Students are active agents of their own learning

The idea that students are active agents of their own learning is accepted widely in cognition and instruction (Bransford, Brown, & Cocking, 2000). Educators are noticing that to be truly effective learners, students must engage in self-regulating behaviors. Furthermore, transforming the academic performance of students in core academic content areas is vital because of the high-stakes nature of school grades in relation to their occupational and/ or college pursuits. Getting students to become more active, strategic participants in their learning by teaching them practical learning strategies as well as specific planning and thoughtful thinking skills is an important path to academic success. The importance of self-regulation has been recognized in recent research with teachers and school psychologists showing that students who are referred for academic troubles frequently have self-regulatory skill deficit (Cleary, Platten, & Nelson, 2008).

Statement of Need

According to No Child Left Behind, California is required to develop and implement a statewide accountability system that will ensure that all schools and districts make Adequate Yearly Progress (AYP). Nonetheless; statistics collected from the California Department of Education shows the 2010 California Standards Tests which indicate that 46-55% grades 2 – 11 performed below proficient/ advanced. In Addition, the results from the 2010 California High School Exit Exam (CAHSEE) show that 76% of students did not pass. Clearly by looking at these numbers there is a need for improvement. But what can be done to assist the students of California become more successful?

Purpose of Graduate Project

By looking at the data above, it is clear that something must be done. Self-regulation skills can have a persistent influence on students' achievement across the board. The standards and goals we set for ourselves, the way in which we monitor and evaluate our own cognitive processes and behaviors, and the consequences we impose on ourselves for successes and failures, all of these are aspects of self-regulation. If thoughts and actions are under our control, rather than being controlled by the people and circumstances around us makes us self-regulating individuals (Zimmerman, 1998). Unfortunately, some educators may not be teaching their students the basic self-regulating skills/ learning strategies.

Studies have shown that when students sustain a strong sense of self-efficacy and possess the essential skills to effectively regulate their lives they have a much greater chance of reaching their academic potential (Pajares & Urdan, 2006). Since teaching self-regulation strategies to student's shows potential, a workshop for counselors will be conducted. The one day eight hour workshop is designed to create knowledge of the importance of teaching self-regulation, resources, and tools for counselors to implement self-regulation activities, and to create a school environment that supports teaching self-regulation. Additionally, a key goal of this program is to provide effective intervention services, in order to increase the use of self-regulation skills to limit the number of students who develop academic or behavioral problems (Fuchs, Mock, Morgan, & Young, 2003). Furthermore, this project intends to examine the impact that teaching students self-regulation skills can have on academic performance.

Population

The target population of the teaching self-regulation program is high school counselors interested in working with freshman students in urban high schools. However, the area of target can extend to any particular setting that has a need for students to increase their self-regulatory skills. If possible, the target population for this presentation should be individuals with strong coordinating skills, a master's degree, and experience working with high school students. In addition, the target audience should be familiarized with implementing programs in schools. The PowerPoint will work best with counselors that have experience collaborating with their fellow administration for the reason that the counselors must constantly collaborate to make sure that the students are being taught the appropriate information.

Limitations of the Project

This project focuses on improving/teaching students self-regulation strategies. This means that the staff that is in control will have to constantly collaborate amongst each other, to make sure that the necessary skills are given to the students uniformly, and due to the schedule time constraints some skills might be left out. However it will be the responsibility of the counselor to have assemblies and get the students up to date. Additionally, students with learning disabilities might require more attention in this area and some teachers might not be up to the challenge. In addition, there is the assumption that the project works, and that is that the counselor who takes on the task of coordinating the self-efficacy program must be willing to work and collaborate with teachers and administration, that may or may not want

to assist. It is also necessary for counselors to have plans in place to that will teach and provide interventions to students in order to continually motivate them.

This project is to be used as a supplemental tool to motivate and ignite the intrinsic motivation for students. It is not to be used as a remedy or replacement of any current learning disability strategy. The purpose of the PowerPoint presentation is to educate and motivate counselors that seek to work with all students to utilize alternative means to inspire students to plan, monitor, and modify their understanding. A major limitation of this project is funding for the program. It will be up to the planning committee to seek the finances to sustain it. Suggestions of where funding's can be acquired include private educational grants, Title 1 funds (schools that have a large population of students on the federal free or reduced lunch program), and the community.

Even with the limitations, teaching self-regulation has the capability of having a significant impact on the students. Since, it teaches them how to better manage their learning skills. The PowerPoint, thus, seeks to show and inform the counselors of the benefits of investing time, money, and effort to this self-regulation program. To have students in this program will assist in increasing awareness of the students metacognitive thought process, also improve academic and test scores. The teaching self-regulation program would serve as a tool for other educators in demonstrating that all students are capable of learning, improving academically, and socially.

Definition

Self-regulated learners: There are a variety of definitions of self-regulated learning; however, two seem significant in regards to academic performance. First, metacognitively, learners are able to organize, plan, self-monitor, self-evaluate, and self-instruct, during the skill acquisition process; motivationally, learners are capable of perceiving themselves as autonomous, competent, self-efficacious, and intrinsically motivated; and behaviorally, learners can select, generate, and structure their learning environments to enhance the attainment of skills (Zimmerman, 2001). Last, important aspect of self-regulated learning that some researchers have included in their conceptualization is the actual cognitive strategies that students use to learn, remember, and understand the material (Pintrich & De Groot, 1990). In addition, Zimmerman (2000) defined self-regulation, as involving self-generated thoughts, feelings, and behaviors that are planned and regularly adapted based on performance feedback in order to attain self-set goals. In sum, students that self-regulate set a specific learning goal chose strategies to achieve their goal, participate in a variety of skills to monitor their progress and make modifications when confronted with hurdles (Winne, 1995).

Chapter Two will present a review of relative literature on self-regulated strategies which may be taught to different types of students including those with learning disabilities, mental retardation, from urban schools, minority, boys, girls, and even those that are already gifted all benefit by being educated and utilizing the strategies throughout their academic career. In addition, self-regulation can lead to academic success during college. Chapter Three describes the project development, intended audience, and

the projects outline. Chapter Four will be a summary and review of the program.

Chapter 2

Literature Review

Research in self-regulation has increased because of its impact on education and in core academic content areas. Furthermore, self-regulation has shown that being taught the use of self-regulated strategies may improve student learning and academic achievement. Self-regulated strategies may be taught to different types of students including those with learning disabilities, mental retardation, from urban schools, minority, boys, girls, and even those that are already gifted all benefit by being educated and utilizing the strategies throughout their academic career. In addition, self-regulation can lead to academic success during college.

Students with learning disabilities struggle to develop writing skills sufficient to pass state and district exams, advance grade to grade, and graduate high school. Chalk, Hagan-Burke, & Burke (2005) provided evidence that teaching students with learning disabilities self-regulation skills improves students writing. The study examined 15 high school sophomores with learning disabilities that were taught to apply self-regulated strategies for writing. After learning the skills they showed improvement and resulted in modest improvements in the quality and quantity of writing.

Additionally, students with learning disabilities tend to be poor at self-regulating and need extra assistance in learning the skills and strategies (Montague, 2007). Nonetheless, Montague (2007) described interventions in

teaching self-regulation that increased mathematic performance in elementary, middle, and secondary school level students with learning disabilities. As students became more proficient in math, their motivation increased leading to more success in the subject. When students are motivated it leads to cognitive engagement (use of self-regulated strategies) and academic performance in the classroom (Pintrich, et al).

Furthermore, Cassel and Reid (1996) provided further evidence that self-regulated strategies may be taught to elementary students with learning disabilities including students with mental retardation to improve their word problem-solving skills. Results showed that self-regulated strategies were effective in increasing the correct number of word problems solved and improve more throughout time. An additional study showed that 3 students with autism spectrum disorder in the second and fourth grades were taught self-regulated strategies in planning and story writing. The outcome demonstrated that teaching these skills were beneficial in improving the overall writing skills of the second and fourth grade students with autism spectrum disorder (Asaro, 2009).

De La Paz (1999) taught middle school students with and without learning disabilities self-regulatory strategies for writing 5-paragraph essays in preparing them for the state writing exam. Before teaching them the skills, 93% of the students did not have the proper skills: planning, organizing, supporting ideas, revising, and were missing transitions for writing a well formatted essay. The instruction of the self-regulation skills was valuable for all of the students and showed writing improvements; even 1 month after the study came to an end.

Cleary, et al considers poor academic achievement in urban high schools the result of environmental factors. Additionally, the study introduced a Self-Regulation Empowerment Program (SREP) which focused on strategic and self-regulatory training for the students. SREP was supposed to improve the behaviors and academic success of urban high school students. However, not only did the program work in getting above average grades in the students biology class, it assisted them in strategizing before test. The students in this study improved test scores, used more self-regulatory strategies, and gained more confidence which led to better understanding of the science material.

In a different study, forty-five boys and 45 girls from the 5th, 8th, and 11th grade that included gifted, regular, White, Black, Hispanic, and Asian students from middle-class socio economic status, were asked to show how they used 14 self-regulated strategies in mathematics and English. Gifted students showed a higher level of use of self-regulation strategies. In addition, results showed that the girls used more self-regulated strategies than the boys; however, there was no difference between the different races (Zimmerman and Martinez-Ponz, 1990). Furthermore, Neber and Schommer-Aikins (2002) did a study on highly gifted students from elementary and high school. The outcome of the study showed that high school students showed more test anxiety and work avoidance than elementary school students. In addition, it did not find any gender differences in higher-level learning strategies, what was found, was that female students showed less interest in science than the boys. Moreover, findings suggested that self-regulated learning of highly gifted students should be taught in different forms.

In a study of finding out what the differences were between the students passing their honors and AP courses. The study showed that the significant difference of those students that passed with A's and B's than those with a C or lower was using self-regulation. The students that were using self-regulations skills along with other strategies proved they wanted to accomplish more than those that did not show (Henry, 2009).

Students that do not have self-regulation strategies should be taught. Interventions need to be created for students to surpass and exceed expectations.

Vassallo (2009) implemented an intervention to assist in developing self-regulated learning while improving academic performance. The intervention included working with a student that had a central auditory processing disability for 5 months, assisting in homework, acquiring learning strategies, and how to better regulate her learning. Even though the intervention took a good quality of time the students showed better use of self-regulating skills and improved the math, history, and writing performance.

In a similar study, students were being taught self-regulation strategies in composition skills. The study consisted of one hundred thirteen German 4th grade students split into three groups. One group was being taught strategies in writing composition but without self-regulation, the second group was being trained in strategy and self-regulation, and the third group was the control. Findings of the study propose that combining teaching strategies with self-regulation increases mental effects on students writing

achievements and better develops students writing skills (Glasses and Brunstein, 2007).

Stizmann and Ely (2010) performed a longitudinal study that demonstrated that the participants that were continuously encouraged to employ self-regulation learned more and were less likely to drop out than the participants that did not use self-regulation. In addition, the study illustrated that self-regulatory interventions need to be longitudinal in order to notice the relationship between self-regulation processes and learning.

In another study of the effects of self-regulation with college students, self-regulatory factors contributed to academic achievement (Zimmerman and Bandura, 1994). Additionally knowledge about self-regulation and how to use it maximizes student's college career paths (Kitsantas, Winsler, & Huie, 2009). In Kitsantas, et al. study it explored that the role of self-regulation and motivation are immense factors in the first and second year of college success. Even though there was no difference in performance within minority students, after the sophomore year, females showed higher levels of academic achievement than the males, even though the males had higher SAT scores. Additionally, the participants consisted of middle-class students from suburban households. The study explains that colleges need to develop interventions in introductory courses to teach how to manage time and learn self-regulation skills to assist them in adjusting better with the college life.

Factors influencing self-regulated learning

A factor of self-regulated learning includes metacognitive strategies. Metacognition is being aware of one's own functioning and thinking, for

instance, metacognitive strategies involve staying focused, planning, monitoring effort by blocking out distracters, and assessing one's growth against a standard. Furthermore, self-regulated learners are superior in cognitively processing the learning material as they have a wide range of learning tactics they apply properly under numerous learning settings. Additionally, cognitive strategies are the use of the use of study aids, selection strategies, and the use of elaboration tactics. Another aspect involves determination, students need to be motivated and determined to employ their cognitive and metacognitive strategies. Determined students create a positive approach towards the learning task, put effort, and persist (Bilde, Vansteenkiste, & Lens, 2011).

An Overview of Social Cognitive Theory

Bandura (1986) suggested social cognitive theory to explain human behavior. This theory discards theories that view individual's behavior as an effect of their environment or internal factors. Nevertheless, social cognitive theory views human behavior as a product of three factors: behavioral, personal and environmental.

According to Bandura (1986), human conduct is described in terms of three factors. In this theory, behavioral, personal, and environmental factors create interactions to influence each other. For instance, the way learners construe the concerns of their own performance alters and informs their personal and environmental factors (e. g., emotional, cognitive, and biological events), which, in the future will enlighten and adjust their future performance. Nonetheless, Bandura (1986) indicated that the influence of

these factors differs based on the circumstances and responsibilities with which individuals are involved. Environmental influences may be stronger than personal and behavioral processes in certain situations. Additionally, it takes time for these factors to apply their influence and operate equally, because as Bandura (1986) indicated, individuals are both products as well as creators of their environment.

Self-regulated learning from a social cognitive perspective

Zimmerman (1989, 1990, 2000) took the lead in introducing the self-regulation model to the academic learning field. According to Bandura (1986) self-regulation is a keystone of social cognitive theory and Zimmerman's work is built on (Bandura, 1986) social cognitive theory, which explains human behavior as a cycle of interactions among personal factors behaviors, thoughts, feelings, and environmental influences. Furthermore, Zimmerman (1989) believed self-regulated learning take place when the learner begins personal and behaviors factors to regulate their current environment to accomplish a desirable goal independently of coaches, teachers, parents, or other agents.

Corresponding to Bandura (1986) theoretical framework, Zimmerman (1989) proposed self-regulated learning model based on triadic model. Zimmerman (1989) proposed that personal factors are not the only foundation in self-regulated learning, but also environmental, and behavioral factors that connect with each other reciprocally. Specific personal factors associated to self-regulated learning include metacognitive such as behavioral and planning control; learners' knowledge, such as self-regulative and

declarative processes; self-beliefs and values, such as motivation and self-efficacy, goals, and affective process, such as anxiety. Additionally, behavioral factors related to self-regulated learning consist of learners' self-evaluations, self-reactions, and self-observations. In addition, environmental influences include social situations, for example enactive experiences formed by modeling and verbal persuasion formed by support from students and other teachers; and the physical environment, such as external outcomes and task features (Zimmerman, 1989, 2000; Zimmerman & Martinez-Pons, 1990).

The progress of self-regulated learning

Zimmerman and colleagues (Kitsantas, Zimmerman, & Cleary, 2000; Schunk & Zimmerman, 1996; Schunk & Zimmerman, 1997) conveyed a social cognitive model of the development of motor and to this model, in the self-regulation involved with the acquisition of new motor skills, learner's progress through four sequential stages: emulation, observation, self-control, and self-regulation. According to this model, observation and emulation initially develop from social learning experiences, while learners cultivate self-control and self-regulation to acquire a high level of skill (Schunk & Zimmerman, 2008; Zimmerman, 2000).

The emulation stage involves modeling and social guidance. The emulation stage is reached when learners initiate a new motor skill by imitating the general form of the model's performance with social guidance and feedback from an instructor or coach. The emulation process provides learners with sensorimotor and social response that allows them to develop standards for

correct performance for subsequent stages of learning. Social feedback is considered the primary source of motivation at this stage of learning (Kitsantas et al., 2000; Schunk & Zimmerman, 2007).

The observation phase of learning motor skills is accomplished through modeling which is the most common process of providing learners with information about how a new motor skill should be performed (Kitsantas et al., 2000). Indeed, modeling is believed to be one of the most influential stages in transmitting information about a specific skill (Bandura, 1986,

1997). Hearing a model describe a skill and watching the outcome of their performance can raise a learner's motivation level. Kitsantas et al., (2000) states, " an observer's motivation at this level is enhanced vicariously by rewards attained by the model" (p. 811).

Kitsantas et al., (2000) investigated emulative and observational learning to confirm the superior learning, self-regulation, and motivation that occur through sequential modeling, emulation, and social feedback. The self-control stage is the first step in moving from social learning experiences toward self-directed learning experiences. Self-control is achieved when learners are capable of using skills or strategies independently through self-directed practice until they reach automaticity (Kitsantas et al., 2000). During this stage, learners no longer depend on the model to learn, but is instead expected to compare his or her performance continually to the standard set by the model (Kitsantas et al., 2000; Schunk, 2001; Schunk & Zimmerman, 2007; Zimmerman & Kitsantas, 1997). Self-reaction is believed

to be the main source of motivation for this. It stems from matching or exceeding the performance of the model's standard (Kitsantas et al., 2000).

The self-regulation stage is the final stage in the development of self-regulated learning. Learners acquire the ability to adopt his or her performance strategies to personal and environmental conditions. At this stage, learners perform skills without attention to the process and achieve automaticity by focusing on performance outcomes (Kitsantas et al., 2000). According to Zimmerman and Kitsantas (1997) self-efficacy and intrinsic interest in the motor skill are the primary sources of motivation during this stage.

A growing body of evidence supports the social cognitive model's assumption that self-regulation can be acquired precisely if learners learn motor skills in hierarchal order. Kitsantas et al., (2000) studied the sequentiality of the observation and emulation learning stages of self-regulatory development. In their study, female high school students were compared in terms of their acquisition of dart-throwing skills. Participants were either in one of two model groups or in a no-model control group. An adult model demonstrated dart-throwing skill strategies and selectively provided social feedback for the participants in each experimental group. Participants in the experimental groups were exposed to one of two conditions. The copying groups were instructed to watch a model who missed some components of dart-throwing skills, followed by 15 minutes of practice, whereas the mastery model groups were instructed to watch a model who demonstrated correct performance (e. g., missed no components), followed by 15 minutes of practice. The results supported the

social cognitive model's multi-level view of self-regulatory development. Participants in the two modeling groups acquired better dart-throwing skills compared to those who attempted to learn from verbal description and direct practice alone. However, participants in the copying model benefited more and performed better than those in the mastery model did. During the emulation stage, participants who received social feedback learned and performed dart throwing skills better than those who learned from their own practice alone. Motivation levels such as self-efficacy and intrinsic interest were higher among participants in both modeling groups than among those in the control groups.

Self-modeling is another technique that is effective during the imitative stage (Schunk & Zimmerman, 1996). Dowrick and Dove (1980) define self-modeling as, " the behavioral change that results from the repeated observation of oneself on videotapes that show only desired target behaviors" (1980, p. 51). Clark and Ste-Marie (2007) recently examined two self-as-a-model interventions and their impacts on the self-regulation processes engaged in learning the motor skills of basic swimming strokes. The study aimed to compare two types of self-as-a-model interventions: self-modeling and self-observation. Children were assigned into three groups, a self-modeling group, self-observation group, and control group. Children in the self-modeling group were shown video of themselves executing an adoptive behavior, while those in the self-observation group were shown video of themselves executing a task at their current skill level. The self-modeling group showed higher swimming performance and higher self-satisfaction than the self-observation and control group. They also showed

more intrinsic motivation and self-efficacy beliefs compared to the self-observation and control groups. The researchers concluded that beyond enhancing learners' intrinsic motivation, self-efficacy, and self-satisfaction, self-modeling effectively advances learners' self-regulation as they develop motor skills for swimming and promotes swimming performance.

To test the sequentiality of self-control and self-regulation in the multilevel hierarchy, Zimmerman and Kitsantas (1997) examined the effectiveness of shifting from process goals to outcome goals among female high school students engaged in dart-throwing practice. Students who shifted developmentally from process goals to outcome goals after achieving automaticity (during the self-regulation stage) exceeded those who were exposed to process goals alone or to outcome goals during the post-test. Self-motivation, reflected in levels of self-efficacy and intrinsic interest in dart-throwing skills, were also higher in the group whose goals shifted.

Models of Self-regulation of motor learning and performance

Zimmerman(2000) proposed to explain the self-regulatory strategies related to motor skill development that learners use in the absence of an external agent (e. g., teacher, coach) to exercise control over their own learning and achieve the best possible performance.

Kirschenbaum's Model

Considered the first to consider individual self-regulation, Kirschenbaum's, (1984, 1987) model, with regard to motor skills and performance in terms of the interaction between cognitive (e. g., evaluating, goal setting, planning),

affective (e. g., tension, excitement, fear, anger), physiological (e. g., physical condition, strength), and environmental factors. Kirschenbaum's (1984, 1987) model of self-regulation contains five sequence stages: The first; problem identification, second; commitment, third; execution, fourth; environmental management, and fifth; generalization.

In the first stage, learners take responsibility for their progression toward peak performance by recognizing the problem to be solved in a specific sport activity, such as shooting accurately. Moreover, Kirschenbaum (1984) suggests that it is important for learners to consider their strength and weakness to adjust their work toward areas that need more improvement. During this stage, learners must believe that behavioral changes are possible and that working toward behavioral change will lead to desirable outcomes.

After recognizing that a change in behavior is possible, learners must make a commitment to that change. In the second stage, learners may employ several strategies to promote their commitment and determination to achieve desirable outcomes. For example, they may engage their psychological skills in strategies involving imagery to achieve optimal performance levels (Kirschenbaum, 1984).

After making a commitment to a behavioral change, learners enter the execution stage. They begin taking an active role in their own learning process by executing the components of motor skills and then engaging in self-monitoring or the evaluation of their own performance against a goal or standard. The outcomes of their self-evaluation lead learners to engage in either self-reinforcement or self-punishment.

The environmental management stage reflects (Kirschenbaum, 1984, 1987) assertion that behavior does not occur in a vacuum. For learners to pursue their goals, they must manage the social and physical environment by finding a place and time to practice their skills without distractions. Additionally, when faced with difficulties, they must seek help and support from teachers, coaches, or superior teammates.

Finally, once learners have achieved self-regulation, the problem of generalizing their newly learned behavior across different and difficult context remains. During this stage, learners must vigilantly self-monitor to prevent generalizing failure rather than success in their new skill (Kirschenbaum, 1984, 1987).

In sum, despite some research recognizing the importance of each self-regulation stage, Kirschenbaum's (1984, 1987) model has not received the extent of support or attention required for sports researchers to validate the overall effectiveness of this five-stage training sequence (Kitsantas & Zimmerman, 1998).

Five-step learning strategies model

Singer and Cauraugh (1985) created another self-regulation model.

This model is also five sequential steps: 1 – readying, or engaging in preparatory activities such as relaxation to build confidence and get ready to perform the task; 2 – imaging oneself executing a specific motor skill successfully; 3 – focusing on specific objects on the target to reduce distracting thoughts; 4 – executing the skill without conscious attention to

the performance and its outcomes; and if time permits, 5 – evaluating the effectiveness of performance outcomes and the previous four processes, making any necessary adjustment.

The success of this five-step-model in the context of motor learnin