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PROMOTING LIFELONG LEARNING THROUGH THE USE OF SELF-
REGULATED LEARNING: A GUIDE FOR INTERMEDIATE EDUCATORS

by

Gail Herin

A Research Project Presented in Partial Fulfillment
of the Requirements for the Degree
Master of Education

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ABSTRACT

Promoting Lifelong Learning through the Use of Self-Regulated Learning: A Guide for Intermediate Educators

The author presented the concept of self-regulated learning (SRL) as a method to encourage students to become lifelong learners. A review of literature showed the need for lifelong learners. The literature revealed the theories behind SRL in education. In addition, the literature demonstrated that the components of SRL can be taught to students as young as the primary grades. This author developed a presentation that provided information for elementary educators; specifically intermediate educators, about SRL and how to establish a high SRL environment in their classrooms. Also addressed was the creation of collaborative communities as a support system for the teachers who are promoting SRL.

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Chapter 1

INTRODUCTION

Educational reform has been at the forefront of the United States political and social scene since the publication of the report, *The Nation at Risk* (National Commission on Excellence in Education, 1983). As U.S. leaders look for ways to improve student performance, many solutions have been tried. It is the responsibility of educators to produce students who can compete in the global economy; also, they need to be capable of being lifelong learners. The question becomes how can this goal be accomplished.

Statement of the Problem

Much has been said about the ongoing, so-called, crisis in education. One of the goals of the U.S. educational system is to produce life long learners. However, this is not being accomplished. Approximately one-third of students drop out of high school (Thornburgh, 2006). Of the students who attend college, at least one-third will require some level of remediation (Colorado Commission of Higher Education, 2003). One of the goals of remedial courses is to prepare the learner to learn independently. According to Curkas (2006), it has been found that many college students are not independent learners. An important aspect of being an independent learner is the ability to self-regulate.

The ability to self-regulate does not emerge suddenly when a student graduates from high school, goes on to attend college, or finds a job. Students must be taught self-

regulation; however, they can be provided with the learning strategies that promote self-regulation. Learners, at all levels, are able to demonstrate some level of self-regulation. These strategies can be developed over the course of years, beginning in elementary school.

Purpose of the Project

The purpose of this project will be to present educators with information about the benefits of self-regulation for young learners. The target audience will be intermediate educators, although parts of the presentation will be applicable to younger students as well. This author will present information about learning strategies that can be used to promote self-regulated behaviors. In addition, this author will provide educators with strategies for the establishment of an environment that offers a wide variety of opportunities for self-regulated learning behaviors to be practiced. This information will be presented during an inservice.

List of Definitions

The following terms will be utilized throughout this project.

Self-regulated: describes learners who demonstrate metacognition, intrinsic motivation, and are strategic (Winne & Perry, 2000; Zimmerman, 1990; both cited in Perry, Phillips, & Dowler, 2004).

Metacognition: a learner's ability to be aware of his or her cognitive strengths and weaknesses, and to be able to select a learning strategy that is appropriate for the task at hand (Northwest Regional Educational Laboratory [NWREL], 2004).

Intrinsic motivation: is reflected by learners in the value that they place on their own progress, their willingness to accept challenging tasks, and their view that errors

are opportunities for further learning (Pintrich & Schunk, 2002, as cited in Perry, Nordby, & VandeKamp, 2003).

Strategic learners: utilize a variety of strategies that are appropriately applied to tasks (Perry et al., 2003).

Self-efficacy: the student's belief in his or her own ability to perform at the level needed to achieve a specific outcome (Bandura, 1986, as cited in Schunk, 2001).

Chapter Summary

It is this author's belief that self-regulated learning (SRL) should be incorporated into every classroom in order to prepare students for a lifetime of learning. Educators, beginning in the elementary grades, need to provide an environment rich in opportunities for self-regulation.

In Chapter 2, the Review of Literature, this author will provide the background knowledge about the theories that support self-regulated learning, along with ongoing research in the field. This research encompasses learners from primary grades through college. In addition, the literature reveals a need for student teachers to be taught the philosophies that surround SRL, as well as the techniques necessary to create a self-regulated learning environment. In Chapter 3, Method, the procedures for this project will be detailed.

Chapter 2

REVIEW OF LITERATURE

The purpose of this project will be to present educators with information about self-regulated learning (SRL) including: (a) what it is, (b) why it is beneficial for students to achieve a level of self-regulation, and (c) how to establish a high SRL environment. As educators move students' ability from learning to read to reading to learn, the desired outcome is individuals who will engage in lifelong learning. Lifelong learners are able: (a) to motivate themselves, (b) to create a conducive environment, and (c) self-monitor their learning. Perry, Phillips, and Dowler (2004) associated these traits with self-regulated learners. According to Rohrkemper and Corno (1988) and Zimmerman and Bandura (1994, both cited in Perry et al.), self-regulated learning leads to success beyond the schoolhouse walls. Educators are being called upon to produce self-regulated learners. The question becomes how do they support students on this quest.

What Is Needed for the 21st Century? Self-Regulated Learners

Today, members of society are exposed to more information than any previous generation (North Central Regional Educational Laboratory [NCREL], n.d.). The World Wide Web provides an enormous variety of information, and a multitude of opportunities to advance an individual's knowledge base. Technological advances occur at a rapid pace, and the need for workers who can learn and adapt to new technology is greater than ever before (NCREL, n.d.). In order to meet these ongoing demands, workers need to

demonstrate the ability to self-regulate their learning. The need for educators to produce this type of learner is viewed as essential by business leaders if the United States is to compete in the global economy. Unfortunately, research data show that the development of self-regulated learners is not being accomplished (Curkas, 2006).

According to Thornburgh (2006), nearly one in three students will not graduate from high school. Among the Hispanic and African American communities, the rate is closer to 50%. These dropout rates would suggest that students' academic needs are not being met nor are they prepared to be lifelong learners nor contributors to the global economy.

Students who do graduate, and attend college, may not have the necessary self-regulatory skills to succeed. The staff of the Colorado Commission of Higher Education (2003) reported that approximately one-third of college students require some type of remediation. The numbers are even higher for those who attend community colleges. Cukras (2006) suggested that college students, especially freshman, lack self-regulatory skills. For college students to be successful, they need instruction in those skills. In college, this issue is addressed by the provision of skills courses (e.g., remediation) and academic assistance programs. The need for SRL is clearly seen at the college level, but strategies should be developed before a student attends college.

Overview of Self-Regulated Learning

According to McCaslin and Hickey (2001), Perry et al. (2004), and Zimmerman (2002), self-regulation leads to achievement of goals, and that it is viewed as a positive outcome of education. Several academicians (Corno, 2001; Mace, Belfiore, & Hutchinson, 2001; McCaslin & Hickey, 2001; McCombs, 2001; Paris, Byrnes, & Paris,

2001; Schunk, 2001; Winne, 2001) have provided theories in regard to self-regulation. These theories will be briefly reviewed later in this document. Many definitions of SRL have been developed based upon the theories and by researchers in the field. This author will provide several definitions that address the topic in a broader fashion.

Pintrich (2003) defined SRL as “the processes by which individual learners attempt to monitor and control their own learning” (p. 1698). This definition incorporates the basic assumptions that many of the SRL models share. Those assumptions include: (a) the learner is an active participant in the learning process; (b) the learner has some ability to monitor, control, and regulate his or her own learning; (c) there are goals in place against which progress is judged; and (d) self-regulatory activities are linked to outcomes.

Zimmerman (2001) provided another definition: “Students are self-regulated to the degree that they are metacognitively, motivationally, and behaviorally active participants in their own learning process (Zimmerman, 1986). These students self-generate thoughts, feelings, and actions to attain their learning goals” (p. 5).

Zimmerman’s definition incorporated the assumptions that Pintrich provided. The key concept noted by Zimmerman is that the learner is actively engaged in the learning process.

For Perry et al. (2004), there are three major components to SRL: (a) metacognition, (b) intrinsic motivation, and (c) strategic learning. Self-regulated learners utilize all of these elements to achieve an acceptable outcome. The next sections will address each of these components. Also Perry et al. suggested how to establish environments that encourage students to utilize these traits.

Metacognition

In the most general sense, metacognition is thinking about thinking. Perry et al. (2004) defined metacognition as a learner's awareness of his or her academic strengths and weaknesses, as well as the strategies that can be used to meet the demands of tasks. As a learner becomes more self-aware of his or her abilities, he or she is able to adapt strategies to assist in the learning process. Paris and Winograd (2003) supported the development of children's skills in the areas of self-appraisal and self-management and noted that these growing skills direct the learning efforts of the children. Their emphasis goes beyond thinking about thinking into the use of metacognitive knowledge to guide: (a) plans, (b) strategy selection, (c) self-monitoring, and (d) self-evaluation. The goal is to successfully complete challenging tasks.

Metacognition has been broken down into components. Simons (1996; as cited in Desoete, Roeyers, & De Clercq, 2003) proposed that the three components of metacognition are: (a) metacognitive knowledge, (b) metacognitive skills, and (c) metacognitive beliefs. Metacognitive knowledge (MK) is knowledge of: (a) person, (b) task, and (c) strategies (Flavell, 1979; as cited in Annevirta & Vauras, 2006). Metacognitive skill (MS) is the learner's control of his or her own cognitive processes, and it incorporates strategy usage and monitoring. An individual's metacognitive beliefs include motivation and behavioral guidance (Dweck, 1996; Heyman & Amp, 1996; both cited in Desoete et al.).

Desoete et al. (2003) studied the effectiveness of metacognitive training on the mathematical skills of students in Grades 3-5. They implemented a number of training scenarios to establish whether the provision of metacognitive training could enhance

procedural knowledge. Four groups of children received instruction in the use of a different strategy, while the control group did not receive explicit training. The results indicated that participants, who received metacognitive training, scored significantly ($p < .01$) higher on problem solving tasks. Also, the children scored higher than other groups on prediction tasks. In addition, these children showed a sustained effect when tested 6 weeks later. The authors concluded that explicit instruction is necessary for the development of metacognitive skills, and those skills can be maintained after the passage of time.

Annevirta and Vaurus (2006) investigated the growth of metacognitive skills (MS) in young children (i.e., 6 – 8 year olds). The measurement of MS was based upon the child's use of private speech and help seeking behaviors. Initially, the participants were grouped according to their scores on a MK test. The participants were asked to perform a MS task in a play like setting. The results indicated that children, as early as preschool, with high MK scores were better able to regulate their performance on the MS task. These children used more private speech to guide their performance. Also, the researchers asked strategic questions to gain understanding of the task. The high MK children seemed to understand the need to evaluate their task and performance. Children in the low MK showed little, if any, development of MS during the 2 years of the study and required more guidance to perform the MS task. The use of their private speech diminished, but the performances did not match those of the high MK group, and evaluation of product was missing from this group. Annevirta and Vaurus concluded that an understanding of a learner's active role in learning is a precursor to self-regulation, but

MS does not develop automatically. Children need guidance before they are able to regulate their performance.

Intrinsic Motivation

According to Zimmerman (2002), self-motivation for learners depends upon their belief systems, including their self-efficacy and intrinsic interest in the topic. Teachers understand that motivation is necessary to set goals and to persevere toward those goals. In an effort to encourage students, teachers have utilized a variety of extrinsic motivational tools, such as rewards and social encouragement; however, the use of these tools may have the opposite effect. While some students will establish goals, others may lose the ability to set goals and motivate themselves (Cluck & Hess, 2003). Students may feel a loss of choice and control that leads to a loss of self-motivation.

Intrinsic motivation is found in students who understand their own capacity to learn and perform (i.e., self-efficacy);(Pintrich, 2003). Learning requires effort, and students have to make a choice to learn (Paris & Winograd, 2003). In SRL, students must: (a) make decisions in regard to goals, (b) determine the value of the task, (c) understand their ability to accomplish the task, and (d) analyze the potential benefits and costs.

Zimmerman (2002) noted that experts, in any given field, engage in study and practice on a daily basis, and find this experience to be motivating. This practice leads to experimentation and improvement that improves performance, which increases expertise. However, novices do not receive the same level of self-motivational benefits and may require extrinsic motivation (McPherson & Zimmerman, in press; as cited in Zimmerman, 2002). Beginners can be guided through the use of self-monitoring to seek

subtle performance changes. This use of self-monitoring can provide motivation that is not provided by the task itself.

Perry and VandeKamp (2000) measured motivational outcomes in primary (i.e., K-3) students. The students were interviewed about their self-perceptions about reading and writing skills. Most reported high efficacy with their skills. The researchers sought to learn whether the high efficacy would change when the learning situation was challenging. Measurement was based upon students' self-reported levels of unhappiness experienced when asked to revise a piece of writing. Over the 3 years of the study, the reported levels of unhappiness decreased. Throughout the course of the study, students were provided with SRL opportunities and regular feedback. Students came to believe that ability was incremental, and mistakes were not reflective of ability. These findings suggested that learners can be taught strategies that improve self-efficacy.

Strategic Learning

Simply put, strategic learning is the selection and utilization of the appropriate strategy for any given task. Perry et al. (2004) defined strategic learners as those who: (a) approach tasks, (b) choose a strategy from their repertoire that is best suited for the task, and (c) then apply the strategy appropriately. Students are provided with strategies from which they can choose the best one for the job at hand. In addition, Paris and Winograd (2003) promoted the idea that learners should be strategic, not just have strategies. Students need to be able to: (a) select a strategy, (b) modify it if necessary, (c) discuss it, and (d) teach others how to use it.

Weinstein, Husman, and Dierking (2000) proposed that good strategy users possess three types of knowledge in regard to strategies: (a) declarative, (b) procedural,

and (c) conditional. Declarative knowledge is knowing a variety of strategies (Paris, Lipsom, & Wixson, 1983, as cited in Weinstein et al.). Declarative knowledge may be obtained through instruction. Procedural knowledge is knowing how to use the strategies (Anderson, 1990; Garner, 1990; both cited in Weinstein et al.). Procedural knowledge requires hands on practice. Conditional knowledge is knowing when to apply a particular strategy (Paris et al.).

Weinstein et al. (2000) suggested that strategy use must be goal driven. Goals are needed to provide a reference for ongoing self-evaluation. Also, goals may influence the selection and implementation of strategies. In addition, the use of goals is linked to motivation and can perpetuate the use of strategies.

Theories of Self-Regulated Learning

“Theory and research on self-regulated academic learning emerged in the mid-1980s to address the question of how students become masters of their own learning processes” (Zimmerman, 2001, p. 1). From this research, several major theories emerged. In each of these educational schools of thought, there is a slightly different belief about a learner’s initiative, perseverance, and ability to adapt to challenges facing him or her. The following discussion will provide a brief overview of seven different theoretical perspectives. Five common issues are shared by all of the theories: (a) motivation, (b) process by which students become self-aware, (c) key processes used to attain goals, (d) effect of the environment on SRL, and (e) the acquisition of capacity to self-regulate. For each theory, these five issues will be presented, as well as the controversies associated with each theory.

Operant Theory

Operant theorists start with the belief that self-regulation behaviors, like other behaviors, are controlled by the environment (Mace, Belfiore, & Hutchinson, 2001). Learners are asked to make behavioral choices based upon the reinforcing stimuli (e.g., reward), and the time between the action and when the reinforcement will be received. The time period varies from immediate gratification to delayed gratification. Delayed gratification may produce a larger, more sought after reward. Mace et al. have identified a set of subprocesses that include: (a) self-monitoring, (b) self-instruction, (c) self-evaluation, (d) self-correction, and (e) self-reinforcement.

Self-monitoring is viewed as the key to self-awareness (Zimmerman, 2001). Self-recording of actions is one way to self-monitor. Self-recording can be done through the use of: (a) journal writing, (b) graphic organizers, and (c) a variety of other techniques. Mace et al. (2001) suggested that the use of self-monitoring and self-recording provide the stimuli for behavioral change.

Self-instruction statements are stimuli that guide a response in environments where there are no external reinforcers (Zimmerman, 2001). Mace et al. (2001) described two scenarios in which self-instruction statements are utilized. The first is an environment where contact with the stimuli promotes the desired behavior. The second involves formation of rules to govern behavior. This would provide both the response and the consequence to the stimuli.

Self-evaluation allows one to compare one's behavior against a standard (Zimmerman, 2001). This evaluation can lead to modifications of the self-monitoring

system that is being utilized (Mace et al., 2001). These modifications are seen as self-corrections to behavior.

The last component, self-reinforcement, involves the use of external reinforcement to reward the learner who has reached the performance standard (Mace et al., 2001). These rewards may hold social value (Zimmerman, 2001). Reinforcements are based upon one's judgment of behavior during the self-evaluation process.

For operant theorists, the functional relationship between behavior and the environment is vital (Zimmerman, 2001). Thus, the provision of a suitable environment is essential to the learner. According to Zimmerman, "Internal processes are defined in terms of their manifestation in overt behavior, and the functional relationship between such behavior and environment are the focus of the operant approach" (p. 11-12). It has been suggested that modeling and reinforcement are useful strategies to promote self-regulation.

The key controversy is whether self-reinforcement is truly a reinforcing process (Zimmerman & Schunk, 2001). If a student self-reinforces, with the use of any external stimuli, then an external reinforcer determines the behavior. Self-regulation requires effort, and the learner must judge the value of the effort. The value of the process of itself is seen by some as the reinforcer. This mastery of task is valuable to the participant.

Phenomenological Theory

Self-perception is the emphasis for phenomenological theorists. Mish (1988, as cited in McCombs, 2001) defined phenomenology as "the study of the development of human consciousness and self-awareness" (p. 68). McCombs contextualized the

phenomenological perspective to SRL as one that gives primacy to self-phenomena in order to guide learning behaviors, and SRL activities should be person referenced rather than performance referenced. The importance of self can be seen in classrooms where learner centered models of instruction are utilized.

McCombs (2001) proposed that motivation for SRL is created by an individual's self-systems. Self-systems can be divided into two categories: (a) global, and (b) domain specific. Global self-concept refers to individuals' perceptions of their own abilities to control their motivation, cognition, and behavior in general learning situations. Domain specific self-concept is the learners' beliefs about their abilities in a specific situation. A learner's motivation is tied to the affective reactions to self-perceptions (i.e., favorable self-concept enhances motivation), while negative self-concept can decrease motivation.

Self-awareness is viewed as omnipresent by phenomenologists (Zimmerman, 2001). Educators can help students create realistic views of their self-perceptions by training them to focus on "knowing themselves" (p. 14).

There are a number of self-system processes seen as key from the phenomenological perspective: (a) self-awareness, (b) self-evaluation, (c) self-monitoring, (d) self-reflection, and (e) self-regulation (McCombs, 2001). The combined usage of these processes allows the learner to: (a) create goals, (b) set expectations, (c) attend to the task, and (d) regulate behaviors and motivations. McCombs emphasized self-evaluation, because it leads to the use of other self-regulatory processes, and SRL is dependent on the development of these processes.

The learners' perceptions of the environment are more important than the objective nature of the environment for phenomenologists (Zimmerman, 2001). The

value of activities is based upon the students' perception of the value of any given activity. Teachers can affect the students' perceptions through the use of encouragement to increase self-confidence.

The major controversy with this theory is how self-identities are defined and measured (Zimmerman & Schunk, 2001). Theorists (Rogers, 1951;1969; Maslow, 1954; Harter, 1999; Marsh, 1990; all cited in Zimmerman & Schunk) are conflicted when they consider global self-identities vs. domain specific self-identities. Each definition leads to a different type of measurement, and those measurements result in differing outcomes. Also, future outcomes are difficult to predict.

Information Processing Theory

In information processing models, two basic types of mental functioning are featured: memory storage and information processing (Zimmerman, 2001). In these models, human mental functions are analogous to the way in which computers process information. According to Winne (2001), learning is the process through which people acquire information. That information is stored in long term memory, where it is retrievable. When that information is retrieved, it becomes working memory, the site where information processing occurs. Winne suggested that there are five components of information processing: (a) search, (b) monitor, (c) assemble, (d) rehearse, and (e) translate. The use of these components allows the learner to change long term memory and, thus, self-regulate learning.

Miller, Galanter, and Pribram (1960, as cited in Zimmerman, 2001) depicted a recursive feedback loop that is based on a sequence of Test, Operate, Test, Exit (TOTE) as the basic unit of self-regulation. Information is inputted and tested against a

predefined standard. If the standard is not met, the information is operated on (i.e., transformed) and retested. This process continues until the standard is met. This development of a negative feedback loop leads to self-regulation. When the standard is met, self-regulation stops.

In Winne's (2001) model of information processing, motivation consists of four categories: (a) outcome expectations, (b) efficacy expectations, (c) attributions, and (d) incentives. Outcome expectations are based upon the prediction that the use of specific strategies will result in products that meet the standards. Efficacy expectations are the probability that the learner will be able to produce an acceptable product. Attributions are the reasons that a learner can succeed at the task. Incentives are the value that the learner anticipates a product will acquire upon completion. All of these categories work together within the recursive loop to generate motivation.

Self-monitoring is critical for self-regulation (Zimmerman, 2001). Self-monitoring uses mental capacity, and it can be limiting to performance. "IP theorists assume that when performances becomes highly automatized, learners can self-regulate without direct awareness at a motoric level, and this frees them to self-regulate at a higher level in a hierarchy of goals and feedback loops" (p. 17).

Winne and Hadwin (1998, as cited in Winne, 2001) suggested that SRL can be broken down into three or four phases. In Phase 1, the learner defines the task, based upon task conditions (i.e., environment) and cognitive conditions (i.e., information retrieved from long term memory), and the learner develops at least two definitions for the task. During Phase 2, the learner sets a goal, and creates a plan to reach that goal. The learner, in Phase 3, implements the tactics that were selected in Phase 2. The

outcome of Phase 3 is the product. Throughout all the phases, monitoring occurs, and phases are revisited as needed. The fourth Phase, adapting metacognition, is optional. This allows tactics to be altered in response to changing conditions.

The environment has little impact on SRL other than it is more information to be processed (Zimmerman, 2001). Winne (2001) viewed the environment as a task condition.

According to Siegler and Richards (1983, as cited in Zimmerman, 2001), learners develop ever increasing levels of information processing, based upon age and experience. However, some aspects of self-regulation might be dependent upon developmental differences.

The controversial aspects of information processing theory involves learner response to negative feedback and positive feedback loops (Zimmerman & Schunk, 2001). Students respond to negative feedback in a variety of ways. Some develop better strategies to meet standards, some lower their standards, and others grow despondent. Also, some learners will set more challenging goals and, thus, develop a positive feedback loop.

Social Cognitive Theory

According to Bandura (1986, as cited in Schunk, 2001), human functioning incorporates interactions between: (a) behaviors, (b) environment, and (c) cognitions. Bandura believed that these interactions exemplify self-efficacy. Therefore, self-efficacy beliefs influence actions and, in turn, actions influence beliefs (Schunk, 1995, as cited in Schunk). For interactions between self-efficacy and the environment, Licht and Kistner (1986, as cited in Schunk) found that some individuals in a student's environment may

react based upon perceived attributes rather than actual performance. The feedback received affects self-efficacy.

In social cognitive theory, learning is a change in behavior brought about by experiences (Schunk, 2001). Learning can be enactive or vicarious in nature. Modeling is one type of learning experience that can serve a variety of purposes including the provision of information and motivation. Modeling allows the learner to observe appropriate behaviors and consequences and to set outcome expectations. Motivation is derived through the use of self-efficacy and outcome expectations in goal setting.

Self-regulation consists of three subprocesses that interact (Bandura, 1986; Kanfer & Gaelick, 1986; Karoly, 1982; all cited in Schunk, 2001). Self-observation serves to inform and motivate. It is particularly relevant in addressing specific situations as a behavior occurs. Self-recording is one tool that aids self-observation, and it helps students to develop an objective record of behavior. Students are able to change their behaviors and efficacy based upon self-observations. Self-judgment is the comparison of one's performance to one's goals (Schunk). Self-reaction is the last aspect. Self-reactions can be personal or environmental (Zimmerman, 2001). Tangible motivators are consequences that are contingent upon task completion. Evaluative motivators are feelings of satisfaction or dissatisfaction. Self-reaction may lead to changes in the other subprocesses.

Zimmerman (1998, as cited in Schunk, 2001) proposed a three phase model of self-regulation. During the first phase, forethought, goal setting occurs. Social modeling during this phase helps to establish self-evaluative standards. Performance control is the second phase. The use of strategies are observed during this phase. Social comparison,

attributional feedback, and self-verbalization of strategies promote SRL throughout this phase. Self-reflection is the final phase in this model. Researchers (Schunk & Schwartz, 1993; Schunk, 1996; both cited in Schunk) have shown that the use of self-monitoring, reward contingencies, and self-evaluation lead to higher achievement. These phases are cyclical in nature. Zimmerman and Kitsantas (1997, as cited in Zimmerman, 2001) found that the cumulative effects of self-regulation lead to increased self-efficacy and skill.

Environmental influences, in social cognitive theory, are focused on social processes and self-regulation processes (Zimmerman, 2001). Modeling and mastery experiences have been shown to be influential on self-efficacy perceptions. Explicit training can promote self-regulation processes.

Schunk (2001) suggested that acquisition of self-regulation is developmental in nature. It does not occur automatically as a child matures. Schunk and Zimmerman (1997), Zimmerman (2000), Zimmerman and Bonner (2001; all cited in Schunk) proposed that development of self-regulation occurs in four levels. Learners begin to acquire skills through the observation of others. Emulation of the general pattern produced by the model happens next. The independent use of the skill by the learner is viewed as the self-controlled level. Self-regulation occurs when the learner is able to adapt skills to a variety of conditions. Learners continue to be affected by the social situation throughout all phases.

There are controversial issues associated with self-efficacy and performance, because self-efficacy judgments may not correlate to performance (Bandura, 1997; as cited in Zimmerman & Schunk, 2001). Expectations are sensitive to the learner's skills and experiences, not just self-efficacy. Also, self-efficacy judgments can be skewed by

experiences and, therefore, be less than accurate. In addition, self-efficacy can be domain specific and, thus, not a predictor of overall performance.

Volitional Theory

In the early volitional theories, the focus was on will power (Zimmerman, 2001). The will was thought to be manifested into the intention to act. Volition was seen as an aspect of motivational theory. Ach (1910, as cited in Corno, 2001) differentiated motivation from volition. Motivation generates impulses to act, while volition controls the impulses so the action can occur. Kuhl (1985, as cited in Corno) suggested that an individual's self-regulatory processes motivate impact decisions before an action, and volitional processes come after the decision to act has been made. According to Corno, self-control processes fall into two categories: covert and overt. Covert self-control refers to control of: (a) cognition, (b) emotion, and (c) motivation. Overt self-control refers to environmental control of the task situation as well as control of others in the situation. Motivation helps to form decisions and promotes those decisions, while volition enacts and protects those decisions.

Kuhl (1985, as cited in Zimmerman, 2001) assumed that some level of self-awareness is needed to access volitional processes, because not all cognitions are controlled by volition. Action oriented thoughts are used to screen out distractions, but state oriented thoughts are focused on emotions. Three types of state orientations can interfere with cognition: (a) rumination, (b) extrinsic focus, and (c) vacillation. It may be possible to overcome those distractions by the use of self-monitoring.

The key processes of self-regulation are focused on strategies that affect intentions rather than learning. Kuhl (1985, as cited in Corno, 2001) presented six

strategies for the control of volition. Attention control, encoding control, and information processing control fall into the area of cognitive control. Emotional control is a separate category. Motivation control incorporates: (a) incentive escalation, (b) attribution, and (c) instruction. In the last category, environmental control, Corno added the substrategies of task situation and control of others within the situation. All of these strategies are teachable, although developmental differences can affect the rate of acquisition of the strategies.

In volitional theory, environmental factors are perceived as secondary to cognitive factors (Zimmerman, 2001). Corno (2001) implied that changes in the environment can contribute to increases in student volition. Kuhl (1984, as cited in Zimmerman) hypothesized that failure could trigger self-awareness and instigate control strategies. However, the environment does not control a learner's volition.

Zimmerman and Schunk (2001) questioned several aspects of the volitional theory. According to Zimmerman and Schunk, "there is reason to question whether volition is in fact a separate construct from traditional measures of motivation such as expectations or goals" (p. 297). In addition, "To our knowledge, volition measures such as action or state control indices have not proven more predictive of students' persistence during the course of learning than motivational measures, such as goal setting and self-efficacy beliefs" (p. 297). The benefits of distinguishing between motivation and volition are unclear to Zimmerman and Schunk.

Vygotskian Theory

The Vygotskian Theory (Vygotsky, 1962, 1978; both cited in McCaslin & Hickey, 2001) is a result of the research on language produced by Vygotsky, which he

began in the 1920s. Vygotsky was interested in the functions of language, specifically communication with others and self-directed speech (McCaslin & Hickey). Language is viewed as developmental: it follows a continuum from hearing speech, then creating meaning of speech, and finally guiding behaviors and communicating with others. The social environment is viewed as the source of external communications (e.g., external speech) and self-direction (e.g., inner speech). Inner speech is when words are turned into thoughts; external speech is the opposite (Vygotsky, 1962, as cited in McCaslin & Hickey). Inner speech can be divided into task involved and self-involved inner speech (Zimmerman, 2001). Motivation is derived from self-involved inner speech that is used to assist with self-control. Strategic statements are used to control tasks and are considered task involved inner speech. Both can be viewed as motivational.

Self-awareness develops as children become more aware of word meanings and utilize inner speech (Zimmerman, 2001). As word meanings become internalized, children become more able to monitor their own behaviors and thinking (Diaz, Neal, & Amaya-Williams, 1990, as cited in Zimmerman). Vygotsky (1978, as cited in Zimmerman) suggested that, once automaticity is reached, self-regulation is no longer necessary. Gallimore and Tharp (1990, as cited in Zimmerman) disagreed and maintained that self-awareness should be focused on those skills being acquired in the zone of proximal development (ZPD). This would lead one to believe that teaching to a student's ZPD would encourage the use of self-regulation.

The development of egocentric speech is a key to self-regulation, according to Vygotsky (1962, as cited in Zimmerman, 2001). Egocentric speech is the stage between external speech and inner speech. As speech becomes internalized, more self-regulation

becomes possible. The social environment provides the context from which children learn to internalize their speech. Adults model self-regulation through their use of speech, and children internalize those patterns. Thus, children learn to use inner speech to self-regulate.

The implementation of Vygotsky's (1978, as cited in Zimmerman, 2001) ideas have led to conflict; "some researchers emphasizing self-verbalization as a cognitive behavioral regulatory technique and others emphasizing dialogue as coconstructive regulatory technique" (Zimmerman & Schunk, 2001, pp. 298-299). Meichenbaum (1977, as cited in Zimmerman, & Schunk) suggested that modeling self-verbalization is a useful strategy for behavior regulation. In the strategy, teachers model the task and the thinking, then provide guidance as the learner practices self-verbalizations. Eventually, the vocalized self-verbalizations would be reduced to a whisper voice and, finally, eliminated. McCaslin and Hickey (2001) promoted the use of co-regulated learning, in which learning responsibilities and self-regulation are shared by the class members in order to encourage the learner to take personal responsibility.

Cognitive Constructivist Theory

Early constructivism was based upon the works of Bartlett (1932) and Piaget (1926, 1952; both cited in Zimmerman, 2001). Both conceptualized schemas as the basis for learning (Zimmerman). Schemas evolve from experiences and are used to construct meaning. This early version of constructivism was focused on solo constructions (Paris, Byrnes, & Paris, 2001). A second wave of constructivism emerged in the 1990s as a reaction to the solo approach. Its emphasis is on the social aspects that are needed to construct meaning. Paris et al. replaced schemas with theories as the basis for the

construction of meaning. Constructivists assume that learners are actively involved in their learning.

In cognitive constructivism, it is assumed that the need to create meaning is inherent (Zimmerman, 2001). A historical principle is that information seeking is intrinsically motivated (Paris et al., 2001). These beliefs are the basis for motivation in this theory. Sigel (1969, as cited in Zimmerman) pointed to cognitive conflict as a source of motivation. Berylne (1960, as cited in Zimmerman) identified curiosity as the reason for motivation. Paris et al. suggested that the factors of agency and control are a source of motivation. Personal agency is when one takes responsibility for actions and ascribes success or failure to one's own efforts. Control refers to personal control, which is exercised over the environment. Both are viewed as necessary for a learner's success.

As children develop, their level of self-awareness increases, and they enter school with unrealistic views of their competence (Benenson & Dweck, 1986, as cited in Zimmerman, 2001). However, as children develop, they become more self-aware and, thus, more accurate in the perceptions of their abilities.

Paris et al. (2001) proposed that learners construct theories to regulate: (a) self-competence, (b) agency and control, (c) schooling and academic tasks, and (d) strategies. Self-competence is a child's beliefs about his or her ability and effort. Agency and control refer to personal responsibility and control of a situation. Schooling and academic tasks are perceptions of school and tasks. Linked to these factors are goals and task structures. Strategies are the tools, both mental and physical, that a student has to accomplish a task. These components are viewed as the key processes for self-

regulation. Strategies are present in most constructivist theories, whereas the other components are more specific to Paris et al. (Zimmerman, 2001).

The differing beliefs between the first and second wave of constructivist theorists is at the heart of the controversy (Zimmerman & Schunk, 2001). First wave theorists, such as Bartlett (1932) and Piaget (1926, 1952; both cited in Zimmerman & Schunk), viewed cognitive conflict as the motivation to construct new meaning. Second wave theorists, such as Paris, et al. (2001), perceived situational contexts as the reason to construct new theories.

Educating Educators

Although research into self-regulation has been ongoing since the 1980s, teachers that this author has spoken with about SRL do not appear to have much knowledge of the subject. These teachers utilize some aspects of SRL, such as teaching strategies, but have not established the environments that promote SRL. This information reinforces the Perry et al. (2004) assertion that, in traditional teacher education programs, self-regulated teaching approaches are not promoted. Duffy (1997, as cited in Perry et al.) reported that, in many programs, the use of *teacher-proof* materials is encouraged. In an effort to incorporate SRL into the classroom, teachers, both inservice and preservice, need to receive both information and support in order to transform their classrooms into SRL environments.

Inservice Teachers

Teachers, who are already in the classroom, need to be provided with opportunities to experience SRL before they can promote it in the classroom. To achieve this, Corno and Randi (1997, as cited in Paris & Winograd, 2003) suggested the use of

collaborative innovation. Use of this model encourages educators to work together to create, evaluate, discuss, and modify instruction in ways that best fit the needs of their students and the working environment. In this model, teachers are provided with an opportunity to be self-reflective. As educators practice metacognition, they are more able to relate to their students' learning experiences. As teachers gain a deeper understanding of their own thinking, they are able to model this type of thinking for their students. Thus, students are able to witness the application of SRL principles.

Perry, Walton, and Calder (1999, as cited in Perry et al., 2004) worked to establish a framework to assist teachers in the design of tasks and environments to promote SRL. In this study a community of teachers met on a monthly basis to share their experiences and to design activities to promote SRL. They agreed to experiment with new techniques and report the results to the group. The teachers recorded their results by free writing. The researchers analyzed the free writing, suggested techniques, and provided student work samples. The findings demonstrated that the teachers valued this approach to development, and reported that they were able to learn from their colleagues. Also, the results showed that the changes made to the teaching practices resulted in the students' development of SRL. The findings from this study suggested that a community of educators, who work together, could encourage the development of SRL in any school.

Preservice Teachers

Teacher education programs are charged with the responsibility to produce new teachers to meet the demands of an increasing student population. It is estimated that student enrollments will increase by approximately 4.3 million students between 1995-

2007 (Paris & Winograd, 2003). In addition to the increased number of students, there are a large numbers of teachers who will retire. This scenario opens the door for new teachers, but many of those teachers will be ill prepared to meet the educational needs of their students. Paris and Winograd maintained that poorly prepared teachers will resort to techniques that do not promote self-regulation. Poorly prepared teachers are a result of teacher preparation programs that are rigid and inadequate. These programs do not promote self-regulation and, thus, preservice teachers are not exposed to SRL in their own learning situation.

In an effort to promote SRL for preservice educators, different mentoring programs have been tested. Perry, Phillips, and Hutchinson (2006) paired preservice teachers with mentors who were part of a high SRL environment. The results from the first year of the study showed that the student teachers were able to design and implement lessons that promoted SRL. However, not all student teachers were able to accomplish this. Nor did all of the mentors model this practice consistently. During the second year of the study, some changes were made to increase the use of SRL tasks, and additional support was provided for all the participants. Mentor teachers achieved a greater understanding of SRL and were able to increase their use of SRL tasks. Student teachers were able to increase the complexity of tasks and provide more opportunities for SRL. These results indicated that support from the teacher education program, along with mentoring, helped to produce new teachers who were able to establish a high SRL environment.

Another mentoring program was a partnership between the University of New Mexico, the Albuquerque Public Schools, and the Albuquerque Federation of Teachers

(Paris & Winograd, 2003). This partnership was formed to recruit, prepare, and support teachers. Preservice educators were engaged in projects that were focused on: (a) their identities as teachers; (b) who they taught; (c) the school community; and (d) the connection between their understanding of self, children, and the community with their understanding of content. In these projects, student teachers were directed: (a) to self-appraise learning, (b) to self-manage learning, (c) to teach self-regulation in diverse ways, and (d) to view self-regulation as part of an individual's identity. Also, they were engaged in a reflective community. The results demonstrated that the new teachers were able to fulfill the objectives. In addition, it showed that teacher preparation programs can provide instructional strategies that promote SRL.

Encouraging Self-Regulated Learners

In an effort to support learners, who have the ability to self-regulate, several conditions need to be established. Learning does not occur in a vacuum, it occurs in a classroom environment. Some environments are more conducive to SRL than other settings. Students need to be provided with learning strategies that will guide them in their quest for knowledge as well as control of their own learning. Also, students need opportunities to engage in tasks that are meaningful and designed to encourage SRL. The incorporation of these elements leads to a classroom that provides a myriad of opportunities for learners to self-regulate.

Environment

Most theories support the idea that the environment plays a role in the learning process. A walk through any elementary school tells the observer that some rooms are more inviting to students than other rooms. The teacher is responsible for the

establishment of an environment that is conducive to learning. An environment that supports SRL requires an understanding of student needs, and a willingness to put forth the effort to develop such an environment. Wharton-McDonald et al. (1997, as cited in Perry & VandeKamp, 2000) noted that classrooms designed to be high SRL areas are filled with tasks and instruction that allow learners experience within those SRL tasks.

Perry and VandeKamp (2000) noted that high SRL rooms were filled with a large variety of resources for the students to utilize, and students received guidance from the instructor. Complex tasks were designed to challenge students, and they received encouragement to expand their thinking. Opportunities for self-evaluation abounded. Students received instrumental support from the instructor and peers. In general, reading and writing were integrated into activities. Feedback from peers and the teacher were embedded in the routines. Errors were seen as learning opportunities. By the combination of all of these factors, a high SRL environment was established.

Learning Strategies

Several researchers (Curkas, 2006; Perry et al., 2004; Weinstein, Husman, & Dieriking, 2000) support the teaching of learning strategies. Paris and Winograd (2003) suggested that strategies should be used for all aspects of learning, in order to provide the method to perform the task. However, any given strategy does not work for all situations nor all learners. The key to the use of strategies is knowing when, where, and how to apply a specific strategy. Also, self-regulated learners should understand that strategies can be modified to meet the need of task. In the classes that this author has visited, strategy instruction is incorporated in many of the lessons.

Symons, MacLatchy-Gaudet, Stone, and Reynolds (2001) demonstrated that students in Grades 3, 4, and 5 could be taught strategies to enhance their success when they searched for information. In a series of studies, the students were instructed in strategies to locate information in a nonfiction text. One group received a search strategy, one group received a search strategy and a self-monitoring strategy, and the last group received no explicit instruction. The students, who received instructions on search and monitoring strategies, were the most successful at locating information. A second study showed that students, who received explicit instruction in strategies and monitoring, were more successful than students who had received an overview of text features. The results from the Symons et al. study indicated that students, who are taught specific strategies and who self-monitor, were more successful at locating information in an efficient manner.

Complex Tasks

The tasks learners are engaged in can encourage SRL. Turner (1997, as cited in Perry et al., 2004) suggested that motivating tasks are those that challenge the learner but do not overwhelm him or her. Self-efficacy and motivation can be increased when students succeed at challenging tasks (McCaslin & Good, 1986; as cited in Perry et al.). The design of appropriate challenges or complex tasks is job of the teacher.

Perry, Phillips, and Dowler (2004) recommended that complex tasks incorporate several elements: (a) multiple goals, (b) large chunks of meaning, (c) extend over long periods of time, (d) engage students in a variety of cognitive and metacognitive processes, and (e) allow for a choice of products. Students need to be provided with the opportunity to make choices about: (a) products, (b) levels of challenge, and

(c) materials and processes used. In this study, Perry et al. observed the classroom for the use of complex tasks by both the mentor and student teachers. The researchers noted that many of the activities observed during the course of the study did not meet all the requirements of complex tasks. The findings showed that the use of complex tasks ensured that students experienced a high SRL environment; however, a complicated task did not necessarily mean that it was complex.

Potential Difficulties with Implementation

Not all students are able to self-regulate their learning (Perry et al., 2004). Several factors influence a student's ability, or lack of ability, to self-regulate: (a) self-identity, (b) fear of failure, (c) belief systems, and (d) lack of preparation to self-regulate. Some students seek extrinsic reinforcements, such as grades, rewards, or praise, to provide them with their identity as a student (Pintrich & Schunk, 2002, as cited in Perry et al.). When faced with failure, some students use defensive strategies (Paris & Newman, 1990, as cited in Perry et al.). Others will engage in avoidance tactics. They will seek easy tasks or procrastinate. Others will blame external forces (Paris & Winograd, 2003). Learned helplessness and defiance are other counterproductive responses to a student's fear of failure.

Boekaerts and Niemivirta (2000) suggested that a student's beliefs about education can inhibit their use of SRL. Traditional beliefs that the teacher is the imparter of knowledge leads to the expectation that it is the teacher's responsibility to provide; (a) materials, (b) motivation, and (c) the learning process. The learner is not an active participant, but a passive receptacle for information. Teachers are expected to provide feedback as well. Some learners may not feel a need to learn. If the learner is unable to

see value in what is taught, then there is no motivation to learn the material. To encourage students to participate in SRL opportunities, teachers need to provide a situation in which the student is able to identify and seek meaningful goals.

According to Randi and Corno (2000), most students are ill prepared for SRL opportunities. In many classrooms, SRL opportunities are not provided; therefore, students lack the experience needed to self-regulate. Also, students may not have the experience to perceive when tasks require self-regulation. Learners may not see the need to take responsibility for their own learning. However, educators can overcome these challenges if they provide specific strategy instruction through modeling and scaffolding.

Many of difficulties experienced by learners can be overcome if: (a) specific strategies are taught, (b) the stigma of failure is removed, and (c) students are encouraged to become active participants in their learning (Randi & Corno, 2000). The responsibility for this is the teacher's. Randi and Corno and Perry et al., (2004, 2006) maintained that a strong community of fellow educators is essential for the successful implementation of an SRL environment. In these communities, educators are provided with a support network to meet the needs of each student.

Chapter Summary

As shown in this review of literature, self-regulated learning is beneficial for all learners. Research (Curkas, 2006; Perry et al., 2004; Pintrich & Schunk, 2002) at all levels of education, from elementary through college, has demonstrated the value of teaching self-regulation. These skills are needed to compete in the global economy.

Educators can provide instruction in the elements of SRL: (a) metacognition, (b) intrinsic motivation, and (c) strategic learning. As students receive training in these

components, they are able to incorporate them into their thinking and become able to regulate their behaviors.

To create a high SRL situation, several features need to be incorporated: (a) an environment conducive to learning, (b) instruction of learning strategies, and (c) complex tasks. The environment should provide opportunities for challenges, yet be supportive. Students need to receive instruction in a wide variety of strategies. They learn to apply strategies appropriately. By designing complex tasks, the teacher provides opportunities for the learner to: (a) extend their learning, (b) set goals, (c) monitor progress, and (d) receive feedback.

In this author's opinion, teaching learners to learn should be a priority for teachers today. Just teaching facts is no longer sufficient. Students need to be prepared to compete in a global economy and, sadly, many young people leave school without the skills in place to be able to do so. School administrators should encourage their teachers to establish a collaborative community to facilitate the establishment of SRL situations. Teachers need to provide the opportunities for students to become self-regulated. In Chapter 3, this author describes the audience, goals, and procedures for this project.

Chapter 3

METHOD

The purpose of this project was to develop a presentation for teachers about self-regulated learning (SRL), and how to establish a high SRL environment in the classroom. A packet of resources accompanied the presentation. This author has observed elements of SRL in various classrooms during her experiences as a substitute teacher; unfortunately, she has not witnessed a high SRL environment. This project grew out of her concern over the lack of independent learners in the business world. She looked for a point, in the educational system, where the needs of the real world were not met. In doing so, she learned that students are not able to self-regulate, even though it is developmentally appropriate for them to do so, beginning in the elementary years. It was looking through this lens that brought this author to the conclusion that educators need to better prepare students, one classroom at a time.

Target Audience

The target audience for this project is teachers of students in Grades 3-6, but the principles will be applicable for the primary grades as well. All teachers who seek to prepare their students for the next educational steps and are willing to modify their practices will be interested in this project. Communities of teachers are encouraged to work together to establish a collaborative cohort based upon the principles presented.

Goals and Procedures

The goal of this project was to provide educators with knowledge about SRL. This information included: (a) background knowledge, (b) perceived need, (c) elements of SRL, (d) ideas for implementing SRL, and (e) building a collaborative community to provide support for the teachers. In addition to the presentation notes, a resource packet was provided. It contained graphic organizers and suggested activities.

Peer Assessment

This author sought feedback on the presentation and supplemental materials from several professionals before the materials were presented. Each reviewer provided written feedback, prior to any presentations to groups.

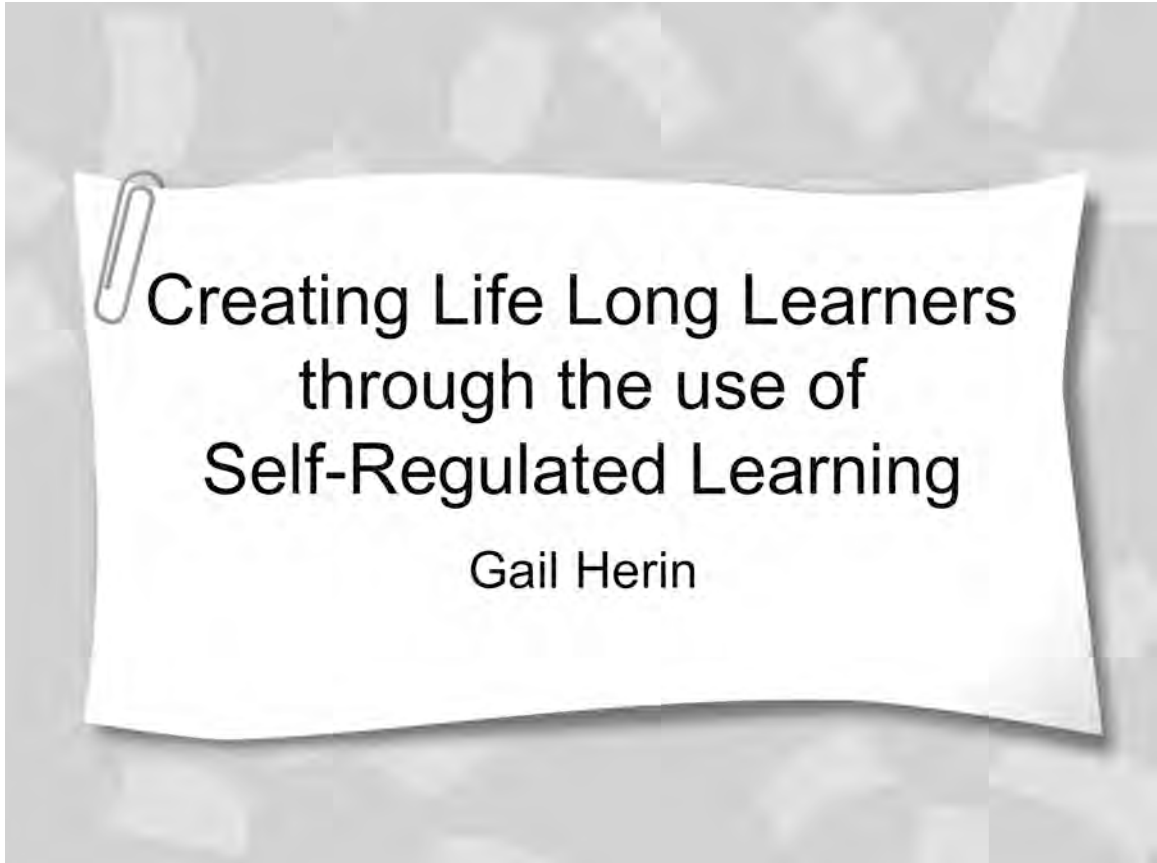
Chapter Summary

This project was developed for elementary school teachers, who want to take their students one step farther, to meet the needs of an increasingly demanding world, and who are willing to step outside of the box. This author sought to inspire those teachers who feel drained by uninspiring curricula and are willing to put forth the effort needed to create life long learners. It is the hope of this author that teachers will remember to look at the bigger picture and help their students achieve their full potential. This author hoped that at least one new SRL community will be established as a result of the information obtained through this presentation.

Chapter 4

INTRODUCTION

This author created this presentation to familiarize educators with the need to create self-regulated learners. The purpose of this presentation was to provide teachers with knowledge and resources to establish a SRL environment. The materials presented provided resources and encouragement to help establish a collaborative community from which teachers can work together to introduce SRL into their classrooms.



Welcome everyone. Today we are going to talk about one way to better prepare our students to become contributing members of society and to help them to achieve academically. Some of you may be familiar with self-regulated learning, while for others it is an unfamiliar concept. By the end of this inservice, I hope to not only provide information about SRL, but also to inspire you to establish a SRL learning community within your room and your school.

Educational Crisis?

- One-third to one-half of students drop out
- One-third of college students require remediation



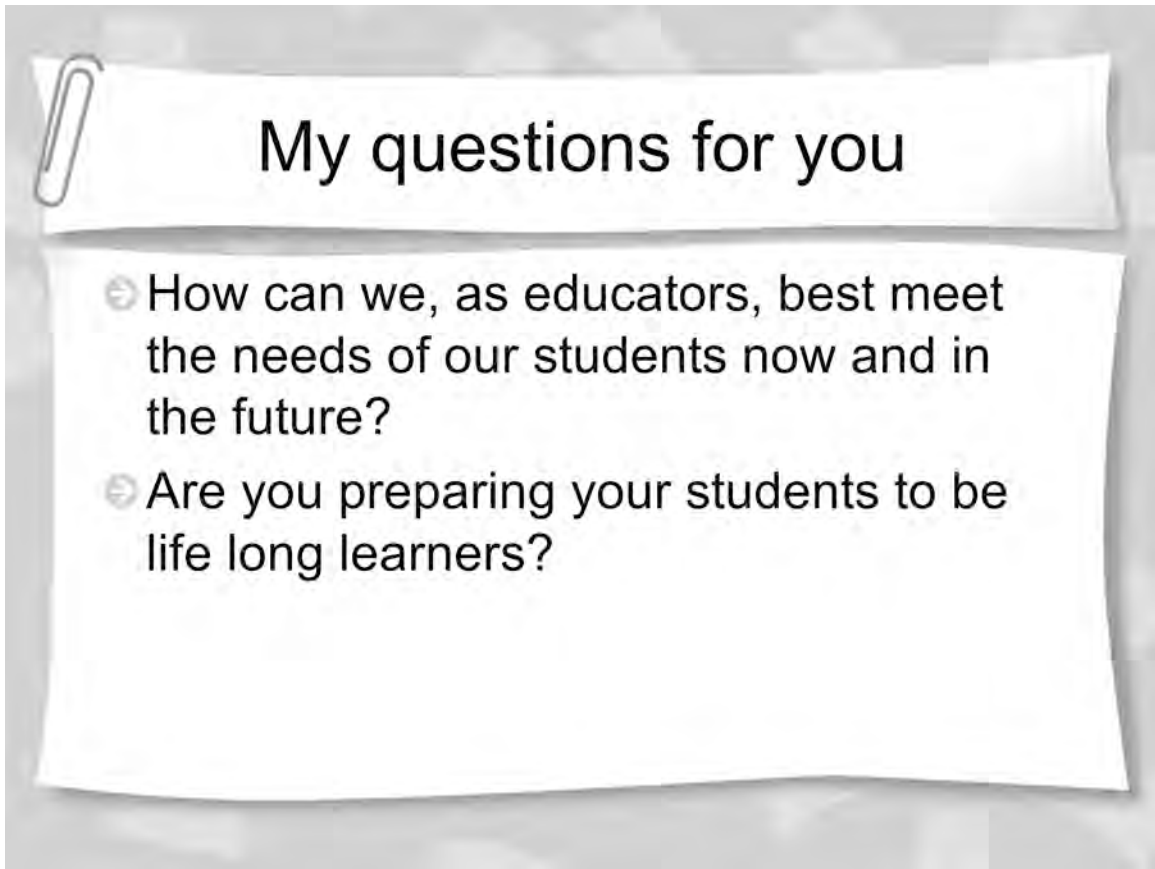
You have been hearing about the crisis in education for a long time. It has been thrown in the face of teachers since at least the mid 1980s. But what types of numbers are we really talking about? One-third of high school students will drop out of school before they graduate. For Hispanic and African American students the dropout rates are closer to 50%. Of the students who continue to college, one-third will require remediation. At the community colleges, approximately 80% require remediation. What skills are these students missing? Some studies show that these students do not possess the strategies needed to complete the tasks that they are assigned. They may not be motivated to learn the materials covered in their courses. These learners may not even realize what their strengths and weaknesses are and, thus, they are not able to regulate their own learning.

Needed in the 21st Century

- Employment demands
- Information and technological demands



Eventually, the students that we have today will join the larger world and become part of the global economy. Employers are seeking employees who are prepared to meet the challenges of a fast paced environment. The World Wide Web brings an overwhelming amount of information to our fingertips. Technology rushes forward at breakneck speed. Today's employee is responsible for maintaining his or her own knowledge of this ever-changing work environment. As educators, we must also update our skills on a regular basis. In order to do so, we must self-regulate our learning.



My questions for you

- ⇒ How can we, as educators, best meet the needs of our students now and in the future?
- ⇒ Are you preparing your students to be life long learners?

I have a couple of questions for you to reflect upon over the course of this presentation. How can we, as educators, best meet the needs of our students now and in the future? Are you preparing your students to be life long learners? Turn to your neighbor and take a couple of minutes to discuss these questions. (Wait time while people discuss with neighbor.)

Now that you have started thinking about the bigger picture, I would like to propose a possible method to help to develop life long learners who are ready to meet the demands of the 21st century. My research has shown one possible solution is to teach students SRL. What do you think SRL is? (Whole group shares ideas.)

Why does it matter to me?

- SRL can be taught
- Young students can participate
- Future of our country



By now, you are probably wondering what SRL has to do with you personally. Probably the best thing about SRL is that it can be taught. You can teach children the skills necessary to promote SRL. Studies show that children as young as kindergarten are able to self-regulate their learning, even if it is as simple as making choices about what centers they wish to visit. It is our job to prepare students for their futures, and in the future, they will be running our country. We need them to be prepared for that responsibility. We can lay the groundwork here and now for them.

What SRL Does

- ⊖ Develops life long learners
- ⊖ Brings fun and learning back into the classroom
- ⊖ Helps students to learn accountability
- ⊖ Increases achievement



Before I give you the specifics of SRL, I want to paint a larger picture of what SRL is and what it is not. It is a way that we can help life long learners develop learning patterns. We are providing strategies and skills that enable students to learn on their own. Students need experiences that allow them to see themselves as learners. By creating an environment that is full of opportunities for SRL, we are reintroducing fun and in depth learning back into the classroom. All too often, we feel pressured to meet the demands of the state and district standards and CSAP. The push to meet these demands has resulted in a loss of creativity and flexibility in the classroom. Using SRL tasks, the standards can be met and the children have buy-in to what needs to be learned. Also, students will learn about accountability through the extensive use of self-evaluation along with

frequent peer and teacher feedback. In this age of accountability, we are striving to increase achievement. Studies show that SRL improves achievement.

What SRL is not

- Students doing whatever they want
- A specific curriculum
- Complicated tasks
- A way to make our lives easier



I know that this is sounding good by now. I have to ask myself what are the downsides to SRL. There are several things that SRL is not. It is not giving permission to students to have a free for all, and do whatever they choose. You are still in control of activities that are acceptable to accomplish a specific learning goal. You are setting parameters for assignments. SRL is not a specific curriculum. It is a concept that encourages students to take control of their own learning. It can be applied to any curriculum that you are currently teaching. Tasks promoting SRL do not have to be complicated. I would say that the biggest downside, for me personally, is the time commitment on the part of the teacher. Creating the environment and tasks that promote SRL takes time. It is much easier to grade worksheets than to grade projects that show higher level thinking skills. It is easier to give grades than explicit feedback. But you

have to ask yourself whether the time you spend now establishing independent learners is worth it in the end. I cannot answer that question for you. I will leave it for you to reflect upon in the days to come.



Defining SRL

- “Students are self-regulated to the degree that they are metacognitively, motivationally, and behaviorally active participants in their own learning process. These students self-generate thoughts, feelings and actions to attain their learning goals.”

» Barry J. Zimmerman, 2001

There are many definitions of SRL found in the literature about the subject. The one featured here was the most common. (Read the slide.) We will be breaking down the elements of this definition to better understand what SRL is. The most critical part of SRL is that the student is an active participant in his or her own learning. The more buy in that the student has, the more he or she will benefit from SRL.

Elements of SRL



- ⇒ Metacognition
- ⇒ Intrinsic Motivation
- ⇒ Strategic Learning

As you saw in the definition, there are three main elements of SRL:

(a) metacognition, (b) intrinsic motivation, and (c) strategic learning. You are probably familiar with each of these terms, but we will briefly review what each of these terms means.

Metacognition

- ⇒ Thinking about thinking
- ⇒ Awareness of strengths & weaknesses
- ⇒ Strategy selection



In the most general sense, metacognition is thinking about thinking. When we are actively learning, we are aware of what we are thinking. One of our jobs is to teach our students to listen to and be guided by their own thoughts. One way we might teach this is to use a think aloud strategy while reading to your students. Turn to your neighbor and share one way that you promote this in your classroom. (Wait time.) Another aspect of metacognition is the learner's awareness of his or her academic strengths and weaknesses. When children begin attending school, they are overconfident about their abilities. As they mature, their self-assessment of their abilities becomes more appropriate with their actual performance. As they become more self-aware of those abilities, they are more capable of selecting strategies to assist in their learning. As we all know, no single strategy is perfect for every learner, every time. Different strategies

work for different kids. The kids need to select the one that works for them in a given situation. One of the goals of developing students' metacognitive skills is to take them beyond thinking about thinking to using that knowledge as a guide for planning, strategy selection, self-monitoring, and self-evaluation.

Intrinsic Motivation



- ⇒ Self-efficacy
- ⇒ Interest
- ⇒ Choosing to learn

Motivation is a concept that is hard to nail down. How do you teach mental attitude? As teachers, we often use extrinsic rewards to promote learning. This may come in the form of stickers, prizes, or social encouragement. What we have less control over is intrinsic motivation. Intrinsic motivation is tied to a student's understanding of his or her own ability to learn and perform; their self-efficacy. We are asking students to understand their self-efficacy, and then to make the decision to learn. By using SRL, we are asking students to set goals, give a value to the task, understand their ability to accomplish the task, and perform a benefit/cost analysis. Students are more motivated by subjects that are of interest to them. When a lack of interest exists, the use of self-monitoring may help to establish some level of motivation. Often, we ask students to choose to learn something they may prefer not to. At that point the learner must make the

decision about whether or not he or she will choose to engage in the learning and create his or her own motivation.

Strategic Learning

- Select & utilize appropriate strategy
- Modify strategy
- Discuss strategy
- Teach others how to use strategy
- Goal driven



When I talk about strategic learning, I am not just referring to the use of strategies in learning. I am referring to the selection and utilization of the appropriate strategy for the task. We need to teach our students a variety of strategies and some of the places where those strategies can be utilized. Self-regulated learners are able to take a strategy from their repertoire, modify it if necessary, and apply it to the task that they are engaged in. They can demonstrate a thorough understanding of the strategy when they are able to discuss it with the teacher and peers. Also, the ability to teach others how to use a specific strategy demonstrates strategic learning. Goals can also influence the use of strategies. Goals provide a reference for self-evaluation. In addition, goals are linked to the selection of strategies, and can provide motivation, which perpetuates the use of strategies.

Creating High SRL Situations



- ⇒ Environment
- ⇒ Learning strategies
- ⇒ Complex tasks

Now that you know what the elements of SRL are, we will look at how to create high SRL situations. In order to promote SRL, three elements need to be present: a conducive environment, instruction in a wide variety of learning strategies, and complex tasks with which to practice and explore self-regulation.

Environment



- ⇒ Tasks
- ⇒ Resources
- ⇒ Guidance
- ⇒ Self-evaluation
- ⇒ Feedback
- ⇒ Errors as learning opportunities

We will begin by establishing an environment that promotes SRL. The challenge that you are faced with is to create a place of learning that meets the needs of each student, fits in the available space, and does not break the budget. While a few of the elements are physical supplies, most come in the form of mental and emotional supplies. Classes high in SRL are rich with activities that challenge the learners, and that allow the learner a number of choices. The tasks provided are complex in nature, yet not complicated. We will discuss complex tasks in more detail shortly. A high SRL class is rich in resources. Reading and writing materials abound. Supplies for creating projects are easily located. A wide variety of manipulatives are available. A more important resource is the support and guidance provided by the teacher and by other students. The instructor provides instruction and guidance while encouraging the students to set goals

and make choices. Students are required to evaluate their learning on a daily basis. These evaluations may be in the form of written reflection, or they may be discussions with the teacher or peers. It is expected that the students will be able to act upon the results of their self-evaluations. Students are provided with specific feedback in a timely manner from peers and teachers. The feedback allows growth in ways that a letter or number grade does not. Another important feature is the attitude that errors are not a negative experience rather they are a way to increase learning. I find that this is sometimes a difficult concept for children and their parents to accept. I bet that you have some of these elements already in place. How many of you have an environment where some of these things exist currently? What could you do to promote this type environment? Would it be much different from what you are doing now? Feel free to share your thoughts with the group. (Allow several people to share.)

Learning Strategies

- Specific instruction
- Variety of strategies
- Self-monitor



A lot of the research that I read supported the teaching of learning strategies. Strategies are not limited to reading, but need to be taught for all subjects. Strategies provide methods to perform tasks. However, our students need to understand that not every strategy works in every situation. For example, sounding out will not help decode a number of sight words. Another strategy must be used. The key to using strategies is knowing when, where, and how to apply a specific strategy. I would guess that most of you incorporate strategy instruction as part of your daily routine. Any strategy can be taught, though some students will figure them out on their own. While teaching strategies, we need to be sensitive to the fact that not every strategy works for everyone. We need to provide a number of strategies to get the job done. In addition, we need to allow students to select what works best for them, rather than dictating what we think

should work. How do learners know that they are using an appropriate strategy? They need to self-monitor their learning. They should be asking themselves if what they are doing is working, and if it is not working, what can be done to fix the problem. Self-monitoring demonstrates self-regulation is occurring.

Complex Tasks



- Multiple goals
- Meaning
- Time
- Variety of processes
- Choice

When I talked about the environment and learning strategies, you probably acknowledged that you are already incorporating at least some of those things into your classroom. The next idea, complex tasks is where the challenges arise. This is the area where most of the thought and preparation is required. Complex tasks incorporate several elements: multiple goals, large chunks of meaning, extend over long periods of time, engage students in a variety of cognitive and metacognitive processes, and allow a choice of products. Multiple goals mean that you are not focusing on one standard or learning concept. The learning needs to have meaning for the student. Also, it needs to incorporate more than one simple idea. Tasks need to extend for several learning periods. Sometimes it may be multiple periods in one day; sometimes it may be a number of days or even weeks. We are asking the learners to engage in a number of learning processes;

including planning and self-monitoring. We need to accept a variety of products. One way to encourage a variety of products is to use a grading scale where different products are given value based upon complexity. A total number of value points must be attained for the grade to be given. A couple of articles listed on the resource page can provide you with more information about this type of grading. The most important part of complex tasks is to allow choice. Students need to be able to choose the products, level of challenge, and the methods to perform the tasks. It is not always possible to utilize complex tasks; however, they should be used whenever possible. It should be noted that complicated tasks are not the same as complex tasks. When designing tasks, you need to take the time to reflect on whether you are using all the elements of a complex tasks and make every effort to do so.



What does SRL look like?

⇒ Students who:

- Set goals
- Plan
- Pay attention
- Work toward goals
- Monitor progress
- Seek help
- Evaluate progress

⇒ Teachers who:

- Model behaviors
- Instruct
- Provide opportunities
- Self-evaluate
- Provide feedback
- Encourage

Now that we have looked at the elements of SRL and how to encourage SRL in the classroom, let's see what SRL looks like for both the learner and the teacher. How do you know that your students are self-regulating? The student who is self-regulating is setting goals, planning and organizing his or her work, and paying attention to the instructions. He or she will ask questions for clarification if necessary. Once the goal is established, efforts will be made to perform the task. Self-monitoring occurs throughout the task. Modifications to the goals and strategies will be based upon the self-monitoring. He or she will seek help and feedback from both the teacher and peers. The student will evaluate progress against the standards that have been established. The student will also help others in their efforts. Self-regulated students are learners who are actively engaged in their learning, even in areas that may not be their favorite subject.

As the teacher, you need to be self-regulated as well. Your students will be looking to you for guidance, and one of the best ways to provide that is by modeling the behaviors that you want your students to learn. If you show the children that you self-monitor and self-evaluate, they will be more open to doing the same. It is your job to instruct the students in the strategies and skills that will take them to the next level of learning. You will be the one that provides the opportunities for learning and reacts to teachable moments with enthusiasm. You are probably very good at self-evaluation already. Just remember to make it a conscious part of your routine. A reflection journal is helpful for getting those thoughts captured before they are lost among the list of things that need to be done for the next day. Be sure to provide specific feedback on a regular basis. Getting a paper back with extensive comments two to three weeks after it is turned in, is not as effective as short, specific comments returned in a couple of days. Our other job, the one not listed in the job description, is that of cheerleader. You need to encourage your kids on a daily basis, even when their performance is not meeting the standards you have established. I would guess that you are doing a lot of these things already. Your transparency will allow your students to see what a self-regulated learner looks and acts like.

Oops - it's not working



- ⇒ Self-identity
- ⇒ Fear of failure
- ⇒ Belief systems
- ⇒ Lack of preparation

As we discussed in the beginning of the presentation, not all students are able to self-regulate their learning. You may have students in your class that lack the ability to self-regulate. Several factors influence the ability to self-regulate. Some students seek extrinsic reinforcers to provide them with an identity as a student. They may be grade driven and view themselves as an “A” or “B” or “C” student, not as a learner who has control over their learning process. Fear of failure can limit the amount of self-regulation that occurs. Students who are afraid of failure will employ defensive strategies and avoidance tactics. They will opt to take the easy way out. Learned helplessness and defiance are outward manifestations of fear of failure. Students may have belief systems that limit their ability to self-regulate. Some children believe that it is the teacher’s job to provide the materials, the motivation, and the learning process. The child’s role becomes

that of an inactive receptacle for information. Some students choose not to learn because they do not see meaning in the materials presented and, thus, there is no buy in for those students. The last major obstacle to SRL is a lack of preparation on the part of the student. Many students have not been required to self-regulate in the past, and when placed in a high SRL classroom, they are lacking the skills necessary to self-regulate. Many of these challenges can be overcome through extensive use of modeling and scaffolding. The goal is to help learners become active participants in the learning process.

Take it school wide Use a collaborative community

- ⇒ Experiment with new techniques
- ⇒ Opportunities to interact with peers
- ⇒ Self-reflection
- ⇒ Support



Up to this point, we have talked about what we need to do in order to establish SRL in students. Let's look at how we can create a school environment that promotes SRL for all students. In an effort to establish a SRL community, teachers need to be supportive of each other. One way to achieve this is by establishing a collaborative community. On a regular basis, teachers convene to discuss how SRL is working in their classrooms. Teachers are responsible for maintaining a self-reflection journal, where they record their thoughts, efforts, successes, and failures. The ideas from the journals are shared at the collaboration meetings. These meetings are a breeding ground for new ideas and techniques. The goal of the meetings is to share experiences, experiments, and suggestions with a supportive peer group. The members of the group will work together to create complex tasks, and to expand the variety of activities available to the students.

Hopefully, the members will be able to implement changes that benefit the students throughout the school. Each year more students should be able to self-regulate as a result of the combined efforts of the collaborative community.

Ideas to get started with



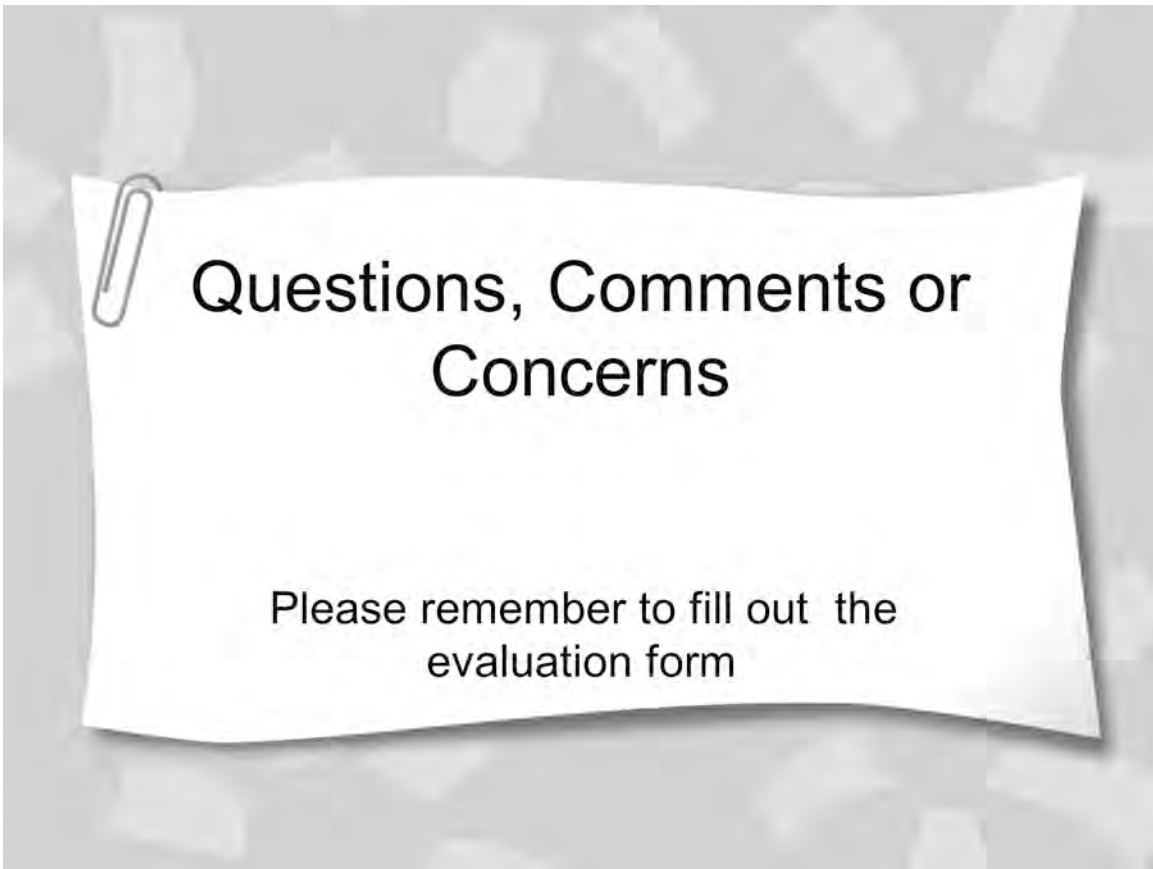
- Projects
- Work Stations
- Self-reflection journals
- Self-evaluation graphic organizers

I would like to suggest a few ideas to get you started on the road to establishing a high SRL environment. The most important thing to remember is that the students need to be provided with opportunities to make choices about their learning. There are many ways to provide those opportunities. Projects are the first thing that pops to my mind when I think about complex tasks. Projects should not be limited to content areas. Expand the use to core subjects. Work stations and centers allow choice. Work stations are not limited to the primary grades, though it is where they appear most frequently. The book, *Practice with purpose: Literacy work stations for grades 3-6*, provides ideas for work stations applicable to the intermediate grades. Self-monitoring is an integral component of SRL. There are several ways to promote it on a regular basis. Self-reflection journals used on a daily basis help kids to focus on the learning. Self-

evaluation graphic organizers help with goal setting and performance monitoring.

Rubrics are another way to help students with goal setting. You will find some samples in the handouts that you received.

At the conclusion of the presentation, you will be asked to spend about 15 to 20 minutes thinking about and discussing ideas aimed at helping you to establish a high SRL environment in the future. You might consider expanding a project you currently use to allow for more choice. You might think about adding work stations to your class. The possibilities are limited only by your imagination.



Before we break into small groups to generate ideas that will help you to establish high SRL tasks and environments, I would like answer any questions that you have. Feel free to share comments or concerns at this time as well. (Brief discussion time to respond to comments.) Now we will break for the work time. We will come back together in about 20 minutes to share the ideas that you have generated. (Work time.)

Please come back together. What ideas would you like to share? (Share ideas with the group.) Thank you for taking time out of your busy schedules to learn about SRL and how we can prepare our students for the world outside of the schoolhouse. Please remember to fill out the evaluation form before you leave. You will find it in your handout packet.

Chapter Summary

This presentation was designed to provide educators with a working knowledge of SRL. The presentation provided a broad overview of SRL including: (a) background knowledge, (b) elements of SRL, (c) implementation of a high SRL environment, (d) establishment of a collaborative community, and (e) suggestions for activities that promote SRL. Throughout the presentation, the author promoted the use of SRL. Interaction with the audience occurred regularly, providing the opportunity for attendees to reflect on, and share how their current classroom management styles may facilitate SRL. Also, attendees participated in a short collaborative brainstorming session on ways to incorporate SRL into their classrooms. The author hopes that as a result of this presentation, attendees will consider promoting SRL in their classrooms.

Chapter 5

DISCUSSION

As the world economy becomes more global, employers are asking employees to increase their knowledge and skill levels to meet the ever-changing demands of an information age. Therefore, individuals must utilize the ability to self-regulate their learning. This author reviewed data that suggested that students are not being taught self-regulation on a consistent basis. This may be a result of several factors: (a) limited knowledge on the part of the teacher, (b) the use of curricula that limits opportunities to self-regulate, or (c) an environment that does not support self-regulated learning.

The most prominent aspects of SRL are: (a) choice, (b) self-reflection, and (c) self-evaluation. Educators need a firm understanding of these behaviors in their own learning, because they are better able to provide SRL opportunities for students after they incorporate SRL in their own lives.

As a response to a perceived lack of knowledge on this topic, this author sought to create a presentation that would provide educators with information about SRL.

Teachers were encouraged to consider establishing environments that provide SRL opportunities on a regular basis. Teachers were asked to review what they are already teaching and look for places to introduce high SRL tasks and student choice. In addition, the presentation suggested that teachers establish collaborative communities to support the use of SRL in all classrooms.

Assessment of the Project

This project was evaluated by four of this author's colleagues. Currently, three of the evaluators work with intermediate students, and one works with primary students. One evaluator is a new teacher, one has taught for approximately five years, one has taught for about 12 years, and the remaining evaluator has taught for approximately 18 years. The experienced teachers have worked in a variety of grades. The following is a summary of the evaluation forms completed by the author's colleagues.

Professional Feedback

The evaluators responded by short answer to the questions on the evaluation form (Appendix A). In response to the first question, regarding past experience with SRL, none of the respondents had formal training with SRL. All respondents reported familiarity with some of the components of SRL.

Various strengths were identified by the reviewers. Those strengths included: (a) steps to implementation, (b) background knowledge, and (c) being reminded of the greater goals of education. Each of the evaluators reported that some of the elements of SRL were present in her classroom.

All of evaluators requested more specific examples. They suggested that grade specific lesson plans be provided. The question of how to deal with implementation difficulty was raised. In addition, reviewers asked for recommended activities to get started with.

The reviewers suggested several areas for further study: (a) how SRL could be used while not neglecting standardized test preparation, (b) meeting the needs of the

student struggling to self-regulate, (c) utilizing technology on a regular basis, and (d) meeting the needs of gifted students. In addition, one reviewer recommended using portfolio assessment as a tool to evaluate students participating in SRL.

Limitations of the Project

This author began this project by looking for ways to meet the needs of students that may not be successful in school or in the world beyond the schoolhouse. From the variety of reform movements, this author decided to focus on teaching students to self-regulate as a way to succeed in school and beyond. The literature reviewed spanned students from preschool to college. It covered many demographics. However, it did not discuss cultural belief systems. This author acknowledges that self-regulation may be a concept valued in the United States, but not in other cultures or countries.

Much of the literature focused on older learners. This author was focusing on grade school students, thus limiting the amount of literature available. Several researchers were focusing on primary students; however, it may be years before long term outcomes can be assessed.

Another limitation is that some students may not be capable of learning self-regulation. Certain behavioral, mental, and physical conditions may limit the amount of self-regulation that can be taught.

An additional limitation was a lack of specific lesson examples. The literature focused on the concepts, but provided limited examples from which to create model lessons. The lack of specific examples may have been a result of the idea that each teacher needs to design opportunities that address individual needs.

Recommendations for Further Research and Development

This author believes that SRL can promote learning for most students, and recommends two areas of development: lesson plans, and long term research that supports the premise. Introductory lesson plans could be developed to help familiarize students with the practice of SRL. Further research could be done on the long term outcomes for students who have been provided with SRL opportunities. Establishing a school or area wide SRL initiative could produce measurable results.

Project Summary

The purpose of this project was to propose a method of teaching that prepares students for the world beyond the classroom. The literature reviewed demonstrated that there is a need to produce lifelong learners. One way that this may be accomplished is through the creation of self-regulated learners. The author sought to provide information to her colleagues about establishing a high SRL environment to better meet the needs of the students in an information laden society. This author chose to create a presentation which supplied: (a) background knowledge, (b) the components of SRL, and (c) ways to establish a SRL community, both in the classroom and throughout a school. The presentation provided opportunities for educators to reflect on what is already happening in their classrooms, and brainstorm ideas for future directions for their teaching. It is the hope of the author that by presenting this information, others will feel inspired to help take their students to a higher level, to promote self-regulation, and to help produce the effective employees of tomorrow.

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APPENDIX A

Questionnaire

Evaluation of Presentation

Please take a few minutes to thoughtfully answer the following questions.

1. How much experience did you have with SRL before the presentation?
2. What were the strongest points about this presentation?
3. What else could it have covered?
4. What suggestions do you have to improve this presentation?
5. Are there any other areas that should be studied and addressed for teachers?

Thank you for taking the time to complete this evaluation!

Evaluation of Presentation

Please take a few minutes to thoughtfully answer the following questions.

1. How much experience did you have with SRL before the presentation?

As a formal introduction/service - very little. During my teaching years I developed some of this for my classroom.

2. What were the strongest points about this presentation?

Child centered, decreased focus on standards yet allowing for standards. Very step by step to help teachers understand and acknowledge what they are already doing.

3. What else could it have covered?

I would have liked a few more details on what SRL would look like in a certain grade.

4. What suggestions do you have to improve this presentation?

Overall, very good! Good use of slides and bullet points. Good use of audience interaction. How about a list of specific activities teachers could use, to get started?

5. Are there any other areas that should be studied and addressed for teachers?

Ally fears of not being prepared for CSAP, other assessments that are required. How would you help a student who is really struggling with the concept in your classroom?

Thank you for taking the time to complete this evaluation!

Evaluation of Presentation

Please take a few minutes to thoughtfully answer the following questions.

1. How much experience did you have with SRL before the presentation?

I have read a little about SRL, but have not attended any classes or workshops on the subject.

2. What were the strongest points about this presentation?

As a classroom teacher, the strongest points were "What SRL Does", "The Environment", and just the steps to implement SRL into my own classroom.

3. What else could it have covered?

Sample lessons for each grade level would be helpful.

4. What suggestions do you have to improve this presentation?

Gail did an excellent job presenting SRL. I look forward to sharing her ideas with my colleagues.

5. Are there any other areas that should be studied and addressed for teachers?

- How to reach gifted students in the regular classroom.
- The importance of using technology daily in the classroom.

Thank you for taking the time to complete this evaluation!

Evaluation of Presentation

Please take a few minutes to thoughtfully answer the following questions.

1. How much experience did you have with SRL before the presentation?

No experience under this terminology, but with component concepts, yes. i.e. centers, goal setting, intrinsic motivation, feedback, reflection. Definition slide (#10) could possibly come earlier.

2. What were the strongest points about this presentation?

It's an important concept that I think many teachers are already trying to implement (i.e. especially classrooms with rich resources and having students "self regulate" while teachers work 1-1 or in small groups.) It reminds us all of the greater goal and purpose.

3. What else could it have covered?

More specifics on goal setting because I think many teachers don't do this personally for themselves and will need more info beyond a goal for reading time per day as far as students are concerned.

Possibly information on specific studies, quotes from experts

4. What suggestions do you have to improve this presentation?

Specific examples, such as attached student profiles to help establish the problem students have and how vital it is to find a way to motivate them. Also, specific examples on how the principle translates to academic work - i.e. students could →

5. Are there any other areas that should be studied and addressed for teachers?

Maybe portfolio assessments as a way to pull this off.

Thank you for taking the time to complete this evaluation!

In case it matters for the hard copies:

74

pg. 78 #7 would ^{you} like

pg 48 - Turn to your neighbor

pg 58 - This is the area where... is required - "agreement?"

2 of education. The Weekly Reflection is a great "take away" for teachers that they can use right away and won't have to spend a lot of time to get set up. The PowerPoint slides look nice!

4 select from a variety of topics, genres to write about, choose the trait they want the work to be evaluated on (word choice for ex.), have another student evaluate + teacher. Is this what you mean?

Please take a few minutes to thoughtfully answer the following questions.

1. How much experience did you have with SRL before the presentation?

I used/use some of the things mentioned, but didn't know the term "SRL". It just seems like "good teaching" and "best practices". I did get a few "a-ha's".

2. What were the strongest points about this presentation?

I like how she highlighted the most important facts so they stood out on the page. It was very easy to read and follow! 😊 I liked how she explained what it was and was NOT

3. What else could it have covered?

I thought it covered all areas I could think of, or it was referenced where we could look to find more information.

4. What suggestions do you have to improve this presentation?

None at this time.

5. Are there any other areas that should be studied and addressed for teachers?

I am a teacher, so same as above.

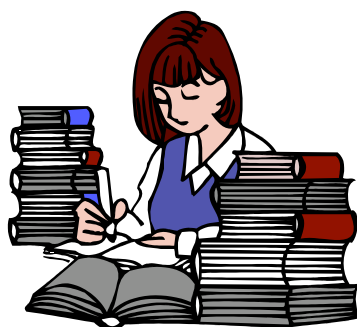
Thank you for taking the time to complete this evaluation!

APPENDIX B

Resource Handout

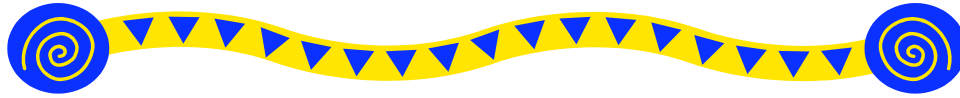
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APPENDIX C

Student Reflection Sheets



Weekly Reflection

Name:

Date:

1. What was the best thing about the week?
2. What did you do best this week?
3. What did you struggle with this week?
4. What would you like to learn next week?
5. How can you improve your performance next week?
6. How can I help you improve your performance?
7. What challenges would you like for next week?

Parent Signature

Name: _____

Date: _____

Self-Reflection for Unit _____

Name three things that you learned during this unit.

What things were easy for you? Why?

What things were difficult or challenging for you? Why?

Did you put forth your best effort? Why or why not?

Who was your partner/s? Did your partner/s put forth his best effort? Why or why not?

What can you do better next time?

What can I do to support your learning in the future?

Other comments or thoughts.