a gift card to a restaurant.

CHAPTER 4

FINDINGS

The purpose of this heuristic holistic multiple case study was to gather an understanding of teacher perceptions and experiences with the use of a self-regulated learning tool known as a data notebook in reading. This case study involved an in-depth study of an issue through multiple cases in the context of environment, situation, circumstance or other form of "bounded system" (Creswell, 2007, p. 73). The use of heuristic inquiry allowed me as the researcher to contribute personal experiences and insights to the study (Patton, 2002). The unit of analysis was the teaching experiences and perceptions about the use of a data notebook of six teachers in fourth or fifth grade classrooms in a suburban school district. This single unit of analysis made this study holistic in nature. Each participant served as a single case, making it a multiple case study. The unit of analysis in conjunction with the research questions provided the structure for the analysis and the findings. In reference to this study, the data notebook is referred to as data notebook, data folder, notebook, or folder.

Qualitative research was an effective design for this study as it allowed for the evolution of details necessary to truly discover the meaning and perceptions behind the use of this tool. Heuristic inquiry supported the exploration of teachers' perceptions and experiences of the data notebook while also giving the researcher an avenue to provide personal experiences. Before reporting on the findings, I set the context for this discussion by briefly describing the methodology, including the setting, participants, data sources, and data analysis. The case descriptions were developed with the use of multiple data sources for each

participant; observations, reflection journals, and in-depth interviews. I report on the cumulative findings for the observations and reflection journals, followed by the within-case studies; I conclude with a cross-case analysis of the data, developed using the in-depth interviews as the major data source with findings integrated from observations and journals and answer the research questions.

Setting and Participants

The six participants for this study were selected using criterion and purposeful sampling to illuminate a specific theme and to gain insight about a phenomenon. Creswell (2012) indicates that criterion sampling differentiates the participants to allow maximum variation to occur. Maxwell (2013) contends that this purposeful sampling is important in a case study to justify the case in terms of the goals for that particular study. This study took place in an elementary school in a Midwestern suburban town. The community that this district serves is comprised mostly of middle to lower income Caucasian families. The free and reduced lunch rate was at 47.3% for the 2012-2013 school year, and the percentage continues to rise each year. There were 462 students enrolled, with approximately 15-18 students per classroom. This site was chosen for this study because of the characteristics it provides relating to the dissertation topic on the use of data notebooks. The data notebooks are used throughout the entire school in every grade level with expectations that are consistent among all teachers. Although this study focused only upon the use of the data notebook in reading, it was utilized in other subject areas such as math and science as well. All data notebooks were set up in a similar manner utilizing tabs to separate subject areas.

The original intent to study the use of a data notebook, derived from my quest to find a learning tool to help support and instill confidence in reading for elementary aged students. My personal experience and knowledge have provided the basis and motivation for the study, and the data notebook provided an avenue for teachers to utilize this type of learning. As the researcher, I wanted to have a clear understanding of teachers' experiences and perceptions of the use of this tool with students. From the beginning and as the study progressed, I remained faithful and loyal to the research questions that guided the study's design. .

I became acquainted with my participants and gained rapport that allowed them to see me as a co-researcher rather than a principal in another district. I thought that my participants were able to be their true, authentic selves without fear of any negative ramifications about their participation in the study. I spent time interacting with the participants, becoming familiar with their culture and climate of their classroom. I provided positive feedback and praise, which they accepted. I was impressed with the uniqueness of each teacher yet all of them consistently demonstrated a teaching style that facilitated learning. I asked them about their background and what brought them to the world of education and their passion for working with children. These types of conversations helped me to gain a clear understanding about their experiences and perceptions regarding the use of the data notebook. I discovered that I was gaining a perspective on not just the notebook, but also on the teachers and their journeys to facilitate learning for students, which resulted in an unexpected ease in collecting data about the phenomenon.

Data Sources

I conducted in-depth interviews with each of the six participants. Each participant was able to share their experiences and journey with the use of this self-regulating tool. I also conducted observations in each of the classrooms for each participant, serving in the role of participant observer for this study (Patton, 2002). These observations gave me a clear understanding of the culture and climate of the classroom, the self-awareness of the students, and their learning goals. I immersed myself in the teaching practices of these classrooms but remained committed to the research questions and focus. Each participant also partook in a reflective journal after the observations were complete. This gave the participants a way to communicate their practices regarding the use of this tool either with the lessons I observed or its utilization in their classroom.

I spent several weeks gathering data and getting acquainted with my participants. This gathering of data took place in the months of February and March 2014, which allowed me adequate time to develop a rich description in order to fully explain the themes during data analysis (Patton, 2002).

Data Analysis Procedures

The primary method of analysis for this study was the six basic phases of heuristic process of phenomenological analysis: (a) initial engagement, (b) immersion, (c) incubation, (d) illumination, (e) explication, and (f) creative synthesis (Moustakas, 1990). Enumerative (Miles & Huberman, 1994) and thematic coding (Grbich, 2013) were utilized during the illumination and explication phases of heuristic inquiry. I selected within-case analysis to provide detailed descriptions of each case, illuminating themes within the case, and then

across-case analysis to compare themes across all six cases. This final phase provided data that emerged from the phenomenon of the self-regulated learning tool in these six classrooms.

Using rich description and data triangulation, validity procedures were upheld throughout this study (Creswell, 2007). This research was guided by the following overarching question: How do teachers implement data notebooks to address the reading needs of their students with the following clarifying questions: (a) What are the fourth and fifth grade teachers' perceptions of the data notebooks that are used by students to monitor their own reading progress? (b) What are some of the ways that data notebooks are used by fourth and fifth grade students in monitoring their own reading progress? (c) How was the data notebook strategy implemented and supported by the leadership in one Midwestern school district? At any point during this study if I felt that my data were not clear, I returned to my participants for clarification. The commitment to stay focused on these questions safeguarded the reliability of this study.

Findings from Observations and Reflection Journals

Each of the participants was viewed as a single case in this multiple case study with observations, interviews, and reflection journals, which were used to construct case descriptions. In this section, I provide a discussion of the findings from the observations and journal entries, which were integrated with findings from the interviews to create thick descriptions on the use of the data notebooks for each participant.

Observations

There were two observations with each participant, in which four themes emerged consistently across all six classrooms. The theme of learning goals proved to be the most significant within the data collection of the observations, with a total of 501 codes. The interpretive codes under the theme of learning goals included types of learning goals, monitoring of learning goals, and self-regulating strategies toward learning goals. The most prevalent within the observation data collection was the focus of academic goals and the monitoring of those goals. The theme of environment was closely behind learning goals within the observation data with a coding of 438. The interpretive codes for the theme of environment include the culture and climate of learning as well as the skills and strategies present in this environment. The more significant code was the culture and climate of learning. The behaviors theme showed 331 codes and included the interpretive codes of behaviors for teachers and students. The teacher as a facilitator and student engagement were the most significant throughout the observations. Communication was the least significant coding, with only 165 codes collected throughout the observations.

The observations provided a time for me as the researcher to discern how this self-regulated learning tool was utilized and applied within these six classrooms for reading. The data collected from the observations on each participant had higher significance than the interviews or reflection journals. The observations therefore provided the most significant data for this study. Specifics quotations and documentation are provided in the details of the within-case analysis.

Reflection Journals

Reflection journals were collected from each participant after the observations were completed. This provided an opportunity for the participants to reflect on the teaching practices and to provide any details they deemed important for this study. The findings for one theme within the reflection journals was not consistent with the data collected from the observations and interviews. In fact, it was the complete opposite. Communication was the highest coded theme within the reflection journals with 116 codes, but in the interviews and observations, it exhibited the lowest number of codes. Communication includes the communication to and from parents, teacher, and students. The remaining three themes were comparable with other data sources. The learning goals were coded 96 times within the reflection journals and was the second highest coding within this data source. As mentioned above, learning goals include types of learning goals, monitoring of learning goals, and self-regulating strategies toward goals. The theme of environment was coded 87 times and included the culture and climate of learning as well as the skills and strategies within the classroom. The theme of behaviors was the lowest coded theme for this selection of data at 66 codes documented, which includes behaviors of teachers and students. Specific examples of data documented or observed are provided in the following sections.

Within-case Analysis

The six participants of this study are described in detail throughout the within-case analysis. Four themes emerged from the data collection collected from these six participants' interviews, observations, and documents. These themes were environment, behaviors,

learning goals, and communication. Each participant is described in detail in the within-case analysis, followed by the four themes within each case, and then across the data sources.

The four themes were consistently present among five of the six cases in varying degrees (see Table 3). I have provided more descriptive representation of this information and definitions related to themes in each case. Case 1, however, provided more background and references than subsequent cases regarding the first three themes, and the same is true for Case 2 regarding the last theme. Cases 2, 3, 4, 5, and 6 provided less description but assumed the same referenced detailed definition from Case 1. Case 1 is the only case that provided no significant reference to communication.

Case 1: Hannah

Each participant chose their own pseudonym, which brought a unique perspective to each case. The name Hannah comes from the Hebrew name meaning "favor" or "grace." This is unique because I found Hannah to be exceptionally graceful and natural at teaching. She had a glow about her that exudes her passion of working with children and perfecting her craft. She was the most experienced teacher for her grade level but only in her fifth year of teaching. On first meeting with Hannah, she appeared very young, which may lead someone to inaccurately assume she is inexperienced. However, her grace and maturity as a teacher radiated the fact that she had truly found her calling and would have a positive impact not only on many children but also on many teachers.

As an administrator myself, I could see that she was a strong mentor for her colleagues and that their success with the use of the data notebook stemmed from her guidance and knowledge. It was also quite evident that her students respected her and felt

Table 3

Cross-Case Themes

	Environment	Behavior	Learning Goals	Communication
Interviews				
Hannah	S	S	S	W
Julie	S	M	S	W
Janis	S	M	S	M
Debbie	M	M	M	W
Ellen	M	M	M	W
Lucy	M	S	M	W
Observations				
Hannah	S	M	S	W
Julie	S	S	S	M
Janis	S	S	S	M
Debbie	S	M	M	W
Ellen	M	M	M	W
Lucy	S	S	S	M
Documents				
Hannah	W	W	S	W
Julie	M	W	S	W
Janis	M	M	S	S
Debbie	W	W	S	W
Ellen	W	S	W	W
Lucy	S	W	W	W

Strong presence = S
Moderate presence = M
Weak presence = W

very comfortable in their classroom. Her walls were filled with inspiring quotes and phrases such as, “You must be the CHANGE you wish to see in THE WORLD,” “inspire,” “KINDNESS.” Another poster read, “What I like most about my classroom is whom I share

it with." All of these brought a sense of pride and commitment to the students that reiterated the positive nature of her graceful and natural teaching ability. It gave me a sense of satisfaction to know that Hannah was in this profession for the right reasons and pursuing a passion that will affect many students in a positive way for years to come. This natural ability is not seen that often and when it is, it is refreshing.

Hannah was a fifth year teacher. All five of her teaching years, including her student teaching experience, were completed at the upper elementary grades at the current location. She held a Bachelor of Arts degree in Elementary Education and a Masters of Arts in Educational Leadership. She mentioned that she was a pilot teacher for the "Leader in Me" program that is still a major part of the school culture. Hannah shared that she became a teacher because as a child she "had a really great school experience and loved all of her teachers." She went on to say, "The more I teach, the broader my love for education becomes and I am learning to love every part of it." Her positivity showed in her interview and her interactions with her students. Her mission statement reiterated this as well:

> Our class will do our best to be trustworthy, ***helpful,*** leaders who live the 7 Habits to **accomplish** our goals and be successful learners by **working together** with positive attitudes.

She was also a mentor to her grade level and stated, "I am on the building leadership for my grade level and hold many other district committee positions as well." It was apparent that Hannah was a teacher who was involved and invested in the future of her school.

Environment. A theme that surfaced throughout the three data sources for this study was environment. This theme was defined as the culture and climate of the classrooms in regard to self-regulated learning and the data notebook as well as the teaching skills and

strategies used in the classroom. Bandura (1977) states, "By managing the stimulus determinants of given activities and producing consequences for their own actions, people are able to control their own behavior to some degree" (p. 3). Self-regulation, or in this case, the use of the data notebook, assumes reciprocal causation among three influence processes: personal, environmental, and behavioral. This implies that a person is constantly interacting among cognitive, behavioral, and contextual factors. According to this reciprocal determination, self-regulation depends not only on personal processes, but also on the influence of the environment and behavioral events. The personal processes include factors such as goals, anxiety, metacognition, and self-efficacy. The behavioral processes include factors such as self-observation, self-evaluation, and self-perception, which have an effect on behavior. The environmental factors include those such as the individual's social and physical environment. Self-regulated learning is an integrated process that consists of all three of these factors that can affect a child's education. It was obvious that the physical environmental was a factor that played a role in the implementation of this tool for this study.

In Hannah's data collection, the theme of environment was fairly significant in both her interview and observations. It was not quite as prevalent within her reflection journal, but she still made mention of it. The climate and culture of learning was an interpretive code found in Hannah's data sources. Clear expectations, routines, and time frames appeared to be very distinct. According to Harry and Rosemary Wong (2009), effective teachers have structures in place for a well-managed classroom with discipline, procedures, and routines taught the first days of school. Hannah's classroom was well managed, and it was clear that the students knew what was expected of them in regard to routines, structures, and learning.

This was evident while observing their routines and procedures as well as their transitions and independence during the lessons. This was a solid classroom community where students appeared relaxed and the transitions were smooth with very little redirect from the teacher. There were clear expectations, both behavioral and academic. Hannah reflected on clear expectations in her journal:

> Students knew their goal and where they needed to be at the end. While the data notebooks were never pulled out in either lesson the students still had opportunities to monitor their growth and success. This happens by spending a lot of time in the beginning really diving into each learning goal. The students were engaged in their task and ready to meet their goals. The tasks led to reading achievement by using what they already know and researching more information.

In Hannah's interview, she stated:

> Implementing the data notebook is just part of our procedures and we added it into the culture of our classrooms this year. They (the students) know that when they get something back that they need to graph it. We put the responsibility on the kids and that has helped with their ownership.

Clear expectations were engrained in this classroom and that would not have been possible without Hannah's precise planning and guidance, which supported a positive learning environment.

Time frames were clearly important with regard to the data notebook and learning environment in Hannah's classroom as well. Time frames were described as weekly, quarterly, morning, afternoon, minutes, or any reference to time of day in regard to goals, tasks, or progress. I made the following comments in my reflective journal that ties directly to the time frames regarding the data notebook: "Learning goals are posted and discussed at the beginning of every quarter. At the start of the lesson the learning goal was then reiterated and monitored throughout the entire lesson." I was impressed by the embedded practice of

monitoring these time frames. Hannah has clearly helped her students to understand how to manage their time through comments such as, "we will do a check- in in 12 minutes," and "you have 5 minutes, so watch your time." Increased use of self-regulatory strategies are developed by awareness of time management skills, and this classroom clearly showed that. Hannah instilled a level of understanding of time frames as well as the management of time itself, which appear to be important components regarding the learning environment necessary to support self-regulated learning and the use of a data notebook.

Another interpretive code that was evident in Hannah's classroom environment was skills and strategies that support a culture of learning. The strategy of using or displaying visual aids was necessary in this self-regulated environment. Visual aids were defined as posters, charts, or graphic organizers that supported the reading activities or learning goals. Hannah described these visual aids through phrases such as "look at the chart," "we should have our graphic organizer out," or "use your venn diagram." Visual aids were the most prevalent in this environment under skills and strategies, which seemed to create a level of independence and autonomy for student learning.

Behaviors. The behaviors in regard to self-regulated learning that occurred in these classrooms was another theme that was found throughout the data from this study. Behaviors were defined as both teacher behaviors and student behaviors. Self-regulated learning is a process that assists students in managing their thoughts, behaviors, and emotions in order to successfully navigate their learning experiences (Zumbrunn, Tadlock & Roberts, 2011). Zimmerman (2002) contends that students need to be empowered to regulate their learning. A study on schooling effects on preschoolers' self-regulation, early literacy, and language

growth suggested that pedagogy of early self-regulation may serve to boost children's early self-regulation skills, and combining with early literacy skills may be a promising holistic approach to early childhood education (Skibbe, McDonald, Morrison & Jewkes, 2010). This was not surprising, as this observation was done in an elementary classroom, and self-regulated learning relies heavily on metacognitive skills. These metacognitive skills are just surfacing at this age and when it comes to self-regulated learning, the teacher is teaching the students explicitly and interacting with the learning environment to promote self-regulating strategies (Kramarski, Desoete, Bannert, Narciss & Perry, 2013). The behaviors therefore both of the teacher and of the student would be an important component of a self-regulated learning environment.

The student behavior of empowerment or ownership was found within her observations and the interview and was most prevalent in Hannah's classroom compared to those of the other participants. This was defined as any behavior depicting a process that helps students gain control over their own learning and motivates them to learn. This type of empowerment could be viewed in Hannah's interview regarding gaps in their learning:

> I keep restating that learning goal. They are so motivated to go back and really dig in to find those answers just from discussing the charts after Chalk Talk and seeing they needed more information in those areas. I didn't have to encourage them because they were motivated and they chose how and who they are learning with and where to find the information they needed. I really just think the teacher needs to facilitate that learning but we really do prep them in the beginning on how to do this. Kids can do way more than what adults think they can.

Self-motivation and empowerment or ownership over their learning occurs when a learner independently uses one or more strategies to keep themselves on track toward a learning goal (Zumbrunn et al., 2011). This classroom showed high levels of empowerment through

phrases of Hannah's interview such as "kids taking ownership," "it gives them more intrinsic motivation," "they are in charge of their learning," or "they were all about sharing their data notebooks and projects with their parents."

Student engagement was another student behavior that was found in Hannah's data. Student engagement was defined as behaviors that show the students are connected in some way to their learning. This could be seen in Hannah's classroom through my observation notes:

> After completing the Chalk Talk activity, students were asked to look at the chart and give a thumbs up or thumbs down if they believe the class needed to spend some more time determining what happened after the Civil War. The chart clearly showed the class was very knowledgeable in all areas but very few details were given in the column of "After." The entire class gave a thumbs up providing 100% engagement.

Other phrases throughout my observation notes showed high levels of engagement through phrases such as students sharing, working, or other verbs indicating they were connected to the learning goal and collaborating with their peers. Hannah also mentioned in her reflective journal regarding the lesson that students were "researching more information." When asked if the data notebook engaged students in reading, Hannah stated:

> Oh yes! I think by working towards a goal that they know they need to work makes them much more engaged in the reading process. The conversation that happened this morning would not have happened had we not had a clear goal and a purpose. Some teachers will say "go off and do research" but if the students don't have a clear learning goal on what to look for or where they need to be at or what they need to fix, we identified those gaps so they have a strict purpose and ownership in their research. It was easy to get 25 students quiet and engaged in research but it comes with that ownership and the expectations of the teachers of this is how it is going to be and this is what I expect you to learn in our classroom and this is what it looks like. It's very defined.

Teaching behaviors were also prevalent in Hannah's classroom. Teacher quality is driven by the characteristics as well as the set of values and beliefs which the educators hold.

It was clear that Hannah saw herself as a facilitator of learning rather than a dictator. Zimmerman (2002) found that few teachers effectively prepare students to learn on their own. Some researchers believe this is due to the traditional classroom methodology present in most of today's classrooms, which may discourage or limit self-regulation. It was apparent that Hannah did not hold the traditional classroom methodology, as is evident in my observation notes:

> I noticed that this teacher is more of a facilitator and does not show any type of authority other than a facilitator type role. Students move around the room comfortably without feeling like there is a place that is off limits. There doesn't seem to be a teacher desk or area that kids can't access. For instance, students were sitting at the teacher's desk using the computer, or behind the kidney table using a laptop. There just wasn't a place that is off limits in here. Students approach the teacher with questions and she guides them (happily) to find solutions.

An example of how she interacts with her students was observed: a boy approached her and asked if he could share his book with two of his friends. Hannah did not answer yes or no but instead asked the student what that would look like. After he stated that they would be reading the book together, she stated "AND" and he added taking notes and she stated "AND" again, and he stated "not talking." She then said, "Good luck and be sure to share those stipulations with your partners." He happily moved on to get his friends. This showed a level of respect and trust for her students that facilitated and supported their learning and choices. The data showed high levels of teacher facilitation and support for her students. Hannah described her role as a teacher implementing the data notebook as a "facilitator more than a teacher."

Research has found that students can be taught self-regulating skills, and through feedback from peers and teachers, self-regulatory skills improve. Rafferty (2011) explains

that the major goal of educators is to enable students to become independent and self-sufficient. It is the desire of educators to enable students to manage their behaviors without other individuals providing directions. Monitoring is a key component, along with the students' perceptions of the learning process. It is the responsibility of educators to guide students on a path that will prepare them for a successful future. Teaching students self-monitoring, self-reflecting, and self-evaluating begins a process that they can utilize through school and their work. As discussed by Schunk and Ertmer (2000), educational research shows that children, adolescents, and adults can be taught self-regulated learning skills. The use of these skills improves learning, and as these skills are maintained over time, they generalize into new learning settings. Researchers at the University of Connecticut in a study conducted in 2013 point out that there is evidence that a number of children, especially those at risk, begin school with a low amount of self-regulation (Long, 2014). Supportive teacher behaviors were prevalent throughout Hannah's classroom. These behaviors were defined as providing tools, grouping students to meet their needs or skills, checking in, and providing help through modeling and teaching. Hannah mentioned in her interview:

> You have to know your kids. You have to do a lot of digging to really know them and what motivates them and what they are lacking. We (the teachers) do a lot of data research and looking at what their data shows. During one meeting a week, we are looking at data and regrouping the kids because we really know them.

Throughout my observation of Hannah, she provided multiple ways in which she supported learners and met their individual needs. This could be seen in my observation notes with comments such as, "the teacher walked around and checked in with students," "the teacher guided students to find solutions," and "how students approached the teacher with questions in a relaxed and non-threatening manner." Clearly the supportive teaching behaviors are an

important component in a classroom that supports self-regulated learning and the use of this data notebook for reading.

Learning Goals. The learning goals of students surfaced throughout all three data sources for this case but showed to be a very critical theme throughout all of the studies. Learning goals for Hannah's three data sources was the highest coded theme of all. Learning goals referred to any goal referenced as types of learning goals, monitoring of learning goals, or self-regulated strategies toward learning goals. The data notebook was a compilation of documents that clearly supported the learning goals for students and will be further explained through the interpretive coding.

Academic goals, a type of learning goal prevalent in this classroom, was an interpretive code that was very critical and embedded throughout the lessons and interview with Hannah. Documents pertaining to the data notebook and reading contained the learning goals for each quarter, which Hannah explained during the interview:

> Each quarter we (the teachers) introduce every learning goal that we are going to accomplish. It's not IF we are going to get to it or we'll maybe get there, it is we WILL be doing this and we need you (students) on board. For our reading goals, we give them our learning goals. One of our first reading lessons was strictly going through each of these (point to the data folder yellow page with reading learning targets for quarter three) and we describe what it means and the kids circle, highlight, and identify what it means in kid friendly language. That's where we get the "I Can" statements that are written by them. However they can understand them. So, it's not a choice….so at the beginning of each quarter they are bombarded with every learning goal they are expected to do and I think setting it up that way makes it not a choice. It is just part of the culture and part of who we are.

This culture focused on the learning goals was observed and noted in my reflection regarding the learning targets and self-awareness of students:

> Students rated themselves in regard to their learning two times and the class once as a whole about their learning objective. The teacher was very much facilitating

> conversations about learning and their goal and the students appeared relaxed and engaged in the conversation. An entire wall was dedicated to the learning goals for the day to include "I can" statements for each subject area.

Hannah also illuminated this focus in her reflective journal, stating, "Students knew their goal and where they needed to be at the end." Student behaviors were also observed as not stressful and very relaxed in regard to their learning goals and discussions that took place around them.

Another interpretive code present in this data regarding learning goals was monitoring of those learning goals. The code of tracking tools was critical throughout this study and within the monitoring of goals interpretive code that appeared in Hannah's data. Tracking tools were defined as tools such as rubrics, rating scales, graphs, charts, or reflections that track student progress. The checklist of learning goals in each student's data folder delineated the importance of these goals and the monitoring of mastery for each student. Hannah explained during her interview that monitoring progress was done continuously:

> In each student's data folder there were weekly check-ins for monitoring their instruction. This usually took place on Fridays and/or at the end of a unit as a smart goal check-in. One example provided in the data folder was titled 3rd Q Smart Goal Check-In. It listed the learning goal: **R3C: Use details from the text to identify the author's purpose**. Underneath this title was a rubric for students to score themselves that ranged from 4 – 1.0. I observed that this student scored a 3.5 and on a separate sheet was able to reflect on why they gave a 3.5 using details from the text such as, "as we pulled away from the park lot..." It was stated that the details showed what happened using details from the text. On a third sheet regarding these learning goals the date was provided along with a 3.5 next to this learning goal as mastery.

Hannah also explained the data folder and how it is implemented in her classroom. She stated: "Students know when to put these scores in their data folder now that it is 3rd quarter and they know the routine. This student did particularly well." Hannah also stated that more

activities would be done to practice this learning goal: “they just add the date and how they did on the activity. This gives the students an opportunity to track their learning and see their progress.”

These students were observed using the rating scales of 1-4, one representing not understanding the learning goal at all to four being able to teach someone the objective. Students clearly understood this process, and a classroom discussion took place about why they felt they were at that score. The students articulated this understanding during the rating process after their Chalk Talk activity. Students who gave a 2 rating shared phrases such as, “there are gaps for us,” and “there is only one fact under that title where the other titles have lots.” It was apparent that the process of monitoring their learning through the use of tracking tools was a critical factor in this classroom.

Another interpretive code that was prevalent throughout the data for this study was the self-regulated strategies used by students in regard to the learning goals. There is an abundance of research regarding self-regulated learning. Weinstein, Husman, and Dierking (2002) discuss a strategic learning course that teaches students to use several phases to self-regulate an academic task. These phases included setting a goal; reflecting on the task and personal resources; developing a plan; selecting a potential strategy or strategies; implementing strategies; monitoring and evaluating the strategies and progress; modifying strategies as needed; and evaluating the outcomes to determine the future use of the strategies. Out of these phases of self-regulation, the last phase of evaluating and determining future strategies was most prevalent in Hannah’s classroom, with goal enactment close behind. These are two phases of self-regulation that take place after the planning and/or goal

setting phase. These include monitoring their individual progress and goal enactment, which is how the student chooses to accomplish the task and/or goal and the method or course that they intend to take. Hannah made this statement depicting what the data notebook meant to her, which also explained the phase of enactment in her classroom:

> I want them to learn and my personal experience is that I learn best when I have chosen a path or when I feel strongly about something. I want to instill that in my students. So a lot of it is their choice on what they work on and it is not things I am coming up with for them. They are choosing what they are not comfortable with and working on it.

Once students have completed a task, however, they move into an evaluative phase in which they assess the choices they've made and determine future plans to continue current strategies that are helping them succeed or abort the strategies and choose new strategies to attempt during the enactment phase. These phases can overlap and are very fluid in nature.

Research findings strongly support the importance of students' use of these phases, but few teachers effectively prepare students with their own self-regulated learning strategies (Zimmerman, Bonner & Kovach, 1996). That was not the case, however, in Hannah's classroom. Students were given choices over how to research the gaps in their learning after the Chalk Talk activity. Hannah stated that she

> was surprised at how they all had chosen different ways to research (i.e. books verses [sic] the lap-tops to gather data) because they knew they needed to change their avenue for obtaining information where there were gaps in their learning on transportation.

She went on to share "many students had been using the lap tops but today had switched to books." This clearly showed that many students had not met their learning goal of providing information on transportation, so they evaluated their avenue and chose a

different route. Hannah made this statement that clearly articulates what I observed in her classroom:

> You have to let kids explore and figure out how they want to grow. They need to evolve with their learning and the use of their data folder. I provide them with the tools and then it is really their responsibility on how or what they use to go forward toward their learning goal.

It was evident that Hannah supported and modeled the phases of enactment and self-evaluative processes in her classroom. Students were very comfortable discussing their progress. When asked what strategies the data notebook support to improve reading, Hannah reiterated the importance of clear targets and ownership:

> Ownership in their learning, clear focus, you can't just implement a data notebook. You have to let the kids explore and figure out how they want to grow…they need to evolve with it. It needs to just be part of their learning. Everyone learns in different ways and they need to know take ownership in their learning. I put it back on them. This is not a teacher responsibility. Really letting them evolve in it. And really just being honest with them. I tell them all the time, we are all in this together and I am not here to catch you or get you to do something wrong. I am here to make you better. Kind of getting them to buy into it and realize that I am on their team. So we are going to go forward together.

Getting students to buy into their own learning and making this process meaningful is not something that is just taught and forgotten about. It is a process that is embedded in the classroom throughout the day. As a former teacher and current administrator, I could see that students in this classroom were learning to monitor their own reading progress and becoming self-regulated learners as well.

Case 2: Julie

As mentioned previously, each participant chose their own pseudonym. Julie was the next case, and the name also brought a unique perspective to my participant. Julie is a popular French first name and derives from the Latin Julia, which could mean youthful, soft-

haired, or beautiful. I found Julie to fit all of the three adjectives. When I first met Julie, she had her hair up, so I wasn't aware of the length of her hair. She had very long, beautiful hair that I distinctly recall, and appeared very youthful and fun. Julie gave a confidence and vibrant feel to her environment. It was quite early in the morning as we finished the interview, and I recall a student entering the room. Julie asked the student if everything was okay. After a brief conversation, Julie shared with me that it was Friday and student ambassadors greet the younger students on these mornings. I assumed this student was anxious about their job and may have arrived early. Julie was a fourth grade teacher, and it was apparent that she cared about this student and the few others that trickled in during this morning interaction.

Julie is a second year teacher, and both years have been at the current location. This was her second career, so she had a very mature attitude about her path in life. She spent several years in the field of fitness and wellness, although she knew she wanted to teach. After the birth of her son, who begins Kindergarten next year, she chose to change careers and has not regretted it. She loves working with children and uses her passion for fitness and wellness in her classroom and with her colleagues. Julie has spent the last two years in the fourth grade and intends to continue there. She holds a Bachelor of Arts degree with a fitness focus and a Masters of Arts degree in Elementary Education. Julie did not have any formal training about how to implement the data notebook but did receive training on the "Leader in Me," which taught her some basic components of self-regulated learning.

Environment. The theme of environment was present throughout all three sources in Julie's data. The theme of environment refers to the climate and culture of the classroom and

the skills and strategies present. Her walls were filled with numerous charts in different colors and styles. There was a small classroom library and a cozy chair next to an easel where she gathered students for lessons. She posted the quote, "the expert in anything was once a beginner," and there was an area for the MVP of the week to highlight students. She had also posted a mission statement, which read:

> Our classroom will live by the 7 habits each day. We will demonstrate leadership by showing respect for one another through our actions and our words. We will foster a fun learning environment by continuously following directions, being safe and being kind to one another. We will strive each day to treat others as we would like to be treated and maintain a positive outlook on everything we do.

This mission statement hung outside of the classroom and a *7 Habits of Happy Kids* book was displayed behind her rocking chair. In her room the lights were dim, and she kept it this way for both lessons.

In Julie's interview and observations, within the theme of environment, skills and strategies related to reading were most prevalent. These skills and strategies included any activity related to the lessons or reading in general. My observations of Julie's classroom had significant recollections regarding reading skills and strategies to help support their learning. This was documented through my observation notes:

> Posters fill the room with reading visual aids. The lessons I observed were focused on Point of View both 1st and 3rd person. There was a chart up front regarding the learning goal. The teacher moved around the room constantly checking in with students and asking them what they noticed about the article. The students were given an activity titled Voices of the Battlefield which had an article, Venn diagram and a rubric attached. The teacher began by having the students look at the activity and discuss what they noticed. She read parts of the article with them and then discussed the reading activity including reading the article, answering some questions on comparing and contrasting as well as writing an abc summary.

The reading skills and strategies were also present in the student-created newsletter that was shared as one of the documents in this classroom and also pertained to reading. Julie shared that "students create the newsletter on their own and communicate the focus of each core subject area." The newsletter focus for reading included this information:

> How are1st hand accounts different from 2nd hand accounts? (1st hand you were there; 2nd hand someone told you about something)
> How is 1st person point of view different from 3rd person point of view? (3rd person you are looking through their eyes. 1st person you are the narrator)
> Reminders: work on Literature Loop, read Mark Twain nominees, reading logs due March 3rd and READ!

When asked in her interview if there were any specific strategies that the data notebook helped support in improving reading skills, Julie stated:

> Dip sticks or check-ins which are quick assessments. We are very fortunate to also have computer programs for reading that meet them at their level and grouping is done within the grade level. Small groups are really beneficial and it helps that students' work together and each groups work on specific skills. There are a number of my students that have opened up with more confidence or who may not have felt confident but really feel okay about now. That's because we talk about our progress so much. We flex group depending on their needs which gives them the focus on their level. Even quiet students gain confidence through this.

It was clear that this classroom and the students were immersed in skills, strategies, and activities that support their learning in reading. Julie also commented during her interview that the data notebook engages students in reading by "helping them master their goals," and "the data folder gives them more confidence which makes them want to read more." The culture that Julie has provided for her students invites them to become active participants in their learning.

Another interpretive code that was present in Julie's classroom was climate and culture, which relates to the clear expectations and routines and structure put in place that

creates a positive learning environment for all students. This was viewed throughout the observation from the start of the lesson. On the screen, for instance, was, "We do…," with some tasks the class did together, then the next screen said, "You do…," and the expectations were step by step what to do for their reading activity. Expectations were never verbalized, and the students appeared to understand the expectations with very little direction from the teacher. Before the students were released to complete work independently, Julie reviewed the expectations by stating, "Read the article, answer the questions and write your prompt on your own." She then stated, "Give me a thumbs up if you got this." All student raised thumbs, and then she reviewed voice level at a 2 before dismissing them to work independently.

Julie articulated clear expectations when she wrote in her reflective journal that

> the group was asked to restate one of the 4th grade smart goals (goals – I can statements – to be met before 5th grade). Self-awareness falls in the area of being able to recognize how the information being used and or taught relates directly to the overall grade level expectation.

Self-regulated strategies and factors relating to self-efficacy in students rely on what the teacher is doing in the classroom and the foundational structures that the teacher puts in place. Routines such as the sign-out sheet by the door allowed students to take care of their needs without bothering the teacher. This created independence for these students which I also observed as students moved freely throughout the classroom, even leaving the room to meet with their particular reading group or using the computer to complete their leveled reading activity. Julie had taught them high expectations and strong classroom routines to support learning.

Behaviors. Behaviors was another significant theme that permeated the data collected in Julie's classroom during her observations and interview. Self-regulating skills involve self-awareness, self-motivation, and behavioral skills to implement knowledge taught appropriately (Zimmerman, 2002). The theme of behaviors was defined as those behaviors related to both teachers and students in regard to the learning goals for reading. The interpretive code throughout this study regarding teaching behaviors that was most significant was the teacher as facilitator. Julie saw herself as a facilitator, which surfaced during her interview in the following statements:

> I definitely see myself as a facilitator rather than a teacher. There are times when I am more of the teacher than facilitator but our team (of teachers) really uses it (data notebook) to help them find the direction they are taking and we provide them the tools to get there. It's hands on with the students and it gives students multiple activities or ways that helps students show how they learn in different ways.

I commented as well in my reflective notes that Julie was "much more of a facilitator than a teacher." These behaviors were observed in her willingness to work one-on-one or in small groups to guide students with their learning and work collaboratively. In conjunction with the teacher as facilitator, the teacher as support was also present through the data and in Julie's classroom. It is documented in my field notes that Julie was walking around during independent work time and checking in with students by either asking them more questions or taking questions from them. When answering questions, I noticed that Julie probed students and didn't give them the answer but rather guided them to find the answer with phrases such as, "why do you think that," AND, "what else," or "that's a possibility." She's very respectful to her students, saying "I'm sorry" when she doesn't hear the question. Asking students "how you feel about that?" "Do you think you can put this into a summary

in your own words?" Julie is very relaxed in her approach with students and it is obvious they respect her as a teacher and facilitator of their learning.

Another interpretive code prevalent throughout this study and particularly in Julie's three data sources was student behaviors in regard to empowerment and student ownership. The philosophy behind the use of a data notebook is to empower students to become active participants in their learning. This strategy can be used with all students of all levels as a self-regulated learning tool. Although the data folder was not a part of the observation, Julie commented on empowerment in her reflective journal:

> Students were empowered to synergize to complete part of the material during the lesson. I saw various displays of synergy even within this small group. For example, one pair of students decided to split the reading and share responses at the end. Another group decided to each complete the task independently and share answers at the end. Understanding the leadership process is being able to apply the process at any point in time. This can look like many different things depending on the setting and depending on the student perception of the task. Targets in this lesson consisted of having students take ownership (accountability) and the feedback was provided based on their level of representation of the stated learning goal (I can statements).

This was an illustration of student empowerment in Julie's classroom. This ownership was also clearly portrayed during Julie's interview:

> We have district assessments, multiple ways implemented grids, dip sticks, many computer programs, day to day. I have such a thermometer on all of my kids and I can tell you where they are in everything. And that is very much intertwined with 7 habits leadership, less work for the teachers and the students take so much ownership. This makes it so much more fun and the students are doing the work.

When students have high levels of ownership in their learning, they are much more likely to be engaged in their learning as well. During her interview when discussing student engagement and how the data notebook aids in self-regulation, Julie stated:

> At this point they are all familiar with the process and expectations and periodically I check in but they are all pretty diligent about the whole process and expectations.

> They know that when we finish something they need to fill out their tracking sheet. They just know when we complete the spelling test they fill out the tracking sheet in their data notebook.

Student engagement in this classroom was at a high level throughout the lesson, and it is apparent that these students have been taught how to regulate their own learning. During her interview, Julie made it clear that the data notebook does engage students in reading:

> You have to know the student. The learning goals are the comprehension strategies and skills and we want to motivate them and help them master those goals. They go hand in hand. But there are many things that help with this (7 habits, leadership responsibilities) that support their life skills that will help them become better at anything and being a more fluent reader. The folder gives them more confidence which would make them want to read more.

Learning goals. The theme of learning goals pertains to the various types of learning goals, monitoring of the goals, and the self-regulated strategies used in regard to learning goals. When teachers model necessary behaviors and teach students to use strategies to move them toward learning goals, students slowly build up stronger self-efficacy beliefs and self-perceptions regarding tasks. Learning goals was the strongest theme for Julie throughout all three of her data sources.

Monitoring of learning goals was the most significant interpretive code in Julie's data collection. Monitoring was defined as ways in which students or the teacher monitored the progress toward learning goals. Tracking tools was important in the coding process as well and referred to items such as rubrics, rating scales, graphs, charts, or reflections that students engaged in regarding their learning in reading. A good description of this type of monitoring was shared from the interview and training document. Julie was asked how she or her students monitor their progress for reading:

> We have district assessments we use, but we have multiple ways to monitor their progress. We implemented grids, dip sticks (weekly), and many computer programs, day to day. I have such a thermometer on all of my students and I can tell you where they are in everything. And they know where they are. And that is very much intertwined with 7 habits, leadership, less work for the teachers and the students take so much ownership. This makes it much more fun and the students are doing the work. It is (the model) that has really helped me to understand this process.

She also described the data notebook process in regard to setting goals and making plans for their learning:

> Not everyone's plan is going to look the same for this. For example, they just finished a Civil War project and they knew what they needed to show us but they could choose how they wanted to do it. They had a rubric and it had the scale and the learning goals on it. They knew what it took to get a 3 or 4 to do this and I believe they used that in their planning because they were amazing!

The interpretive code of goal enactment was also prevalent in this classroom. Students in this classroom showed high levels of goal enactment, which is how the student chooses to accomplish the task and/or goal and the method or course that they intend to take. A good description of this type of learning was clearly shared from Julie's comments about the data folder when she said, "The data folder and projects are hands-on with the students, and it gives students multiple ways for them to show how they learn in different ways." It was quite clear that Julie had taught some self-regulating strategies and that she believed her students were comfortable implementing them in their reading projects or activities.

Academic goals was also an interpretive code that surfaced throughout Julie's interview and observations. These goals pertain to smart goals, targets, learning goals, or learning targets. Julie immersed her classroom in the knowledge and understanding of their learning goals as viewed during the observations. Julie also made it clear that the understanding about their learning targets was a focus for their grade level. During her

interview Julie explained how the data notebook supported her students in gaining a clear understanding of their targets:

> Every day we have learning goals and they are displayed. Depending on the modality of how the lesson is delivered they are displayed with the lesson. We talk about the goals constantly and they are on their tracking sheets in the data folders. My hope as a teacher is that anyone that comes into our classroom could see any one of my students and know exactly what learning goal they are working on and what I as the teacher am having them take away from this lesson or learning.

It is clear that Julie understands that in order for students to master their learning goals they must have a clear picture of what those are first.

Communication. Research has found that active involvement in learning, including setting meaningful goals, selecting appropriate and task-specific strategies, monitoring motivational levels, and adapting behaviors based on feedback are all activities that are positively related to learning outcomes (Moos & Ringdal, 2012). Feedback or communication was another theme that was prevalent throughout most cases in this study: communication *to* and communication *from* parents, students, or teachers. The interpretive code that clearly had some significance in Julie's observations and interview data was communication *from* teachers and *from* students and *to* students and *to* teachers. Self-regulated processes or beliefs such as enactment and/or self-evaluative practices can be learned from instruction or modeling by parents, teachers, or even peers (Zimmerman, 2002), and to some degree would require strong communication. Although research has stated this is not common in classrooms, it is an approach that can easily fit into our educational settings. This type of communication could be observed through the feedback from the teacher and from the students in regard to their rating system after their reading activity. I observed Julie calling students up individually to discuss her rating score and their rating

score on their activity to reflect on their progress and compare the two scores. I could see that this was an activity the students were accustomed to and appreciated. Many students were eager to meet with her and gave sighs of relief or high fives for celebrations. Communication in this classroom was also described during the interview with Julie in regard to feedback for students:

> We try to keep everything at school as much as we can because we are Title 1 and we don't want to put that added pressure on them. We definitely use the data folder at student-led conferences in the winter and they can take them home whenever they want to show their progress. We use them at conferences and the students pull out things and say "hey look how good I did on this one." We also have a Friday folder with a weekly report and we fill out things we may want them to work on at home. We also do a 4th grade newsletter that the kids totally do on their own to go home and that's how we communicate with parents. The students make the newsletter and they put it together totally student driven. We give them the expectations but then they do all the rest. We rotate that amongst the classrooms each week. The kids put information in that they want to share with their parents (usually in groups of 4….this is a job application in our classroom) This has been how we've implemented the 7 habits because they own it, they do it, they deliver it and it's one less thing for the teachers to do.

Communication is obviously important in an educational setting. The data notebook in this classroom provided feedback *to* parents *from* students. The data notebook supports the feedback provided *from* teachers *to* students about their learning. Julie's perception of the data notebook was shared during her interview:

> To me the data notebook is a means for students to have ownership in their learning. Rather than me holding their hand and making the students do things. It helps them grow as a student and as a learner. It gives them the accountability to see areas of strength and to see areas of weakness. They can have a deeper understanding of what they need to learn or know from this or apply for this. For instance, what do I need to know from this or how can you expand on it, or how can you apply it? There are no surprises because they have seen all of their scores. They are seeing their learning goals and progress so there are no surprises when grades come out because they know exactly where they are on their learning goals.

In Julie's classroom the data notebook is form of communication to all parties and helps students to gauge their learning as well.

As an educator, I was impressed with the level of focus on learning goals, the environment, and the theme of behaviors within Julie's classroom. As an administrator and former teacher, I would have found comfort in having Julie as a teacher or colleague in my building for the simple fact that she had a made a life-altering career change to satisfy her passion for working with children. The comfortable environment her student interactions provided was unique.

Case 3: Janis

The name Janis, chosen as a pseudonym, means a gift. I was immediately intrigued by Janis and her shyness. She was very reserved when I met with the group, but one-on-one, she was much more at ease. When Janis shared her reasoning behind becoming a teacher, she mentioned that she had a teacher in 4th grade that she enjoyed very much. This teacher had the ability to empower students and helped them to own their learning. Ever since then, Janis wanted to be a teacher and have that same effect on her students. Just as the name implies, I believe Janis has a gift to work with students and will touch lives for many years. This was seen through her engagement with her students.

Janis is a second year teacher and was spunky and to the point. She was very matter of fact, but it was apparent that the children respected her and knew her expectations. She is currently teaching fourth grade, holds a Bachelor of Arts degree in Elementary Education, and has been at her current location for both years of teaching. Judging from her interactions and mannerisms with her students, it was clear that Janis enjoys what she does and has a

passion for working with children. Janis had had no formal training on the use of the data notebook other than what was provided in the "Leader in Me" workshop during her first year of teaching. As mentioned previously, this provides basic components of self-regulated learning without using the actual terminology of self-regulated strategies.

Environment. The theme of environment appeared throughout this study. From a social cognitive perspective, the development of self-regulated learning is a function of the interactions of personal, behavioral, and environmental factors, which take the form of triadic reciprocal causation (Bandura, 1997; Schunk, 2001). The environment therefore plays a role in the study of the data notebook and was a significant theme throughout the data collection. In the realm of this study, environment encompassed a climate and community of learners and the skills and strategies present. The theme of environment was documented throughout all three data sources for Janis.

A prevalent interpretive code found in Janis' data was related to the culture and climate of the classroom. One area that surfaced in this interpretive code was time frames or mentions of time management. Time frame was defined through words from the interview and observations such as, "time, morning, quarter, yearly, beginning of the year, immediately, beginning/end of the month, throughout day." Time management skills are important to all learners, but specifically self-regulated learners. Zimmerman et al. (1996) believe this to be true and that teachers can help student understand that time is a crucial learning resource and efficient time management can bolster learning and perceptions of self-efficacy. Along with time frames within culture and climate, the data collection also highlighted clear expectations as an important factor in relation to the environment. In my

observation documentation and within the reflection journal it was noted on several occasions that students knew and understood the expectations of the teacher. During the interview, when discussing learning targets, Janis stated this about expectations:

> I think we wanted to focus on learning goals. This year we added the learning targets for the whole quarter and we go over them at the beginning of the quarter and they just know that they are expected to learn these and we keep referring back to them so they are really the focus.

Expectations for her students were also clearly defined with this statement regarding the data notebook:

> It takes time and we just started implementing the ELA Common Core Standards sheet so I have to have them at the carpet to field questions because it is so new and I will need to guide them. If we start this 1st quarter next year I would expect them be independent in tracking their progress. We do a lot of teaching the expectations in the beginning.

In my observation notes, I also commented that the teacher was moving around the room during their morning arrival checking in with students. The students were proficient in completing morning activities and taking care of their needs with little guidance from the teacher. The schedule for the day was on the smart board with highlighted specials and activities.

Another interpretive code under environment was skills and strategies that were noted throughout the data collection. Skills and strategies for reading could be defined in the data collection as any reading activity, lessons, or anything relating to the core area that the students were engaged in. This study was focused on reading, so it is not surprising to see a large amount of data collected regarding reading, and in this classroom this interpretive code was significantly high. As mentioned previously, the environment is an integral part of the self-regulated learner. In this classroom, the environment played a significant role in the

implementation of the data notebook. The skills and strategies referred to in this classroom were focused on reading and were significant in Janis' observation. The following was noted in my observation:

> The Reading Goal Today: I can compare and contrast the education in Russia and the U.S. The teacher begins reading and stops to say "I am having a text code." Then she shares a connection to the text and a story about her daughter. She then allows students to share their text codes and three students shared their text connections. The teacher then began reading again. This happened two more times before the teacher stopped and had students rate themselves on how they felt about what they knew about Russian education as compared to the U.S.

Clearly, high expectations are embedded in this classroom as seen by the interactions not only between the teacher and the students, but also between students. Teachers can assist students with self-regulated learning skills and strategies by holding them to high expectations and displaying a level of understanding in regard to reading activities and lessons.

In most classrooms that implement the data notebook, mission statements are created to sum up the values and purpose of the classroom. These mission statements, as noted throughout this study, also promote clear expectations. This particular classroom created a set of charts in addition to the mission statement that appeared to promote a high level of expectations for everyone. Following are some of the phrases included in these charts that hung from the walls in this classroom:

> What will you need to do in order to be successful this year? Responses: work hard, use the 7 habits, do homework on time, help others, listen and practice. What will the teacher need to do to help you this year? Responses: teach us a lot, help us when we need it, be nice, and make us feel calm. Our Classroom should be _____ every day. Responses: hard working, quiet, learning, clean and safe, perfect, happy and constantly learning.

These charts reiterated clear expectations for the student and the teacher. My observations of this classroom proved that these students and the teacher stood by this oath.

Behaviors. Behaviors was a significant theme that was present throughout this study. Two interpretive codes were present in the data that tied to the theme of behaviors: student behaviors and teacher behaviors. Janis' data collection showed that all three data sources provided some significance for this theme.

The code of student behaviors was described as behaviors exhibited by the students in the classroom in regard to self-regulated learning. The most prevalent of these student behaviors was student engagement. Student engagement was extremely high in Janis' data collection and could be seen consistently through both observations, in which I noted lots of engagement, and the thoughts Janis shared through her reflection as well as her interview. During my observation, I noted numerous occasions during which students were showing high levels of engagement through movement or interactions. The teacher asked students to share the progress their partners had made. For example, one student said he went from 2.5 to 3.0. All students were engaged as they shared with partners and then were asked to share with the group. Engaging behaviors of students, such as being asked to give a thumbs up for agreement, were also used various times, along with several turn and talk to your neighbor behaviors. In her reflection, Janis shared phrases such as "students have to turn and talk," or "students enter scores, reflect back, or discuss progress." During her interview, when asked if the data notebook engages students in reading, she said

> Yes, but it is more of the conversations we have about their progress. We aren't experts yet on using the data notebooks but I feel like if we could have started this 1st quarter that it would have been better because they would know and understand the expectations like they do in other areas where it is used.

Teacher behaviors was another prevalent code found in Janis' data collection; two significant areas surfaced. Teacher as a facilitator was the most dominant code, and teacher as a support closely following. Janis was definitely more of a facilitator of learning in this classroom and she viewed herself that way as well, as stated in her interview:

> I don't remind them of their tracking. I am a facilitator more than a teacher. I could do a better job of staying on top of them but with this material we put in their folder today it is very beneficial and they will look at it and think about their progress and track their grade instead of just putting it in their mailboxes and not reflecting on it. We use a lot of rubrics. It's on their activity and we are going to have good conversations about the learning goals because they did really well on one and then forgot the other. They had to integrate all three of the learning goals. They score themselves and then I score over them and then we talk about it. They score in pencil and some are way off but others do really well scoring themselves. I think that is a learning process too and I need to teach them how to effectively do this.

Janis encompassed the definition of facilitator as teacher and had a very relaxed and comfortable way about her. She was calm and articulated high expectations without fear of judgment. She is confident in her teaching, and it was clear that the students trusted her and saw her as a facilitator who has their best interest at heart.

Support was also fairly high in the data collected from this classroom. Support was shown through behaviors from the teacher which included small groups that support students at their level as well as through phrases from the interview such as "I help them," "I meet with them," or "provide lots of feedback to support them." Janis was observed as a supportive teacher when most of the class was working independently and she was seated on the floor re-teaching parts of the lesson to two boys. The two students were discussing the goal of completing the activity by recess today, quite possibly with some assistance (from the teacher), as these two students appeared to need extra time to process the information. She

never told them when to have the assignment complete. She merely guided them to think about when they felt they could complete it and how long that might take them. This was a good depiction of both a supportive teacher and one who facilitates students as well.

Learning goals. The learning goals of students appeared throughout this study and were a critical theme throughout all of the cases. Learning goals is defined as any goal in reference to types of learning goals, monitoring of learning goals, or self-regulated strategies toward learning goals. Janis' most significant theme was learning goals, and evidence of this was found throughout all three data sources.

The most significant learning goal from Janis' data collection was academic goals, which could be viewed through all three data sources. Academic goals might be communicated through learning goals, learning targets, smart goals, I can statements, or any language related to the learning objective. When asked to share how students using the data notebook know their learning targets, Janis shared:

> They are posted. They are in their folder. We discuss them and they do know all of their targets for the entire quarter. The big thing is that they are posted. Students are supposed to write them in their agendas but you never know. The teacher stated that she wasn't very good about making sure they do this. We also determined 4th grade smart goals and students are aware of them based on their map data. We looked at our data from last year and determined where the students were low and then we presented that to the kids and discussed what we could really work on to be better. There is one reading goal and three math goals. In our tracking folders these are bolded. We presented it to them as a challenge. So we will do an assignment and they will see it bolded and say "that's a smart goal." And it's kind of cool to see them have that ownership and they see it as a challenge and we also talk a lot about the 5th grade teachers and what they are going to expect from them. We tell them smart goals are something you need to master before you go to 5th grade. So we tell them their 5th grade teachers are expecting them to know this stuff. If you walk in next year and can't do _____, then they will ask me why don't they know this?

During my observations it was also noted that academic goals were mentioned, posted, and engrained in the classroom environment as a significant part of their learning. I also mentioned that learning objectives were the first item mentioned in both observations and reiterated numerous times during the lessons.

The second code that was significant was monitoring of these learning goals. This could be defined by the ways of checking progress or tracking the progress of these goals. This also encompassed two areas that were closely related: student tracking tools and student reflection. Tracking tools were ways in which students or teachers could track the learning. It was described in my observations, the interview, and through her reflection journal through words such as rubric, tracking sheet, data folder, data notebook, scores, or grade. When asked how teachers and students monitor progress using the data notebook, Janis shared:

> They grade themselves using rubrics and I grade over them. I also use a rubric and informal observations. One of my goals for the DESE pilot this year was critical thinking for my summative and I feel like I can learn so much by having deep conversations rather than just a paper pencil activity. Just like probing them to think more when I am on the carpet with them or one-on-one. We track progress on our tracking sheets and I use those to monitor students.

Monitoring learning with the guidance of a teacher is a way for students to become aware of their learning processes and build strategies that will assist them in meeting their goals. Tracking tools to monitor therefore are components of this task. During my observation I found tracking tools to be used throughout the lesson and made mention of these with phrases such as rating themselves, using rubrics to score their learning, and scoring and reflecting on progress. During her interview, Janis also talked about tracking sheets when she described how students and the teachers monitor progress. Reflection was also a prevalent code found throughout her data; during her reflection she made mention of it:

> Students reflect on their learning a lot. Even this morning during their meeting, the students who didn't turn in their assignments when we entered them in the notebooks didn't get a free pass from reflection. When all the other students were reflecting over their progress, they had to reflect on why they did not turn the assignment in; more importantly what they are going to do next time to get it turned it. This is where you will hear the students speaking about the 7 habits and putting first things first.

While observing in this classroom, I also noted the reflecting that was taking place. At one point during the lesson, students were told they had 15 minutes before they were going to return to the carpet area and reflect on their reading activity. I also stated that this seemed to be something they were accustomed to and knew the expectations of the turn and talk strategy of sharing their reflections.

The last interpretive code found under monitoring instruction was the self-regulating strategies used toward learning goals. This classroom was consistently using three of the four self-regulated strategies throughout both observations, and they were also prevalent in the data collected through Janis' interview and reflection. Student task perceptions or how a student feels about a given task was viewed in this classroom through scenarios such as this one documented during my observation:

> Students were asked prior to doing the reading activity and again after having worked on the reading activity to rate themselves on how they felt about the knowledge they felt they could provide. The rating system being 1 (not able to teach this) to 4 (able to teach anyone about this). When she had them rate themselves prior to the activity, students appeared eager to get busy on their task as she reiterated the expectations.

Another area consistent in this classroom was goal setting or planning once the task or learning goal was provided. She said:

> In our tracking folders smart goals are bolded. We presented it to them as a challenge. So we will do an assignment and they will see it bolded and say "hey that's a smart goal." And it's kind of cool to see them have that ownership. They see it as a challenge and we also talk a lot about the 5th grade teachers and what they are going

> to expect from them to know and set goals or plan from there. We tell them smart goals are something you need to master before you go to 5th grade.

The process of goal planning was also noted in my observations at times when students reflected on their progress and shared with their partners what they needed to do next time to make progress or move forward. I observed this on more than one occasion in this classroom and discussions between students and with the teacher showed an understanding of the process.

The last self-regulated process consistently shown through Janis' data was the goal adaptation or evaluation stage. This was defined as a time when students would evaluate their progress and then reflect on everything from effort to knowledge to then create new plans of action. This was clearly articulated during my interview with Janis when asked what strategies the data notebook supports to improve reading:

> The tracking gives them confidence and being able to score themselves is a huge factor in that because they are immediately self-evaluating. Then they self-evaluate again when they get my score back and it's a huge confidence builder. They can see their progress grow as they move along from 1.5 and 2.5 and hopefully up to 3.0. It was also really great to hear the student led conferences and I would be like "wow that student knows that?" It was really cool. All of my students were really excited about sharing their progress. They got to share their first project (Civil War) with their parents so they were excited to show them their research and their essays. They only work on these at school.

This is a cyclical process that students need to be taught through modeling and guidance. It was clear that Janis had a good handle on how to create self-regulated learners and used the data notebook as a tool for this process.

Communication. Communication mentioned previously as a theme prevalent throughout this study included communication to and communication from parents, students, or teachers. This classroom showed extremely high levels of both types of communication

but focused only on the relationship between teacher and student. Communication to and from parents was minimal or it was not documented at all. All three data sources provided evidence of communication for Janis.

The communication to and from the teacher as well as to and from the students was typically documented together. For example, Janis noted in her reflection journal that she liked the conversations they had during morning meeting because the students were very honest with themselves and the rest of the class. She went on to say they felt comfortable sharing their progress with peers and that it was a good time to talk about the seven habits, character traits, and responsibilities. Communication was between teacher and students and students to students. This was a very collaborative classroom; I noted communication in several different ways. This was documented as giving thumbs up, sharing, reflecting, turning and talking, discussing, or having conversations about something. Janis also shared that communication with the use of the data notebook was helpful when "having conversations with kids about their goals, checklists, or book logs." When she was asked in the interview what ways the data notebook provided feedback for students, she shared, "Student-led conferences are one place communication to parents occurs and they are all about it—excited! They had just completed a Civil War project and that really helped them to get motivated."

Janis stated that she thought data notebooks were beneficial to students for reading and shared this during her interview:

> The more we work at integrating it with the learning goals the more beneficial I see it. The more ownership I see the students have. This morning we are going to take some papers and enter them into their data notebooks during our class meeting. It just takes time and we started implementing the ELA Common Core Standards sheet so I

> needed to have them at the carpet to field questions because it is so new. If we start this 1st quarter next year I would expect them be independent in tracking their progress.

In her reflection she shared the importance of communication to the students. This classroom showed qualities of a well-managed and well-structured community of learning. The students in this classroom truly were self-regulated learners, and the conversations and perceptions behind the data notebook appeared to be the supportive tool that assisted them with this type of learning. Janis did not seem stressed and was completely at ease with her students. Her interactions were positive, and she appeared to enjoy her opportunities to talk with students.

As an evaluator of educators, I have found that teachers of the younger generation have a different perspective on learning than those of veteran teachers. The new generation act as facilitators and supporter s of learning rather than as dictators. Janis was of the younger generation, and she followed this pattern. This is a new way of thinking for educators, and one that I will continue to push for in the building that I lead.

Case 4: Debbie

The pseudonym Debbie was the name chosen for the fourth participant. Debbie is a Hebrew name meaning bee. Debbie is young and darted around the classroom checking in on students. She was full of energy and enthusiasm. The data from her classroom clearly indicated that it was a "reading focused" classroom with a very large banner that read: NOT all Readers are Leaders, But All Leaders Must be Readers! The focus in the front of the room was on reading, and numerous charts about reading skills and strategies were hanging as visual aids. I observed Debbie interact one-on-one with several students during reading

conferences in a very loving and kind manner. She took these opportunities to provide guidance on specific reading strategies or skills that would assist students to become self-regulated learners. She provided them with positive comments and then a skill she would like them to work on. It was clear that there was a mutual respect from both parties. This was not surprising, since Debbie has recently discovered that she would like to move into the counseling realm of education so that she can better meet the social and emotional needs of students; she stated "work with kids in a different way and help them with their lives from that aspect."

Debbie is a third year teacher who is currently teaching fifth grade and has been at the same school all three years of her career. She holds a Bachelor of Arts degree in Elementary Education and Early Childhood and is working on a Masters of Arts in Counseling. She shared that she became a teacher because she loved working with kids and had an internship in high school that strengthened this passion. This high school program was like a mini-internship and stimulated her desire to be a teacher. Debbie was also the cheerleading coach at the high school and enjoyed working with students of all ages. Debbie did not have any formal training in self-regulated learning but had been exposed to some components of it during her new teacher training at the beginning of the year.

Environment. The theme of environment was present throughout the data collection for this case. In fact, environment was the most significant theme in Debbie's observation data, but it was prevalent in all three sources. Environment is defined as the culture and climate of a school as well as its skills and strategies used within that environment. She had created the foundational culture of a respectful and positive learning community that

encompassed the theme of environment. Two interpretive codes were present: climate and culture and reading skills and strategies.

The interpretive code of reading skills and strategies was the most significant which emphasized her strong focus on reading. The reading focus of skills and strategies could be viewed through her interactions with students during one-on-one conferences. A synopsis of a conference from my field notes follows:

> The teacher has called a student to the front table for a conference. A one page story is provided to the student. The student appears comfortable meeting with the teacher and excited to a talk about the book. The teacher asks the student what they are working on in reading. The teacher stated "Today we are going to work on how to fluently read our book." The student nods her head. They have a short discussion and then the reader begins to read with the teacher. The teacher has an electronic tool in front of her. The teacher stops her and asks the student "does that sound right?" The student figured it out and shared that she thought it was stared. A short discussion took place and why that made more sense. The teacher praises the student several times with "good, yes," or "what's that word?" "What made you change that?" "I like the way you didn't look at me for the answer but instead went back." She also stated "so what are you thinking right now with this story?" at the end of the conference.

This clearly shows the various skills and strategies with which she was assisting this student, but it is also important to note that she took time with each student and did not rush the conference. Debbie also made mention of reading skills and strategies several times throughout her reflection with reading-specific language such as "main idea, key details, summarizing, author's purpose, and evidence that supports details" as mentioned in Debbie's reflection journal. During the interview, when asked if the data notebook engaged students in reading, Debbie said:

> I think it helps with the checklist (of learning goals) because it is an easier way for them to see their progress and it is more of a visual. They think to themselves, this is where I am and I know I have mastered these goals or these are the other goals I need to master. It gives them more of a focus.

These are all self-regulated strategies that help support readers and guide them in the direction that they need to go. It is clear, however, that the environment and what is present in the environment is an important component as well.

As mentioned, climate and culture was also an interpretive code found in Debbie's data collection. Time frames or management of time emerged within this code. Time frame was defined through words from the interview or observations such as, "time, minutes, morning, quarter, yearly, beginning of the year, weekly, or immediately." In this classroom I documented numerous times when the teacher was modeling time management strategies such as, "I will give you two minutes," or "take a minute and…," or "you've got the rest of the class time to finish." Along with time management skills, Debbie has a strong focus on routines and structures in her classroom. My field notes documented, "students really understood their role and the rules in this classroom and were expected to adhere to them." The students were entering and leaving the room but seemed to understand where to go and what to do. These routines were clearly taught and embedded in their daily practices.

Behaviors. Behaviors was a theme that was present throughout the data collected from Debbie. Two interpretive codes defining behaviors include student behaviors and teacher behaviors. Both interpretive codes were significantly high and were prevalent throughout the data collection in all of the six cases and in this case were significant only through observations and the interview.

Student behaviors in this classroom were high in student engagement, which was defined through language such as tracking, reading, engaged, reflecting, monitoring, or anything related to the activity of the students. During my observations in this classroom, I

explained student engagement through phrases such as, “most students were engaged,” “engaged and on task,” “students highly engaged in reading,” “students giving thumbs up for agreement,” and other forms of student behavior. This teacher kept students excited about their learning and focused on the task. Debbie stated:

> Students using the data notebook are more engaged in reading when they use their checklist which shows them their progress and helps them see their progress as more of a visual. It is a motivator too.

Students should be involved in the process of their learning. Processes such as setting goals and applying interests develop skills and motivation that will serve as tools to develop life-long learners. Keeping them engaged in their learning will improve academic achievement.

Teacher quality is driven by the characteristics as well as the set of values and beliefs that the educators and their leaders hold. According to Ponton and Carr (2000), fostering self-regulated learning skills is not often considered from a pedagogical perspective. That was not the case in this classroom, however. This teacher, I noted in my observations, was a “true facilitator of learning.” Teacher behaviors were prevalent in the data collection for Debbie. Behaviors of teacher as facilitator and teacher as support were consistent throughout the study and seemed to be a recurring theme in each case. The teacher as a facilitator in this case was observed through statements in my observation such as, “very much a facilitator of learning,” or “the teacher was probing students by asking why did you pick that, how did that work out for you,” or “how can we accomplish that.” During her interview, Debbie stated that she felt she was “more of a facilitator of learning.” She went on to say that “the data notebook does take some reminders but for the kids that it is meaningful for, they really do own it.”

The teacher as a support was also prevalent in Debbie's data collection. Support was documented as guided practice, meeting one-on-one with students, conferring or discussing reading strategies and skills, and monitoring instruction. During my observation, I noticed that she had an area that allowed students to sign up for a conference to meet with her. I could see that this was a classroom of high expectations and one that was also respectful of student needs. I observed Debbie conference with several students; her demeanor and mannerisms were nonthreatening, and both the student and teacher seemed at ease. She supported her students in reading by reading alongside them and asking probing questions to help them comprehend. She whispered about their progress, keeping it private, and guided them in finding strategies they felt comfortable applying. During the interview, she also stated that she felt the data notebook:

> Allows for open conversations about their progress and guides them to meet their goals. Students have more of a focus on what they haven't mastered. I think there is always something the kids are better at and this tracking helps them to see their progress. This is at their reading level and so they feel some success.

When asked how she perceived her role implementing this tool, Debbie shared that she saw herself as a facilitator and supporter of their learning. I felt that as well.

Learning goals. The learning goals of students was seen as a significant theme throughout this study and throughout Debbie's three data sources. Learning goals referred to any goal in reference to types of learning goals, monitoring of learning goals, or self-regulated strategies toward learning goals. Academic goals was the most prevalent code in types of goals for all six cases. The significance in this classroom was the consistency of monitoring their learning throughout the observations, interview, and reflection. Students must know their learning goals in order to monitor their own learning, which Debbie

reiterated through her reflection journal. In this class, it was noted that knowing and understanding the learning goal was very important. During Debbie's interview, she was asked how students know their learning targets. She answered:

> My students have a checklist and their big learning goals are on it. A lot of times when I give things back they put a check mark next to the goals that they are working on, in pencil so when they master it they can erase it. During independent reading time this guides them on what they need to focus on.

I observed her meeting individually with students and could see that she was taking anecdotal notes and keeping track of their goals on her tablet. She later shared with me that this was an app on her tablet called Confer that helps her organize her conference notes for each student. Consistently in this classroom, learning goals were discussed, posted on their white boards, and on the smart board for lessons.

Monitoring these goals is also an important component in this classroom. All codes under monitoring goals were utilized during this study. This classroom was unique in that all of the monitoring of learning codes were utilized. The first code was tracking learning goals, which could be defined as keeping track of their learning goals. This was explained above, in detail, with the focus of their checklist for reading which includes their learning goals. It was clear that each student had a checklist in their data notebook where they tracked their progress. The second code noted was tracking tools, which were defined as anything used to track learning. For instance, during my observation I coded students displaying thumbs up or down, spiral notebooks, post-it notes, rating, portfolio, and checklists. These were all ways that portrayed monitoring instruction in this classroom. During her interview Debbie shared that "the checklist in their data notebooks along with the conversations that take place about

their progress provide opportunities to discuss where they want to be or would like to be in regard to their goals."

The next code in this category was meeting individual needs. This was observed through the one-on-one conferences with students but also during her interview when she mentioned, "When I see that a student of small group is struggling with a learning goal, I pull individual students or a small group and we work on it together so they can accomplish their task." The last code prevalent under monitoring learning goals was reflection. This classroom reflected a few times when the teacher would say, "reflect back on what we did yesterday," or "how did you do on that?" Reflection is an important component of self-regulated learning and was prevalent in this classroom.

The last interpretive code that surfaced in Debbie's data was goal setting and planning with regard to self-regulated strategies. This is a phase where students actually take time to set goals or make plans to meet their goals. Debbie mentioned, "students are able to set goals and see what goals they need to be focusing their most attention on" in her reflection journal. This was seen through language such as "these are the goals I need to master," "planning their progress," or "next time…" This language indicates the self-regulated strategy of goal setting is also being utilized. It was clear that monitoring progress was important.

Communication. Communication, which was the final theme that was present throughout this study, included communication *to* and communication *from* parents, students, or teachers. In this classroom, communication to and from parents was not documented at all, but communication from students and from teachers was documented in the interview

and observed during lessons. This statement was documented about communication during the interview with Debbie:

> The teacher was meeting with a student and discussing what the students' focus was for reading. During this time the teacher asked the student questions about what they were working on in reading. Another version of communication was documented when a conversation took place with a student regarding what they were thinking with the story and what made them think that.

This teacher was very good about probing the students to think deeper and asking for their thinking to be shared. When asked her perception of the data notebook or what the data notebook meant to her, Debbie said, "I like it because it is their own personal portfolio and it is a good way for the kids to see their progress." She continued,

> This is more for them than it is for me. I've used it for student led conferences but I don't think parents really bought into it. It's a good a way for kids track their progress and how they've accomplished this.

Communication is important in any relationship, and teaching is no exception. Although the theme was not as prevalent as others, I observed some very deep and caring conversations during my time with Debbie. I found her to have a special knack for connecting with students, so it is no surprise to me that she is moving into the counseling field.

Case 5: Ellen

My first interaction with Ellen was very positive, and I immediately felt that she was confident in her teaching and relaxed about having someone observe her. Ellen, the pseudonym that she chose, means independent, friendly, approachable, and generous. I found her to be all of these and a true believer in self-regulated learning. Out of all the classes I observed, she has the truest mastery of empowerment or ownership of student

learning. She was the teacher with the most experience. Ellen gave this recollection when asked why she became a teacher:

> As a kid I was inspired by my own teachers and in my senior year I had an English teacher who lit the fire under me and had us think outside the box. In elementary school math was really difficult for me. By not understanding things when I was a kid has helped me want to help others. I want to help kids understand, and I just have that yearn to teach people.

I could clearly see her passion to help; it showed through her interactions and mannerisms that surfaced throughout this research.

Ellen was a twelfth year teacher who had a lot of experience and was currently teaching fifth grade. She had taught several grade levels and had at one point been an instructional coach as well. She mentioned that she did not have a favorite grade level to teach and that each grade level brought different challenges and experiences. She had been at her current school for two years and stated that she "was not as strong with the knowledge of 'Leader in Me,'" but she did take the week-long training prior to her first year at this school. Although she did not have any formal training with a data notebook, she had been to several workshops about student tracking and monitoring learning.

Ellen dressed professionally. She was poised and confident in her teaching, and her students were well trained in their routines and procedures. She was relaxed and at ease with her students. She respected their thoughts and allowed them to make choices about how to use their time wisely. She gave her full attention to the person she was speaking to and allowed them to share their insights and opinions with her. She gave the control of her classroom to her students, and they seemed be accustomed to this style of learning.

Environment. The theme of environment was present throughout the data collection for this study. The theme of environment embodied a culture and community of learners that respected one another and the classroom focus on skills and strategies prevalent in reading. The theme of environment for Ellen was found in three of her data sources. Ellen's atmosphere was unlike that of the other classrooms I had observed for this study. Her students had tables while the other classrooms had desks. This gave a different "feel" to the room, and was more of a collaborative setting. The most significant interpretive code found in her data was reading skills and strategies. The study was focused on the reading emphasis, so I was not surprised that phrases such as reading, responding to reading, projects, tests, assessments, activities, reread, and Common Core were found.

Another interpretive code prevalent in the environment of this classroom was time frames. Time frames were mentioned within the observations and reflection journal in order to set limits for the management of their time, which includes weekly and quarterly as well as times of the year. A reference to time was made during my observation when the teacher had a timer displayed on the smart board and told the students "there is a time check-in clock if you are trying to gauge your time." Time frames and the focus of reading skills and strategies appeared to be the most prevalent in the environmental theme of this classroom.

Behaviors. Behaviors was a theme that was prevalent throughout this study. Two interpretive codes defining behaviors include student behaviors and teacher behaviors. Both interpretive codes were significantly high and were prevalent throughout the data collection in all of the studies. In Ellen's data collection, behaviors were prevalent in three data sources.

Student engagement was one code in student behaviors that was very significant in all classrooms throughout this study. In this classroom, student engagement was more heavily weighted on engagement between peers rather than pertaining to the teacher engaging students. The students in this classroom were taught that their classroom was, as the teacher stated, "like an organization where everyone can talk and be respectful without always having to raise their hands." This was a quote I found to be true and quite impressive. It was documented in Ellen's reflection journal that "students were very much involved in the lesson, typing or writing." During the second observation, I witnessed a group of students working together; the engagement came from their collaboration and passion to work on a fundraiser they were preparing for. This scenario was documented:

> Students left the room and came back with lap tops. A few of the other students were deciding who was going to type what. They had created a script for each day that would be read during announcements pertaining to their fundraiser. One student (the one who was just in the safe seat) immediately stated that he couldn't type his part because he couldn't read it. One of the girls in the group asked another student if he could read it and he said yes so he gave his paper to the other student to type and shouted "Problem solved!" The group was happily discussing how they should type up their information and after much deliberation decided to color code so that it would be easier to read. This fundraiser was something they had come up with and truly were engaged in their task of preparing scripts to raise money for their cause which was cancer awareness.

Research shows that getting students involved in projects that mean something makes all the difference in the world. That is what I saw happening in this classroom on this day. Ellen felt that using the data notebook engages students in reading. She said, "the data notebook definitely gives them more of a focus and keeps their attention on what the learning goal is." Another code found in student behaviors was collaboration with students, defined as students

collaborating and working together. Ellen had the highest coding when it came to student collaboration, illustrated by a group the students initiated to raise funds to combat cancer.

Teacher behaviors, also an important component in self-regulated learning, was prevalent when focusing on the teacher as a facilitator. This was a recurring theme I witnessed throughout this study and has proven to be a necessary component of self-regulated learning. This type of teaching style was explained in more detail when Ellen described what she perceived her role to be while implementing the data notebook:

> We have as a district become more of facilitators and it goes hand in hand with differentiation with a little bit of leader in me. It may have changed with the Common Core. We have been hearing more about becoming more of a facilitator and guiding students to where they need to go as far as learning. Having the data notebook to help them with their specific areas of need and then talking to them about this helps to keep them focused.

I found Ellen to be a great example of this facilitator style of teaching that supports self-regulated learning. Ellen clearly saw herself as a facilitator and understands that children have the capability to drive their own projects and learning. The teacher as a support was also prevalent in Ellen's data collection. Ellen showed supportive behaviors at the end of the interview when she stated, "It's just about listening to kids." She continued, "We really need to listen to what they want to learn and what they need." This sums up her philosophy and paints a clear picture of the kind of teacher she is.

Learning goals. The learning goals of students appeared throughout this study but as mentioned previously, was a critical theme throughout all of the studies. Learning goals referred to types of learning goals, monitoring of learning goals, or self-regulated strategies toward learning goals.

As with others in this study, the predominant code under the learning goals theme was academic goals. This, as mentioned numerous times, was communicated with words such as goals, learning goals, targets, or I can statements. In her interview Ellen described the relevance of these academic goals:

> Students have their learning goals behind each tab in their notebooks and we put them in their notebooks as they occur. I don't have a sheet that says "here are your learning goals for 3rd quarter." Instead, they have all of their learning goals on their tracking sheets and they are in the form of "I can" statements. For example, one of the learning targets was, I can describe how a narrator's or speaker's point of view influences how events are described. This might be in the form of a response to a reading activity where they are graded by the teacher or by other students.

Tracking tools and tracking goals was also significant in Ellen's data and was best described in her interview when asked to share how the data notebook helps students identify clear targets. She stated:

> They have a tracking sheet in their notebook that has the learning targets in the form of "I can" statements. The teacher provides them with the learning goals for the activity, sometimes the students choose them with guidance from the teacher. Students set goals to meet these targets and/or create plans of action to meet these targets with the help of the teacher. The students can use time in the morning to practice things they need to work on.

Tracking tools were defined in this classroom as anything that supported the students or teacher with a means for tracking their learning. It was communicated with words like notebook, data notebook or tracking sheets. According to Ellen, the students have data notebooks that have tabs for each content area, and their learning goals are behind each tab for tracking purposes. Tracking these goals were done in this notebook and was documented as another significant code in this classroom. Ellen was asked during the interview what strategies were most helpful in improving reading:

> I think that understanding the goal is the most important strategy for students in reading. The students need to know and understand what it is that you are going to teach them. A lot of times teachers will say this is what you are going to learn but kids don't really understand what that means or how they will use it or how it is going to impact them with their reading. So I would suggest before any teacher goes forward in their instruction that they make sure the students understand what they are going to be learning about and helping students deal with the new knowledge and how this new knowledge will affect them as a reader. For instance, when will I use this? How will I use this? Why is it important? I think that is an important step that a lot of teachers miss.

This depicts the philosophy and basis of using a self-regulated learning tool such as a data notebook for reading. Her perception of this tool also documented this same idea:

> The data notebook definitely helps kids own what they are learning. They know where they are at and there is really no reason for a report card because they actually know exactly what they need to work on. They know what they are experts on and they know how they can help others. It really is the key to learning.

Another aspect important to monitoring progress is using the self-regulated strategies necessary to be self-motivated learners. This classroom utilized goal setting consistently; this was documented in the first observation when I noted,

> the teacher shared that the students do a pre check in and a post check in with each learning goal. The teacher does the pre check in and then teaches the learning goal and then puts students into groups so they create a plan on how they want to accomplish the learning goal.

This was something the students seemed to understand, and the ownership came when these student then taught the learning goal to the grade level below them. This is the ultimate mastery of a task; teaching someone else.

Communication. Communication, which was the final theme that was present throughout this study, included communication *to* and communication *from* parents, students, or teachers. In this classroom, communication from students was one of the only codes documented consistently under the interpretive code of communication from someone. This

was seen throughout all observations and in some parts of the interview. Students were the sole communicators throughout this classroom. Ellen noted in her interview when asked how the data notebook provides feedback from students, "students did a PowerPoint for their student-led conferences and they were very reflective." I noted in my field notes that "the students created PowerPoints focused on each content area and the students reflected on their learning targets and discussed their progress using information from the data notebook." Ellen added, "the students do a lot of collaborating and sharing with each other. I do a lot of conferring and collaborating with kids. There is just a lot of collaborative work in here."

Although the data collection for communication did not appear high in this classroom, I felt that the students were truly in tune with each other, and communication between them was worthwhile and meaningful. This classroom forced me to think about my childhood and how collaboration and peer interactions were not encouraged. Had this type of learning been present when I was younger, I may have had a more positive school experience.

Case 6: Lucy

Lucy was the last participant I interacted with. Her pseudonym, Lucy, means light, radiance, and clarity. I found a connection with this as I found her to provide clarity and radiance throughout her observations and interviews. She was very calm in nature, and her room was exceptionally clean and organized with each item having a specific place. She was one of the only teachers in this study to have a teacher's desk in the corner of the room. She mentioned that she had been gone the last couple of days and felt a little disorganized, but it was not the way I felt when I was in there. She had an aura that gave a peaceful but radiant

feel. It was warm and almost calming, as if she had been chosen for this profession, and she was a natural at connecting with students. Lucy mentioned this when asked why she became a teacher:

> Teaching is in my blood. My mom is a teacher and my grandma was a teacher. I was going to college to be a fashion merchandiser, but I didn't really ever get excited about my classes. I came home from college over a weekend and they were building a new elementary school so my mom and I went and took a look at it. Whenever I started looking in the classrooms I realized "this is exactly what I want to do" and I went back to college that next Monday and changed my major.

Lucy was a fifth year teacher, but she had a maturity that made me believe she had been doing this for much longer. She was a fifth grade teacher and had been at the same school her entire career, including her student teaching experience. She seemed comfortable and content with her position but made mention of just beginning a family and missing part of the beginning of the school year. She also shared that she had moved up from the previous grade with this class and had enjoyed being able to stay with them another year. It was clear she understood the importance of relationships.

Lucy had a "togetherness" about her. She was structured and prepared. The student desks in her room were grouped together, which gave the impression a lot of collaboration took place between students. She had a small area where they would gather on the floor in front of an easel, and the routines and procedures seemed second nature for her students. There was a basket by the entry way where students turned in assignments, and her directions were on the smart board both times I observed. In regard to the data notebook, she mentioned that the staff had received some professional development on its use, but that she had also visited a school in Columbia, Missouri, where the data notebook had been

successfully implemented. Lucy was completely relaxed as a teacher, and it was clear that her students respected her.

Environment. The theme of environment was present throughout the data collection regarding Lucy. As mentioned, the interpretive codes for environment refers to the culture and climate of the building along with reading skills and strategies observed or mentioned. The theme of environment could be viewed in all three data sources for Lucy. The most prevalent code was reading skills and strategies found in the classroom environment. It was apparent that reading was a very comfortable time for these students. When I entered the classroom for the second observation, Lucy was reading a chapter book. At the conclusion of the time, when students had to transition to another part of their reading instruction, there were sighs of disappointment because the kids were so engaged in the read aloud. Lucy reassured them that they would pick up tomorrow where they left off, which seemed to satisfy most of them. Reading skills and strategies were observed and discussed during the interview and even reflected upon in Lucy's reflection journal, in which she specifically addressed reading skills and strategies:

> We have been working on main idea, key details and summarizing for about 2 weeks. I feel that the students are ready to move on to our next goal based on the work that they have put forth. When we come back from break and begin our new skill, we will be graphing where we feel we are on that particular skill and then again after the lessons on that skill are taught.

This focus was also portrayed during my observation:

> The teacher gave directions to put summaries up in the basket from the previous day. She then stated, "I am going to meet with you and show you your score from your main idea assessment and go over your assessment as well. She went on to say that she would be "discussing why you got that score and maybe what you were missing." You are going to read independently during this time. You are going to write a brief summary of a book, a page, or a paragraph of the book that you are reading. You will

> turn those in. Anyone I don't meet with today I will meet with you tomorrow. Do you want a 5 or 7 minute warning? Student stated 7 and she set the timer.

It is clear through this observation that they were focused on reading skills that would later show them tracking their learning. This teacher had very clear expectations, which was another code found in this environment. These expectations were stated on the smart board:

1. Read your text together
2. Complete the summary graphic organizer.
3. Compose a summary of your text (chart also up next to chair)
4. Meet with Mrs. _____

Expectations also surfaced in this data was in my observation notes, indicating this teacher had very clear expectations; redirects were at a minimum for that reason.

This leads into the next code that surfaced in this classroom, which was time frames. Time frames, which were mentioned in Lucy's reflection journal and interview, were an important part of the climate of this classroom and were focused on the setting of time limits for the management of their time, time in reference to quarterly, days, as well as beginning lessons or units. Lucy mentioned in her interview that her experience with the use of the data notebook "is that it is a time-management thing."

The last code in the interpretive coding of climate and culture was a positive learning environment. This could be depicted through her mannerisms and structure of her classroom. She was respectful and positive with her students, but the atmosphere itself I noted was "comfortable and organized." I also noted in my observation a scenario that showed her style of redirecting student behaviors in a kind manner.

> A student across the room was off task and talking. The teacher whispered her name to get her attention, smiled at her while shaking her head, and pointed to her book. The student giggled a nervous giggle and said "sorry."

This teacher provided a positive learning environment through her use of clear expectations as well as time management. Students knew what was expected of them, and they appeared more than willing to follow her lead.

Behaviors. Behaviors was a theme that was present throughout the data collected from Lucy throughout all three data sources. As mentioned earlier, self-regulating skills involve the self-awareness, self-motivation, and behavioral skills to implement knowledge taught appropriately (Zimmerman, 2002). The theme of behaviors was defined as those behaviors related to both teachers and students in regard to the learning goals for reading. The theme of behaviors was most prevalent in Lucy's observations, but it was also a significant theme throughout the interview. The interpretive code regarding teaching behaviors that was most significant was the teacher as facilitator, which was consistent throughout this study. The teacher as a facilitator was described best through the interview when Lucy stated, "my role is more of a facilitator with the data notebook and find that with these older elementary students it is easier to be more of a facilitator." To reiterate this theme, she also mentioned in her reflection journal, "I like having conversations about their learning goals with my students and building them up or instilling confidence in their abilities."

I observed another example was the interactions during my second interview when the teacher was meeting one-on-one with students and going over their main idea assessments. I noted that everything, including her body language, expressions, and words that she spoke toward her students, displayed a supportive style of teaching that was more of a facilitator.

> The teacher was meeting with students and discussing their assessments one-on-one. She sat next to one student and shared the score asking the student probing questions like why is that important for mastery or what do you think happened. After a short discussion the student began working on the assessment. The next student was slouched in the chair and seemed disengaged in his book. The teacher pulled up a chair next to him and began whispering something and then showed the scores of his test with a little bit of disappointment in her look. She then scooted closer and said, "let's work on this main idea and two details." He sat up straight and asked a few questions. The teacher stated to the student that he needed to complete this now and that she would sit right there and wait for him to finish. The teacher seemed very positive. I heard her say "yes, sure" on three different occasions in this time frame alone.

This scenario reminded me of a quote I once read, "Say yes more than you say no and allow students opportunities to fail, when assistance is still available." This teacher's support and facilitation of learning was beneficial; the student appeared relaxed in her presence and worked on the task for several minutes while she was near. Self-regulated learning requires this type of leadership, and I could feel that the students wanted to please her. Teacher as a support was also noted in this data collection and was seen through phrases from her interview such as, "I check in with them and help support them based on what they need." She was a supportive teacher and showed great consideration for their individualized progress. That was another code prevalent in her data as well: differentiation, which is meeting the needs of her students at their level.

Student behaviors were also shown to be of some significance in this classroom, which surfaced in student engagement. Student engagement was defined through language such as tracking, reading, engaged, reflecting, monitoring, or anything related to the activity of the students. When asked in what ways the data notebooks engage students in reading, Lucy said:

> They have much more of a purpose for reading instead of asking "why am I doing this?" At the beginning of each lesson we review the learning goal from the day or lesson before. Usually it is the same for a few days but we still go over them so they really understand their goal and know the purpose. We review them so much and go over it again and again and again. It's pretty amazing when you can walk up to any student and they will be able to tell you what the learning goal is and why they are learning it.

I also noted student engagement during an observation where I documented "students were all engaged and there were sighs when she stopped her read aloud because students wanted her to continue reading." It was also expressed through words such as "sharing their learning," "interacting," and "working with a partner." The trend in this classroom was to collaborate with their peers, which kept them engaged and excited about learning. Reading appeared engaging and students were on task and motivated during my observations.

Empowerment was also a code noted in Lucy's data. Self-regulated learning leads to empowerment or ownership with students. This was documented during the interview with Lucy when asked what the data notebook meant to her:

> It's really exciting when kids do track their learning to see how kids progress. It's nice to see how they were doing at the beginning of the unit and at the end. It's also nice because they know that I keep a data notebook and track their progress so we can look back at their gains and when we look at the progress it really empowers them. When THEY can see their growth from beginning to end it really empowers them.

This was a classroom that supported self-regulated learning, and this teacher recognized what that accomplished for her students.

Learning goals. The learning goals of students appeared throughout this study but showed to be a critical theme throughout all of the studies. Only two of the codes under learning goals were referenced: types of learning goals and monitoring of learning goals.

These two interpretive codes were found within all three data sources. The observation or discussion of specific self-regulated strategies toward learning goals was not prevalent.

Academic goals were mentioned numerous times and were documented through words such as "learning goals" or "goals." In the reflection Lucy provided this statement regarding goals: "When I confer with students on a learning goal, I always try to build them up first and then discuss some goals that we could use to make their work even better." I was amazed at how many times learning goals were either discussed, posted, or referred to before, during, or even after the lesson. During the interview, Lucy also described ways that her students know what their targets are:

> There is some statistic that if you just have your learning goals posted and don't even interact with them that your test scores will go up like 17-20%. We discuss them at the start of the lesson and review them all the time. We go over the learning goals at the beginning the quarter so they know exactly what they will be learning. For student led conferences they did a PowerPoint they exhibited what they learned with that learning goal. A lot of times I will give them a learning goal before we do the lesson and have them kind of interpret what that might look like in reading and have them interact with it before we actually learn it.

Monitoring these learning targets also was prevalent in this data collection and could be seen through three different codes: tracking tools, reflecting on goals, and tracking goals. Tracking tools was defined by rating, data note book, data folder, or learning goal sheet. These were tools that assisted either the teacher, the students, or both in tracking their learning. Monitoring learning also included reflecting on goals. This could be viewed through this scenario:

> The teacher stated, "If you are still working on your summary with your partner keep going. If not, you need a pencil and come to the carpet. Once at the carpet, the teacher discussed a pink sheet that had their learning targets on it. She went through the rating scale 1 (being need a lot of support) to 4 (I can teach it). You guys keep this in your folder and I will be the only one to see it. Grade yourself on how you feel

> about the summary. Once you finish, please stand in a circle. Here is what I want you to share: What you marked on your pink sheet or what you wrote about in your summary. We have 5 min so please be respectful of others time and share one of those two things. Everyone shared….some of the comments: "I gave myself a 3 because I don't need to ask for any help with this." "I gave myself a 2.5 because occasionally I still need some help with this." "I gave myself a 3 because I don't need any help." ***students were a little restless during this time just moving around. The teacher gave expectations about what to do after the reflection and stated that the pink sheet is your ticket out the door.

This clearly showed the importance of monitored learning, reflecting, and tracking their learning. One area that was not shown to be of any significance in this classroom was the four self-regulated strategies toward learning goals. Hints of these strategies were present, but were not of any great significance.

Communication. Communication, which was the final theme that was present throughout this study, included communication *to* and communication *from* parents, students, or teachers. In this classroom, communication to and from students and to and from teachers was consistent throughout the interview and observations. All were similar in range but the following statement was given during the interview when asked what strategies the teacher finds helpful in improving reading:

> The strategy I really like to use to improve reading is the one-on-one conferring or even conferring in small groups when they are bouncing ideas off of each other there is a lot of ah ha moments when they hear someone else share something that they might be struggling with or it helps clarify it for them.

This shows the importance of this communication between students and teachers in this classroom, which would most likely impact the student achievement scores in reading as well as the confidence a reader has about their abilities. It was also noted when the teacher stated, "the data notebook gives students more of a purpose in reading and when assignments are given back we track them and have discussions about it."

The data notebook in this classroom was more of a choice which showed in the data collection. During the interview, the teacher was asked to describe her students' experiences with the use of a data notebook. She said:

> It is such a time management thing and a lot of my kids are good about going right to their data notebook and track their progress. Some of them love to track their stuff. Others see it as another thing to do. This year we've had a harder time staying on top of it.

Although this teacher stated that the data notebook was being used in a different capacity this year, it was apparent that self-regulating strategies were being taught and students were seeing themselves as active participants in their learning. Each case provided significant data to gain a better understanding for the use of this self-regulated learning tools. As an administrator, I reflected on the teaching practices that were prevalent in my elementary school years and those that are present today. I believe that we must continue to search for ways to support self-regulated learning and use of helpful tools such as the data notebook for reading. Next, I provide a summary of the cross-case synthesis for this study.

Cross-case Analysis

The central question for this study was: How do teachers implement data notebooks to address the reading needs of their students, with the following clarifying questions: (a) What are the fourth and fifth grade teachers' perceptions of the data notebooks that are used by students to monitor their own reading progress? (b) What are the ways that data notebooks are used by fourth and fifth grade students in monitoring their own reading progress? (c) How was the data notebook strategy implemented and supported by the leadership in one Midwestern school district? The cross-case analysis served as a means to analyze all data across all cases and illuminate the findings in relation to the research questions.

The findings of this study revealed that three themes were consistent across all six cases as well as the interviews, observations, and documents. These themes were environment, behavior, and learning goals. The theme of communication was consistent with five of the cases. I utilized cross-case analysis to illuminate the research questions findings.

Environment Theme

Throughout this study, I defined the environment as the foundations of climate and culture that were present along with the reading skills, strategies, or activities regarding the surroundings. The environment and climate of what was present in these classrooms was significant in the implementation of the data notebook. There were 766 times throughout this data that environment was present across all six cases. The analysis of this theme provided a response to the central question for this study: How do teachers implement data notebooks to address the reading needs of their students?

All six of these participants had strong classroom management skills and an emphasis on solid connections or relationships with their students. These classrooms had routines and procedures that exhibited a sense of community. An interesting detail that intrigued me was that all six teachers kept their lights dim during their reading instruction and relied on the natural light from the windows to brighten the room. This had a calming effect on the room, and students seemed relaxed as they read.

There were two commonalities in the environment that stood out across all six cases. They were time frames and reading skills, strategies, and activities. The time frames were described as weekly, quarterly, morning, afternoon, minutes, or any reference to time of day

or time in general in regard to goals, tasks, or progress. The teachers were all consistent in managing and teaching time management skills with their students and their learning goals. Deadlines and expectations of time was an important commonality, and there was clearly an embedded practice of monitoring time in regard to student learning. Increased use of self-regulatory strategies are developed by awareness of time management skills.

Another commonality was presence of reading skills, strategies, and activities. The focus on reading and the teaching skills and strategies that support reading was the strongest overall interpretive theme, and for good reason. This study focused on how to support the needs of readers in the classroom, and this data showed that all six teachers had a strong focus on reading and provided many skills, strategies, and activities that support this foundation. Environment was the second most prevalent theme in this study.

Behavior Theme

The behaviors in regard to self-regulated learning that occurred in the classrooms was another theme that was found throughout the data from this study. Behaviors were defined as both teacher behaviors and student behaviors. There were 746 recurrences of this theme across all six cases of this study. The cross-case analysis of this theme helped provide clarity for the central question: How do teachers implement data notebooks to address the reading needs of their students? It provided clarity as well for the sub-question, which was, How was the data notebook strategy implemented and supported by the leadership in one Midwestern school district?

Student engagement was extremely high in all classrooms in this study and proved to be of significance. Student engagement was defined as behaviors that show the students are

connected in some way to their learning and was referenced 149 times throughout the data collection. The process of engagement looked very similar in all six classrooms. Students were engaged in their learning, and this was shown when they were engaged with the teacher, with their peers, and/or even with their own personal reflections of learning. The classrooms had an expectation for these students, and this typically began by creating a mission statement at the beginning of the year. The classes lived by the mission statements, and it was apparent this was a building expectation.

The recurrence of student engagement was enhanced by the teacher as facilitator teaching style, referenced 140 times, along with teacher as a support, which was referenced 117 times. All teachers across these six cases believed that their role was more of a facilitator of learning and that it was the responsibility of the students to be engaged in this process. Support from the teacher, however, was extremely high as well providing an atmosphere that reinforced this type of leadership and student engagement.

Learning Goals Theme

During this study, I defined learning goals as any goal pertaining to types of learning goals, monitoring of learning goals, or self-regulated strategies toward learning goals. This proved to be the single most documented theme throughout this study and across all six cases. The analysis for this theme provided a response to the central question of this study, as well as sub-questions a and b:

How do teachers implement data notebooks to address the reading needs of their students?

(a) What are the fourth and fifth grade teachers' perceptions of the data notebooks that are used by students to monitor their own reading progress?

(b) What are some of the ways that data notebooks are used by fourth and fifth grade students in monitoring their own reading progress?

In the self-regulated learning environments, monitoring of the learning goals was significant. A critical code across this theme was academic goals, which were defined as goals pertaining to smart goals, targets, learning goals, or learning targets, and was referenced 192 times across all six cases and from interviews, observation, and documents. This was extremely high, and all six teachers were consistent in their delivery and expectations about how this was embedded into their practices.

Another commonality in this theme was tracking goals and tracking tools. Tracking goals was defined as the tracking of any learning or progress, which could be in the form of a checklist of learning goals in each student's data folder. Tracking goals delineated the importance of these goals and the monitoring of mastery for each student. Tracking tools was defined as tools such as rubrics, rating scales, graphs, charts, or reflections that track student progress. Tracking goals was referenced 114 times, and tracking tools was referenced 210 times throughout the study. These two codes intermingled and pertained to one another, and both supported monitoring of student learning.

Goal setting or planning was another prevalent code that was significant in five of the six cases; it was referenced 81 times. The teachers had an embedded practice of guiding students to an understanding that goal setting or planning how to improve learning was an important aspect pertaining to learning goals. This coincided with reflection at times and

allowed students to see their choices that might not have been successful and then allowed them to make new choices that might be more beneficial in meeting their learning goals.

The teachers all indicated that the data notebook was a tool that empowers students or establishes ownership over their learning. They also believed that it was beneficial in providing a solid understanding for their students about how to monitor their learning goals, their status in mastering those learning goals, and ways to meet those goals. As teachers, they believed their job was to assist their students in choosing strategies and plans that would help them meet their goals.

Communication Theme

Throughout the data collection, communication depicted some relevance in regard to the data notebook and its use for reading. The data on communication was not as prevalent as other themes but still held some significance to student learning across three of the six cases. The analysis for this theme provided a response to the central question of this study: How do teachers implement data notebooks to address the reading needs of their students? Overall communication was referenced 285 times throughout the research but had little significance in a few cases. In four cases (Janis, Debbie, Ellen, and Lucy) the teachers found that communication *from the student* was of some significance, referencing this 66 times. At the same time, Julie, Janis, Debbie and Lucy felt that communication *from the teacher* was relevant, with a total of 62 recurrences. There were also commonalities noted between Janis and Lucy, who felt communication from students, referenced 41 times, and from teachers, referenced 33 times, has some relevance.

Summary

The purpose of this holistic heuristic case study was to develop a rich description of the experiences of six teachers and their perceptions on the use of a self-regulated learning tool known as a data notebook in reading: how it was implemented and utilized as a means to engage, monitor, and improve reading in their classrooms. As this study progressed, and as I analyzed and coded data, I found similarities in the foundations that the six classrooms utilized to support and facilitate self-regulated learning.

This study provided insight into several areas of interest in the use of a data notebook for reading: the classroom environment; the behaviors of teachers and students in monitoring progress; and the type of leadership necessary to facilitate and support self-regulated learning. I have a clear understanding that direct instruction is not a teaching practice that supports self-regulation and that guiding and supporting students suggests to students that teachers are there as a resource and not as dictators. Along with this type of leadership, there must be a strong structure to monitor their goals and guide students to become active participants in their learning. This emphasizes the importance of the students not only knowing their learning targets but actually understanding them and how they benefit their reading ability. These teachers taught me the importance of time management and how it aids in self-regulated learning for students. These teachers were reflective in their practices and all had success with the use of the data notebook for reading.

As an administrator in an elementary school setting, I am intrigued by the benefits of self-regulated learning and its effect on student motivation and achievement. I found that it is not just the data notebook that drives students to be active in their learning, but rather the

environment, the teaching style, and the intense focus on the learning goals. They have taught me to begin with the focus on learning goals, about which Ellen said, "Having students truly understand 'what' you want them to learn is the key to learning." I believe that with more professional development on the keys to monitoring instruction, teachers can implement strategies that will encourage self-regulated learning and in turn improve overall academic achievement. The data notebook is only a tool to help organize and track progress. It is the teaching practices that make this self-regulation successful.

In Chapter 5, I will provide thoughts about what I believe led to the conclusions of this study. I will also provide a brief reminder on the importance of self-regulated learning and implications on the use of a self-regulated learning tool. This study investigated only the teacher perspective on the use of this tool, so I also provide several recommendations that would create useful studies for the future and ways to ensure self-regulation is included as an important component as we seek strategies that motivate our learners.

CHAPTER 5

CONCLUSIONS AND RECOMMENDATIONS

The purpose of this heuristic case study was to gain a clear understanding of the experiences and perceptions of six fourth and fifth grade teachers regarding the use of a self-regulated learning tool known as a data notebook in reading. This study took place in a Midwestern suburban elementary school. The unit of analysis was the teaching experiences and perceptions of the use of this data notebook in reading of teachers in fourth or fifth grade classrooms. This study provided a journey into the classrooms of six teachers who shared their most genuine and authentic experiences and perceptions about the use of a self-regulated learning tool known as the data notebook in reading. It revealed an answer to the research question of this study, which was: How do teachers implement data notebooks to address the reading needs of their students? It also revealed answers to the following clarifying questions: (a) What are the fourth and fifth grade teachers' perceptions of the data notebooks that are used by students to monitor their own reading progress? (b) What are some of the ways that data notebooks are used by fourth and fifth grade students in monitoring their own reading progress? (c) How was the data notebook strategy implemented and supported by the leadership in one Midwestern school district?

Four themes were present throughout the data collection for all six participants: environment, behaviors, learning goals, and communication. The theme of environment was defined as the culture and climate of the classrooms in regard to the data notebook as well as the skills and strategies used. Time frames and reading skills and strategies were the most prevalent codes throughout this theme and throughout all cases. The second theme,

behaviors, which included student and teacher behaviors in regard to the data notebook, were both consistently present throughout all six cases. Student engagement and teacher as facilitator were the most dominant codes throughout this study. The third theme, learning goals, was defined as types of learning goals, monitoring of learning goals, and self-regulated strategies used with the learning goals. Throughout all six cases, academic goals and monitoring of learning goals were strong codes. Self-regulated strategies was also prevalent in all six cases, but not all four strategies were consistently used. Three of the five cases were strong in the use of goal setting or planning, two were strong in goal enactment, and two were strong in goal adaptation. One case, however, had minimal data on the use of these self-regulated strategies. Communication, defined as communication to parents, teachers, and students, as well as communication from parents, teachers, and students, was the last theme present in this study. This theme was present in all cases but to varying degrees. For one case, communication was strongly present, in two cases communication was moderately present, and in three cases the communication theme was minimal.

Self-regulated Learning

Self-regulated learning is recognized as an important predictor of student academic motivation and achievement. This process, which includes planning, monitoring, and assessing their own learning, is something few students do naturally, but research has shown that self-regulated learners perform better academically than those who lack these skills (Moos & Ringdal, 2012; Schunk & Zimmerman, 2007; Zimmerman, 2008). A school district in Maryland that has adopted the focus of self-regulation through the use of the data notebook, K-12, has proven its success. According to an *Education Week* report, this school

district has one of the highest graduation rates among the nation's largest school districts ("MCPS Academic Record," 2014). This supports the research that has found that students who use self-regulated learning strategies present higher levels of academic self-efficacy (i.e., confidence) and therefore present higher academic success. From a social cognitive perspective, the development of self-regulated learning is a function of the interactions of personal, behavioral, and environmental factors, which takes the form of triadic reciprocal causation (Bandura, 1986, 1997; Schunk, 2001). Although this triadic reciprocal causation is historical in nature, it has been emerging in different forms consistently throughout schools as they search for ways to meet the needs of all students and instill a level of ownership in their learning. The use of self-regulating strategies or the use of a data notebook could be the answer to creating life-long learners in our students.

More current research has found that active involvement in learning, including setting meaningful goals, selecting appropriate and task specific strategies, monitoring motivational levels, and altering the plan based on feedback are all positively related to learning outcomes (Moos & Ringdal, 2012). Although this study did not provide data on student achievement test scores, it did provide evidence that the data notebook instills a level of ownership and confidence in students that will likely present higher academic success. Although the data notebook shows evidence of success, there may be some implications to its implementation.

Implications for Self-regulated Learning Tools

As the research for this study progressed and throughout the data coding processes, I became aware that the data notebook is just one piece of the puzzle that supports and promotes self-regulated learning. The other components, such as the environment, the

behaviors of the students, and the behaviors of the teacher, play an important role in whether or not students become active participants in their learning. This reinforces the evidence that the previously mentioned triadic reciprocal causation is an important historical component to consider with self-regulated learning. The theory behind self-regulated learning is based upon this triadic reciprocal causation, which is a model created by Albert Bandura and defined as an individual's personal characteristics, behavior, and the environment, all working together to produce learning (Bandura, 1988). In order for a self-regulated learning tool to be implemented properly, it would be imperative that the theory behind this strategy be understood. This study proved that self-regulation can be taught without an understanding of the theory behind it; however, it is this theory in this case that provides the foundation or purpose behind a self-regulated learning tool. Had these teachers been introduced to the theory during their training on the use of the data notebook, I believe the notebook would have been much more powerful.

As I continued my research, I began documenting the prevalent themes and from that knowledge created a tool that would assist me with observations with the important components on the use of a data notebook in my own duties as an administrator. I named this tool the Overview Document of Data Notebook Look-Fors. The purpose of the Overview Document (see Appendix I) is to provide educational leaders and teaching staff with an overview, based on the findings of this study, of the "look fors" pertaining to the data notebook and the important components that must be present in order for it to be successful. The Overview Document could provide educational leaders with important information pertaining to self-regulating tools or strategies and ways to support self-regulated learning in

an upper elementary setting. Though not all-inclusive, the Overview Document could provide a holistic picture of utilization of a data notebook in reading with elementary students.

The following section will provide details of the four themes relevant to this study and how these participants shared their experiences with the use of the data notebook as well as their perceptions of this tool in regard to student achievement in reading.

The Four Themes

The four themes that were prevalent during this study were environment, behaviors, learning goals, and communication. Each them were present but to varying degrees. The following section will provide details of the four themes relevant to this study and how these participants shared their experiences with the use of the data notebook as well as their perceptions of this tool in regard to student achievement in reading.

Environment. Throughout all of the six cases in this study, the theme of environment was present to varying degrees. Environment was defined as the culture and climate of the classrooms pertaining to self-regulated learning and the data notebook, as well as the skills and strategies used within the environment to support reading. Educators in the 21st century must motivate students to attend to learning environments (Dean, Hubble, Pitler & Stone, 2012). Self-regulated learning derived from social learning theory grounded with Bandura's triadic model.

Bandura's triadic reciprocity explains how personal, behavioral, and environmental influences are used and are affected by the task. This model was significant in this study, as the environment plays an important role in self-regulated learning. The notion of reciprocal

interactions, according to Schunk and Zimmerman (2007), illustrates how people—in this case teachers—can affect student behaviors and environments.

The two elements within the theme of environment that were consistent among all six cases was references to time and reading skills and strategies. Because of the focus and attention that reading receives in this district, it is not surprising that the data of all six teachers provided evidence of best teaching practices for reading. Although they are important, this study was not focused on whether or not the reading skills and strategies were viable. However, as an elementary administrator with a reading background, I know that the skills and strategies focused on the learning goals presented in these classrooms were researched-based. The visual aids, engaging activities, and lessons were all relevant to the current standards set by the state. All six of these classrooms had a strong reading focus with consistent charts, activities, lessons, and learning goals. The skills and strategies were consistently implemented using the data notebook, which is an important factor.

The second element that was common within the theme of environment was the reference to time or time frames. Zimmerman et al. (1996) believe that teachers can help students understand that time is a crucial learning resource and that efficient time management can bolster learning and perceptions of self-efficacy. In reference to time, there appeared to be trend with these teachers that time or frames of time was an important component to the learning environment, or in this case, the use of the data notebook. The time frames were described as weekly, quarterly, morning, afternoon, minutes, or any reference to time of day or time in general pertaining to goals, tasks, or progress. Time frames pertained to feedback provided to students about progress or time management to

monitor their progress. Providing students with feedback must be focused and timely (Dean et al., 2012). Both are important aspects of self-regulation and are supported by research. This reiterates the idea that time is an important component for the implementation of a data notebook and specifically, the feedback students receive. The teachers in this study embedded the reference to time or time management skills throughout their classrooms. Each of them consistently modeled, promoted, and implemented time frames as part of their environment, which kept students aware of the importance of time frames.

Behavior. Behavior is another important component in the reciprocal interactions of self-regulated learning. The theme of behavior was described throughout this study as the behaviors of both students and teachers that support self-regulated learning. Students should be involved in the process of their learning, but that must be initiated by the teacher. Environmental influences, personal factors, and behavior help shape a person, and according to the triadic model of self-regulation, they in turn inform future actions and goals (Pintrich, 2006). In the social cognitive theory, research has outlined the prominent role of efficacy beliefs in regulating these processes as well as in overall child development (Zimmerman et al., 1996). In this case, reading ability can be determined through personal influences, environmental influences, and behavioral influences. For that reason, student engagement in reading could be a strong indicator of student achievement in reading.

All six of these teachers communicated that the data notebook engaged students in reading. Student engagement behaviors encompassed a wide variety of behaviors including engagement on a task between the student and the teacher, the student and their peers, or the student and their personal reflections. Engagement is not necessarily limited to the

engagement between student and teacher or student and peers. Engagement can also encompass the self-observations or self-reflections that a student undertakes. Student engagement was defined through language such as tracking, reading, engaging, reflecting, monitoring, or anything related to the activity engagement pertaining to students. This was consistent over all six cases and prevalent throughout the interviews, observations, and reflections. The foundation of student engagement is in the relationships between the teacher and student. These six teachers had strong connections with their students, and it was evident this was the main reason student engagement was so widespread.

Behaviors of the teacher as a facilitator and the teacher as support were also prevalent throughout all six cases in this study. Teacher as facilitator comprised the teaching behaviors in the classroom that facilitated learning and guided students through the process of learning. The six teachers consistently perceived their role as a facilitator and found that meeting the needs of their students by focusing their particular level of learning to the learning goals help students see their progress as individualized and beneficial to their personal achievement. These teachers exemplified being a facilitator of learning, which in their case goes hand in hand with supporting their learning and becoming active participants alongside students rather than over them. Teacher support was important to all six cases and was typically shown as check-ins, monitoring, or conferring. It was a regular occurrence to view the teachers walking around supporting students in various ways, both with personal needs and academics. A school with high capacity leadership is one with trust and team efforts working together for the betterment of the group.

THIS particular school was known as a Lighthouse School. This recognition is awarded after fully implementing a program called *The Leader in Me* through Franklin Covey. Based on *The 7 Habits of Highly Effective People®*, *The Leader in Me* (2014) is intended to produce transformational results such as higher academic achievement, fewer discipline problems, and increased engagement among teachers and parents. The data notebook is but one component within this program that helps student become life-long learners. A school can accomplish this high achievement after three years of implementing the program. This school had already received this honor, which was evident through the use of their data notebooks and the embedded practice of the *7 Habits*. *The Leader in Me* Lighthouse Schools also serve as models of leadership and mentors to other schools. This entire building had mission statements and a focus on the *7 Habits*, both of which support the philosophy of self-regulated learning. The building goals were focused on recognition of learning goals and student engagement. It takes a certain type of leadership to support self-regulated learning, and it was clear that teachers and even the principal were supportive of this.

Learning goals. Learning goals was the strongest area that was presented throughout the data in this study. Learning goals was defined as any goal pertaining to types of learning goals, monitoring of learning goals, or self-regulated strategies toward learning goals. Consistent throughout all six cases was the focus of academic goals. These teachers communicated learning objectives to students explicitly by stating them verbally, displaying them in writing, and calling attention to them throughout a unit or lesson (Dean et al., 2012, p. 7). This helps focus the students on what teachers want them to learn. These classrooms

consistently posted learning goals and spoke of them before, during, and after lessons, but most of all, the teachers had a clear understanding that this was necessary in a self-regulated learning environment that utilized a data notebook.

Monitoring instruction through tracking goals and tools was also prevalent throughout this study. Tracking goals was defined as tracking any learning or progress of students and was usually in the form of a checklist of learning goals in each student's data folder which delineated the importance of these goals and the monitoring of mastery for each student. Tracking tools were defined as tools such as rubrics, rating scales, graphs, charts, or reflections that track student progress. These teachers were habitual about tracking not just the learning taking place, but also their students' thoughts and beliefs about the learning goals. This is an important component of self-regulated learning. Fuchs and Fuchs (2002) conducted an analysis of research on student progress monitoring that considered only experimental, controlled studies. This research supports the fact that when teachers use systematic progress monitoring to track their students' progress in reading, mathematics, or spelling, they are better able to identify students in need of additional or different forms of instruction, they design stronger instructional programs, and their students achieve better (p. 1). This provided evidence on the importance of tracking goals and tools to help support that process.

Although not consistent across all six cases, self-regulated learning strategies were still an important part of this study. Five of the six cases consistently implemented goal setting or planning in their classrooms. This is just one of three phases in a particular self-regulated model upon which I chose to base this study. Zimmerman's Self-regulated Cycle

of Learning is a cyclical process (Zimmerman, 1989). The process has three major phases, each with important components. The three major phases of the self-regulated learning cycle are forethought, performance or volitional control, and self-reflection. Each phase includes several self-regulating processes and has been formed into goals. For this study, I broke down phase two into two separate goals: (a) the goal setting and planning and (b) enactment or how the goal is attempted. Three teachers consistently used all phases of the model and the other three consistently used only goal setting and planning. Regardless of their usage, all six classrooms utilized some forms of self-regulation in their classrooms in relation to the data notebook. This informed me that professional development is necessary in regard to self-regulated strategies and using them in their classrooms.

Communication. Research has found that active involvement in learning, including setting meaningful goals, selecting appropriate and task-specific strategies, monitoring motivational levels, and adapting behaviors based on feedback are all activities that are positively related to learning outcomes (Moos & Ringdal, 2012). Feedback or communication was another theme that was prevalent in five cases in this study in varying degrees: communication to and communication from parents, students, or teachers. The interpretive code that clearly had some significance in the data was communication from teachers and from students. Self-regulated processes or beliefs such as enactment and/or self-evaluative practices can be learned from instruction or modeling by parents, teachers, or even peers (Zimmerman, 2002) and to some degree would require strong communication. Although research has stated this is not common in classrooms, it is an approach that can easily fit into our educational settings. Hattie and Timperley (2007) concluded that feedback

is the single most powerful educational tool available to educators. "As in many other areas of life, timing is everything (or at least important) when giving feedback" (Dean et al., 2012, p. 13).

The participants in this study all communicated with their students and parents in some form. The type of communication required with the use of the data notebook, however, was not particularly relevant in these classrooms. For that reason, most classrooms had less time documented as communicating in regard to the data notebook. However, I believe that all of these teachers were communicating with students on a regular basis and consistently providing much needed feedback. This, however, informed me as the researcher that the teachers need additional professional development about the types of communication necessary to include all stakeholders pertaining to the data notebook. Julie, Janis, Debbie, and Lucy all had a strong understanding that communication from the teacher was important. Janis, Debbie, Ellen, and Lucy also felt that communication from students was relevant. However, only Janis and Lucy's data showed that communication to students and teachers was relevant. This data were somewhat deceiving, because I believed all six teachers communicated consistently with their students and vice versa. However, specific discussions about self-regulated learning to and from all the participants were lacking as well as the communication with parents. This informed me that professional development on these types of conversations might be of benefit to help better support the data notebook already in place.

Recommendations for Educators

Based on the findings of this study, several recommendations are appropriate for educational leaders or educators with an interest in the use of a data notebook. The first recommendation is to study high quality teachers (trained in self-regulated learning) and the evaluations that support their growth. More attention is being given to the recruitment, preparation, and the retention of teachers in our nation (Cochran-Smith & Ziechner, 2009) as we attempt to find ways to close the achievement gaps and meet the needs of all students. The use of a self-regulated learning tool supported by a high quality teacher could be the answer.

Another recommendation is to provide professional development for teachers or schools who are seeking to implement a data notebook or self-regulating tools like it. Professional development would ensure that teachers gain a good understanding about what self-regulated learning is, how to promote, model, and support it, as well as how it can be of benefit to all students. Communication Arts test scores showed improvement at the chosen site during the implementation of the data notebook. The findings of this study support improved teaching practices. This will be an important component to discuss with the director of assessments in this school district in a meeting requested by the director prior to the study. The teaching practices on the use of this self-regulated learning tool have also instilled an interest in my own first grade team, who next year have intentions of utilizing a data notebook in reading. This would require the previously mentioned necessary professional development. One last recommendation is to use the Overview Document (see Appendix I) created for data notebook look-fors. This could be used in teacher education programs, for evaluation purposes, and to assist with professional development on the use of

a data notebook. More details about each area are provided in the following paragraphs. The practice of self-regulation needs to be a part of the teachers' evaluation to ensure they are accountable to its use.

Teacher Quality and Evaluations

Numerous studies show that student academic success depends in no small part on access to high-quality teachers (Goldhaber & Walch, 2014). A teacher highly qualified in the use of self-regulated learning or tools to support it would be necessary for its implementation. This study clearly indicated that all six participants had some background on the use of the data notebook and its benefits to student learning. Evaluations of teachers can serve as a means to identify these teaching practices and the needs of the teachers so that professional development can be provided. Evaluations help to identify high achieving teachers as well as low achieving teachers; both need professional development to help support the improvement of their teaching practices. Evaluations have recently undergone some criticism, and states have revamped their tools to make teachers more accountable for student learning. Teachers highly trained in self-regulated learning could also benefit from the Overview Document mentioned previously as a means for receiving feedback on the use of the data notebook. This is another way to ensure high quality teaching practices that support self-regulated learning are present.

Professional Development

As the needs of students change, self-regulated learning tools such as the data notebook could be of benefit for all students, but its use is most promising with low-motivation students who tend to create undue amounts of stress for teachers. When teachers

receive well-designed professional development, an average of 49 hours spread over six to 12 months, they can increase student achievement by as much as 21 percentile points (Yoon, Duncan, Lee, Scarloss & Shapley, 2007). I recommend that educational leaders provide ongoing professional development on what self-regulated learning is and how to implement strategies in classrooms. The current study has provided evidence that professional development should require that teachers understand the type of learning environment necessary, the behaviors of both teachers and students, and the focus pertaining to learning goals and monitoring of student learning and components of communication. A professional development model for self-regulated learning or tools for this type of learning need to include concrete activities, ongoing workshops, classroom visits, and within-school discussions for it to be advantageous (Kuijpers, Houtveen & Wubbels, 2010). Teachers need to practice, discuss, and see models of self-regulation to learn how to self-regulate their own learning in order to fully implement a tool such as a data notebook. Teachers at the chosen site met on a weekly basis to collaborate and discuss student progress and monitoring of their instruction regarding the data notebooks. Professional development focusing on learning goals was also provided building wide. This collaboration was about sixty minutes and included all teachers within the grade level. It was noted that this team time, which gave teachers the opportunity to collaborate, was a factor in the success and implementation of the data notebooks.

The data notebook cannot be implemented without a clear understanding of self-regulated learning and how to integrate self-regulation models that support this type of learning. The focus of this type of learning must be engrained into the culture of the school

and supported by the leadership in order for it to be successful. This means everyone in the school needs to understand the components of self-regulated learning. Tools such as the Overview Document could be used for professional development.

Overview Document of Data Notebook Look Fors

The Overview Document (see Appendix I) could provide educational leaders with important information pertaining to self-regulating tools or strategies and ways to support self-regulated learning in an elementary setting. Though not all-inclusive, the Overview Document could provide a holistic picture of utilization of a data notebook in reading with elementary students. Educational leaders could focus their professional development for teachers and principals on self-regulated learning and the "look fors" provided in the Overview Document. This document might evolve as it is implemented, but it is a starting point that provides the basic components for self-regulated learning. This document could serve many purposes, but initially it could begin to engage both educational leaders and teachers in a dialogue that could potentially lead to teaching practices that support self-regulated learners. These conversations and use of the Overview Document could provide teachers with a means to reflect on their practices and their environment to ensure they are supporting this type of learning. This would also be a means for principals to observe classrooms using this document as a tool to help provide feedback to the teachers about their practices.

The data notebook used for this study provided evidence that educators need a clear understanding of what self-regulation is, how to promote, support, and model it, and what components may need to be in place to ensure its success. Administrators and teachers need

to know these basic components. I believe that teacher education programs are the first place to start, but evaluations can also be a means to help gauge the teachers' level of understanding of its use. That would require, however, that administrators had a good knowledge base for its use as well.

Professional development and mentorship is needed to support teachers' and administrators' needs and teaching practices for this type of learning. The chosen site provided evidence that mentorship was key to the success of implementing the data notebook, combined with the collaboration during team time. Data from this study provided evidence that the teachers felt the data notebook engaged readers in learning and provided them with ownership about their learning. The data notebook was helpful for teachers but could be of benefit to administrators as well. The Overview Document could be a tool to help provide look-fors and feedback to and from administrators for teachers, which could lead to beneficial conversations that provide teachers with valuable feedback. Following are recommendations for future research.

Recommendations for Future Research

This study examined the use of a self-regulated tool known as a data notebook by six teachers and provided a rich description of the experiences of these teachers with its use. Suggestions for future research would provide an opportunity to replicate or expand this study in a different setting, with varied participants and a different researcher. I have recommendations for future research that could investigate different aspects of the data notebook or a self-regulating tool like it; investigating the students' perspective and

experiences, rethinking what goes into our teacher education programs, and examining how this tool can benefit all learners, especially those of diverse backgrounds.

I would suggest investigating the students' perspectives and experiences on the use of the data notebook. This study explored only the teachers' perspectives and experiences; listening to students' voices in the research will provide more opportunities to improve this tool and make it useful to both the teacher and the students. Evidence confirmed that learning goals and time were important factors in the data notebook. Understanding whether the students were more focused on time to complete the task or if they truly had a clear understanding of their learning goals would provide helpful information to teachers and the use of this tool. This research provided evidence that teacher and student behaviors were prevalent, supporting a need to investigate student views on the use of the data notebook as well. Longitudinal studies could also explore the students' intrinsic motivation to continue self-regulation and reflection in learning. This could provide evidence on whether or not students transfer these processes to other subject areas and whether it would be beneficial to continue the use of this tool through middle school.

In conjunction with the students' perspective, the parent/guardian perspective would be beneficial. Communication and the bridge between home and school is extremely important in any school setting, and the data notebook could be used to form a system or avenue to share progress of students. This study provided evidence that the data notebook and its contents were utilized to assist students with student-led conferences but that not all parents had a clear understanding and purpose behind the data notebook's use. The teachers communicated that they did not have time to "teach" their parents on its use and therefore

stopped sending it home. It was also communicated that each year in their leadership program, *The Leader in Me,* the school took part in a leadership day. This day, which allows students the opportunity to share their data notebooks with parents or visitors interested in the tool, was one way that students were able to share their progress. One teacher stated that this day was a great benefit, but due to timing and scheduling conflicts this year, they were not participating in a leadership day.

Within the school setting, it might also be beneficial to study how class size impacts the use in a self-regulated school. Each classroom in the particular site was comprised of 15-18 students, which is fairly low. It was communicated that the district had attempted to keep class sizes low to better meet the needs of each student. Lower class sizes therefore could be a factor in the success of the use of a data notebook. A study to investigate this notion would help educators plan for future successes.

I also recommend taking a close look at what we are providing in our teacher education programs and adding self-regulated learning and models to support this type of learning. We currently have two avenues for our teacher programs: traditional and alternative. Both avenues require clinical supervision with observations and student teaching experience. This would require first and foremost that mentor teachers are trained in self-regulation and self-regulated tools so they can support incoming teachers. Teacher education programs are calling for higher standards and accountability. The shift in focus in teacher education programs is on building teachers' skill levels by using teaching standards as a means to keep them accountable. The key goal of teacher education programs is to prepare and retain quality educators. In order to start teachers out on the right path, it would be

beneficial to include components of what self-regulated learning entails, its benefits to students and teachers, and how these models of self-regulation can work within classrooms.

As educators are pushed to prepare students to be college or career ready, the philosophy of self-regulated learning could finally change the way educators view their role. The current study clearly showed that being a facilitator of learning was necessary with the use of the data notebook. Many times teacher education programs teach teachers to use direct instruction models. Teaching teachers to be facilitators of learning is another important aspect that should be incorporated into teacher education programs.

It was also noted in this study that having a strong mentor was of benefit to teachers and the implementation of the data notebook. As an administrator, I have firsthand knowledge that teachers improve practices more successfully when mentors are used to guide, model, and support them. A clear understanding of the use of a data notebook includes how to apply its usage within the classroom. Mentors can provide this for teachers and guide them as they apply the strategies of self-regulated learning.

In an effort to expand this study, I suggest that additional research be conducted in classrooms where culturally responsive pedagogy is present and implement the use of the data notebook to meet culturally diverse student needs. If teachers were explicitly taught how to teach self-regulated strategies and implement a tool such as the data notebook in addition to culturally responsive teaching practices, I believe student achievement would rise. This type of study could investigate how teachers might integrate self-regulated strategies and tools into their classroom in a culturally responsive curriculum. Each teacher has their own pedagogic style, but I believe, given that certain components are in place, self-regulated

learning is dependent on the strategies and the tool used to support them. Another area to expand upon might include how the data notebook is used in other subject areas, such as math, science, social studies, and writing. Investigating the roles of the teacher and how this might be the same or different from how it was implemented in reading are important components that could add to the success of its use.

One last suggestion for future research is to perform a comparison study of state test scores of classrooms that explicitly teach self-regulated strategies or use a tool such as the data notebook with classrooms that do not. This would provide educational leaders and teachers the evidence that this tool is successful in creating learners who are well-rounded and motivated to learn, which, in turn, will lead to successful scores on state testing. This might be an avenue to investigate alongside teacher evaluation systems. With the high stakes testing focus in combination with the accountability of teachers, the data notebooks could be tied to the standards and how the teacher supports meeting the students' learning goals. This leads to the importance of instructional leadership and the building leaders' level of knowledge on the use of self-regulated learning tools. Although a daunting task, educating all instructional leaders on the importance and value of seeing a self-regulated learning tool in practice could be the key to improving teacher practices that support all learners.

Final Thoughts

Children who grow up in poverty are much more likely to be exposed to negative environments that have direct and lasting effects on brain development, compromising their chances for success (Nelson & Sheridan, 2011). As educators we must lessen the effects of issues such as poverty and provide our students with the essential interventions and strategies

to instill the skills necessary for a successful future. Many times poverty-stricken students have gaps in their cognitive development as well as deficits in both academics and behaviors. This is better known as cultural deficit theory, which states that some students do poorly in school because the linguistic, social, and cultural nature of the home environment does not prepare them for the work they will be required to do in school (Lynch, 2013). By teaching self-regulated skills to children, schools can help students build motivation and ownership of their learning, which will help them to overcome harmful issues that affect their ability to succeed. Public education is not to judge on what level a child performs but rather to meet their needs at their level and prepare them to become life-long learners. The data notebook is just one tool that, while supporting the low achieving, has also been found to have the same success with the high achieving students as well.

However, there are so many factors to consider in regard to public education and the civil rights of each and every student: decisions about what is taught, how it is taught, and to what extent it is taught. Schools are facing challenges that they have never had to face before, with little guidance about how to resolve issues that pull educators away from teaching, as well as trying to meet the basic needs of students. Linda Darling-Hammond (1996) describes a democratic education as one that "enables all people to find and act on who they are, what their passions, gifts, and talents may be, what they care about and how they want to make a contribution to the world" (p. 5). Learning is complex, and the list of all the issues that must be taken into account is endless: cultural backgrounds, curriculum, teacher quality, facilities, and funding. We struggle in the United States to instill a democratic education because we are stuck in a traditional school model. There is a new

reality, however; the world is no longer a safe, stable, and predictable place. We must prepare for these changes in our society and take a different approach to teaching our children. That shift to a more democratic education will allow for self-regulated learning.

This study taught me how self-regulated learning is implemented in classrooms. I watched as students had a real interest in their learning and how the teacher facilitated learning rather than dictated it. This is not a program that will fade away. This is a way to learn. The data notebook or self-regulating tools like it can be the shift we need in our educational system to educate the whole child and meet them where they are. This will allow students to plan for a future and build their education on a purpose rather than a policy.

Two and half years ago I chose to study the data notebook and the concept of self-regulated learning. I never imagined the amount of knowledge I would gain and how this knowledge would change me as an educational leader. I have grown both professionally and personally through this process, and I have a better understanding of how we can meet the needs of our most diverse students with a simple tool that also encourages all students to be life-long learners. As a child who suffered from a negative upbringing, this type of learning gave me a future. This study confirmed for me that the data notebook could be the answer to our needs for low-motivated students, while also meeting the needs of all learners within the classroom. The tool itself is only part of it, but with a clear picture of what self-regulated learning is, teachers can implement this tool as a way to meet the challenges they face in empowering their students to be college or career ready. Although my study has concluded, I am still on a journey to perfect this process and find a way to implement this tool to its best use.

APPENDIX A

UNIVERSITY OF MISSOURI-KANSAS CITY SSIRB APPROVAL LETTER

UMKC
Office of Research Services

UMKC
5319 Rockhill Road
Kansas City Missouri
TEL: 816 235-5927
FAX: 816 235-5602

NOTICE OF EXEMPT DETERMINATION

Principal Investigator: Jennifer Friend
328 Education Building
Kansas City, MO 64110

Protocol Number: 13-961
Protocol Title: IMPLEMENTING A STUDENT REGULATED LEARNING TOOL IN READING: A HEURISTIC CASE STUDY
Type of Review: Administrative Review

Date of Determination: 01/16/2014

Dear Dr. Friend,

The above referenced study was reviewed and determined to be exempt from IRB review and approval in accordance with the Federal Regulations 45 CFR Part 46.101(b).

Exempt 1.

This approval includes the following documents:
Attachments

- Training IRB
- Project Proposal Approval Form - Platt
- APPENDIX G
- Appendix F
- Consent Form Final
- Consent_Form_Approved_Version_Dated_12.16.13
- Liberty Approval
- Appendix H
- Consent to Participate_TC_12.16.13
- Chapter 3 Methodology 12-5-2013
- Appendix E
- Appendix B
- Appendix C
- Appendix D

You are required to submit an amendment request for all changes to the study, to prevent withdrawal of the exempt determination for your study. When the study is complete, you are required to submit a Final Report.

Please contact the Research Compliance Office (email: umkcirb@umkc.edu; phone: (816)235-5927) if you have questions or require further information.

Thank you,
Mary Oconnor
SSIRB

APPENDIX B

PERMISSION TO STUDY (DISTRICT OFFICE)

Tracy Platt
UMKC Doctoral Student
9135 N. Mulberry Ave.
Kansas City, MO 64155
Phone: 898-2693/Fax: 816-532-5611

Dear _____,

My name is Tracy Platt, and I am a Principal at Smithville Primary Elementary School. Presently I am studying for a Doctoral degree in Educational Administration at the University of Missouri-Kansas City.

The purpose of this letter is to request permission to invite fourth and fifth grade teachers from Ridgeview Elementary to participate in a research study. The focus of my research is on the development of self-regulated learning skills in reading with elementary children through the use of a data notebook. I intend to study the experiences of the teachers using the data notebooks for reading with their students.

My data collection methods may include some or all of the following: at least one audiotaped interview, two observations, two reflection journals, blank documents of the data notebook, and anecdotal notes. All information collected in this research project will be treated with the strictest confidence and will be stored on a UMKC university computer or campus central location to ensure proper data security and confidentiality measures are taken. This data will be saved for seven years after completion of the research. No student, teacher, or school will be identified by name, and pseudonyms or code names will be used in any reporting of the research.

Participation in this research is entirely voluntary. Teachers will be free to withdraw at any time during the project, in which event their participation in the project will immediately cease and any information obtained will not be used.

For the study, I intend to reflect on and hopefully improve upon the teaching practices revolving around the self-regulated learning tool known as a data notebook. Should you have any questions or concerns regarding this research study, please call me at 816-898-2693 or email at plattt@smithville.k12.mo.us.

Best regards,

Tracy Platt

APPENDIX C

INVITATION TO PARTICIPATE IN THE STUDY (PRINCIPAL)

Tracy Platt
UMKC Doctoral Student
9135 N. Mulberry Ave.
Kansas City, MO 64155
Phone: 898-2693/Fax: 816-532-5611

Dear_____,

My name is Tracy Platt, and I am a Principal at Smithville Primary Elementary School. Presently I am studying for a Doctoral degree in Educational Administration at the University of Missouri-Kansas City.

The purpose of this letter is to request permission to invite fourth and fifth grade teachers from your school to participate in a research study. The focus of my research is on the development of self-regulated learning skills in reading with elementary children through the use of a data notebook. I intend to study the experiences of the teachers using the data notebooks for reading with their students.

My data collection methods may include some or all of the following: at least one audiotaped interview, two observations, two reflection journals, blank documents of the data notebook, and anecdotal notes. All information collected in this research project will be treated with the strictest confidence and will be stored on a UMKC university computer or campus central location to ensure proper data security and confidentiality measures are taken. This data will be saved for seven years after completion of the research. No student, teacher, or school will be identified by name, and pseudonyms or code names will be used in any reporting of the research.

Participation in this research is entirely voluntary. Teachers will be free to withdraw at any time during the project, in which event their participation in the project will immediately cease, and any information obtained will not be used.

For the study, I intend to reflect on and hopefully improve upon the teaching practices revolving around the self-regulated learning tool known as a data notebook. Should you have any questions or concerns regarding this research study, please call me at 816-898-2693 or email at plattt@smithville.k12.mo.us.

Best regards,

Tracy Platt

APPENDIX D

INVITATION TO PARTICIPATE IN THE STUDY (TEACHERS)

Tracy Platt
UMKC Doctoral Student
9135 N. Mulberry Ave.
Kansas City, MO 64155
Phone: 898-2693/Fax: 816-532-5611

Dear 4th and 5th Grade Teachers,

I am a doctoral student from the University of Missouri-Kansas City. Your name was provided by your school principal to receive a copy of this invitation for your possible participation in a research study.

The focus of my research is on the development of self-regulated learning skills in reading with elementary children through the use of a data notebook. I intend to study the experiences of teachers using the data notebooks for reading with their students.

Your participation in this research is entirely voluntary; nevertheless, your participation will contribute to the success of the research. For the study, I intend to reflect on and hopefully improve upon the teaching practices regarding the use of a self-regulated learning tool known as a data notebook. You will be free to withdraw at any time during the project, in which event your participation in the project will immediately cease, and any information obtained will not be used.

My data collection methods may include some or all of the following: at least one audiotaped interview, two observations, two reflection journals, blank documents of the data notebook, and anecdotal notes. All information collected in this research project will be treated with the strictest confidence and will be stored on a UMKC university computer or campus central location to ensure proper data security and confidentiality measures are taken. This data will be saved for seven years after completion of the research. No student, teacher, or school will be identified by name, and pseudonyms or code names will be used in any reporting of the research.

Should you have any questions or concerns regarding this research study, please call me at 816-898-2693 or email at plattt@smithville.k12.mo.us. In case you have questions about your rights as a participant in this study or should you feel you have been placed at risk, you may contact the chair of the SSIRB.

Sincerely yours,

Tracy Platt

APPENDIX E

INTERVIEW GUIDE

Thank you for taking time to allow me to interview you and learn about your experience with the use of a data notebook. As you know, I am working on my doctorate and this is the topic of my research. I've given you the questions in advance along with a pseudonym you have chosen (or been given) so please use that from now forward. During the interview some of your answers may prompt me to ask other questions to help me better understand so please don't be surprised by that. The interview shouldn't take too long. If you want to stop at any time you may do so.

Introduction Questions:

1. Can you share with me why you became a teacher?
2. How long have you been teaching?
3. What grade do you currently teach?
4. What college degree(s) do you currently hold?
5. Do you have any formal training in self-regulated learning or data notebook models? If so describe that training. If not, how did you learn to implement them?

How do you describe your students' experiences with the use of data notebooks?

- How long have you been implementing data notebooks for reading?
- Mission statements seem to be an important piece of the data notebook. Can you describe the purpose and how that process looks in your classroom?
    - When do you do a mission statement?
    - Where is this displayed?
    - How do you complete a mission statement?

- Can you describe the physical environment/set-up for the data notebook and how it aids self-regulated learning?

What are the teacher's perceptions of the data notebook?

- Explain what the data notebook means to you.

- How do you perceive your role as a teacher implementing this tool? What is your role….

In what ways do data notebooks engage students in reading?

- My understanding is that data notebooks help students identify clear targets. Can you describe the ways in which your students know what their targets are?

- My understanding is that students set goals to meet these targets and/or create plans of action to meet these targets. Can you describe what that process looks like in your classroom when students make plans and set goals?

- How do you as the teacher and the students monitor progress?

- What assessments or activities do you use within the data notebook?

- Does using the data notebook engage students in reading? If so how?

What strategies do teachers find helpful in improving reading?

- Are there any specific strategies that you find helpful in improving reading?

- What strategies does the data notebook support to improve reading?

- Do you feel that the data notebook helps how children feel about themselves as readers?

In what ways does the data notebook provided feedback for your students and parents? Does this feedback help them in setting/meeting their goals? Are there other ways communication helps your students in reading?

Tell me how the communication works for the data notebook.

APPENDIX F

OBSERVATION PROTOCOL

Date and Time: _____

Prior to the observation:

I will provide the teacher with the list of questions one week prior to the scheduled observation and communicate the following message:

"Thank you for allowing me to observe your classroom in an effort to gain a better understanding of the use of a data notebook. Next week I will visit your classroom to observe the reading block and information pertaining to the use of a data notebook for reading. Prior to my visit (or when I enter the classroom), please share with the children the reason for my visit (to observe your interactions with them using the data notebooks), where I will be located, that I will not be asking them any questions and to pretend I am not there. I will keep these questions (below) and this code book (my code book 1 from my interview phase) by my side and refer to them as I observe. Do you have any questions of me before I come for my visit?"

Teacher Answer:

Provide the teacher with the research questions below and the focus areas I will be observing.

Research Questions:

How do teachers' implement data notebooks to address the reading needs of their students with the following clarifying questions: (a) What are the fourth and fifth grade teachers' perceptions of the data notebooks that are used by students to monitor their own reading progress, (b) What are some of the ways that data notebooks are used by fourth and fifth

grade students in monitoring their own reading progress, (c) How was the data notebook strategy implemented and supported by the leadership in one Midwestern school district?

Observation Focus Areas:

Self-awareness

- Self-perception or how a student feels about a task
- Self-efficacy or the confidence or belief they have about a task
- Any discussion relating to character traits or role models

Organization

- Tools related to the data notebook
- Time frames mentioned or observed
- Environment or culture/climate…what does it feel like?
- Reading skills/strategies/assessments/data

Targets

- Objectives or learning targets
- Accountability
- Monitoring of the targets
- Progress
- Plans of action
- Celebrations
- Behaviors of empowerment, motivation, support
- feedback

My Personal Reflection After Observation: (adapted from Marzano (2007)

Questions to consider:

1. Are learning goals and student progress communicated in some way?
2. How does the teacher effectively interact with the students using SRL?
3. How does the teacher engage students in their learning process in reading?
4. How does the teacher communicate high expectations?

APPENDIX G

REFLECTION JOURNAL FOCUS AREAS

***Please reflect on the following areas and how they were utilized throughout the week in regard to the data notebook for reading.**

Self-awareness

- Self-perception or how a student feels about a task. What tasks were completed with the data notebook, and how did the tasks focus on reading achievement?
- Self-efficacy or the confidence or belief they have about a task. How did the data notebook assist students in their confidence toward a reading task?
- Were there any discussions relating to character traits or role models with the students?

Organization

- Tools related to the data notebook. What items were used?
- Time frames mentioned or observed (i.e., reference of time practicing a task, or progress made, etc.)
- Environment or culture/climate: Was there anything added to the environment regarding reading or data notebooks? (i.e., charts, graphs etc.)
- Reading skills/strategies/assessments/data: Were any of these used this week?

Targets

- Objectives or learning targets
- Accountability
- Monitoring of the targets
- Progress and Plans of Action
- Feedback
- Behaviors of empowerment, motivation, support
- Reflections
- Celebrations

APPENDIX H

PARENT INFORMATION LETTER

Dear Parent/Guardian,

Your child's classroom is participating in a dissertation research project, which is focused around the teacher's experiences and use of the data notebook in reading. During the next several months, I will observe in the classroom during the reading block on two different occasions to learn about the teachers' use of a data notebook in reading only. This letter is to inform you that I will be in the classroom to observe only the teacher, and I will not be interacting with your child at all. If the teacher provides any documents, the name will be removed before I gain access to ensure anonymity of your child.

This study involves the use of self-regulated learning strategies and tools such as the data notebook that support those strategies. My research will help other educators to understand how a self-regulated learning tool can assist teachers to help students to become active participants in their learning. Your child will be in the classroom where observations are occurring, but the focus is on the teacher experiences only. I will also use this information to develop helpful strategies for the teaching of reading.

If you have any questions about this study, please contact me using the number listed below.

Sincerely,
Tracy Platt
816-898-2693

APPENDIX I

OVERVIEW OF DATA NOTEBOOK LOOK FORS

Environment

- **Culture and Climate**
  - Routines/Structures/Procedures
  - Clear Expectations
  - Time Frames (time management/time of day)
  - Positive Learning Environment (relationships with students)

- **Best Practice Teaching Skills/Strategies**
  - Visual aides
  - Life/leadership skills
  - Skills/strategies
  - Data/activities/projects (targeted core areas)

Behaviors

- **Teacher Behaviors**
  - Facilitator
  - Support
  - Differentiation
  - Encouragement

- **Student Behaviors**
  - Engagement
  - Collaboration
  - Ownership/Empowerment
  - Celebrations

Learning Goals

- **Types of Goals**
  - Academic goals
  - Behavioral goals
  - Personal goals
  - Mission statements

- **Monitoring of Goals**
    - Tracking goals
    - Tracking tools (rubrics, scales, rating, etc.)
    - Individualized learning
    - Reflections
- **Self-Regulated Strategies**
    - Task Perception
    - Goal Setting/Planning
    - Goal Enactment (How)
    - Goal Adaptation (Evaluation/Reflection)

Communication

- **Feedback TO**
    - Parents
    - Teachers
    - Students

- **Feedback FROM**
    - Parents
    - Teachers
    - Students

REFERENCES

Alexander, P. A., & Fox, E. (2004). A historical perspective on reading research and practice. In R. Ruddell & N. Unrau (Eds.), *Theoretical Models and Processes of Reading* (pp. 33-68). Retrieved from http://www.reading.org/Publish.aspx?page=/publications/bbv/books/bk502/abstracts/bk502-2-alexander.html&mode=redirect

Alexander, P. A., Jetton, T. L., & Kulikowich, J. M. (1995). Interrelationship of knowledge, interest, and recall: Assessing the model of domain learning. *Journal of Educational Psychology, 87*, 559–575.

Almasi, J. F., & Fullerton, S. K. (2012). *Teaching strategic processes in reading* (2nd ed.). New York, NY: The Guilford Press.

Anderman, L. H., & Anderman, E. M. (2000). Considering contexts in educational psychology: Introduction to the special issue. *Educational Psychologist, 35*, 67-68.

Anderson, J. R., Reder, L. M., & Simon, H. A. (1995). Situated learning and education. *Educational Researcher, 25*(4), 5-11. Retrieved from http://people.ucsc.edu/~gwells/Files/Courses_Folder/ED 261 Papers/Anderson, Reder_Pt1.pdf

Anderson, S., Medrich, E., & Fowler, D. (2007). Which achievement gap? *Phi Delta Kappan, 88*, 547-550.

Association for Career and Technical Education. (2010). *Up to the challenge: The role of the career and technical education and 21st century skills in college and career readiness*. Retrieved from http://www.p21.org/storage/documents/CTE_Oct2010.pdf

Bandura, A. (1977). *Social learning theory*. New York, NY: General Learning Press.

Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory.* Englewood Cliffs, NJ: Prentice- Hall, Inc

Bandura, A. (1988). Self-regulation of motivation and action through goal systems. In V. Hamilton, G. H. Bower, & N. H. Frijda (Eds.), Cognitive perspectives on motion and motivation (pp. 37-62). Dordrecht: Martinus Nijhoff.

Bandura, A. (1989). Six theories of child development. In R. Vasta (Ed.), *Annals of child development* (Vol. 6, pp. 1-60). Greenwich, CT: JAI Press

Bandura, A. (1994). Self-efficacy. In V. S. Ramachaudran (Ed.), *Encyclopedia of human behavior* (Vol. 4, pp. 71-81). New York, NY: Academic Press. Retrieved from http://www.uky.edu/~eushe2/Bandura/BanEncy.html

Bandura, A. (1997). *Self-efficacy: The exercise of control.* Palo Alto, CA: W.H. Freeman.

Bandura, A. (1999). Social cognitive theory: An agentic perspective. *Asian Journal of Social Psychology, 2*(1), 21-41. Retrieved from http://onlinelibrary.wiley.com/doi/10.1111/1467-839X.00024/pdf

Bandura, A. (2001). Social cognitive theory: An agentic perspective. *Annual Review of Psychology, 52,*1-26.

Bandura, A., Ross, D., & Ross, S. A. (1963). Imitation of film-mediated aggressive models. *Journal of Abnormal and Social Psychology, 66*(1), 3-11. doi:10.1037/h0048687

Bandura, A., & Walters. R. H. (1959). *Adolescent aggression: A study of the influence of child-training practices and family interrelationships*. New York, NY: Ronald Press.

Barton, P., & Coley, R. (2009). *Parsing the achievement gap II*. Retrieved from http://www.ets.org/Media/Research/pdf/PICPARSINGII.pdf

Bates, E. (1999). *On the nature and nurture of language.* La Jolla, CA: University of California-San Diego. Retrieved from http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.140.3229&rep=rep1&type=pdf

Bergeson, T., & Davidson, C. (2008). *A plan to close the achievement gap for African American students*. Retrieved from http://www.k12.wa.us/cisl/pubdocs/aframer achgap rpt final.pdf

Blair, C., & Diamond, A. (2008). Biological processes in prevention and intervention: The promotion of self-regulation as a means of preventing school failure. *Development and Psychopathology, 20*(3), 899-911. doi: http://dx.doi.org/10.1017/S0954579408000436

Blankstein, A. M., Hargreaves, A., & Fink, D. (2010). Building sustainable leadership capacity. In A. M. Blankstein (Ed.), *Failure is not an option* (2nd ed., pp. 208-236). Thousand Oaks, CA: Corwin.

Boekaerts, M., & Cascallar, E. (2006). How far have we moved toward the integration of theory and practice in self-regulation? *Educational Psychology, 18*, 199-210. doi: 10.1007/s10648-006-9013-4

Boekaerts, M., & Corno, L. (2005). Self-regulation in the classroom: A perspective on assessment and intervention. *Applied Psychology: An International Review, 54*(2), 199-231. Retrieved from http://sohs.pbs.uam.es/webjesus/motiv_ev_autorr/lectsextranjeras/selfregulation.pdf

Brayboy, B. M., & Deyhle, D. (2000). Insider-outsider: Researchers in American Indian communities. *Theory into Practice, 39*(3), 163-169.

Brookhart, S. M. (2008). *How to give effective feedback to your students*. Alexandria, VA: Association for Supervision and Curriculum Development.

Burton, G. (2011, January 31). Most important skill child needs to learn. *Wicked Local Wayland: With News from The Wayland Town Crier*. Retrieved from http://www.wickedlocal.com/wayland/topstories/x1235862862/Gary-Burton-Most-important-skill-child-needs-to-learn?zc_p=0

Camp, W. G. (2001). Formulating and evaluating theoretical frameworks for career and technical education research. *Journal of Vocational Education Research, 26*(1), 4-25. Retrieved from: http://scholar.lib.vt.edu/ejournals/JVER/v26n1/camp.html

Chamot, A. U., & El-Dinary, P. B. (1999). Children's learning strategies in language immersion classrooms. *The Modern Language Journal, 83*, 319-338.

Chung, M. (2000). The development of self-regulated learning. *Sookmyung Women's University, 1*(1), 55-66. Retrieved from http://courses.csusm.edu/lbst361bby/~1a_articles/~EDUCATION/SelfRegLEARNING/00_APedREV_SRL-developASIA.pdf

Cole, R. W. (2008). Educating everybody's children: We know what works—and what doesn't. In R. Cole (Ed.), *Educating everybody's children: Diverse teaching strategies for diverse learners* (2nd ed.) (pp. 1-40). Retrieved from http://www.ascd.org/publications/books/107003/chapters/diverse-teaching-strategies-for-diverse-learners.aspx

Coleman, J. S., Campbell, E. Q., Hobson, C. J., McPartland, J., Mood, A. M., Weinfeld, F. D. …York, R. L. (1966). *Equality of educational opportunity*. Washington, DC: U.S. Department of Health, Education, and Welfare.

College and career-ready students. (n.d.) Retrieved from http://www2.ed.gov/policy/elsec/leg/blueprint/college-career-ready.pdf

Conger, J. (1989). Leadership: The art of empowering others. *Academy of Management Executives, 3*(1), 17.

Cochran-Smith, M., & Ziechner, K. M. (2009). *Studying teacher education*. Washington, DC: American Educational Research Association. Retrieved from http://books.google.com/books?hl=en&lr=&id=hbiLAgAAQBAJ&oi=fnd&pg=PP1&dq=teacher quality research&ots=kti8saD-ES&sig=2V48Xpg7ZkYIAWxxtD8ipRIOfw0

Covey, S. (2008). *The leader in me*. New York, NY: Simon & Schuster.

Creswell, J. W. (2007). *Qualitative inquiry and research design: Choosing among five approaches* (2nd ed.). Thousand Oaks, CA: Sage.

Creswell, J. W. (2012). *Qualitative inquiry and research design* (3rd ed.). Thousand Oaks, CA: Sage.

Darling-Hammond, L. (1996). The right to learn and the advancement of teaching: Research, policy, and practice for a democratic education. *Educational Researcher*, *25*(6), 5-17.

Davies, B. (2009). Introduction. In B. Davies (Ed.), *The essentials of school leadership* (p. 2). London: Sage.

Dean, C., Pitler, H., Hubbell, E., & Stone, B. (2012). *Classroom instruction that works: Research-based strategies for increasing student achievement* (2nd ed.). Alexandria, VA: ASCD.

DePree, M. (1987). *The art of leadership*. New York, NY: Doubleday.

DeWalt, K. M., & DeWalt, B. R. (2002). *Participant observation: A guide for fieldworks.* Walnut Creek, CA: Alta Mira Press.

Dignath, C., & Buttner, G. (2008). Components of fostering self-regulated learning among students: A meta-analysis on intervention studies at primary and secondary school level. *Metacognition and Learning*, *3*(3), 231-264. doi: 10.1007/s11409-008-9029-x

Dufour, R., & Eaker, R. (1998). *Professional learning communities at work*. Bloomingdale, IN: Solution Tree.

Duke, N. K., & Pressley, M. (n.d.). *How can I help my struggling readers?* Retrieved from http://www.scholastic.com/teachers/article/how-can-i-help-my-struggling-readers

Flavell, J. H. (1978). Metacognitive development. In J. Scandura & C. Brainerd (Eds.), *Structural/process theories of complex human behavior* (pp. 213-245). The Netherlands: Sijthoff & Noordoff.

Flavell, J. H. (1979). Metacognition and cognitive monitoring: A new era of cognitive developmental inquiry. *American Psychologist*, *34*, 906-911.

Fresch, M. J. (2007). *An essential history of current reading practices*. Newark, NJ: International Reading Association.

Fuchs, L. S. & Fuchs, D. (2002). *What is scientifically-based research on progress monitoring?* (Technical report). Nashville, TN: Vanderbilt University.

Glaser, B. G. (1978). *Theoretical sensitivity.* Mill Valley, CA: Sociology Press.

Goldhaber, D., & Walch, J. (2014). Gains in teacher quality. *Education Next, 14*(1), Retrieved from http://educationnext.org/gains-in-teacher-quality/

Goodman, K. S., & Goodman, Y. M. (1980). *Learning to read is natural.* In L.B. Resnick & P.A. Weaver (Eds.), *Theory and practice of early reading* (Vol. 1, pp. 137-154). Hillsdale, NJ: Erlbaum.

Goodwin, B. (2010). *Changing the odds for student success: What matters most.* Denver, CO: McREL.

Grbich, C. (2013). *Qualitative data analysis: An introduction* (2nd ed.). Thousand Oaks, CA: Sage.

Groenewald, T. (2004). A phenomenological research design illustrated. *International Journal of Qualitative Methods, 3*(1). Article 4. Retrieved from http://www.webpages.uidaho.edu/css506/506%20Readings/groenewald%20phenom%20methodology.pdf

Grusec, J. E. (1992). Social learning theory and developmental psychology: The legacies of Robert Sears and Albert Bandura. *Developmental Psychology, 28*(5), 776-786. Retrieved from http://www.psy.cmu.edu/~siegler/35grusec92.pdf

Gwartney, J. (1970). Changes in the nonwhite/white income ratio—1939-67. *The American Economic Review, 60*, 872-883.

Hallinger, P., & Heck, R. (1998). Exploring the principal's contribution to school effectiveness: 1980-1995. *School Effectiveness and School Improvement, 9*(2), 157-91.

Hattie, J., & Timperley, H. (2007). The power of feedback. *Review of Educational Research, 77*(1), 81-112. doi: 10.3102/003465430298487

Hauser, P. M., McMurrin, S. M., Nabrit, J. M., Nelson, L. W., & Odell, W. R. (1964). *Integration of the public schools: Chicago*. Chicago, IL: Board of Education, Chicago Public Schools.

Haynes, M. (2013). *Confronting the crisis: Federal investments in state birth through grade twelve literacy education*. (Policy Brief). Retrieved from http://www.all4ed.org/files/ConfrontingTheCrisis.pdf

Hernandez, D. J. (2011). *Double jeopardy: How third-grade reading skills and poverty influence high school graduation.* The Annie E. Casey Foundation. Retrieved from

http://www.aecf.org/~/media/Pubs/Topics/Education/Other/DoubleJeopardyHowThirdGradeReadingSkillsandPovery/DoubleJeopardyReport040511FINAL.pdf

Holliday, A. (2002). *Doing and writing qualitative research.* London: Sage.

Irvin, L. E., & White, D. (2004). Keys to effective leadership. *Principal Leadership,* 4(6), 20-23.

Jahan, R. (2000). *Transformative leadership in the 21st century.* Centre for Asia Pacific Women in Politics. Retrieved from http://www.capwip.org/resources/womparlconf2000/plenray1.htm

Jardine, G. M. (2005). *Foucault & education*. New York, NY: Peter Lang.

Jensen, E. (2013). How poverty affects classroom engagement. *Educational Leadership, 70*(8), 24-30. Retrieved from http://www.ascd.org/publications/educational-leadership/may13/vol70/num08/How-Poverty-Affects-Classroom-Engagement.aspx

John-Steiner, V., & Mahn, H. (1996). Sociocultural approaches to learning and development. *Educational Psychologist, 31*(3/4), 191-306. Retrieved from http://www.tlu.ee/~kpata/haridustehnoloogiaTLU/sociocultural.pdf

Kloeber, T. (2009, May 6). *Victory principles: Leadership lesson from D-day*. Retrieved from http://www.victoryprinciples.com/2009/05/why-is-leadership-so-important-today/

Kramarski, D., Desoete, A., Bannert, M. Narciss, S., & Perry, N. (2013). New perspectives on integrating self-regulated learning at school. *Education Research International, 2013,* Article ID 498214. doi:10.1155/2013/498214

Kuijpers, J. M., Houtveen, A. M., & Wubbels, T. (2010). An integrated professional development model for effective teaching. *Teaching and Teacher Education*, *26*(8), 1687-1694. Retrieved from http://www.sciencedirect.com.proxy.library.umkc.edu/science/article/pii/S0742051X10001022

Lambert, L. (2005). What does leadership capacity really mean? *Leadership at the School Level*, *26*(2), 38-40. Retrieved from http://www.nsdc.org/members/jsd/lambert262.pdf

Lambert, L. (2007). Lasting leadership: A study of high leadership capacity schools. In *The Jossey-Bass reader on educational leadership* (2nd ed., pp. 421-444). San Francisco, CA: John Wiley & Sons.

Leithwood, K. (1992, February). The move toward transformational leadership. *Educational Leadership, 49*(5), 8-12.

Leithwood, K. A. (2007). Transformation school leadership in a transactional policy world. In *The Jossey-Bass reader on educational leadership* (2nd ed., pp. 183-196). San Francisco, CA: John Wiley & Sons.

Lemann, N. (1997). The reading wars. *The Atlantic Monthly*, *280*(5), 128-134. Retrieved from http://www.theatlantic.com/past/docs/issues/97nov/read.htm

Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. Beverly Hills, CA: Sage.

Linnenbrink, E. A., & Pintrich, P. R. (2002). Motivation as an enabler for academic success. *School of Psychology Review*, *31*(3), 313-327. Retrieved from http://www.wce.wwu.edu/Depts/SPED/Forms/Kens Readings/Motivation/Motivation as an enabler for academic success Linnenbrink 2002.pdf

Liontos, L. (1992). *At-risk families & schools: Becoming partners.* Eugene, OR: ERIC Clearinghouse on Educational Management.

Locke, E. A., & Latham, G. P. (1990). *A theory of goal setting and performance task.* Englewood Cliffs, NJ: Prentice-Hall.

Long, L. L. (2014, February 27). Self-regulation: A key tool used to improve student learning behaviors [Web log message]. Retrieved from http://psychsocialissues.com/2014/02/27/self-regulation-a-key-tool-used-to-improve-students-behavior/

Louis, K., Leithwood, K., Wahlstrom, K., & Anderson, S. (2010). Investigating the links to improved student learning. *Learning from leadership project*. Retrieved from http://www.wallacefoundation.org/knowledge-center/school-leadership/key-research/Documents/Beyond-the-Pipeline-Getting-the-Principals-We-Need.pdf

Luke, S. D. (2006). The power of strategy instruction. *Evidence of Education, 1*(1), 1-4. Retrieved from http://nichcy.org/research/ee/learning-strategies

Lynch, M. (2013, January 1). *The impact of culture on academic performance.* Retrieved from http://www.educationworld.com/a_admin/ask-dr-lynch/culture-and-academic-performance.shtml

Marzano, R. (2003). *What works in schools*. Alexandria, VA. ASCD

Marzano, R. (2007). *The art and science of teaching: A comprehensive framework for effective instruction*. Alexandria, VA: Association for Supervision and Curriculum Development.

Matthews, G., Roberts, R., & Zeidner, M. (2004). Seven myths about emotional intelligence. *Psychological Inquiry*, *15*(3), 179-196. Retrieved from http://www.pacific.edu/Documents/library/acrobat/7 myths about EI.pdf

Maxwell, J. A. (2013). *Qualitative research design: An interactive approach.* Thousand Oaks, CA: Sage.

Mazzeo, C. (2003). Improving teaching and learning by improving school leadership. Retrieved from http://www.esha.org/Documents/Improving+Teaching+and+Learning+by+Improving+School+Leadership.pdf

McCall, M. S., Hauser, C., Cronin, J., Kingsbury, G. G., & Houser, R. (2006). *Achievement gaps: An examination of differences in student achievement and growth*. Retrieved from http://www.kingsburycenter.org/sites/default/files/AchGap_11.11.061.pdf

MCPS academic record of success. (2014, January 10). Retrieved from http://www.montgomeryschoolsmd.org/uploadedFiles/about/Refresh_2011_Content_Pieces/recordofsuccess_011014.pdf

Merriam, S. B. (1998). *Qualitative research and case study applications in education*. San Francisco, CA: Jossey-Bass.

Merriam, S. B. (2001). *Qualitative research and case study applications in education.* San Francisco: Jossey-Bass

Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis: An expanded sourcebook* (2nd ed.). Thousand Oaks, CA: Sage.

Montuori, A. (2010). Transformative leadership for the 21st century. *ReVision*, *30*(3-4), 4-14. Retrieved from http://www.academia.edu/239399/Transformative_Leadership_for_the_21st_Century

Moos, D., & Ringdal, A. (2012). Self-regulated learning in the classroom: A literature review on the teacher's role. *Educational Research International, 2012.* doi:10.1155/2012/423284

Morrison, F. J., Ponitz, C. C., & McClelland, M. M. (2010). *Self-regulation and academic achievement in the transition to school.* Retrieved from http://people.oregonstate.edu/~mcclellm/ms/Morrison,%20Ponitz,%20McClelland%20in%20press.pdf

Moustakas, C. (1990). *Heuristic research design, methodology, and application*. Newbury Park, CA: Sage.

Moustakas, C. (1994). *Phenomenological research methods.* Thousand Oaks, CA: Sage.

Myers, A. (2011, Oct 25). Stanford's John McCarthy, seminal figure of artificial intelligence, dies at 84. *Stanford News*. Retrieved from http://news.stanford.edu/news/2011/october/john-mccarthy-obit-102511.html

Nelson, C. A., & Sheridan, M. A. (2011). Lessons from neuroscience research for understanding causal links between family and neighborhood characteristics and educational outcomes. In G. J. Duncan & R. J. Murnane (Eds.), *Whither opportunity? Rising inequality, schools, and children's life chances (*pp. 27-46). New York, NY: Russell Sage Foundation.

Pajares, F. (2002). Overview of social cognitive theory and of self-efficacy. Retrieved from http://www.uky.edu/~eushe2/Pajares/eff.html

Pajares, F. (2003). Self-efficacy beliefs, motivation, and achievement in writing: A review of the literature. *Reading & Writing Quarterly*, *19*(2), 139-158.

Pajares, F. (2006). Self-efficacy beliefs of adolescents. In F. Pajares & T. Urdan (Eds.), *Self-efficacy during childhood and adolescence* (pp. 339-367). Bingley, United Kingdom: Emerald Group Publishing.

Paris, S. G., & Paris, A. H. (2001). Classroom applications of research on self-regulated learning. *Educational Psychologist*, *36*(2), 89-101.

Patton, M. Q. (2002). *Qualitative research and evaluation methods* (3rd ed.). Thousand Oaks, CA: Sage.

Pearson, P. D. (2004). The reading wars. *Educational Policy*. doi: 10.1177/0895904803260041

Peterson, P. E. (2012). Low family income not a major reason for poor student achievement. *Education Next*. Retrieved from http://educationnext.org/files/ednext_20123_ctf_PR.pdf

Pintrich, P. R. (1994). Continuities and discontinuities: Future directions for research in educational psychology. *Educational Psychologist, 29,* 137-148.

Pintrich, P. R. (1995). Understanding self-regulated learning. *New Directions for Teaching and Learning,* 3-12. doi: 10.1002/tl.37219956304

Pintrich, P. R. (2000). Multiple goals, multiple pathways: The role of goal orientation in learning and achievement. *Journal of Educational Psychology, 92,* 544-555.

Pintrich, P. R. (2003). A motivational science perspective on the role of student motivation in learning and teaching contexts. *Journal of Educational Psychology*, *95*(4), 667-686. doi: http://psycnet.apa.org/doi/10.1037/0022-0663.95.4.667

Pintrich, P. R. (2004). A conceptual framework for assessing motivation and self-regulated learning in college students. *Educational Psychology Review*, *16*(4), 385-407. Retrieved from http://deepblue.lib.umich.edu/bitstream/handle/2027.42/44454/10648_2004_Article_NY00000604.pdf?sequence=1

Pintrich, P. R., & DeGroot, E. V. (1990). Motivational and self-regulated learning components of classroom academic performance, *Journal of Educational Psychology, 82*, 33-40.

Polkinghorne, D. E. (2005). Language and meaning: Data collection in qualitative research *Journal of Counseling Psychology, 52*(2), 137-145. Retrieved from http://www.edbengtson.com/wp-content/uploads/2011/12/Polkinghorne.pdf

Ponton, M. K., & Carr, P. B. (2000). Understanding and promoting autonomy in self-directed learning. *Current Research in Social Psychology, 5*(19). Retrieved from http://www.uiowa.edu/~grpproc/crisp/crisp.5.19.htm

Rafferty, L. (2011). Step by step teaching students to self-monitor. *Teaching Exceptional Children, 43*(2), 50-58.

Reardon, S. F. (2013, May). The widening income achievement gap. *Educational Leadership, 70*(8), 10-16. Retrieved from http://www.ascd.org/publications/educational-leadership/may13/vol70/num08/The-Widening-Income-Achievement-Gap.aspx

Reeves, A. R. (2011). *Where great teaching begins*. Alexandria, VA: ASCD Publications.

Rice, J. K. (2010). *Principal effectiveness and leadership in an era of accountability: What research says.* National Center for Analysis of Longitudinal Data in Education Research. Retrieved from http://www.urban.org/uploadedpdf/1001370_principal_effectiveness.pdf

Schunk, D. H. (1990). Goal setting and self-efficacy during self-regulated learning. *Educational Psychologist, 25*, 71-86.

Schunk, D. H. (2000). *Learning theories: An educational perspective* (3rd ed.). Upper Saddle River, NJ: Prentice Hall.

Schunk, D. H. (2001). Social-cognitive theory and self-regulated learning. In B. Zimmerman & D. Schunk (Eds.), *Self-regulated learning and academic achievement: Theoretical perspectives* (2nd ed., pp. 125-151). Mahwah, NJ: Erlbaum.

Schunk, D. H., & Ertmer, P. A. (2000). Self-regulation and academic learning: Self-efficacy enhancing interventions. In M. Boekaerts, P. R. Pintrich, & M. Zeidner (Eds.), *Handbook of self-regulation* (pp. 631–649). San Diego, CA: Academic Press.

Schunk, D. H., & Zimmerman, B. J. (1997). Developing self-efficacious readers and writers: The role of social and self-regulatory processes. In J. T. Guthrie & A. Wigfield (Eds.), *Reading engagement: Motivating readers through integrated instruction* (pp. 34-50). Newark, DE: International Reading Association.

Schunk, D. H., & Zimmerman, B. J. (Eds.). (1998). *Self-regulated learning: From teaching to self-reflective practice*. New York, NY: Guilford Press.

Schunk, D. H., & Zimmerman, B. J. (Eds.). (2007). *Motivation and self-regulated learning: Theory, research, and applications.* Mahwah, NJ: Lawrence Erlbaum.

Seidman, I. (1998). *Interviewing as qualitative research: A guide for researchers in education and the social sciences*. (2 ed., Vol. 75). New York, NY: Teachers College Press.

Sergiovanni, T. (1996). *Leadership for the schoolhouse*. San Francisco, CA: Jossey-Bass.

Sergiovanni, T. (2001). *The principalship: A reflective practice perspective* (4th ed.). Needham Heights, MA: Allyn & Bacon.

Sergiovanni, T. (2004). Balance individual autonomy and collaboration to center on students. *Education Digest, 70*(3), 17-23.

Sergiovanni, T. (2007). *Rethinking leadership: A collection of articles*. Thousand Oaks, CA: Corwin Press.

Sergiovanni, T. (2009). *The principalship: A reflective practice perspective* (6th ed.). San Antonio, TX: Pearson Education.

Skibbe, L. E., McDonald, C., Morrison, F. J., & Jewkes, A. M. (2010). Schooling effects on preschoolers' self-regulation, early literacy, and language growth. *Early Childhood Research Quarterly, 26*, 42-49. Retrieved from http://dx.doi.org.proxy.library.umkc.edu/10.1016/j.ecresq.2010.05.001

Sloan, M. (1996). I love this piece because…. *Instructor, 105*(7), 30-32.

Snow, C., Burns, M., & Griffin, P. (1998). *Preventing reading difficulties in young children.* Washington, DC: National Academy Press. Retrieved from http://books.nap.edu/catalog/6023.html

SparkNotes. (2002). *SparkNote on The Bluest Eye.* Retrieved from http://www.sparknotes.com/lit/bluesteye/

Stake, R. (1995). *The art of case research.* Thousand Oaks, CA: Sage.

Symonds, W. C., Schwartz, R. B., & Ferguson, R. (2011). *Pathways to prosperity: Meeting the challenge of preparing young Americans for the 21st century*. (Unpublished manuscript). Cambridge, MA: Pathways to Prosperity Project, Harvard Graduate School of Education.

Taylor-Powell, E., & Renner, M. (2003). *Analyzing qualitative data*. Madison, WI: University of Wisconsin. Retrieved from http://learningstore.uwex.edu/assets/pdfs/g3658-12.pdf

The leader in me. (2014, January 1). Retrieved from http://www.theleaderinme.org/

Tracey, D. H., & Morrow, L. M. (2012). *Lenses on reading: An introduction to theories and models* (2nd ed.). New York, NY: The Guilford Press.

Trail, K. (2000, October). Taking the lead: The role of the principal in school reform. *CSRD Connections, 1*(4), 1-4. Retrieved from http://www.sedl.org/csrd/connections/oct00/oct00.pdf

U.S. Department of Education. (2003). *No child left behind: A parent's guide*. Retrieved from http://www2.ed.gov/parents/academic/involve/nclbguide/parentsguide.pdf

U.S. Department of Education. (2011). *Each and every child: A strategy for education equity and excellence*. Retrieved from http://www.foreachandeverychild.org/60565_EEC_(508)_rev.pdf

U.S. Department of Health and Human Services. (1979). *The Belmont report: Ethical principles and guidelines for the protection of human subjects of research*. Retrieved from http://www.hhs.gov/ohrp/humansubjects/guidance/belmont.html

Usher, A. (2012). *AYP results for 2010-11: November 2012 update*. Center on Education Policy. Retrieved from http://www.cep-dc.org/displayDocument.cfm?DocumentID=414

Vacca, R. T., & Vacca, J. L. (1983). Two less than fortunate consequences of reading research in the 1970s (Guest editorial). *Reading Research Quarterly, 18*, 382-382.

Wallace Foundation. (2003). Beyond the pipeline: Get the principals we need, where we need them most. Retrieved from http://www.wallacefoundation.org/knowledge-center/school-leadership/key-research/Documents/Beyond-the-Pipeline-Getting-the-Principals-We-Need.pdf

Waters, T., Marzano, R., & McNulty, B. (2003). *Balanced leadership: What 30 years of research tells us about the effect of leadership on student achievement.* Retrieved from http://www.mcrel.org

Wehmeyer, M. L., Palmer, S. B., Agran, M., Mithaug, D. E., & Martin, J. E. (2000). Promoting causal agency: The self-determined learning model of instruction. *Exceptional Children*, 66, 439-453.

Weinstein, C. E., Husman, J., & Dierking, D. R. (2000). Self-regulation interventions with a focus on learning strategies. In M. Boekarerts, P. R. Pintrich, & M. Zeidner (Eds.), *Handbook of self-regulation* (pp. 727-747). San Diego, CA: Academic Press.

Westbrook Church, G. (1997). The significance of Louise Rosenblatt on the field of teaching literature. *Inquiry*, *1*(1), 71-77. Retrieved from http://www.vccaedu.org/inquiry/inquiry-spring97/i11chur.html

Whitaker, T. (2003). *What great principals do differently*. Larchmont, NY: Eyes On Education.

Wolcott, H. F. (2001). *The art of fieldwork*. Walnut Creek, CA: Alta Mira Press.

Wong, H., & Wong, R. (2009). *First days of school: How to be an effective teacher.* Mountain View, CA: Harry K. Wong.

Wood, B. S., & Murphy, P. K. (2002). Thickening the discussion: Inspecting constructivist theories of knowledge through a Jamesian lens. *Educational Theory, 52(1), 43-59.*

Yin, R. K. (2003). *Case study research: Design and methods* (4th ed.). Thousand Oaks, CA: Sage.

Yoon, K. S., Duncan, T., Lee, S. W.-Y., Scarloss, B., & Shapley, K. (2007). *Reviewing the evidence on how teacher professional development affects student achievement* (Issues & Answers Report, REL 2007–No. 033). Washington, DC: U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance, Regional Educational Laboratory Southwest. Retrieved from http://ies.ed.gov/ncee/edlabs

Zimmerman, B. J. (1989). A social cognitive view of self-regulated academic learning. *Journal of Educational Psychology, 81*(3), 329-339.

Zimmerman, B. J. (1998). Developing self-fulfilling cycles of academic regulation: An analysis of exemplary instructional models. In D. H. Schunk & B. J. Zimmerman (Eds.), *Self-regulated learning: From teaching to self-reflective practice* (pp. 1–19). New York, NY: Guilford.

Zimmerman, B. J. (2002). Becoming a self-regulated learner: An overview. *Theory into practice, 41*(2). Retrieved from http://commonsenseatheism.com/wp-content

Zimmerman, B. J. (2008). Investigating self-regulation and motivation: Historical background, methodological developments, and future prospects. *American Educational Research Journal*, *45*(1), 166-183.

Zimmerman, B. J., Bonner, S., & Kovach, R. (1996). *Developing self-regulated learners: Beyond achievement to self-efficacy.* Washington, DC: American Psychological Association.

Zimmerman, B. J., & Kitsantas, A. (1997). Developmental phases in self-regulation: Shifting from process goals to outcome goals. *Journal of Educational Psychology*, *89*(1), 29-36.

Zimmerman, B. J., & Martinez-Pons, M. (1988). Construct validation of a strategy model of student self-regulated learning. *Journal of Educational Psychology, 80,* 284-290.

Zimmerman, B. J., & Schunk, D. H. (2003). *Educational psychology: A century of contributions*. Mahwah, NJ: Erlbaum.

Zumbrunn, S., Tadlock, J., & Roberts, E. D. (2011). *Encouraging self-regulated learning in the classroom.* Metropolitan Educational Research Consortium. Retrieved from http://merc.soe.vcu.edu/Reports/Self Regulated Learning.pdf

VITA

Tracy Platt was born in Detroit, Michigan, on June, 9, 1970. She moved to Texas shortly thereafter, where she completed high school in the public school system. After graduating high school, she entered the U.S. Army for three years. She was stationed in Hawaii, where she completed a Bachelor of Arts degree in Psychology and began working in the field of social work. While there, she found her passion for teaching reading. After working in that field for several years, she completed a Masters of Arts degree in Elementary Education from Texas State University with an emphasis in reading.

She began teaching in the urban setting of Kansas City Kansas Public Schools in 1999, where she taught for three years before moving to Smithville, Missouri, and teaching there. In 2006, Tracy completed a Masters of Arts degree in Educational Administration from William Woods University. This led her to leave the classroom and move into administration as an Assistant Principal within the Smithville R-II School District. After three years of administration, Tracy earned a Doctoral Degree from the University of Missouri-Kansas City in May 2014.

Mrs. Platt currently serves as an elementary principal in the Smithville School District. This unique lakeside community has experienced some changes over the past few years and continues to grow. Tracy is a life-long learner who is committed to ensuring all students receive the best possible education.