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SELF-REGULATED LEARNING IN A RURAL, SOUTH-CENTRAL, KENTUCKY MIDDLE
SCHOOL

By

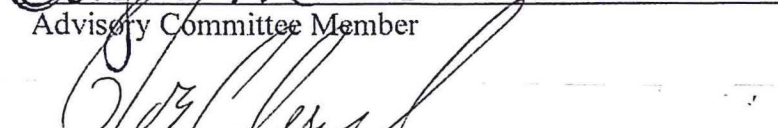
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SELF-REGULATED LEARNING IN A RURAL, SOUTH-CENTRAL
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DEDICATION

This dissertation is dedicated to my Momma, who has taught me the power of strength and perseverance over the obstacles that life throws our way.

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I would like to thank Dr. James Bliss for support and faith in my abilities; Dr. Sherwood Thompson for guidance, leadership and support as my committee chair; and Dr. Angie Madden, Dr. Roger Cleveland and Dr. Richard Day for serving on my committee and offering their support and guidance for my work. I would also like to thank my dear friend and mentor, Dr. Tiffany Wheeler; without her faith in my abilities, and constant expectations for my success, I would not have completed this dissertation.

ABSTRACT

Self-regulated learning is a phenomenon recognized in nations with positive results on international assessments, such as the PISA (Program for International Student Assessment; IES, 2012). This qualitative, non-evaluative study sought to determine the presence of self-regulated learning in a rural middle school in the south-central United States by utilizing a phenomenological approach.

Self-regulated learning is a practice based upon the constructivist learning theories championed by theorists such as Bandura (1995) and Vygotsky (1978). Zimmerman (1990) coined the term self-regulated learning, which reflects a method by which students are responsible for their own learning through four stages: pre-planning, monitoring for progress, self-evaluation and reflection.

The participants in this study included five Social Studies teachers from a rural middle school in a south-central Kentucky school district. The teachers demonstrated various uses of SRL methodology in their Social Studies classes. These teachers used a program known as *History Alive* (Frey & Hart, 2005), which was arranged in mini-units of three or more lessons all tied together. The program equipped students with various opportunities to self-regulate their approach to content knowledge acquisition.

Argyris and Schon's (1974) *espoused vs. enacted theory* served as a lens through which this study's data was analyzed. This was done to determine if study participants actually carried out the SRL instruction like they had reported in the verbal interviews and written questionnaires that they completed during the study. Field observations were conducted to further understand SRL practices within these Social Studies classrooms.

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CHAPTER I INTRODUCTION

A Path toward Proficiency: Self-Regulated Learning

Across the United States, students continue to demonstrate documented deficiencies in their growth toward proficiency according to the “Nation’s Report Card”, the NAEP (IEP, 2015). In participating states, such as Kentucky, educators’ adoption of the Common Core State Standards (CCSS) represents an attempt to make public school students’ norm-referenced scores more nationally competitive (www.aasa.org). The Commonwealth of Kentucky also annually administers a blended test known as K-PREP (Kentucky Performance Rating for Educational Progress), which combines criterion-referenced content tests (CRT) for students in grades 3-8 with a norm-referenced component (NRT). The criterion-referenced portion of this assessment is based upon the Kentucky Common Core, which drives classroom instruction throughout the school year. The criterion-referenced test (CRT) items consist of multiple-choice, extended-response and short answer items. NRT is a purchased test with national norms while the CRT portion is customized for Kentucky (KDE, 2017).

While NAEP scores appear lax in the area of student growth in reading and math across the United States, students’ performance on Kentucky’s K-PREP assessment has demonstrated growth toward proficiency (i.e., 75.5 percent accuracy in reading and 80.0 percent accuracy in math) in targeted areas (KDE, 2017). Successful instructional practices in Kentucky have aided teachers in encouraging students’ ability to attain growth or progress toward proficiency, even as the nations’ fourth and eighth graders demonstrate little growth in reading and mathematics (National Assessment of

Educational Progress, 2013, 2015). My study describes one instructional method that is currently practiced by Social Studies teachers at a rural, south-central Kentucky middle school. Known as Self-Regulated Learning (SRL), this method was first conceptually introduced by Bandura (1989), a social-constructivist who emphasized the learner's social and emotional regulation toward pre-set goals.

According to Zimmerman, who coined the term Self-Regulated Learning, SRL helps to enhance student agency and self-efficacy (Zimmerman & Schunk, 1989). For example, Boekaerts' (1996) research on the Netherlands described SRL as a learning episode which has a goal-directed and context-specific pattern of behavior, unfolding over time or until one of the following conditions is met: (1) the learning goal which organized the learning episode is attained; (2) the goal is partially accomplished, as accepted by the learner; (3) the goal is re-appraised and determined unattainable, unattractive or irrelevant in the present context by the learner; or (4) another goal takes precedence with the learner. Per Zimmerman and Schunk (1989), these types of reflections enhance students' ability to self-regulate their own acquisition of content. In this same vein, one of my study participants noted that "[students] set learning goals by looking at their unit goals [Social Studies units are based upon Kentucky Common Core Standards] seeing where they are, personally and where they need to be [in order to obtain proficiency]; they then set personal goals for attainment of proficiency, then we [teacher and student together] periodically check the Kentucky Common Core standards-based goals to see how they are doing."

Besides assisting students in planning, goal-setting, self-evaluation and reflection, SRL provides students with a higher sense of learning efficacy, as well as

greater persistence, effort, and intrinsic interest in their own learning and performance (Schunk, 1989). Additionally, Zimmerman and Martinez-Pons (1988) found that self-regulated learners often make greater use of learning strategies and achieve better overall learning than do learners who make little use of self-directed strategies.

My study moved beyond earlier work in the field of SRL to qualitatively demonstrate how middle school Social Studies teachers integrated SRL as a method of daily instruction. Additionally, my study considered how Social Studies teachers' beliefs regarding their instructional use of SRL methods correlated with their demonstrated use of the method during field observation.

Chapter Summary

According to the most recent NAEP (IES, 2015) assessment windows, United States students in the fourth and eighth grade have not experienced consistent growth in reading and math. However, Kentucky's state-wide K-PREP assessment has demonstrated student growth in these targeted areas (KDE, 2017).

This study aimed to provide a glimpse into how SRL can be integrated into Social Studies classes in a rural, south-central Kentucky middle school (grades 6-8). Teacher response data from both the questionnaires and interviews were compared with field data obtained via actual classroom observation. The intent in comparing these data was to determine the extent to which SRL-like methodology was demonstrated within teacher-participants' classrooms (Argyris, 1980).

Many researchers and educators have come to accept the concept of SRL (Boekaerts, 1996; Lombaerts et al., 2009; Loyens, Magda, & Rickers, 2008; Pintrich, 2000; Zimmerman & Schunk, 2001). The following literature review will demonstrate the evolution of interest and insight regarding SRL as an instructional method.

CHAPTER II REVIEW OF RELATED LITERATURE

Introduction to Self-Regulated Learning

This chapter presents a review of the studies and related literature that solidify the practice of Self-Regulated Learning (SRL) in the field of education. This review also seeks to highlight the significance of practicing SRL-like strategies in content area classrooms such as social studies, math and reading.

As a concept, self-regulation has been most influenced by the work of Bandura (1989), who emphasized what he termed *efficacy* and *agency* in terms of behavioral and emotional regulation (Bandura, 1995, 1997). According to Bandura and Wood (1989), learning is affected by three interacting factors: personal (learner's attitudes and beliefs), behavioral (ability to invoke prior knowledge and employ appropriate strategies to support learning), and environmental (type of instruction, quality of feedback, and nature of interactions with parents/peers). As an organizing concept, SRL describes how learners cognitively, motivationally, and behaviorally promote their own achievement (Zimmerman & Schunk, 1989).

Zimmerman and Schunk (1989) crystallized Bandura's (1989) work into the term "Self-Regulated Learning," which emphasizes the connection between learning and personal agency. Zimmerman (1990) originally conceived of a three-phase cycle of forethought (planning), management of task (monitoring), and the evaluation and reflection of the task at hand (p. 4). Later, as Zimmerman and Schunk conducted additional studies, they revised their SRL labels to include Reflection as a fourth, separate stage of the process. As a result, it is not uncommon for SRL to be listed as

either a three- or four-stage process; nonetheless, they share the same elements and have both found support. Turker and Zingel (2008), for instance, showed that SRL corresponds to not only the organization of learning resources, but also how students plan and work toward self-selected goals.

Schunk (2005) described Pintrich (2000) as an additional founder of SRL's introduction into education. Pintrich was particularly instrumental in formulating SRL as a conceptual framework (Pintrich, 2000), which he based on his own work and that of other theorists. According to Schunk (2005), Pintrich's model of SRL may be thought of as a social-cognitive framework, although it incorporated elements from other theories (Zimmerman & Schunk, 2001). Pintrich's (2000) model posits three basic tenets: First, learners in both models represent active and constructive participants in learning rather than passive recipients. Second, learners have some options, including some choice/control over the learning direction/activities needed in the process. Third, learners need to have a goal or criterion level of performance to aim for, such as a rubric, scoring guide, model, or other materials (Schunk, 2005).

More recently, Vukman and Licardo (2010) went so far as to state that, based upon their research; SRL should be a goal of formal education in order to equip students as learners.

Evidence of SRL Improving Learning Achievement

Research has documented evidence that SRL builds learning accomplishment among students instructed in these metacognitive and behavior-related concepts. Utilizing a multidimensional scale created by Bandura and Wood (1989), Zimmerman, Bandura,

and Martinez-Pons (1992) interviewed high school students to assess their perceived self-regulatory efficacy in not only academic achievement, but also other domains of functioning (Zimmerman & Martinez-Pons, 1988). The authors hypothesized that students perceived efficacy for using self-regulated learning strategies and achieving in academic courses would influence their personal goals and grade achievement (Zimmerman et al., 1992). The authors used two sub-scales from the Children's Multidimensional Self-Efficacy Scale (Bandura & Wood, 1989): self-efficacy for self-regulated learning and self-efficacy for academic achievement. The authors also assessed the grade goals of both students and their parents using rating scales developed by Locke and Bryan (1969). The resulting questionnaire was administered in the social studies classes of 102 participating students (Zimmermann et al., 1992).

Zimmerman et al.'s (1992) study found that students' personal goals played a key role in their grade attainment, thereby providing support for a social cognitive view of academic self-regulation. In accordance with prior research, the higher students' perceptions of their own self-efficacy, the higher the goals they set for themselves (Bandura & Wood, 1989). The influence of parents' goal-setting for students additionally influenced academic attainment, largely by fostering self-motivation. In other words, students who felt that their parents had high goals for their grades personally sought to attain those goals (Zimmerman et al., 1992).

In a related study, Zimmerman and Martinez-Pons (1988) asked teachers to rate their own perceptions of students' use of SRL strategies. Given on Likert scales, these teacher ratings were submitted to multivariate analyses along with the students' math and verbal scores on a standardized test. By combining teacher ratings with test scores, the

researchers separated the students' achievement outcomes associated with their use of SRL strategies from students' general abilities. The authors confirmed that student interviews demonstrated a .70 correlation with SRL usage. According to the authors, this finding is indicative of students' use of SRL beyond their general abilities (p. 9). This further demonstrated that instruction in SRL provides a valuable contribution to student achievement (Zimmerman & Martinez-Pons, 1988).

During the 1990s, researchers demonstrated a desire for students to not only know *what* a strategy was, but also *how* and *when* to use the strategy, as well as how to teach the strategy to others. The goal was to render learning so self-regulated that students would be able help other classmates obtain knowledge of the concept. This strategy entailed three, important metacognitive (i.e., thinking about one's own thinking) aspects: declarative knowledge (what the strategy is), procedural knowledge (how the strategy operates), and conditional knowledge (what, when, and why a strategy should be applied) (Paris, Lipson, & Wixson, 1983). In this vein, SRL proved a valuable concept due to its emphasis of the "self" – in terms of the agent establishing learning goals (Paris & Winograd, 2003) – and its combination of cognitive strategies, metacognition, and motivation (behaviorally controlled) into one coherent construct. Researchers believed this approach to be consistent with Bandura's (1989) work on self-regulation, which included the three interrelated processes of self-observation, self-evaluation, and self-reaction.

One such researcher, Boekaerts (1996), described SRL as a learning episode with a goal-directed and context-specific pattern of behavior that unfolds over time until one of the following conditions is met: (1) the learning goal that organized the learning

episode is attained, (2) the goal is partially accomplished, but this state of affairs is accepted by the learner, (3) the goal is re-appraised and determined unattainable, unattractive or irrelevant in the present context by the learner, or (4) another goal takes precedence for the learner. According to Boekaerts (1996), this definition distinguished learning opportunities from personal learning episodes and endorsed that some learning opportunities provided by the teacher might be interpreted by students as personal learning episodes, whereas others might be perceived as mere tasks or assignments. While Boekaerts' (1996) work was focused on the Netherlands, U.S. researchers were already producing parallel evidence of students achieving positive academic outcomes through SRL-infused curriculums (Paris & Winograd, 2003).

In order to synthesize this evidence, the U.S. Department of Education commissioned Paris and Winograd (2003) to compile papers in the following series: *Preparing Teachers to Use Contextual Teaching and Learning Strategies to Improve Student Success in and Beyond School*. At the core of their study was a single question: "How can we provide students with the skills and motivation needed to be life-long learners?" To answer this question, they reviewed principles of SRL within four general categories that they believed teachers could apply in their classrooms to strengthen the relevance and meaningfulness of content. According to Paris and Winograd (2003), teachers need to provide instruction across a greater extensive variety of contexts, incorporate a wider set of perspectives, and implement a more extensive set of instructional strategies than has been traditionally the case. The authors chose SRL as the appropriate model for fulfilling that purpose.

A major contribution of Paris and Winograd's (2003) study was making SRL more teacher-friendly and classroom viable. To do this, their research illuminated the principles of SRL that could be converted into practice:

1. Self-appraisal leads to a deeper understanding of learning. They suggested that both teachers and learners practice reflection as a first step toward changing one's approach to the task, if need be. This includes evaluation of what is known and what is yet to be acquired. This periodic monitoring of one's learning process is a useful habit due to its promotion of self-efficacy.
 2. Self-management of thinking, effort, and affect promotes flexible approaches to problem-solving that are adaptive, persistent, self-controlled, strategic, and goal-oriented.
 3. Self-regulation can be taught in diverse ways. SRL is flexible and adaptive; different kinds of strategies and motivation might be emphasized for different learners. SRL can be taught with explicit instruction, directed reflection, and metacognitive discussions.
 4. Self-regulation is woven into everyone's narrative experiences and identity.
- (Paris & Winograd, 2003, pp. 5-9)

Just prior to Paris and Winograd's (2003) study, Paris and Paris (2001) conducted a seminal study that recommended Project/Problem Based Learning (PBL) as a vehicle for SRL instruction. PBL focuses on student-designed inquiries regarding authentic problems in realistic environments and the use of many resources over extended time. With this structure, PBL allows for the concepts embedded in SRL to flourish among students who demonstrate motivation for learning (Paris & Paris, 2001, p. 94). Learning

in this environment depends upon the assessment of both the product and the process. In other words, students must understand what is known, what requires additional effort, and what skills are needed in achieving the goals of the project/learning experience.

According to Paris and Paris (2001), self-assessment in PBL requires that students internalize standards so they can regulate their individual learning more effectively. This assessment depends on both internal and external factors, and encompasses all three domains of SRL – cognitive, motivational, and affective (Paris & Paris, 2001, p. 95). Like Paris and Paris (2001), Hmelo (2004) conducted extensive work with the PBL concept and found that the model, when instructed correctly, required learners to use SRL to solve highly complex problems.

One way that Paris and Paris (2001) helped individuals understand SRL as a concept was the use of metaphors. One metaphor was that of *acquisition*: Learning new strategies and skills, and then applying those strategies/skills to content acquisition. According to Dabbagh and Kitsantas (2012), students' practice of SRL may be regarded as a skill (p. 3). The second metaphor was *becoming* more regulated (i.e., as students developed new competencies). As Paris and Paris (2001) promoted it, SRL was not obtained, so much as shaped and elaborated upon through participation in students' zones of proximal development. Zimmerman et al. (1992) would label this approach a Vygotskian view of SRL.

Paris and Paris (2001) also deviated from prior research by discussing how students become self-regulated. Researchers have noted that every student constructs his or her own theory of SRL; however, students' understanding of the process might be enhanced or encouraged in these three ways: 1) SRL can be induced from authentic or

repeated experiences in school, 2) teachers may provide explicit instruction about SRL, and 3) SRL can be acquired through engagement in practices that require self-regulation (i.e., situations in which self-regulation is welded to the nature of the task). Regardless of the approach chosen, Paris and Paris (2001) argue, students of all ages could benefit from the practice of SRL's constructs, analyses, and discussions of learning strategies.

Following closely behind Paris and Paris' (2001) empirical work was a study conducted by Perry, VandeKamp, Mercer, and Norby (2002). This study embodied Paris and Paris' (2001) point of applying SRL to authentic classrooms in grades K-3. This was groundbreaking work in the field of SRL, as scholars had previously believed that children under 10 years of age were not developmentally mature enough to coordinate the complex cognitive and metacognitive processes involved in SRL (Perry et al., 2002).

Perry et al. (2002) claimed that qualitative methodologies were responsible for the insights gained into younger students' utilization of SRL. In particular, researchers revealed how qualitative methods targeted issues that young children valued (learning to read and write), used language that young children understood (classroom language), and assessed SRL in the context of naturally occurring events in the young students' classrooms. For Perry and colleagues (2002), the objective was to identify features of classroom tasks, authority structures, and evaluation practices that were supportive of young children's development of independent and academically effective forms of reading and writing. To this end, they worked alongside teachers to design activities that contained the aforementioned features.

Perry et al. (2002) conducted a five-year longitudinal study in which they observed literacy activities in five 2nd grade and 3rd grade classrooms from 1998 to 2002.

The classrooms were selected from a larger pool of classrooms in a suburban school district in British Columbia. The observations took the form of running weekly records for six months during reading and writing time. Based on researchers' observations, three of the classrooms were categorized as high-SRL classrooms. Teachers in these classes engaged students in complex, open-ended literacy activities, offering them choices and opportunities regarding their level of challenge in completing tasks, as well as self- and peer-evaluation opportunities (Perry et al., 2002). In contrast, the two low-SRL classrooms featured students who engaged in simple, closed activities that often focused on specific, isolated skills. Student choice was extremely limited in the last two classrooms; the teacher controlled the difficulty level and evaluation criteria, which were typically the same for all students. Teacher support typically targeted procedural task completion; as a result, the non-SRL classrooms offered few opportunities for students to participate in SRL-like curricula (Perry et al., 2002, p. 6).

After collecting, coding, and analyzing the running records, Perry et al. (2002) derived five overarching categories that reflected SRL in these classrooms: (1) choices, (2) opportunities to control challenges, (3) the opportunity to evaluate their own and others' learning, (4) instrumental support, and (5) feedback and evaluation that was nonthreatening and mastery oriented. The authors additionally looked at teachers' speech and actions to determine which aspect of self-regulation they promoted and why. While the focus of the study was on teachers' engagement in SRL, the researchers uncovered evident benefits to the students (Perry et al., 2002).

From their study, Perry et al. (2002) concluded that young children do utilize SRL in classrooms where they can engage in complex, open-ended activities, make choices

that impact learning, control challenges, and evaluate themselves and others. Furthermore, the field observations revealed that teachers can provide support or scaffolding for students through questioning, clarifying, correcting, elaborating and modeling. Students in these classrooms were also allowed to support one another through brainstorming and sharing problem-solving strategies.

Lastly, Perry et al. (2002) asserted that, by embedding assessments and evaluation into the classroom's ongoing activities, teachers created nonthreatening and intrinsically motivating learning contexts. In these classrooms, students demonstrated attitudes and actions that were aligned with independent, academically effective learners: metacognition, intrinsic motivation, and strategic action. Perry et al.'s (2002) work continues to be a seminal example of not only SRL's existence as a concept, but its practical ability to advance academic achievement for students as young as primary school.

Perry et al.'s (2002) findings were substantiated and expounded upon by later studies. In a meta-analysis of SRL studies, Dignath, Buettner, and Langfeldt (2008) found that SRL could not only be taught to primary-aged students, but that primary students appeared to benefit most from strategy instruction based upon socio-cognitive theories. In another study, Lombaerts et al. (2009) conducted field testing to develop and refine an instrument aimed at measuring primary teachers' beliefs regarding the use of SRL instruction/strategies in the classroom. This study reestablished a known constraint present in SRL instruction: the difficulty of accurately measuring belief systems. The authors determined that their instrument, the Self-Regulated Learning Teachers' Beliefs (SRLTB) scale, was valid and reliable; however, they noted that the SRLTB items

required more specific revision in order to tease out teachers' beliefs regarding SRL from teachers' general education beliefs. For example, teachers who adhere to constructivist-type curriculums might more naturally embrace SRL, while those who lean more toward behavioristic educational philosophies might find fault with SRL instruction (Lombaerts et al., 2009).

Looking to explore the concept of SRL from an empirical lens, Loyens et al. (2008) compared various SRL studies to assess the quantitative state of the research. These researchers reiterated that the "self" aspect was the crucial piece in the SRL concept, but went further by highlighting that self-generating and self-monitoring learning issues are beneficial for students' academic achievement. Self-reflection is equally crucial for self-regulation: Indeed, highly driven students often and accurately performing self-assessment. These findings further validated that SRL depends on the learner, and particularly the actions that he or she initiates and undertakes (Loyens et al., 2008).

Building on Zimmerman et al.'s (1992) work, Coutinho (2008) assessed the relationship between self-efficacy and metacognition among college students, seeking to understand how these variables related to students' performance as measured by their grade point averages. Like Zimmerman et al. (1992), Coutinho (2008) found that self-efficacy reflected a person's perceived ability to attain a desired outcome by taking necessary steps.

Self-Regulated Learning and Student Accomplishment

Across various studies, researchers have determined that the constructs of SRL – such as pre-planning, completion monitoring, and evaluating and reflecting on work – can foster students' academic achievement (Loyens et al., 2008). However, current theorizing and empirical evidence suggest that SRL acts as a mediator of success rather than a direct cause of it (Gonzalez, 2012, p. 15). In other words, students who are self-regulated learners are aware of their accomplishment through monitoring, evaluation and reflection on or of their learning process (Zimmerman & Schunk, 1989).

One of the first empirical demonstrations of this mediation came from Maitland (2000)'s study of college developmental reading classes. As an instructor of such courses, the author found that many students did not take personal responsibility for their own learning. Thus, her aim was to not only boost scores and create academic progress, but to improve students' self-regulation of learning. To do this, Maitland (2000) employed the following steps: a) teachers guiding students to set personal goals; b) students making their own choices of materials and activities; c) students being in control while teachers facilitate or reinforce; and d) students setting challenging tasks for themselves, self-assessing their progress, and taking stock of their own accomplishments. To accomplish these goals, Maitland (2000) integrated Zimmerman's (1990) original steps for SRL instruction into a planned reading lab. In the lab, Maitland's (2000) students were responsible for creating and implementing personal reading plans, and the comments they made during the planning and implementation process served as the evidence of SRL development and students' academic growth.

Although the students were not formally evaluated, one participant captured the general sense of progress: “It felt good to get so many right answers. I need harder things to work on next” (Maitland, 2000, p. 33). The author concluded that the project was successful insofar as students visibly took charge of their own learning experiences and demonstrated metacognitive awareness in their lab reports. While one might argue that these were adult students at a community college and thus more able to control their learning environment, it is worth noting that Perry et al. (2002) already established the benefits of SRL with K-3 students using qualitative methodology. Thus, Maitland’s (2000) study offers initial evidence that SRL can be effective for students of varying ages and educational levels.

Mason, Meadan, Hedin, and Corso (2006) returned the focus to primary schools, assessing SRL’s mediating ability in a study of 32 5th graders, all of whom struggled to comprehend a particularly expository text. The researchers attempted several strategic approaches to help these students improve their comprehension, and SRL proved to be the most beneficial. Researchers called this strategy TWA, emphasizing the stages in thinking that closely mirror those of SRL: (1) think before reading, (2) think while reading, and (3) think after reading. According to the researchers, these strategies improved participants’ ability to comprehend the expository text. Mason et al. (2006) determined that TWA with SRSD instruction was a viable approach for whole-class general instruction, small group instruction, or for individualized instruction or tutoring.

Several years later, Dignath-vanEwijk and vanderWerf (2012) conducted a study with K-3 teachers to determine the extent to which teachers fostered SRL practices alongside constructivism in their classrooms. These researchers operated under Pressley,

Borkwski, and Schneider's (1989) assumption that SRL cannot flourish unless practiced in a constructivist setting. The authors then created a questionnaire and sent it to over 300 primary-level teachers throughout the Netherlands, many of whom completed and returned it. Most of the participants expressed greater comfort with the construct of constructivism than with SRL concepts and strategies.

This presented an issue for the researchers in light of Perry et al.'s (2001) finding that the classroom environment, and its conduciveness to SRL instruction, is important to students' success with the concept. In order to assist teachers in delivering SRL strategies, Dignath-vanEwijk and vanderWerf (2012) developed three levels of instruction; in so doing, they stressed that students would not be successful in practicing SRL-driven instruction unless they received the highest level of instruction. According to the researchers, the first level of instruction – which is as far as many teachers get in providing SRL instruction – is called *blind training*: Students are instructed to choose a subject and begin research, and the teacher feels that students will be motivated enough to accomplish the task. The next level is *intermediate or informed training*: Here, students are told which strategies they should practice throughout the study. However, students are not told why or what the end results of the inquiry should be. The highest-level entails explicit explanations regarding the importance and outcomes of the SRL-driven work, as well as SRL's strategies and concepts.

Andrade and Bunker (2009) extended these findings by applying SRL as an instructional model for distance learning. The researchers determined that dialogue or interaction between the learner and the teacher was a necessary *structural* element in instructional course design. They defined structure as the degree to which the course

accommodates learners' preferences and needs with regards to course objectives and learner goals. In addition, Andrade and Bunker (2009) argued that distance learning requires learner autonomy, which captures learners' ability to create a learning plan, find resources that support their individual study, and then self-evaluate their own progress. In this way, Andrade and Bunker's (2009) study reiterated SRL's importance to not only the K-12 education community, but for college learning and beyond.

Following a similar path, Bergamin, Ziska, Werlen, and Siegenthaler (2012) conducted a study on the relationship between flexible and self-regulated learning in university distance learning environments. These researchers found that flexibility in learning had a relationship with SRL: In particular, learners' perception of flexibility within their own learning setting worked to encourage (or discourage) learners' self-regulation. Bergamin et al. (2012) also showed that increases in students' perceived environmental flexibility led to increases in students' reported use of SRL strategies.

Switching the focus to teachers, Effeney, Carroll, and Bahr (2013) demonstrated that teacher play an important role in the practice of SRL, often serving as the dominate source for SRL instruction. The adolescent student participants in this study expressed that the teacher-led experiences were the most valuable to them. These findings substantiate the importance of sound instructional modeling and examples as students work to obtain self-regulation of their curricula (Effeney et al., 2013; Dignath-vanEwijk & vanderWerfs, 2012).

Going a step further, Johnson and Davies (2014) concluded that "given the continuously increasing volume and complexity of required learning in contemporary society, self-regulation of learning is increasingly critical to student success" (p. 8). This

may be especially true for middle school students in light of Ryan and Deci's (2000) assertion that middle school is a time when students are generally able to internalize cultural and environmental rules, and use these rules to establish their own standards of behavior.

Summarizing the research up to this point, Karlen, Compagnoni, and Merki (2016) emphasized that "self-regulated learning cannot be fostered by just applying student focused teaching methods such as free choice of work, weekly schedule or project weeks. Learners need to be taught how to self-regulate their own learning and need teacher's support." Furthermore, the authors contend that the competence fostered by self-regulated learning is so crucial for students' success in school and beyond that SRL should be a key component of today's school curricula (Karlen et al., 2016).

Middle School Contexts for SRL Studies

Pelt (2008) conducted a study with middle school participants, arguing that such students may be more developmentally prepared to embrace SRL practices than younger students. However, Pelt (2008) pointed out that the structure of middle school has often inhibited students' development into self-sufficient individuals. Pelt (2008) maintained that most middle schools have offered students less autonomy than what is believed necessary for a SRL environment to be productive and successful (p. 26).

While Pelt (2008) acknowledged the public's general interest in student achievement, she focused on the achievement gap between ethnic populations in public school. Pelt (2008) maintained the principle that SRL classroom environments can produce elevated academic achievements (Pintrich & DeGroot, 1990). This prompted a

question: “Why do particular populations flourish from the use of SRL driven curriculum while others languish?” Pelt found that the achievement rates among high- and low-achieving student participants directly correlated with high and low instances of SRL strategy practices such as motivation, planning, and execution of work toward a goal (p. 73).

More recently, Bell and Pape (2014) conducted a study with middle school students, using SRL as part of mathematics instruction. In line with Zimmerman’s (1990) cyclical format denoted earlier, students were given planning time in order to determine the correct approach to finding answers to their assigned tasks. Upon completion of their tasks, student participants in Bell and Pape’s (2014) study would engage in whole-class discussion regarding each group’s progress and performance. The authors found that the students’ performance corresponded with Zimmerman’s (1990) monitoring and evaluation stages. In conclusion, Bell and Pape (2014) stated that “the focus of instruction in all middle grade classes must expand beyond teaching subject-specific content knowledge and move toward supporting development of strategic learning behaviors while teaching content” (p. 31).

Another researcher who studied the impact of SRL on the middle school population was Heater (2005) at the University of Victoria in Canada. As one of the few quantitative studies on SRL in this review, Heater (2005) tested the characteristics present in middle school students using SRL versus those who did not seem to practice SRL strategies. For this purpose, Heater (2005) utilized two instruments: the *Motivated Strategies for Learning Questionnaire* (Pintrich & DeGroot, 1990) and the *Student Environment Measure* (Feldlaufer, Midgley, & Eccles, 1988). In essence, Heater (2005)

found that students who engaged in SRL consistently used deeper cognitive processing skills and attained higher academic achievement than students who did not practice SRL. Pelt (2008) and Heater's (2005) studies offer a valuable baseline for understanding middle school students and/or instructors in social studies classrooms.

Self-Regulated Learning in Project/Problem-Based Learning

Zimmerman and Kitsantas (1999) have argued that self-regulated learners are able to set goals, plan a course of action, select appropriate strategies, self-monitor, and self-evaluate their learning, as well as reflect upon their goal accomplishments. They are also intrinsically motivated to learn and report high self-efficacy for learning and performance. Additionally, according to English and Kitsantas (2013), numerous research studies have found that students' self-regulation is highly predictive of student academic performance (Zimmerman, 2002; Zimmerman & Kitsantas, 1999). On the contrary, researchers have found that students' inability to self-regulate their learning behavior is equally related to academic learning difficulties and low motivation (Zimmerman & Schunk, 2001). Other authors (i.e., English & Kitsantas, 2013; Hmelo, 2004) have also discussed SRL as an essential skill in a Project-Based Learning (PBL) environment, which is defined as "a systematic teaching method that engages students in learning knowledge and skills through an extended inquiry process structured around complex, authentic (real-life) questions and carefully designed products and tasks" (Larmer, Ross, & Mergendoller, 2009, p. 4).

Many studies have documented a gradual shift toward teachers intentionally supporting the constructs of SRL, which entails encouraging students' ownership of work

and creating a classroom climate that supports students' planning and execution of their work. Perry et al.'s (2002) five-year case study of elementary classrooms, for instance, found that students demonstrated higher levels of SRL behaviors when teaching practices were more supportive of SRL pedagogy. Similarly, Lawanto et al. (2013) conducted an exploratory SRL study involving 27 students in grades 9-12 who were working on an engineering design project. The project was similar to PBL (Hmelo, 2004) in that students received design problems that their project had to solve/overcome. According to Lawanto et al. (2013), the higher-scoring SRL students showed a greater completion rate for planning and constructing their engineering project than the lower-scoring students, the latter of who often had great plans that they struggled to execute.

Theoretical Framework for Self-Regulated Learning

By its nature, SRL is a constructivist learning concept—one whose roots can be traced back to landmark scholars such as Vygotsky (1978), a constructivist who developed the Zone of Proximal Development theory. According to Zimmerman and Schunk (2001), Vygotsky's theory aligns closely with the tenets of SRL: Namely, Vygotsky believed that children constructed learning within an individual zone of proximal development, utilizing peers and instructors as scaffolds to assist them as needed.

While Vygotsky (1978) galvanized new theories of education, it was not until the mid-1980s that researchers started systematically addressing the question of how students became masters of their own learning process (Zimmerman & Schunk, 2001). This led to the notion of self-regulated academic learning, which referred to a self-directive process

through which learners transformed mental abilities into task-related academic skills (Zimmerman & Schunk, 2001, p. 1). Since then, several researchers (Pintrich, 2000; Zimmerman, 2002; Zimmerman et al., 1992) have demonstrated that students' SRL capabilities can play a significant role in their metacognitive skill. However, SRL remains widely underused in classrooms today (Kinnerbrew, Biswas, Sulcer, & Taylor, 2010).

According to Zimmerman and Schunk (1989), SRL theory comprises three elements originally derived from Zimmermans' studies. First, students are metacognitively, motivationally, and behaviorally active participants in their own learning process. Second, SRL requires self-oriented feedback during the learning process, which entails: 1) *forethought*: which includes setting goals, selecting strategies and methods, assessing self-efficacy, assessing mastery or performance orientation, and assessing interest; 2) *performance control or monitoring*: which includes focusing attention (excluding distractions and other competing attentions) and engaging in self-instruction and self-monitoring of progress; and 3) *self-reflection*: which includes self-evaluation against a standard or goal, forming self-reactions, and adapting based on ability or effort (Zimmerman, 1990, 2002). To this end, students monitor the effectiveness of their learning methods or strategies and respond in kind, whether that involve covert changes in self-perception to overt changes in behavior (e.g., replacing one learning strategy with another; Zimmerman & Schunk, 1989). Third and finally, SRL includes a description of how and why students choose to use a self-regulated process, strategy or response (Zimmerman & Schunk, 2001).

Beyond these core tenets, SRL theories do vary in terms of their key perspective, whether that be the operant perspective, a phenomenological stance, an information processing view, a social cognitive view, a volitional view, a Vygotskian stance, or a cognitive constructivist prospective (Zimmerman & Schunk, 2001). However, SRL theorists all seem to agree that learning is not something that happens *to* students, but is rather something conducted *by* students. Thus, these theorists argue that learning can only happen when students become proactively engaged at both a covert and overt level (Zimmerman & Schunk, 2001, p. 22). The covert level is a given: It is the *self* in self-regulated learning. The overt level, meanwhile, includes peer interaction, teacher/student interaction, modeling and other means of support (Zimmerman, 2002).

These principles align with Piaget's Cognitive Constructivism theory of learning and teaching, which holds that humans could not immediately understand and use the information given to them. Instead, people must build their own knowledge and meaning through experiences. In this regard, Piaget (1952) advanced a notion of cognitive *schema* as the underlying basis for human learning and recall. Building on this work, Paris and Paris (2001) adopted the term *theory* instead of *schema* for learners' constructive processes, assuming that students construct personal theories of learning based on their experiences. The constructivist view presumes that learners play an active and personal role during learning and recall, which is particularly vital for SRL. There is also a large emphasis on self-awareness, as this factor contributes to learners' capacity for practicing SRL strategies. All in all, self-regulated learners (a) planned, (b) set goals, (c) organized, (d) self-monitored, and (e) self-evaluated and reflected at various points during the process of knowledge acquisition (Corno, 1989; Ghatala, 1986; Pressley et al., 1989).

Synthesis of Studies Reviewed

Zimmerman, Schunk, and Pintrich began work with the concept of SRL in the United States during the 1980s. Later, Pintrich and DeGroot (1990) conducted a study that gauged students' motivational, behavioral and contextual aptitude in applying SRL strategies for the purpose of improving their academic achievement. The instrument they developed for that study, the Motivated Strategies for Learning Questionnaire (MSLQ), is still widely used in educational studies (Schunk, 2005).

As pioneers in this field, these researchers built upon theories of earlier social and cognitive theorists such as Vygotsky (1978), Bandura (1995, 1997) and Piaget (1952) to construct a theory of self-regulated learning. More recent scholars in this domain, such as Turker and Zingel (2008) have emphasized the interaction between personal agency and self-regulated learning. Thus far, this literature has found support for SRL in student populations ranging from elementary school to college, with the most common finding being that SRL strategies and practices can improve students' agency and efficacy (Bandura, 1995).

Bell and Pape (2014) stated that the focus of all instruction must expand beyond content-specific knowledge toward the development of strategic learning behaviors. Similarly, Vukman and Licardo (2010) claimed that equipping students with self-regulatory learning skills should be the goal of all formal education. SRL is a strategy capable of aiding students in this type of development. That said, teachers play a pivotal role in the success of SRL: Teachers are students' preferred source of SRL instruction (Effeney et al., 2013), even during distance learning (Bergamin et al., 2012).

Chapter Summary

Self-Regulated Learning is a documented practice that can increase participating students' academic performance (Zimmerman & Schunk, 1989; Mason et al., 2006).

Since the 1990s, researchers in various countries such as Finland, the Netherlands, Australia, and the United States have delineated the core principles and components of SRL, and found it to be a valuable strategy for students at nearly all levels of education.

Zimmerman (1990) identified SRL as a construct that could assist students in developing a higher sense of academic efficacy, as well as displaying greater persistence, effort, and intrinsic interest in their own academic learning and performance (Schunk, 1989). Research indicated that self-regulated learners made greater use of learning strategies and achieved better overall learning experiences than did their peers who made little use of self-directed strategies (Zimmerman & Martinez-Pons, 1988, 1990).

The articles covered under Chapter Two ranged from the 1980s to the present day; encompassed students from primary school through college, and represented various methodologies such as longitudinal (Perry et al., 2002) and case studies (Zimmerman, 2002; Zimmerman & Kitsantas, 1999). Notably, the literature suggests that SRL could be taught to students as young as primary school (Dignath et al., 2008; Perry et al., 2002) and yet also remains beneficial for adult students, even those completing online and distance courses (Bergamin et al., 2012; Dabbagh & Kitsantas, 2012; Vukman & Licardo, 2010; Wolters, 2010).

CHAPTER III METHODOLOGY

This chapter discusses the non-evaluative, qualitative methods used in this study for data collection. These three methods include: teacher interview and questionnaire data, as well as classroom observations/field notes from participating educators. Participant data was compared from written to verbal formats, and then all three data sources were triangulated to determine each source's relationship to the other. The findings were then compared against Argyris' (1980) espousal/enactment theories. Teacher-participants in the current study came from the same rural, south-central Kentucky school district and taught in grades six through eight. Their data was used to answer the following research questions:

1. How do middle school Social Studies teachers in a rural, south-central school district in Kentucky describe/demonstrate successful implementation of Self-Regulated Learning in their classrooms?
2. How do the three sources of data collected from this study demonstrate the teachers' delivered versus projected practices?

Theorists' Influence

The primary theory underlying this study is the Constructivist Learning Theory, championed by Vygotsky (1978) and Piaget (1952). Constructivism states that students control their own learning through their ability to plan, monitor, evaluate, and reflect upon their learning experiences (Zimmerman & Schunk, 1989). Piaget's (1952) Cognitive Constructivism theory of learning and teaching was based on the principle that

humans could not immediately understand and exploit knowledge; rather, they developed knowledge and meaning through learning experiences. Thus, constructivism formed the basis for self-regulated learning theory (Zimmerman, 1989).

An additional theory underpinning this study came from Argyris and Schon (1974), who asserted that there was a documentable split between the theory and action of most individuals. However, instead of declaring that people did not act as they claimed to have acted, Argyris and Schon (1974) suggested that there were two theories of action involved in the process: The first, *enacted theory*, reflected what people actually did; the second, *espoused theory*, captured how individuals described their own actions to others. These *theories-in-use* encompassed the tacit structures that underlie our actual behavior, much like “the relation of grammar-in-use to speech; they contained assumptions about self, others and environment – these assumptions constituted a microcosm of science in everyday life” (Argyris & Schon, 1974, p. 30).

Based upon the *espoused vs. enacted* theory (Argyris & Schon, 1974), the present study compared data utilizing Provalis QDA Miner, a software tool designed to assist qualitative researchers in visually displaying patterns and percentages found within entered data. Specifically, I compared teacher-participants’ questionnaires and video-taped interview responses with my own classroom field observations/notes to determine whether participants’ espoused SRL instruction matched participants’ enacted SRL practice. I also examined the extent to which teacher participants practiced SRL methods in their instruction (Argyris & Schon, 1974).

Study Overview

This study took a phenomenological approach, aiming to qualitatively assess a particular phenomenon and its meaning for a group of individuals (Creswell et al., 2007). In this case, the individuals were the five Social Studies teacher-participants and the phenomenon was the practice of SRL methods in the classroom. Specifically, I interviewed the teachers and observed how each one used SRL instruction in the classroom. In this study, all Social Studies teachers used *History Alive* curriculum materials (Frey & Hart, 2005).

In the first step, all questionnaire data was placed into one document for data analysis (Data 1). This document was combined with interview data to form another document (Data 2) and then combined with field observation data to form a third and separate document (Data 3). This method allowed me to preserve participants' anonymity, as they were not separated by responses or cases. The use of one body of data from each source type also enhanced the function of Provalis QDA Miner.

The methodology of this study has been delineated into the following subsections: a) research design, b) research setting, c) research participants, d) researcher's role, e) data sources, f) data collection, and g) data analysis. The primary data sources in this study consisted of participants' questionnaire responses that were sent by and returned to me via email; video-taped interview responses (transcribed into one document), and field observation data. The collected data was then coded and separated, according to the four main domains identified by Zimmerman (1990): planning, progress monitoring, evaluation, and reflection. Finally, I analyzed the findings in accordance with Argyris and

Schon's (1974) theory of *espoused vs. enacted* intentions in order to answer the study's research questions.

Research Design

Locke, Silverman, and Spirduso (2004) described qualitative research as reflective of what sources constituted data, how researchers related to participants, and what represented acceptable rationales of engagement in social/educational research (p. 124). Locke et al. (2004) also emphasized that investigators, while acting as the primary instrument for data collection in qualitative methodologies, build an extensive collection of thick description (e.g., detailed records concerning the context, perceptions, and actions of the study's participants). In this study, the thick description comprises the three data sources mentioned earlier (questionnaires, interviews, field observations). These data served as the basis for aligning teachers' practices with each identified domain of SRL (Locke et al., 2004, p. 150).

Research Setting

The setting for this study was a middle school in rural, south-central Kentucky. The school's 879 students were ethnically homogenous (less than 10 percent non-Caucasian), but nearly evenly split along gender lines. The teacher-participants only saw one grade level of students per day for Social Studies instruction. The students had been placed on instructional teams of 140 individuals, give or take. The corresponding teams of teachers received one planning period daily that lasted for 50 minutes. A head principal and two assistant principals served as administration for the school's 35 core faculty and seven exceptional children faculty.

Research Participants

The subjects of this study were five Social Studies teachers in grades six through eight at the district's only middle school. The teachers were selected as participants by the head principal. All participants were female and their experience as Social Studies instructors ranged from fewer than seven years to more than 20 years. In terms of educational backgrounds, two teachers came from a MAT program (an alternative training program for teachers in Kentucky who already hold a bachelor's degree in an unrelated field and have acquired a Master's degree in education to teach in their chosen content area) while the other three were more traditionally prepared as educators.

The Researcher's Role

I served as the primary researcher for this study. In this role, I obtained participant consent and site access. Specifically, participants were asked to sign a form stating their willingness to participate, as well as a release statement (Merriam, 2002). As the sole researcher, I was primarily responsible for data collection; however, I did not in any way participate in the planning or conducting of any Social Studies lessons (Locke et al., 2004).

Data Sources

The data used in this study came from three sources: detailed, narrative questionnaires completed by participants; video-taped participant interviews, and researcher-compiled field notes taken from observing participants' classrooms. In order to form better conclusions from the data, I performed triangulation, which refers to the application and combination of several research methods in the study of the same phenomenon. Triangulation is a powerful technique that facilitates the validation of data

through cross verification from two or more sources. This was accomplished by transcribing, coding and separating the data into common themes, and then analyzing the results through the lens of Argyris' (1980) *espoused vs. enacted* theory of actions. By triangulating the data, this study could better validate teacher responses and establish that they practiced SRL (Creswell et al., 2007).

To perform the data analysis, I compiled data into three separate documents (data 1: questionnaires, data 2: interview transcriptions, and data 3: field observations), and then input these documents into Provalis QDA Miner. I specifically looked for comparisons between teachers' questionnaire and interview responses to gauge for overlaps and divergences in their responses. The data was sorted into 12 code categories in order to determine the numbers of times particular codes occurred within the data. Lastly, data were triangulated to determine the extent to which teacher responses agreed with field data from observations.

Interview Questions

The interviews featured *unstructured, open-ended* questions (Spradley, 1979) that were adapted from Lombaerts et al.'s (2009) Teacher Belief Scale. Lombaerts et al.'s (2009) questionnaire was intended for primary grade-level teachers who taught the same students for six hours or the entire school day. However, I had to tailor the questions to participants' experience as middle school teachers, as their instructional time allocations are very different from those of primary teachers (i.e., classes are usually limited to one hour sessions). The interviews strove to determine the degree to which participants implemented SRL within their classroom(s) (Argyris & Schon, 1974).

I expected that teacher-participants would offer additional discussion about SRL as pedagogy during the interview process, and thus kept the questionnaire unstructured in order to allow for more flexibility and thicker description.

Questions

1. Describe students' set goals in your classroom. What type of model do you use for goal setting with your students?
2. Discuss the amount of planning that students engage in when beginning a project/task. Can you provide an example of student planning you have used recently? Discuss particular strategies you encourage students to use.
3. How motivated to complete tasks would you say your students are on average? You may include multiple years' experience. Can you describe conditions which appear to encourage student self-motivation?
4. Describe the processes used in your classroom by students for acquiring needed assistance: from you, from peers, from other sources.
5. How often do students self-evaluate in your classroom? Can you describe the methods used for self-evaluation by your students?
6. Describe your philosophy regarding students self-regulating their own learning. How strongly do you encourage this philosophy in your classroom?
7. Can you describe how/when/to what extent you utilize modeling of master examples for your students? Do you often engage in guided practice with your students within your content? Can you give an example of guided practice in your classroom?

8. How is social support provided for students in your classroom during project/task work? Can you provide an example of this?
9. What methods do you most often practice to provide timely feedback for students? Can you give an example of a recent feedback method you practiced with students?
10. Describe your reflective practices regarding your unit instruction as well as your students' reception to this instruction.

Researcher Notes

The observations were field notes taken by the researcher during participants' delivery of SRL instruction. Field notes were taken as the observation occurred, with the researcher serving as a non-biased, non-participating observer in the Social Studies classrooms. The researcher observed participants' SRL instruction, as well as students' behaviors, which together indicated the practice of self-regulated learning strategies. The research notes were divided into the four domains of data analysis (planning, monitoring, evaluation, and reflection) already identified by Zimmerman (1990). Figure 1 illustrates these domains.

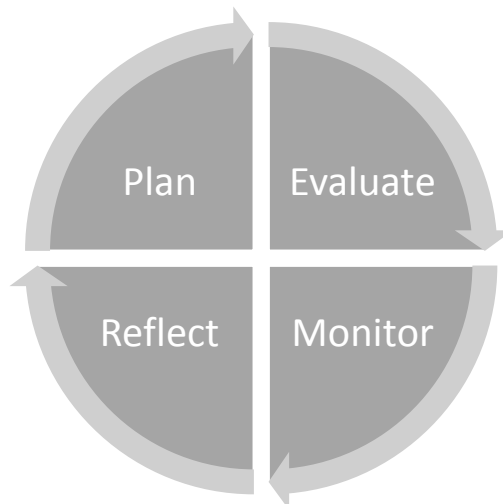


Figure 1. The SRL Cycle

The interview questions were emailed to each participant in a questionnaire format. After the answers were emailed or returned (as a hardcopy) to the researcher, the video-recorded interview session was scheduled with each participant. The same questions were used in both instances to not only confirm the validity of participants' answers, but also to assess the degree of overlap between them. Video recording was conducted by a third-party assistant, who was only present during interviews for recording purposes. This assistant was totally unfamiliar with the content of the interview questions (Spradley, 1979). Following the recordings, the researcher transcribed the teacher interviews.

Data Collection

Data collection progressed in the study in the following order: Participants were asked to respond to questions regarding their instructional practices, sent to them via school email from the researcher. Next, each participant was interviewed by researcher, and these interviews were video recorded. Teacher participants were asked to respond to the same questions they had already answered in questionnaires in order to ensure the

validity of teacher-participants' responses. This method of checking was used to ensure that answers remained consistent and valid, as well as to guard against any issues of bias toward the researcher. The collection of data for this study was dependent upon a timeline. The following estimated timeline was subject to adjustments as viewed necessary by the researcher:

December 2016: Participation and permission letters were completed by participants. Classroom observations were to begin at an agreed-upon time between the researcher and teacher.

January 2017: Teacher questionnaires were sent via email to participants. Upon receipt of answers to questions, the researcher moved forward to schedule teacher interviews with confirmed participants. All interview data was video recorded and transcribed into one document of data.

February 2017: Field observations were scheduled and conducted with participating teachers.

March 2017: Data was analyzed and the findings were compiled using Provalis QDA Miner software.

April 2017: The project concluded and the results were written. These findings comprise chapter four and five of this work.

Data Analysis

Spradley (1979) stated the dual goals of domain analysis were to (1) identify *native* (in this case *personal*) categories of thought, and (2) to gain an overview of the scene or phenomenon that you are studying. Spradley defined a *domain* as any symbolic category that included other categories, all of which shared at least one feature of

meaning (semantics). In this study, the *domains* were established by enlisting the major components of SRL as cover terms: planning, progress monitoring, evaluation and reflection (Zimmerman, 1990). Under each larger category (Zimmerman, 1990) were codes or topics, which appeared in the data from all sources; these items were labeled as sub-domains. Spradley (1979, p. 102) referred to these smaller semantic categories as *included terms*.

The data were gathered (and in the case of interview data, transcribed) from all sources: the questionnaire, interview, and field observation data. All data were coded using Provalis' Qualitative Data Analysis (QDA) Miner. QDA Miner performed the data sorting tasks as all three bodies of data were inputted and manually coded. Codes or sub-domains were established by inductive reasoning methodology (Spradley, 1979, p. 102). Inductive reasoning allows the researcher to determine key terms or concepts most commonly observed and/or referenced in data (Locke et al., 2004). The established codes/terms (this study shall hitherto refer to these codes/terms as sub-domains) were inputted under existing domains in QDA Miner. The codes/terms are shown here, under domains as assigned manually to data: (1) planning: student choice, goal setting, motivation; (2) progress monitoring: follow-thought of plans, and questioning (peers, teachers, others); (3) evaluation: student-created evaluation, teacher-created evaluation, self-evaluation, and models to follow; (4) reflection: student self-reflection, teacher self-reflection and support in or outside of class (Spradley, 1979).

The following tree diagram (Figure 2) displays the domains and sub-domains that were used to code and analyze the three data sources gathered in this study. A tree diagram is a framework used in qualitative data analysis which allowed the coding process of the data to be visible (Locke et al., 2004).

	Data 1	Data 2	Data 3
Planning			
• Student choice	4	5	4
• goal setting	8	12	6
• motivation	5	6	3
Evaluation			
• student created	4	2	2
• Teacher created	6	7	13
• self-eval	7	5	6
• models to follow	2	4	1
Reflection			
• Student self	1	1	3
• Teacher self	4	3	
• support in class/outsid	8	6	1
Progress Monitoring			
• follow plans			2
• questioning	4	6	1

Figure 2. Tree Diagram of Data Domains and Sub-Domains

Chapter Summary

The phenomenon of self-regulated learning has long been the prescribed curriculum in various settings. Locations such as the Netherlands and Finland have demonstrated elevated levels of student agency and efficacy through the mandated inclusion of SRL practices in these their schools' curricula (Finnish National Board of Education, 2004). Therefore, instructors who are experienced in the use of SRL strategies have a lot to share with educators who may be not be experiencing equal student success.

The combination of data from teacher questionnaires and interviews helped to answer this study's first research question (Spradley, 1979). The second question in this study dealt with teachers' projected ideas on their delivery of SRL instruction versus the observed delivery of SRL instruction. The triangulation of field observations with participants' interview and questionnaire responses helped to answer this question. All findings will be addressed in Chapter 4 (Argyris & Schon, 1980).

The instructor/teacher-participants in this study were selected by the head principal at a rural, south-central, Kentucky middle school. The principal felt these instructors would be more likely to incorporate SRL instruction into their curricula. Due to the principal's sample selection, the researcher had no influence over which instructors were chosen for the study as participants. Thus, this type of participant selection constituted a *convenience sample*. Potential participants either opted in or out of the study by choosing to sign (or not sign) a letter agreeing to participate, provided to them by the researcher. To ensure validity, the researcher incorporated measures such as repeated questioning in the interviews and questionnaires (Locke et al., 2004).

CHAPTER IV FINDINGS

I totally encourage self-regulation by students. This teaches them survival skills outside of the standards. Students must learn to depend on themselves for finding answers.

The preceding quote was taken from a participant response in the SRL questionnaire, and it indicated this participant's purported use of SRL instruction. The first part of this two-part analysis is a review of instructors' stated SRL practices in their classrooms. The second part of the analysis represented what I observed within the teacher-participants' classrooms.

Research has documented that several nations – whose students score higher than their U.S. counterparts on mathematics and reading assessment, according to the PISA assessment (IES, 2012) – incorporate SRL into their everyday classroom instruction. In fact, Finland and the Netherlands have required SRL instruction since 1995 (Finnish National Board of Education, 2004, 2016); thus, those countries have been able to longitudinally demonstrate the efficacy of SRL strategies.

My study collected data demonstrating the teacher-participants practice of SRL in a rural, south-central, Kentucky middle school. This middle school utilized a Social Studies curriculum known as *History Alive* (Frey & Hart, 2005). The principal at this site felt that, due to the number of instructors who used *History Alive* in the Social Studies department, these teachers practiced SRL strategies more often than other content teachers at this school. Thus, SRL was not a school-wide initiative, which was apparent in this school's curriculum documents.

This non-evaluative study sought to find evidence of teacher-participants' SRL strategy use through their written (questionnaire) and verbal (interview) responses, in tandem with field observations conducted by the researcher within teacher-participants' classrooms.

Research Questions

1. How do middle school social studies instructors in a south-central school district in rural Kentucky describe/demonstrate successful implementation of Self-Regulated Learning in their classrooms?
2. How do the three sources of data collected from this study demonstrate the teachers delivered versus projected practice?

Triangulation, i.e., the comparison of the three data sources in my study (both written and verbal participant responses, as well as researcher field notes), provided a clear snapshot of participants' practice of SRL strategies in their daily instruction. This study analyzed the data in accordance with Zimmerman's four domains of SRL: 1) Plan, 2) Monitor, 3) Evaluate, and 4) Reflect. The researcher identified and sorted various sub-domains as additional concepts emerged from the data (Spradley, 1979).

Perceived Implementation of SRL by Teacher-Participants

Five Social Studies teachers in grades 6-8 participated in this study. Figure 3 compares teachers' verbal and written responses in line with the research questions. There was a highly positive correlation between participants' responses on the questionnaire and in the interviews, which extends the consistency and validity of

participants' responses. It is worth noting that, while the interview questions contained the same wording as the questionnaire items, participants did not have access to their written responses during their interviews. As Figure 3 below shows, teachers' most positive response was in terms of student goal-setting (18.2 percent), followed by support inside and outside of the classroom (12.7 percent). Notably, 11.8 percent of participants administered teacher-created evaluations (or evaluation criteria culled from *History Alive*).

	Count	% Codes	Cases	% Cases
Planning				
• Student choice	9	8.2%	2	100.0%
• goal setting	20	18.2%	2	100.0%
• motivation	11	10.0%	2	100.0%
Evaluation				
• student created	6	5.5%	2	100.0%
• Teacher created	13	11.8%	2	100.0%
• self-eval	12	10.9%	2	100.0%
• models to follow	6	5.5%	2	100.0%
Reflection				
• Student self	2	1.8%	2	100.0%
• Teacher self	7	6.4%	2	100.0%
• support in class/outsid	14	12.7%	2	100.0%
Progress Monitoring				
• fidelity of student work				
• follow plans				
• questioning	10	9.1%	2	100.0%

Figure 3. Number of Participant Responses to Sub-Domain Categories

Some planning/goal setting teacher quotes read as follows:

- “Students set learning goals by reading over targets/standards from student self-assessment. They realize what they don’t know and get goals from this.”

- “Students may set individual goals by stating they will reach the *proficient* or *distinguished* level on a test, open response, or project. Students also use ‘I can’ standards statements to see if they can fulfill the mastery of the statement.”
- “At the beginning of the year, as we set up notebooks, I had students create four goals for themselves to work on over the course of the year. One is a verbal goal, one is a written goal, one is a behavior goal, and one is their choice.”

While many participants agreed upon the importance of student pre-planning and goal-setting, others did not indicate as strong a preference for this item. This finding is demonstrated in the following quotes:

The state of Kentucky has set the learning goals for students when they set the Standards. However, if we are talking about goal setting in general then I believe that students are responsible for setting their own goals. Sometimes we discuss the topic in Advisory (a non-content class). Students set goals for themselves and we discuss how they can achieve those goals. I have not had students complete this task this year but in the past I have also had students create goals in their journal. Students may review one test and set goals for their next test or task.

The comment suggested that goal setting only occurred at the beginning of the year or of a unit. Also of note was the participant’s impression that the state of Kentucky set goals for all students, rather than individual students being independent agents capable of goal-oriented work (Zimmerman, 1990).

The strong correlation between the two versions of participants' responses to identical items was a valuable result, indicative of not only study and question validity, but also the importance and consistency of teachers' answers. The following paragraphs will further probe the first two data sources (written and verbal responses) in order to highlight discrepancies in teachers' agreement with themselves and others.

In comparing verbal with written responses, the researcher found that 12 vs. 8 participants, respectively, stated that classroom instruction involved student goal-setting. Motivation within the planning domain garnered a verbal-to-written response ratio of 6/5. This pattern of more verbal reports than written reports did not hold for other sub-domain items, such as student-created evaluation.

Within the evaluation domain, participants reported fewer student-created evaluation opportunities in the verbal format compared with the written format (a ratio of two to four, respectively). Teacher-created evaluations constituted one of the largest areas of data collected, with the verbal ratio of reported teacher created evaluations equaling seven and the written responses equaling six. Student self-evaluation was reported at five spoken responses to seven written responses. Instances of models being provided by participants for students to follow were reported at four verbal to two written responses.

Motivation responses (under the domain of planning) garnered a variety of participant comments as well: "Most students are somewhat self-motivated. A few are extremely motivated. I try to encourage students to use the Growth Mindset. They need to realize that they can increase their intelligence. Students must realize if they cannot do something that they simply cannot do it *yet*." Another participant expressed a belief "that students are intrinsically motivated regardless of what we do in the classroom." Likewise,

one participant noted: “For the most part that class is a huge percentage of self-motivated students. Student choice helps motivation. Sometimes it wouldn’t matter they are just going to do the best they can however I do feel student choice increases their motivation.” However, not all participants felt that students expressed motivation. As one said: “It depends on student’s motivation. They have to be motivated on their own. It depends a lot on interest as well; if they are interested in the topic they will do well. Most of the students are very motivated by the end product.”

The third domain of performance monitoring, which included only two codes (i.e., students following plans, and students questioning or gaining assistance from their peers or the instructor), was reported during six verbal responses and four written responses.

The final domain of reflection included student self-reflection, teacher self-reflection, and support for students and teachers in or outside of the classroom. There was only one report of student self-reflection opportunities in both the verbal and written formats. Teacher self-reflection had more reports: three verbal and four written. However, the responses reported most often in this category were for the sub-domain of support. Participants expressed confusion about this item during the interviews and required further explanation from the researcher.

In order to avoid skewing the data, I chose not to limit participant responses to any particular type of support (e.g., peer, instructor, or outside-the-classroom support). Some participants responded positively to the item and referred to students having ample support from peers. Conversely, others referred to their own support from their instructor peers or the support they, as instructors, gave to students. Still, other participants spoke of

parent and community support for their classes. The following are two examples of positive feedback generated by this question:

- “Again, social support is embedded in the Kagan classroom. Students learn to support and encourage each other through use of hand signals and other cues learned early in the year.”
- “The first step is to raise their hand and ask. I may not always answer them directly but instead through questioning and discussion. If they need help from their homes they can email me anytime.”

Conversely, other participants commented negatively on outside class support:

“Social support for my students outside the classroom is rare. Many students have parents who work while they are home, and/or live with grandparents. Within the classroom small groups are used and peer support.”

Other participants commented on in-class peer support:

- “My classroom is set up in Kagan teams. I do this so that students have a built-in support system and peer tutors. I also utilize structures such as Rally Robin and Round Robin for structured conversations. I allow students to socialize during independent work, if they are remaining on task.”
- “Students are seated in pairs. They are encouraged to get assistance from their shoulder partner first and then from me.”
- “Students know that they can come to me or another student at any time to ask for help. In my class, we use Kagan strategies which develop different processes for assistance.”

- “Social support is very important during project work because students need to be able to discuss their ideas with their peers. We have a period of planning before each project to do brainstorming within the group.”

Some participants’ verbal responses focused on community or parent support:

“Luckily, I have good parents and the parents do help out a lot. Which is not really a bad thing; if they are offering support and helping their child, it’s a good thing. I help them a lot through technology. If we are talking outside the classroom support such as community support, I don’t have a lot of that; I wish there were more but it is what it is.”

This participant referred to support for themselves, and from other educators:

As far as peers I have an awesome learning community after school. My other grade-level teacher and I work two or three hours after schools sharing work, ideas and materials. So professionally we have a great team leader, she’s awesome. The way I took that question [on a questionnaire regarding students] is that probably seventy percent have no support outside of school. Very few of our kids have any support outside of this classroom. They go home, their parents work overtime or second shift, so very few of them have any support outside of classroom. That’s how I took this question.

This “support” item garnered a variety of responses, perhaps due to participants’ confusion about the question’s meaning. Consequently, the sub-domain of support was not one of the larger response areas. Future studies may need to clarify this question in order to render it more useful. Figure 4 below demonstrates the largest area(s) of participant responses, with goal-setting (by students) and teacher-created evaluation tools receiving the greatest number of responses.

List of codes					
Category	Code	Description	Count	% Codes	Cases
Planning	Student choice		13	8.60%	3
Planning	goal setting		26	17.10%	3
Planning	motivation		14	9.20%	3
Evaluation	student created		8	5.30%	3
Evaluation	Teacher created		26	17.10%	3
Evaluation	self-eval		18	11.80%	3
Evaluation	models to follow		7	4.60%	3
Reflection	Student self		5	3.30%	3
Reflection	Teacher self		7	4.60%	2
Reflection	support in class/outsid		15	9.90%	3
Progress Monitoring	questioning		11	7.20%	3

Figure 4. List and Count of Study Sub-Domains

As mentioned previously, student-created evaluations and student self-reflection generated the fewest number responses. Also, while there was a 92% positive correlation between participants' written and verbal responses, there was a weaker correlation between these data sources and the field observation. In other word, the field observations did not clearly indicate that teacher-participants enacted the SRL that they espoused in their responses.

Triangulating Field Observation Data with Participant Response Data

While field data also enjoyed a positive agreement with response data, the positive correlation here was somewhat weaker at .72 and .74 percentage points (see Figure 5 below). This finding is important in light of question two, which sought to apply Argyris and Schon's (1974) espoused verses enacted theory of behavior to participants' classroom instruction.

Figure 5 demonstrates the triangulation of the three data sources used in the study: Data 1 constitutes participant written responses to questionnaires, Data 2 represents participant interview responses, and Data 3 represents field data collected by researcher in participants' classroom. Data 3 did demonstrate a highly correlative relationship with both forms of participant response data (Data 1 & 2).



Figure 5. Triangulation of Study Data Sources

The somewhat weaker correlation between participants' interview responses and the field data could be seen as supportive of Argyis and Schon's (1974) *espoused vs. enacted* theory. Participants reported that they practiced the domains and/or sub-domains identified within the SRL concept more often than they demonstrated these strategies in their classrooms, as per the field observation data (Argyis & Schon, 1974).

Figure 6 reflects the introduction of Data 3 into QDA Miner's analysis totals on sub-domains. The count is now indicative of all three data sources.

	Count	% Codes	Cases	% Cases	Nb Words	% Words
👤 Planning						
◆ Student choice	13	8.6%	3	75.0%	734	9.5%
◆ goal setting	26	17.1%	3	75.0%	1280	16.6%
◆ motivation	14	9.2%	3	75.0%	811	10.5%
👤 Evaluation						
◆ student created	8	5.3%	3	75.0%	285	3.7%
◆ Teacher created	26	17.1%	3	75.0%	1245	16.2%
◆ self-eval	18	11.8%	3	75.0%	934	12.1%
◆ models to follow	7	4.6%	3	75.0%	428	5.6%
👤 Reflection						
◆ Student self	5	3.3%	3	75.0%	153	2.0%
◆ Teacher self	7	4.6%	2	50.0%	415	5.4%
◆ support in class/outsid	15	9.9%	3	75.0%	597	7.7%
👤 Progress Monitoring						
◆ questioning	11	7.2%	3	75.0%	514	6.7%

Figure 6. Percentages of Sub-Domain Codes Reported

Figure 6 illuminates that there were more instances of student self-evaluation during the field observation than participants reported during their interviews or questionnaires. The researcher could observe student self-evaluation throughout fieldwork – not always at a formal, teacher-intended time, but as student work proceeded throughout the lesson observed. That said, several participants seemed aware of creating formally planned student self-evaluation opportunities. One participants’ written response stated, “Self-evaluation sheets are given to each student at the start of a new unit. These sheets have learning targets and standards listed for the unit. As students travel or progress through the unit, they are to check-off their own mastery of various content.” Another participant responded, “Students self-evaluate several times a month. They write self-evaluations in their ISNs (Interactive Student Notebook).” However, some participants expressed more hesitation with the concept. For example, one participant

remarked, “Self-evaluation is a tricky thing at middle school. Students at this age are not very adept at self-evaluation.” One participant, who arguably had the clearest idea of student self-evaluation based on the field data, stated it this way:

They [students] don’t self-evaluate as often as I feel they should or as I try and persuade them to, I’ll tell you that. A lot of that’s on me. At the end of each unit we do have student learning targets and we revisit them often, I remind them what we did with these and ask them to evaluate to what extent they feel they got or if they still need to work on it. Another thing we need to be doing I just haven’t gotten it set up yet is *writing folders* and in the writing folders there will be a chart where students can chart their progress on specific writing pieces marking the piece as 01234. After that I will ask them three simple questions: What’s a trend you see in your writing? What are you doing well? And how can you improve? Then at the end of the next semester I have them chart additional progress and re-respond to questions.

Another point made salient by Figure 6 is the identical representation of two sub-domains, student goal-setting and teacher-created assessments, which both appeared in 26 reports (17.1 percent of total). The next highest-rated issue was student self-assessment, which received eighteen reports (11.8 percent of total) across all three data sources. While student-goal setting comprises a major component of SRL’s planning domain, teacher-created evaluations align more with a teacher-controlled classroom environment. This finding demonstrates that while student are planning and perhaps goal-setting to complete tasks, their work is still being largely evaluated through teacher-created assessments. However, in Zimmerman’s (1990) ideal notion of SRL, students would self-

evaluate throughout the task in order to be fully in control of and able to self-regulate their learning experience.

Chapter Summary

This chapter sought to provide a picture of the participating middle school, and particularly the views and practices of the social studies instructors regarding Self-Regulated Learning strategies and constructs within their classroom. This non-evaluative, qualitative study strived to answer the following research questions: “How do middle school social studies instructors in a small, south-central school district in rural Kentucky describe/demonstrate successful implementation of Self-Regulated Learning in their classrooms?” and “How do the three sources of data collected from this study demonstrate the teachers’ delivered versus projected practice?”

The purpose of this study was not to evaluate the teaching style or delivery of any study participant, but to observe and note the presence of SRL strategies and practices within the Social Studies classrooms at this rural, south-central, Kentucky middle school. The data collected indicated that teacher-participants performed several practices that aligned with the four domains that primarily constitute SRL. In fact, the sub-domain of student self-evaluation – which is integral in SRL and falls under the domain of Monitoring – was observed more often in participants’ classrooms than participants recognized in their written or verbal responses (Zimmerman, 1990).

Figure 7 provides a visual summary of the study’s findings. The SRL sub-domains that were either under-reported or not observed within these classrooms are

represented by the smaller circles, while the sub-domains that garnered the most support or reports are represented by larger circles.

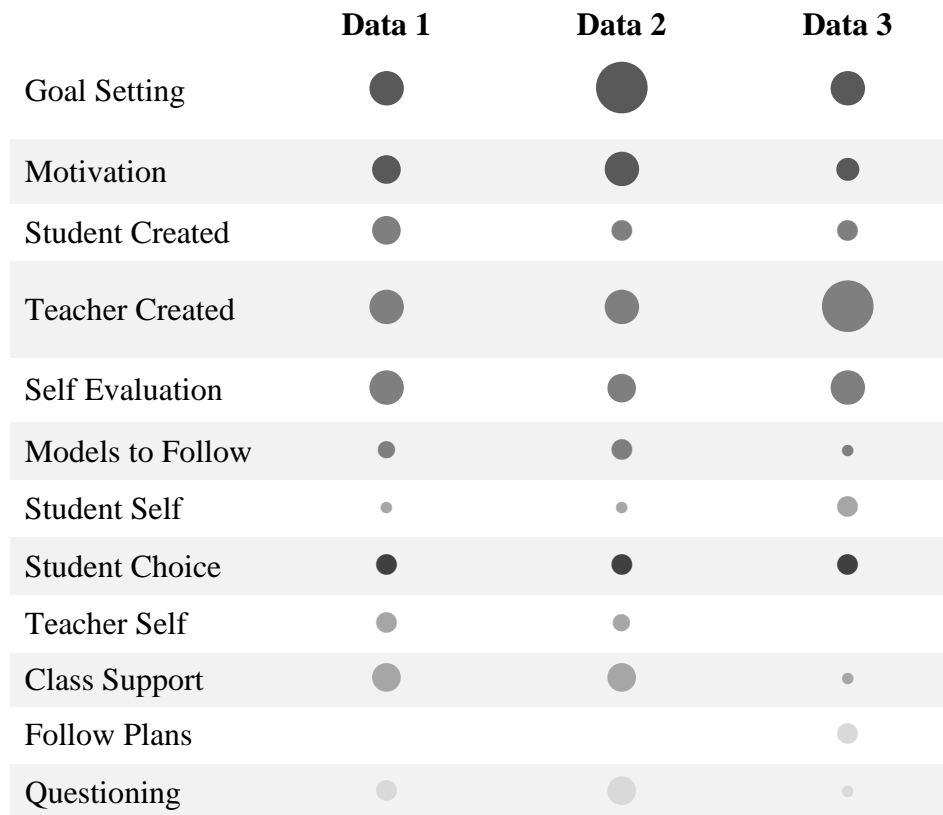


Figure 7. Visual Summary of Total Findings

Note: The size of each dot represents the number of teacher-participant reports. There is no significance to the color of each dot, save for visual distinctiveness.

According to Figure 7, while student goal-setting was an important planning domain term, it appeared more often in participant reports than during fieldwork. Likewise, participants described opportunities for student support – this being peer-to-peer, primarily in-class support – in their verbal and written responses more than actually appeared in the field observations. Additionally, participants described questioning or seeking assistance more positively in their responses than they demonstrated during field

observations. Interestingly, participants underreported the amount of student self-evaluation opportunities relative to their frequency during field observations.

While participants demonstrated several aspects of SRL, such as student goal-setting, motivation, self-evaluation, and student choice, their classes lacked other SRL facets, such as student-created and/or monitored assessment (Zimmerman & Schunk, 1989). The introduction of formal and informal student-created assessment can increase students' ownership in their learning (Zimmerman, 1990). The participants in this study acknowledged the import of student self-monitoring, but generally only to the extent that it was planned or recognized by the teachers.

This study offers evidence that elements of SRL are apparent in this middle school Social Studies department. However, the findings also demonstrated a need for the increased integration of the SRL pedagogy into the Social Studies content area. If SRL can encourage students (meta)cognitively, as the literature suggests, then SRL could potentially be a strategy by which Kentucky schools can increase students' mathematics and reading scores (Zimmerman, 1990). As Zimmerman and Schunk (1989) stated, by self-regulating their learning – cognitively, motivationally, and behaviorally – students can promote their own achievement.

Chapter Five will discuss the implications of the study's findings and suggestions for future work in this area.

CHAPTER V DISCUSSION & RECOMMENDATIONS

In this final chapter, I pull together a few conclusions from the findings, discuss the study limitations and provide some implications for future work regarding SRL for students. My purpose in conducting this study was to determine, in a non-evaluative manner, the extent to which teacher-participants at a middle school in rural, south-central Kentucky incorporated the use of Self-Regulated Learning strategies into their Social Studies instruction. Additionally, this study sought to determine if participants actually used SRL in a way that matched their written and verbal responses (Argyris & Schon, 1974).

The questions investigated by this study were: “How do middle school Social Studies teachers in a small school district in rural, south-central Kentucky describe and demonstrate successful implementation of Self-Regulated Learning in their classrooms?” and “How do the three sources of data collected from this study demonstrate the teachers’ delivered versus projected practice?”

Study Conclusions

SRL is a promising practice that has been commonly used in nations such as Finland and the Netherlands to the betterment of student outcomes. Some schools in the United States also practice SRL; hence, my study examined the phenomenon of SRL use in a selected Kentucky middle school. The teacher-participants taught Social Studies content in grades six through eight. In accordance with Creswell et al. (2007, p. 120), I gathered a criterion sample of five individuals who experienced similar phenomenon—in

this case, teaching middle school Social Studies curriculum using the same materials (*History Alive*; Frey & Hart, 2005). These participants completed a written questionnaire and video-recorded interview sessions, both of which featured identical questions regarding participants' SRL practices. This double questioning measure helped to confirm the study's validity and ensure consistency within participant responses. As the researcher, I also collected field notes by observing participants' classroom instruction. At teacher-participants' request, I reviewed the instructional materials that would be delivered prior to and following the scheduled observations.

On that basis, this study arrived at three notable conclusions: First, the collected data indicated that participants had enacted several practices that aligned with the four SRL domains (Zimmerman, 1990). Second, there were two sub-domains – teacher-created assessment and student goal-setting – that were most often reported among participants. Third, while there was a substantial correlation between participants' written and verbal responses, there was a slightly weaker, albeit still positive, correlation between the field and response data (Argyris & Schon, 1974).

One issue that I did not anticipate involved the field observation. Teacher-participants were resolute that field observations should include materials prior to and immediately following the observed class session. Teachers explained that these lessons were constructed within the curriculum that they taught, *History Alive*, in mini-units that relied upon the entire unit as the concept. Therefore, teachers maintained that, in order for field observations to clearly represent the SRL practices students engaged in, the entire mini-unit must be entered into data. However, doing so was beyond the scope and resources of this study, which will be addressed further in the Limitations section.

Prominent Trends

Chapter Four outlined several significant observations that were illustrated by QDA Miner. The two most prominent trends, involving teacher-created assessment (evaluation domain) and student goal-setting (planning domain), resulted in bit of a paradoxical snapshot of the practice of SRL within these classrooms. For example, planning is a major component in Zimmerman's SRL methodology; thus, the sub-domain of student pre-planning is an important SRL practice. However, the prominence of teacher-created assessment raises questions about the intended execution of SRL methodology. According to Zimmerman (1990), students who self-regulate and pre-plan their own learning experience should equally self-evaluate during and following their learning experience.

Furthermore, there was a strong, positive correlation (0.92 correlation, where 1.0 represents a perfect correlation) between teacher-participants' written responses (questionnaire) and verbal responses (interview) regarding their perceived use of SRL-like strategies in their instruction. The strong correlation in this regard was a positive finding that helped to substantiate this study's validity. However, there was a weaker, but still positive correlation between these responses and the field observations (Data 3). The stronger correlation in this regard was between field data and interview data (0.749 correlation), which suggests that Argyris and Schon's (1974) theory of espoused versus enacted behavior was somewhat relevant in this study.

More specifically, participants expressed that they practiced the four domains of SRL (Zimmerman, 1990) – student planning, self-monitoring self-evaluating, and self-reflection upon work – but this was not necessarily reflected in their classroom

instruction. It may be that participants were somewhat unsure of how their practices aligned with accepted methods of SRL instruction.

Nonetheless, the positive correlation between the field data and participants' responses provides encouraging evidence of SRL's practice in this setting. In both the verbal and written responses, teacher-participants acknowledged the importance of integrating student choice and motivation measures into their curricula.

Implications for Further Research

In general, the field of education would benefit from future qualitative studies that assess how SRL strategies or methods are incorporated into various content areas. One area of concern that arose in the present study was the discrepancy between student-created and teacher-created evaluation: Participants reported six instances of teacher-created evaluation, but did not report any instances of student-created evaluation measures. However, the field research found two instances of student-created evaluation. This is concerning insofar as students may not be metacognitively involved in their learning if they lack methods for evaluating said learning (Zimmerman, 1990).

Additionally, participants reported more instances of support (i.e., students requesting assistance or information from teachers, peers, or others) during their written and verbal responses than actually appeared during field observations. However, even though students were not observed utilizing support, it was obvious from the fieldwork that participants expected students to collaborate and arrive at conclusions together.

Evidently, there is a need for more research on SRL and its use in middle school content areas. While the present study focused on Social Studies, other studies could focus on content areas such as Science and English Language Arts to determine not only

how widespread such practices are in a given school, but how departments overlap and diverge in their application of SRL. It may also be valuable to study several middle schools in a given area in order to assess variations in curricula and instruction.

Researchers might also compare middle school grades with those immediately preceding and following (i.e., grades 5 or 9); in this way, one could determine whether SRL was used more often or more successfully in variant grade levels (Creswell et al., 2007).

Any replications of the current study should consider that participants expressed some confusion over one questionnaire item involving the area of support. Therefore, that item requires clarification or rewording to be useful in further work. There may be value in broadly revised or adapting Lombaerts et al.'s (2009) questionnaire instrument based on the target group (e.g., middle school instructors) (Spradley, 1979).

Relationship of Findings to Theory

The conceptual frameworks for this study were phenomenological theory (Creswell et al., 2007), Argyris and Schon's (1974) theory of *espoused vs enacted* behaviors and Zimmerman and Schunk's (1989) theory of self-regulated learning. The phenomenon investigated was the use of SRL methods in a Social Studies curriculum practiced in one rural, southeastern, Kentucky middle school.

As Chapter Four evidenced, the data provided some support for Argyris and Schon's (1974) theory of *espoused vs enacted*: It appeared that teacher-participants believed they practiced SRL strategies more often than was actually demonstrated during field observations. Meanwhile, a number of the participants' expressed and observed practices aligned with Zimmerman's (1990) theory of self-regulated learning.

Limitations

While this study uncovered, some positive results regarding the theories and methods of SRL, there are some notable limitations that must be highlighted. First, this study focused on one particular middle school that employed a small number of Social Studies instructors; this produced a small sample. To avoid a small sample size in the future, researchers could pursue a vertical approach by including both High School and Intermediate Social Studies teachers from around the district. Alternatively, scholars could include neighboring districts and assess the convergences and divergences in their curricula.

Another limitation of this study was the amount of time I spent in each teacher's classroom for field observations. The participants stressed that their curriculum was arranged in mini-units, which required two to three days' worth of instruction in order to accomplish one lesson or deliver that set of standards. In reflection, I see it would have strengthened the study to have conducted several field observations that captured the entirety of a mini-unit. Thus, adding observation time(s) to this study could illustrate the small-scale value of each mini-unit and thereby offer a clearer picture of the curriculum. That said, the scheduling of my observations did allow me to experience the beginning, middle and end of the mini-unit, and I also reviewed the lesson materials for each day's instruction, all of which was factored into my field notes.

Lastly, the questions that I adapted from Lombaerts et al.'s (2009) instrument could benefit from further refinement. Some teacher-participants struggled with the intended meaning of a few of the questionnaire items, such as the question regarding

support: Teachers were not certain if this meant peer support, teacher support or even outside-the-classroom support.

In terms of my own difficulties, I dealt with issues related to scheduling field observations and interview opportunities. Some teachers returned questionnaires in more timely fashion than others, which impacted the scheduling of the subsequent interviews. Furthermore, as a first-time user of the Provalis QDA Miner software, I experienced a learning curve with operating this software. This is an amazing tool for creating tables and diagrams from my data, but I would have benefitted from a tutorial that better prepared me to exploit its abilities.

While I believe that SRL has a documented ability to increase students' learning (Perry et al., 2002), there is still a need for more research that demonstrates SRL's varied capabilities.

Summary and Conclusion

In the field of education, prominent theories fall in and out of recognition; however, self-regulated learning has enjoyed recognition since the 80s. Countries like Finland and the Netherlands have documented the value of SRL and embedded these strategies into their curricula (Finnish National Board of Education, 2004, 2016). While the practices of SRL are not mandated in the United States, there are schools and curriculums that support their use. One such setting was found to be a middle school in rural, south-central Kentucky, whose Social Studies teachers were attempting to implement SRL methods.

The data ultimately satisfied my research questions. For example, regarding question one, the findings demonstrated that Social Studies teachers in the participating

school did incorporate SRL-like strategies in their instruction. However, in regard to question two, the findings fell short of demonstrating that the teachers were regular and consistent in applying the four components of SRL as identified by Zimmerman (1990). That said, the findings did support Argyris and Schon's (1974) theory of espoused versus enacted actions insofar as participants claimed (espoused) that they included SRL strategies more frequently than the field data uncovered (enacted).

While many curricula differ in the opportunities they give students to acquire content knowledge, the introduction of self-regulation can help many students self-monitor and evaluate their own progress toward a pre-appointed goal (Zimmerman, 1990). This study successfully demonstrated that this method is being practiced and may be valuable in even small, rural schools.

The responsibility for teaching the youth of our world is an ominous one—one that teachers embrace daily with passion and perseverance. We need to be equally passionate regarding the most effective tools or instructional practices for students in our classrooms. The efficacy of SRL has been demonstrated in various studies that have examined a swath of learning experiences and student characteristics (Perry et al., 2002). According to Perry et al. (2002), Students must be trained to assume responsibility for their own learning, which entails that they become engaged and active learners (Zimmerman, 1989). This may be the most we can hope for as teachers!

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