

SELF-REGULATED STRATEGY INSTRUCTION WITH THE SELF-
REGULATION MICRO-ANALYTIC ASSESSMENT AND
ATTRIBUTION TRAINING IN HIGH SCHOOL STUDENTS WITH
LEARNING DISABILITIES

by

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DEDICATION

This is dedicated to my husband, Kevin Dvorchak, my parents, my sister, and the rest of my family who offered love and support through this process.

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ABSTRACT

SELF-REGULATED STRATEGY INSTRUCTION WITH THE SELF-REGULATION MICRO-ANALYTIC ASSESSMENT AND ATTRIBUTION TRAINING IN HIGH SCHOOL STUDENTS WITH LEARNING DISABILITIES

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This multiple-baseline design study investigated the effectiveness of the self-regulation micro-analytic assessment (SMA) in improving the development of self-regulation during self-regulated strategy development (SRSD) with attribution training with seven high school students with learning difficulties. The study also investigated the effectiveness of SRSD on improving self-efficacy, attribution style, and academic performance in high school students with learning issues. The strategic instruction occurred during the regular school day in designated extra help periods. During these hour long sessions an (SRSD) approach that combined self-regulation instruction with attribution training was used to teach a note-taking and test-preparation strategy. Prior to the intervention, students completed three baseline probes and three questionnaires: self-efficacy as a learner, the self-regulated micro-analytic assessment, and the student's attribution style. After completing the baseline probes intervention began and lasted approximately 36 days, followed by post testing. Findings revealed that the intervention significantly

improved performance on the criterion measures from baseline to post intervention, as well as, the students overall self-efficacy for learning and attributions for strategy-use.

CHAPTER 1

Introduction

Self-regulation is often a difficult skill for children with learning disabilities to master. As Baird, Scott, Dearing, and Hamill (2009) indicate that students with learning disabilities (LD) possess, “a distinctive cognitive self-regulatory pattern, one that has been associated with such maladaptive approaches to learning as avoiding challenges, experiencing negative affect, exhibiting poor persistence and task abandonment, and showing a deterioration in performance following failure,” (pp. 899). Children with LD can exhibit weaknesses in one or more aspects of self-regulation: goal setting or planning, self-control, self-observation, and self-evaluation. Self motivation beliefs, specifically, self-efficacy and attributions, often prevent children with LD from attempting or completely learning all aspects of self-regulation. To assist children with learning disabilities to learn the process of self-regulation researchers and educators have developed various strategies that enhance a child's ability to self-regulate. These strategies are often area specific, for example, a reading strategy to improve comprehension. Often times these strategies will also focus on improving self-motivational beliefs, including self-efficacy and attributions. The difficulty is that most of these strategies focus on a specific content area, which makes generalizing the self-regulated strategy across all academic areas a challenge for students. There is very little information available about using general study skills strategies to promote self-regulation in

the majority of academic areas.

Statement of Purpose

The purpose of this was to teach goal setting, organization/planning and two specific strategies, MIND and War during a two phase intervention single subject multiple baseline design study with high school students identified as having learning disabilities and other learning issues. MIND is a mnemonic for the four steps. M stands for main ideas, which students are expected to highlight from relevant reading material for classes. The I stands for important details, which students highlight to support the main idea they have selected. The N or Name component requires students to name the main ideas found in the highlighting. The last step, D for Define requires students to define the main ideas with the important details. WAR begins with, Write the main idea from the notes on one side of the note card and then Analyze the main idea on the other side of the note card. Finally, the student Reviews all of the material on the individual note cards. These two strategies were taught separately with MIND taught during phase I of the intervention and WAR taught during phase II of the intervention.

The study relied on the following dependent measures during baseline and postintervention to demonstrate student improvement. The Self-efficacy for Learning measure, an attribution measure, and the Self-regulation Micro-Analytic Assessment. As well as, criterion-reference measures that assessed students' knowledge of the strategies being taught and performance using the strategies. These passages consisted of a generic reading passage followed by five short answer questions, five true/false questions, and five multiple choice questions.

By teaching both strategies, the goal was to improve students' ability to

prepare for any test they may have in any of their academic classes, as well as, improve their confidence about preparing and taking these tests.

Research Questions

Specifically, this study addressed the following research questions:

(1) are high school students with learning disabilities able to learn and apply note-taking and study skills strategies to content area material for test preparation?, (2) does the use of the SMA as a pre/post measurement facilitate self-regulation development in SRSD instruction?, (3) does attribution training embedded within the SRSD instruction affectively train high school students with LDs to use effort and strategy-use attributions, as well as, improve students' self-efficacy?

Definition of Terms

Attributions. Attributions are beliefs an individual has about why they succeed or fail at a task (Robertson, 2000).

Self-efficacy. Self-efficacy is a student's belief about his/her ability to carry out a given task (Bandura, 1994).

Self-regulation. Self-regulation refers to self-generated thoughts, feelings, and behaviors that are directed toward to achieving goals (Zimmerman, 2000).

Learning Disabled. Learning disabled, LD, "means a disorder in one or more of the basic psychological processes involved in understanding or in using language, spoken or written, that may manifest itself in an imperfect ability to listen, think, speak, read, write, spell, or to do mathematical calculations, including conditions such as perceptual disabilities, brain injury, minimal brain dysfunction, dyslexia, and developmental aphasia," (Department of Education, 34 C.F.R. §§300.7 and 300.541).

Emotionally Disturbed. Emotionally disturbed, ED, "means a condition

exhibiting one or more of the following characteristics over a long period of time and to a marked degree that adversely affects a child's educational performance:(A) An inability to learn that cannot be explained by intellectual, sensory, or health factors,(B) An inability to build or maintain satisfactory interpersonal relationships with peers and teachers, (C) Inappropriate types of behavior or feelings under normal circumstances, (D) A general pervasive mood of unhappiness or depression, (E) A tendency to develop physical symptoms or fears associated with personal or school problems," (IDEA, 2004).

Other Health Impairment. Other health impairment, OHI, "means having limited strength, vitality or alertness including a heightened alertness to environmental stimuli, that results in limited alertness with respect to the educational environment," (IDEA, 2004).

CHAPTER 2

Review of the Literature

The literature in this area has also tended to focus on elementary or middle school populations. The few studies with high school students have focused on self-regulated strategy instruction in a given content area without any motivational or attributional support (Garcia & Hidalgo, 2006; Azevedo & Cromely, 2004; Baker, Chard, Ketterlin-Geller, Apichatabutra, & Doabler, 2009). Many of these studies have also tended to focus on one particular model of self-regulated learning and utilize only the tenants of that model (Cleary, Keating, & Zimmerman, 2006; Harris, & Graham, 1999). However, different models can complement each other in the development and intervention of self-regulated learning. Zimmerman's (2002) self-regulated learning (SRL) model and Graham and Harris' (1989) self-regulated strategy development (SRSD) model both present a conceptual framework that can be useful in assisting high school students with learning disabilities. SRL comes from the social cognitive perspective of self-regulation and stresses the organizational aspects of self-regulation; including self-evaluation, planning, goal setting, attributions, and self-efficacy; where as SRSD stresses strategy use (Azevedo et al., 2004). Most importantly the SRL model measures a student's ability to successfully carry-out each of the above activities and then utilizes that information to influence intervention. The instrument used to measure these aspects of self-regulation is the self-regulated micro-analytic assessment

(SMA) (Cleary & Zimmerman, 2004). The results of this measurement then influence the amount of goal setting, self-evaluation, and planning involved in the SRSD intervention, which is also heightened by attribution training. The addition of attributions and SMA is to improve all aspects of self-regulation, including: self-efficacy, goal setting, self-evaluation, planning, and strategy use. The purpose of this study is to combine each of these aspects into an intervention that focuses on developing note-taking and study skills strategies in high school students with learning disabilities.

SRL and SRSD

In SRL students generate thoughts, feelings, and actions that assist them in achieving a goal (Zimmerman, 2002). Self-regulated learners monitor their behaviors in terms of their goals and self-reflect on their effectiveness in achieving these goals. This improves their motivation for learning and academic achievement. This cognitive model presents self-regulation as an active, constructive process whereby learners set goals for their learning, and then attempt to monitor, regulate, and control their cognition, motivation, and behavior in service of their goals (Azevedo et al., 2004).

Within Zimmerman's (2002) model there are three phases: forethought, performance or volition control, and reflection, which work in a cyclical process. Forethought consists of task analysis and self-motivation. Task analysis involves setting goals to complete the task and planning how to complete the task. There is considerable evidence that students who set specific proximal goals are more successful academically than students who do not (Zimmerman, 2002). Self-motivation stems from students' belief about their abilities as learners. This

includes self-efficacy, as well as intrinsic motivation. Performance phase includes learning to self-control and self-observe. Self-control refers to the use of specific strategies that were chosen in the forethought phase. Some of the key types of self-control methods are imagery, attention focusing, self-instruction, and task strategies (Zimmerman, 2002).

Self-observation refers to a student's ability to self-record or observe their own behavior and respond to that observation. For instance, a student may find that he or she gets their homework done faster when working alone than working with another student. Self-reflection contains two major classes: self-evaluation and self-satisfaction. Self-evaluation is comparing, self-observed performance to a standard, such as prior performance, another person's performance, or an absolute standard of performance (Zimmerman, 2002). Within the self-evaluation process students are making causal attributions that explain why they received the outcome that they did. These attributions can be based upon effort or other variables, such as luck.

Self-evaluation, self-efficacy, self-observation, and task analysis are considered part of the self-regulatory process and are often termed self-regulatory processes. Assessing each of these processes is often very difficult, particularly with just measures. Zimmerman and Cleary (2004) developed the self-regulation micro-analytic assessment (SMA) to target each of the processes. This assessment was developed to target students' motivational and self-regulation processes, as well as, their use of specific learning strategies (Cleary et al., 2004). The assessment can be used to determine how well a student self-monitors, self-evaluates, and goal sets for a particular learning activity. Self-efficacy and

attributions can also be measured by the assessment. The SMA is a very valuable tool in evaluating students' self-regulating capacity. The information gained about the students' ability to perform the different processes within the self-regulatory model can influence the types of strategies that are taught and the material within the strategies. The assessment could be used prior to completing an SRSD intervention with students to determine the areas the SRSD intervention needs to focus on, for instance, writing or math.

The SRSD model by Graham & Harris (1989) focuses on explicit instruction in goal setting, self-assessment, and self-recording in relation to the acquisition, maintenance, and generalization of a planning strategy for a particular academic skill, such as writing, among students with learning disabilities (LD). SRSD as described by Santangelo, Harris, and Graham (2008) in their review of SRSD, the model consists of six stages; 1) develop background knowledge, 2) discuss it, 3) model it, 4) memorize it, 5) support it, and 6) independent performance. Developing background knowledge focuses on making sure that students have the prerequisite skills needed to write. This means that students understand, learn, and apply the strategy. The second stage, discuss it, ensures that students are motivated and willing to learn the new strategy (Santangelo et al., 2008). In this stage, students discuss their perceptions of their current writing performance and how the strategy will help them to improve their writing. After, discussing the benefits of the strategy and how it can help them to improve, students learn the steps of the strategy and exactly how to use it. Throughout the introduction of the strategy teachers are modeling each step and are using positive attributions to maintain motivation (Santangelo et al., 2008). At this stage, students

can also set a goal for their writing by indentifying one aspect of their writing that they would like to improve based upon the baseline information that was gathered in stage 1. Within the model it stage, the teacher may have to model each stage for students multiple times before the students understand the strategy. In the next stage, memorize it, the students become more familiar with the strategy. The goal of this stage is that students will be able to become comfortable enough with the strategy that they can use it automatically. This stage is often the fastest stage and can be the most fun for students. Teachers can use flash cards, mnemonic devices, and other techniques for students who have difficulty with memorization (Santangelo et al., 2008). The support it stage imparts responsibility for using ths strategy to the student. As Santangelo et al. (2008) state, this stage is most effective when frequent constructive feedback is given along with positive reinforcement. The final stage of the model is independent performance. In this stage, the goal is that students will successfully use the strategy over time in different settings, as well as discuss how their writing has improved. The independent performance requires that the student be able to self-regulate in order to be able to reflect on their work and improvements that have been made. This model is particularly effective with students with LDs because it requires that the student be able to independently perform the strategy at the completion of each phase and finally again at the end of the strategy.

Each of these models offers useful aspects in the strategy instruction of high school students with learning disabilities. Combining the self-evaluation, self-monitoring, goal-setting and planning aspects of the SRL model with the SRSD model and adding in attribution training to create a strategy that successfully

improves LD high school students' ability to take notes and study for tests would be a valuable addition to the use of these models.

Research on Self-regulated Instruction in Students with Learning Disabilities

SRSD was initially developed to assist students who face significant and debilitating difficulties. Graham and Harris (1999) believed this population would benefit from an integrated approach to intervention that directly addresses their affective, behavioral, and cognitive characteristics (Harris & Graham, 1999). When using the SRSD method goal setting, self-monitoring, self-instructions, and self-reinforcement are as important as the stages within the SRSD model. Goal setting refers to a student's ability to set proximal goals for themselves and clearly plan how those goals can be achieved using strategies (Zimmerman, 2002). In the process of working toward one of these goals a student monitors their progress, how they are moving toward their goal, and effectively corrects themselves to more successfully achieve the goal. Self-monitoring occurs during the goal attainment process where a student monitors their performance for signs of progress (Zimmerman, 2002). Self-instruction focuses on a student's ability to successfully guide themselves through strategies and tasks to achieve their goal. Self-reinforcement is similar to intrinsic motivation and refers to a student's ability to successfully motivate themselves to the completion of their goal (Harris et al., 1999).

The procedures for self-regulated strategy instruction vary greatly; however, the results of these studies tend to be remarkably similar in relation to the effectiveness of the instruction. Most studies find that SRSD is effective in improving whatever academic area is being remediated. Nelson and Manset-

Williamson (2006) found that elementary and middle school students with a reading disability who participated in self-regulated reading comprehension strategy intervention made significantly ($p < .05$) larger gains in their reading comprehension skills than did participants in the control group. In a different study that emphasized the SRL model, the strategy intervention, still lead to significant changes in the students' ability. Azevedo and Cromely (2004) found that training students to self-regulate their learning in a 30-minute training period significantly increased their understanding of a specific topic in science. Another study utilizes self-regulated strategy instruction with attribution training to improve reading comprehension. Miranda, Villaescusa, and Vidal-Abarca (1997) found that self-regulation procedures were effective in increasing students' reading-comprehension strategies. Overall, regardless of the theoretical approach to SRL the results demonstrate that students' ability to plan, organize, and evaluate a given task improves with self-regulated instruction (Sexton et al., 1998).

Attributions and Self-Efficacy

Attributions play an important role in the development of self-regulated learning. It is believed that combining strategy instruction and attribution training within SRL and SRSD results in positive changes in the students performance of the given task and attributions for effort and strategy use (Sexton, Graham, & Harris, 1998; Cleary, Keating, & Zimmerman, 2006). Attributions are beliefs an individual has about why they succeed or fail at a task (Robertson, 2000). For instance, a student may state that they received an A on a test due to luck. They are attributing their success to luck. Luck is considered an uncontrollable, unstable, external factor. Unstable refers to whether or not the factor the student is

attributing success or failure is not consistent over time. Stable refers to a factor that is consistent over time. External refers to a factor outside of the student themselves. Internal refers to a factor within the student. For instance, if a student attributes their success to the amount of effort they placed on studying the student is demonstrating an internal-unstable attribution. Uncontrollable vs. controllable refers to whether or not a student has control over that particular factor. The goal of attribution instruction is to train students to attribute their success to internal, controllable, and unstable factors, like effort or strategy use. Students who attribute their success to unstable, external factors like luck are considered to have maladaptive attribution styles. Students with a maladaptive style may conclude that their efforts are unrelated to achievement outcomes, and therefore futile (Fulk & Mastropieri, 1990). It has been recommended that attribution training would benefit children with learning disabilities who have maladaptive attribution styles (Robertson, 2000; Weiner, 1985).

By improving attribution styles a student's self-efficacy toward a given task is also being enhanced. Self-efficacy is an important part of the self-regulation model presented earlier. Many studies measure for changes in self-efficacy when performing intervention with self-regulated learning instruction (Azevedo & Cromely, 2004; Baker et al., 2009; Graham & Harris, 2000; Sexton et al., 1998). Self-efficacy is defined as beliefs in one's abilities to carry out a desired course of action (Klassen & Lynch, 2007). These beliefs are formed from four sources, mastery experience, vicarious experience, verbal persuasion, and physiological responses. An individual's mastery experience comes from how they gauge the effects of their actions and how they interpret these effects is important in the

creation of their self-efficacy (Pajares, 1997). Actions that lead to successful outcomes or experiences raise self-efficacy and actions that lead to unsuccessful outcomes or failures lower self-efficacy.

Vicarious experience occurs when an individual models or observes another's actions. When people lack prior experience or are uncertain about their ability it is safer to learn from and interpret other's actions for themselves. Verbal persuasion or positive/ negative messages from significant others; such as, "Give it a try, you will do great." Verbal persuasion is most affective when a student already believes that they are capable of completing the activity. Negative verbal persuasion is more affective in reducing a student's self-efficacy than positive verbal persuasion is in improving it. Verbal persuasion is not as affective as a student successfully completing the activity, but it still adds important information to the development of a student's self-efficacy. Physiological and emotional responses refers to the sensations individuals feel in their bodies when completing an activity and how those responses add or take-away from their self-efficacy (Klassen et al., 2007). Physiological responses include such things as sweaty palms, racing heart beat, or butterflies in the stomach. Individuals can interpret the physiological response as either positive or negative and whether the anticipated outcome will be a success or a failure. Each of these sources of information for self-efficacy are not directly translated into judgements of competence, but rather individuals interpret the results of events and from the information from those interpretations make self-efficacy judgments (Pajares, 1997). Improving self-efficacy will increase the likelihood that a student with LDs will approach a task with confidence because self-efficacy is considered an essential motive for learning

(Klassen et al., 2007).

Attributions: Effects on Student Learning, Performance, and Self-Efficacy

Like the self-regulatory processes, attribution style and self-efficacy both play an important role in the development of self-regulation; however, although these factors are often measured, they are not often specifically focused on within a study on self-regulation. The majority of studies that looked at changes in self-efficacy and attribution using an SRSD intervention followed a similar procedure where measures of self-efficacy and attribution were administered prior to and following intervention; however, the instruments used to measure self-efficacy and attribution tended to vary in each study (Baird et al., 2009; Sawyer et al., 1992, & Sexton et al., 1998). Nelson and Manset-Williamson (2006) conducted a study using a self-regulated reading comprehension intervention with students in grades 4-8 where they measured for changes in self-efficacy towards reading and reading attributions to strategy use. To measure reading self-efficacy, Nelson et al. (2006) used an instrument developed by Schunk and Rice (1987). The instrument consists of reading passages at various grade levels with each passage being followed by questions about the passage. Following the completion of the questions about the passage the student answers questions explaining how unsure or sure (a scale from 10-100) they are about their answers to the questions about the passage. The attribution measure developed by Nelson et al. (2006) for this study consists of four scenarios: you get an A+, you can't read any of the words, you get an F, and you can't read most of the words. For the two failure situations the students were asked how important strategy use was in their failure on a scale of 0 (not important) to 10 (very important). For the success scenarios students were asked

how important correct strategy use was in explaining their success. Sawyer, Graham, and Harris (1992) were performing an SRSD writing intervention and used a self-efficacy instrument created by Harris and Graham (1989) that probed into one's perception about their ability to write. The instrument consisted of ten questions that asked about a student's ability to write a story. It began with such questions as, "Can you write a story that tells about a main characters feelings?" and then the student would have to rate how well they thought they could complete this activity on a scale of 10-100 with 10 being not sure, 40 being maybe, 70 being pretty sure, and 100 being really sure (Sawyer et al., 1992, p. 343). Each self-efficacy measure is tailored to the specific academic area that is being assessed. As Schunk et al., (1987) focused on reading and Harris et al. (1989) focused on writing. The approach is also slightly different. Harris et al. (1989) is asking a student how well they think they can do; whereas, Schunk et al. (1987) is asking how well they thought they did on the activity. These measures tend to vary from study to study, which does make it difficult to assess reliability of the measures.

Other studies approach attributions directly when teaching strategies with self-regulation. These studies embed attribution training in the strategy instruction. For instance, Fulk and Mastropieri (1990) present a six stage procedure for teaching strategies that includes attribution training. This strategy focuses on teaching students how to use effort and strategy use attributions; rather than, using internal stable attributions like, "I am not smart enough." Sexton, Harris, and Graham (1998) embedded attribution instruction into each stage of the SRSD model with particular emphasis in the "model it" stage. The instructor in the "model it" stage would use a variety of attributional self-statements where they

attributed success in writing the essay to effort in the use of the strategy (Sexton et al., 1998). For example, an instructor may state, “If I work hard and follow the steps of the strategy, I’ll write a good essay,” (Sexton et al., 1998, p. 300). Similar to Fulk and Mastropieri (1990) the goal of the attribution training for Sexton et al. (1998) is to direct students’ attributions to effort and strategy use. However, similar to the difficulty presented earlier with measures, how the attribution training is performed may vary from study to study. This makes it difficult to determine the most effective way to embed attribution training into self-regulated strategy instruction.

Self-regulated strategy instruction has also been shown to improve both attribution styles and self-efficacy, in addition to the academic improvement. Schunk and Gunn (2001) in their study looking at the influence of self-regulated task strategies on self-efficacy found that the greater use of strategies bore a positive relationship to ability and task difficulty attributions and a negative relationship to effort and luck attributions. Nelson et al. (2006) found that participants in the explicit self-regulated reading comprehension intervention made greater gains in their attributions to incorrect strategy use for reading failure situations. This represents an unstable and controllable cause for failure, which means that the students feel they have the ability to improve in another situation if they use the strategy correctly. Self-efficacy did not improve, as expected, for this particular intervention by Nelson et al. (2006); however, there was a medium effect size ($d = -.52$). These findings demonstrate that attributions and possibly self-efficacy may improve as a product of the self-regulated strategy instruction.

The studies that included attribution training into self-regulated strategy

instruction varied not only in their procedures, but also in the results that were found. Miranda et al. (1997) used a sample of 80 fifth and sixth-grade students which were divided into two conditions and a control. A portion of these children were diagnosed with LDs. The first condition consisted of self-regulatory strategy instruction for reading comprehension and the second condition consisted of self-regulatory strategy instruction plus attribution training. The control group consisted of normally achieving fifth and sixth grade students. The attribution training was included in each stage of the strategy instruction. It was hypothesized by Miranda et al. (1997) that the students in the self-regulatory instruction plus attribution condition would outperform those in the self-regulatory instruction condition on reading comprehension strategies. This hypothesis was not confirmed. Adding attribution training to self-regulation procedures did not produce any benefits. In contrast to these findings, Sexton et al. (1998) found that a student's attributions for writing can be influenced by a combination of strategy, attribution, and self-regulation components. The study conducted by Sexton et al. (1998) consisted of a population of six fifth and sixth grade students who had been identified as LD and were also experiencing difficulties with writing. These students received SRSD instruction in writing until they demonstrated mastery of the strategy. All instruction was performed in pairs for forty to fifty minute sessions. These two studies demonstrate conflicting results; however, the many differences in study design make it difficult to determine if attribution training is or is not beneficial when embedded into a self-regulatory strategy instruction intervention.

A New Model: SRL in combination with SRSD and Attribution Training

There is much variability in the aspects of self-regulation that are studied. Some studies focus just on SRSD or SRL, some on goal setting within a self-regulated framework, and others on self-efficacy or attributions. Investigators are also using different models of self-regulation. The subtle differences in each of the self-regulation models means investigators may be looking at different processes within the umbrella term of self-regulation depending on the concepts that are stressed as important in the particular model being used. For this reason, very few studies are replications of previous research because every study is looking at something slightly different than the previous study, which makes it difficult to determine best practices. The SRSD and SRL models are two models throughout the literature that have been tested and re-tested in many different ways. SRSD is also the only model mentioned in this paper that is now considered a research based practice (Harris et al., 1999). The lack of studies that look at self-regulated strategy instruction with attribution training in combination with the SMA aspect of SRL impedes the ability to make conclusions about the effectiveness of this combination on the LD population. It is believed, however, that by adding planning, goal setting, self-monitoring, and self-evaluation through the use of the SMA to the SRSD model, general strategies such as note taking and study skills will be able to be generalized across academic disciplines. For purposes of this study, note taking is defined as the student's ability to write and define main ideas and important details that they read or hear during a lecture. Test preparation is as a student's ability to prepare necessary materials and study for a test. For this reason, the proposed research will look at self-regulated strategy instruction with

attribution training in high school aged students with learning disabilities with an initial focus on the SMA, which will influence the SRSD intervention used in this study. It is predicted that the combination of SRSD with attribution training will significantly enhance students' use of effort and strategy use attributions, as well as improve students' overall performance on study skills activities, such as note-taking and test taking.

CHAPTER 3

Research Design

A multiple baseline design across participants with multiple probes during baseline was implemented to assess the instructional effects across small groups of students (Kennedy, 2005). Participants included seven students who were staggered across different start dates, so that each student may act as his/her own control. Although instruction was delivered individually the seven students were subdivided into three groups of two and one group with just one student. Group 1 started baseline first, group 2 started three days after group 1, group 3 started six school days after group 1, and group 4 started baseline nine school days after group 1. Following stable baselines, instruction began in each group, which was followed by post intervention testing.

Participants

The students were from mid to upper socioeconomic levels and come from a private high school in Virginia. Each of the students was diagnosed with various learning disabilities and had an individual learning plan and was between the ages of 14 and 17 (mean age = 16.1 years). There were seven students of whom – five were male and two were female-enrolled in the extra help class, which included the intervention. Students were enrolled in the course if they demonstrated significant difficulty in one or more academic course. The enrollment was 70% male and 30% female. Students were representative of the ethnicity and health status of all students

attending the high school. Students' age, ethnicity, and gender, as well as, other demographic information were collected, and are in Table 1.

Table 1

Student Characteristics

Student	Gender	Ethnicity	Age (Years, Months)	Special Education Categories	Test Scores
George	Male	Caucasian	17.50	ED, LD	WISC IV; VCI 132; PRI 98; WMI 83; PSI 86; Full Scale= 102
Adam	Male	Caucasian	15.70	LD, OHI	WISC IV; VCI 106; PRI 106; WMI 113; PSI 80; Full Scale= Not interpreted; GAI 111
Wyatt	Male	Caucasian	15.90	ED, LD	WASI; VA 126; PA 103; Full Scale= 115
Tia	Female	Caucasian	17.10	ED, LD	WISC IV; VCI 104; PRI 102; WMI 107; PSI 94; Full Scale= 111
Peter	Male	Caucasian	15.50	LD	WISC IV; VCI 116; PRI 112; WMI 97; PSI 65; Full Scale= 101
Danielle	Female	African American	16.90	LD	WISC IV; VCI 96; PRI 96; WMI 107; PSI 106; Full Scale= 101
Finley	Male	Caucasian	17.80	LD	WISC IV; VCI 112; PRI 90; WMI 91; PSI 14; Full Scale= 94

Note. ED= emotional disturbed; LD= learning disabilities; OHI= other health impairments; WISC IV= Wechsler Intelligence Scale for Children-fourth edition (Wechsler, 2003); VCI= Verbal Comprehension Index; PRI= Perceptual Reasoning Index; WMI= Working Memory Index; PSI= Processing Speed Index; GAI= General Ability Index; Full Scale= Full Scale IQ; WASI= Wechsler Abbreviated Scale of Intelligence; VA= Verbal Reasoning; PA= Performance.

Student Descriptions

George. George was a male 12th grade student who has been diagnosed with executive dysfunction, ADHD, Major Depressive Disorder, and Generalized Anxiety. He struggled on a day to day basis to manage his classes and organize his work. He maintained relatively good grades because of his compulsive work ethic. He typically spent 5 to 6 hours a night on homework plus two hours a day during his study halls.

Often times his homework took him so long because of his inattention. George also had severe test anxiety, which made testing and test preparation very difficult for him. His anxiety also tended to overflow into other academic areas, which caused George to become frustrated easily. He received 50% extra time on all tests and quizzes.

Adam. Adam was a male, 9th grade student who was diagnosed with Tourette's Disorder, ADHD, and executive dysfunction. Adam had a great deal of difficulty in his first year of high school in all subjects. He was unable to organize his assignments and complete them on time. Adam also had trouble organizing his notes or other materials to prepare for a test, so often times he did not prepare. Due to his inattention, he was often not able to use his time effectively and became distracted easily. He received 100% extra time on all tests and quizzes.

Wyatt. Wyatt was a male, 9th grade student who was diagnosed with Pervasive Developmental Disorder Not Otherwise Specified, Depressive Disorder Not Otherwise Specified, and ADHD. Wyatt struggled to maintain focus, process through information, and organize himself. If he did not feel a positive emotional attachment to a teacher, he had difficulty motivating himself to complete the work. He did not tend to study for tests because he was unable to organize himself. He struggled in most of his classes and at times demonstrated a negative affect towards his teachers. He was receiving 50% extra time on all tests.

Tia. Tia was a female, 11th grade student who was diagnosed with Post Traumatic Stress Disorder and ADHD-Inattentive Type. Tia expressed a high level of stress due to her inability to focus and complete tasks. She also had difficulty understanding and processing through assignments. The PTSD exacerbated the ADHD, as well as increased her stress levels. She has been in counseling for the

PTSD all year, which improved her academic functioning. However, she was still not performing well on tests. She received 50% extra time on all tests.

Peter. Peter was a male, 10th grade student who was diagnosed with ADHD-Inattentive Type, Executive Dysfunction, and Dysgraphia. He also had an extremely low processing speed, which appeared to inhibit performance greatly on tests. His executive dysfunction made organization very difficult and thus many of his assignments were not completed on time or at all. To assist Peter with focusing, he wore head phones that play music any time he had to take a test or perform classwork. This assisted him in being more attuned during classwork. Peter also learned to take all tests on the computer this year, which improved his performance. He received 100% extra time on all tests.

Danielle. Dannielle was a female, 11th grade student who was diagnosed with an Auditory Processing Disorder and ADHD- Inattentive Type. Danielle had difficulty with note-taking in class and test-taking. She improved on her writing and reading comprehension skills, but still tended to do very poorly on the majority of her tests. She always prepared for tests; however, reading her notes tended to be her only form of preparation. So, she often complained that she was not able to remember the information. In addition, Danielle tended to study the general themes; however, as she progressed into higher grades general themes were not enough and teachers wanted to see synthesis and analysis. This was extremely difficult for her. Danielle had 50% extra time on all tests.

Finley. Finley was a male, 11th grade student who was diagnosed with ADHD-Inattentive Type, Executive Dysfunction, and Generalized Anxiety. Finley struggled in all academic classes, primarily because of his extremely low processing

speed. He had difficulty keeping himself organized, turning in assignments, and taking tests. If he deemed a task difficult, he would not complete it. On tests, he tended to fall apart and leave much of the test blank. It took a lot of positive verbal coaching to get him through a test. Finley also did not complete any work at home or receive any support at home. This exacerbated any issues that he was having at school with the completion or preparation of work. Finley received 100% extra time on all tests.

Data Sources and Scoring Procedures

Self-Regulation Microanalytic Assessment. The Self-Regulation Microanalytic Assessment (SMA) was the measure completed during pre/post assessment. This assessment was 15 questions long and was designed to assess the student's ability to self-regulate in an academic setting (Cleary & Zimmerman, 2004). It asked questions about the student's ability to set goals for academic courses and strategy use when preparing for a test. The students completed this as an individual interview. The students completed the interview with the researcher prior to the beginning of the intervention and at the completion of the intervention. (See Appendix I). The Cronbach's alpha coefficient for this measure was .90 (Cleary & Zimmerman, 2006). The interview questions were separated into the nine different self-regulation processes as identified by Cleary and Zimmerman (2004). Each student interview was transcribed, then each question and response was placed into one of the nine categories. The researcher reviewed each transcript multiple times for recurring themes. Recurring themes for baseline interviews were placed in a table corresponding to the category they were found along with postintervention themes in a separate column of the table.

Self- Efficacy for Learning. The second questionnaire assessed the student's self- efficacy for learning. This questionnaire asked questions about the student's confidence in their ability to learn and be academically successful. The questionnaire asked questions about the student's confidence in studying and test preparation. The questionnaire assessed students' overall self-efficacy for learning; rather than, focusing on a particular aspect of learning. The Cronbach's alpha reliability coefficient for scores on this scale was .98. (Zimmerman & Kitsantas, 2007). (See Appendix J). The questionnaire was scored based upon the scoring procedures presented by Zimmerman, Kitsantas, and Campillo (2005). The percentages for each item were added up divided by the total number of items to gain an overall score for the measure. The researcher also calculated the scores for each of the subtypes as designated by Zimmerman et al. (2005): reading item, study item, test preparation item, writing item, and note-taking item. Each score was calculated for baseline and postintervention measures.

Student's Attribution. The last questionnaire was a scenario based questionnaire that assessed the student's attribution style. The student was given 4 scenarios and asked to rate on a scale from 0 to 100 how they would respond to each of the scenarios. These questionnaires were also completed at the end of the intervention. The Attribution Strategy Success and Attribution Strategy Failure Scales yielded Cronbach alphas of .53 and .54, respectively (Nelson, & Manset-Williamson, 2006). (See Appendix H). An average score for all four scenarios was calculated as per the scoring dictated by Nelson et al. (2006). In addition, the scores for each scenario were also entered. Scores were calculated and entered for baseline and postintervention.

Baseline and Post Intervention Passages. Baseline, intervention effectiveness, and final probes were designed to be relatively short criterion-reference measures that assessed students' knowledge of the strategies being taught and performance using the strategies. The baseline and intervention passages consisted of a generic reading passage followed by five short answer questions, five true/false questions, and five multiple choice questions. The following is a sample from one of the passages, the passage was taken from the 1995, English, Virginia Standards of Learning (SOL) test,

During the 1800s trying to catch a glimpse of Lake Champlain's monster was a popular pastime. The famous showman P. T. Barnum wanted to display the creature in his museum, [and] offered a \$50,000 reward to anyone who could capture the creature and deliver it to him. Needless to say, the reward was never paid. However, the offer attracted many monster hunters to the lake.

A sample short answer question about this particular aspect of the passage was, "Who offered a reward if someone could catch Champ and why was a reward offered?"

Students also answered the following multiple choice questions, "P.T. Barnum offered how much money as a reward to catch Champ? a) \$40,000, b) \$30,000, c) \$50,000, or d) no reward existed. Students also answered five true/false questions that followed this format, "True or False. Champ is a mythical monster in Loch Ness." Each student completed three passages at baseline and three passages at post-intervention. The student completed a passage at the 9th, 10th, and 11th grade reading level. At post-intervention the student completed two new passages that were different from baseline and one that he/she had read at baseline. The passages were given in order of difficulty; 9th, 10th, and 11th grade reading level. (See Appendices B-G).

The passages were scored according to the answer sheets associated with past Virginia Standards of Learning Tests (SOL). Each of the passages associated with this

study were taken from an SOL given in the past ten years. A selection of five short answer, five multiple choice, and five true/ false questions were taken from each of the tests across grades 9-12. If the students answered all questions correctly they received a score of 15. No half points were awarded. The answer was either correct or incorrect. Due to the variability in short answer questions, all short answer sections were also scored by another graduate student researcher, not conducting the study, to maintain reliability of scoring for these sections. There was 100% inter-rater reliability for both baseline and postintervention scoring.

Probes. During phase I, note-taking, and phase two, test-preparation, of the intervention students completed effectiveness probes to determine their understanding of the strategy. The probes asked students to name and describe the steps of the strategy. For instance in phase I, note-taking, the students were asked to list the mnemonic, MIND, and explain what each letter stood for:

- Main idea of each paragraph should be highlighted
- Important details that support the main idea should be highlighted in second color
- Name the main ideas as headings for notes
- Define the main ideas with important details in notes

The probe for phase II of the intervention, test preparation, students had to list the steps for the mnemonic, WAR, and explain what each letter stood for:

- Write the Main Idea from notes on the front of the note card
- Analyze the main idea using important details on the back of the note card
- Review all note cards until information can be recalled without looking at the note card

At the bottom of the probe, there was also a question that asked students how comfortable they would be using the strategy on a day-to-day basis for all classes.

The probes were worth 15 points each, so that they would have the same point value as the passages. This meant each aspect of the MIND probe was worth 3.75 points and each aspect of the WAR probe was worth 5 points. There were no half points awarded. Like the passages, these were also scored by a graduate student researcher, who was not part of the study, to maintain reliability of scoring. For both MIND and WAR probes, 100% inter-rater reliability was achieved.

Materials

Student Materials. Student materials consisted of multiple materials maintained in student drawers, including the weekly goal sheet, two different colored highlighters, notebook paper, note cards, and the student weekly planner. The weekly goal sheet asked the student to choose one goal for the week to work and explain why they wanted to work on it. These goals were small attainable goals; such as, the student completing all of his/her math homework instead of just doing it one day a week. At the bottom of the goal sheet was an area for the student to review his/her progress from the week. (See APPENDIX O for an example). During the instruction of phase I, MIND students needed two different color highlighters for highlighting the main idea and important details. They also needed the notebook paper for the notes created after highlighting the material in phase I. During phase II, WAR, the students needed note cards to create the necessary study materials. A weekly planner was also used by each student at the end of every session to assist with organization. The weekly planner had Monday through Sunday listed across the chart and 7 a.m. to

11 p.m. down the side of the chart. A sample of this planner can be seen in Appendix P.

Instructor Materials. Multiple materials were designed for the instructor, including, lesson plans, a smart board, effectiveness probes, readings from various textbooks, treatment fidelity checklists, and folders to maintain student information. The lesson plans consisted of the material that would be covered in each 45 minute session. Each lesson plan followed the same organization of weekly goal, intervention phase I or phase II, and weekly planner. A sample lesson plan can be seen in Appendix N. The smart board allowed the instructor to highlight material in front of the students and also create notes. The instructor used various readings from student textbooks that could be opened on the smart board as samples for highlighting. The highlighting from these readings was used as the basis for the notes, which were also written using the smart board. The instructor also had copies of the effectiveness probes for each student, which given at designated times. The treatment fidelity checklists consisted of the phases of the intervention that were expected to be covered during each lesson, including the modeling of attributions for effort and strategy use. A sample of the checklist can be seen in Appendix O. All information about from the study was kept in named (pseudonym was used) folders in a locked filing cabinet in the instructor's office.

Procedure

First Human Subject Review Board approval was granted by the university and participating school district. Then appropriate signed informed consent and assents were signed prior to participation in the study and followed by selection into the study. During, the baseline phase each student completed a minimum of 3

baseline probes, as well as, the Self-regulation Micro-analytic Assessment (SMA), the Self-efficacy for Learning measure (SELF), and the attribution measure. During the intervention phases, instruction was delivered during 45 minute long extra help sessions approximately three days a week for a period of about three months from January to the beginning of April. It took approximately three weeks to collect baseline data and all pre-intervention measures. Phase one lasted approximately two weeks and phase two lasted approximately a week and a half with the post-intervention taking two full weeks to complete. On average each student received 315 minutes of instruction time. Instruction of the intervention ranged from February 2, 2011 to March 14, 2011. Phase I and phase II of the intervention were interrupted by snow days and spring break delaying instruction.

Instructional effectiveness probes were administered, requiring students to list strategy components and reflect on their ability to use this strategy in class. The probes were given three days into phase I and phase II of the intervention and daily after that until the student demonstrated mastery. On average each student completed two probes for each phase. After reaching criterion performance on phase one note-taking and phase two test-preparation strategies, a minimum of three post instruction passages were administered. The passages were administered in order of grade level difficulty beginning with a 9th grade passage. After the completion of the passages the students completed, the SMA, the SELF, and the attribution measure.

A description of the intervention.. The intervention phase consisted of approximately three forty-five minute sessions each week over five weeks during which a two-phase intervention taught goal setting, organization/planning, and specific strategies for note-taking (phase one) and test-preparation (phase two). Each

student was taught the intervention in groups of two, except Group 4 which was just one student. Group 1 spent six days or 4.5 hours on phase I of the intervention and three days or 2.25 hours on phase II of the intervention. Group 2 spent five days or 3.75 hours on phase I and three days or 2.25 hours on phase II. Group 3 spent seven days or 5.25 hours on phase I and three days or 2.25 hours on phase II. Group 4 spent six days or 4.5 hours on phase I and three days or 2.25 hours on phase II.

In each lesson the instructor spent the first ten minutes of each lesson covering goal setting, followed by thirty minutes of strategy instruction, and ending with five minutes of organizing the student's weekly planner. The goal setting consisted of the student and instructor determining an academic behavior the student wanted to try to improve for one week. This included such goals studying for a vocabulary quiz every night that week instead of just the night before. After the student set the goal, the instructor would use that ten minutes during the other two sessions that week to review the student's progress in achieving his/her goal. The completion of the lesson consisted of the organization of the weekly planner. During this time the student filled out his planner with all major assignments for the week, when they were due, and for which classes. After completing this at the beginning of the week during the first session, the subsequent sessions were used to update this planner.

During phase one, the note-taking strategy, MIND was taught. MIND is a mnemonic for the four steps. M stands for main ideas, which students are expected to highlight from relevant reading material for classes. The I stands for important details, which students highlight to support the main idea they have selected. The N or Name component requires students to name the main ideas found in the highlighting. The last step, D for Define requires students to define the main ideas

with the important details. On average four, 45 minute sessions were required to reach mastery of the MIND strategy

For the second phase, the strategy, WAR, was taught and mastered in three, 45 minute sessions on average. This strategy was to assist students in preparing for a test. The student took a note card and the notes previously made with MIND and applied the next strategy WAR. The initial step was to Write the main idea from the notes on one side of the note card and then Analyze the main idea on the other side of the note card. Finally, the student Reviews all of the material on the individual note cards.

The structure of the teaching followed a Self-regulated Strategy Development (SRSD) model. The sessions began by the students writing down their goal for the week on a goal sheet. These goals focused on academic achievements, such as, study for two hours for my math test (Appendix O). After writing their goal, training in one of the strategies began. The last five minutes of every session was spent working on the planning and organization aspect of the study students' weekly planners. This was the time the students created a plan to complete homework, study for tests, and monitor their assignments for the week. This was the organizational piece of the intervention. The goal statements were reviewed at the end of every week and were an additional way of working on self-regulation. The student reviewed whether or not they met their goal, how well they met their goal, or if they did not meet their goal what they needed to do differently to achieve their goal.

Each strategy was taught using six phases of SRSD instruction: Develop Background Knowledge, Discuss It, Model It, Memorize It, Support It, and Independent Performance, while emphasizing throughout effort and strategy-use

attributions, self-regulation, and independent use. In the two initial stages the researcher gained an understanding of the students' knowledge of note-taking strategies and then described the purpose of the new strategy. Following this the researcher explained the importance of effort attributions and then the researcher moved into the Model It phase where she gave examples of how the strategy works. She also provided examples of effort and strategy-use attributions to use in conjunction with the note-taking strategy. During the Memorize It phase, students demonstrated that they have learned what the strategy steps were for note-taking and also how to use effort or strategy-use attributions. After memorizing the strategy students practiced performing combined strategy-attribution sequence with feedback. Finally, the students completed independent practice of the note-taking strategy. The students followed the same phases for the test-preparation strategy. (See Appendix A for explicit list of steps).

Probes were administered periodically throughout phase one and phase two. Students on average completed two probes for each phase of the intervention. Students continued to complete probes until they demonstrated mastery of the strategy, which was a perfect score of 15 on the probe.

Post-testing phase. Once students demonstrated mastery in the use of both MIND and WAR they moved onto the post intervention phase. In this phase each student was tested on his/her ability to use the strategy on a reading comprehension test. Each student was asked to apply both MIND and WAR to the comprehension test. These tests were the same format as the ones administered in baseline. During post intervention, each student also completed the SMA, SELF, and attribution measures.

CHAPTER 4

Results

This intervention was implemented over three months of the spring semester and included ongoing data collection using a variety of measures. Results are reported in the following sections: a) treatment fidelity; b) performance on baseline and postintervention criterion measure; c) self-regulation micro-analytic assessment; d) academic attributions; and e) self-efficacy for learning.

Treatment Fidelity

Examination of the treatment fidelity checklists indicated that the instruction had been conducted with a high degree of fidelity ($M= 97$, range= 95-100%). This was also supported by the treatment fidelity checklists completed by the independent observer for 30% of the lessons. Times when components of the lesson were not completed was usually due to a lack of time. For instance, it may have taken longer than expected for students to work through the organizational piece of the lesson. To make up for missing components, each lesson always began with a review of the previous lesson.

Performance on Reading Comprehension Measures

Overall. During baseline and postintervention each student read three passages (one at a 9th, 10th, and 11th grade reading level) and completed five short-answer, five true/false, and five multiple choice questions on the passage the day after completing the reading. Students only had to answer the questions during baseline;

however, during postintervention students were expected to use the note-taking strategy while reading the passage and the test-preparation strategy to study for the reading comprehension questions. The students made a significant improvement from baseline to postintervention on their overall performance, with pre-test means of 9.8 (SD= 1.2) and post-test means of 13.0 (SD= 0.7). Table 2 demonstrates the results from baseline to postintervention on the grade level criterion measures. The supporting percentage of non-overlapping data (PND) for these results varied from group to group and were calculated by comparing each grade level passage from baseline to the matching grade level passage from postintervention. If the score at postintervention was less than the score at baseline this data point was subtracted from the total number of data points. The resulting number was then divided by the total number of data points, yielding the percentage of non-overlapping data for each student. PNDs were calculated for each individual student, as well as overall for the group. George demonstrated a PND of 80% and Adam a PND of 100% for Group 1. The students in Group 2, Tia and Wyatt, both demonstrated a PND of 100%. Peter in Group 3 had a PND of 100%; whereas, his partner, Danielle had a PND of 80%. Finally, Finley had a PND of 100%. The overall PND for the group was 94%. The variability in PND for overall performance can be seen in Figure 4.1 and 4.2.

Figure 4.1. Effects of Phase I and Phase II on Performance on Criterion Measures Across Item Types (Group 1-2)

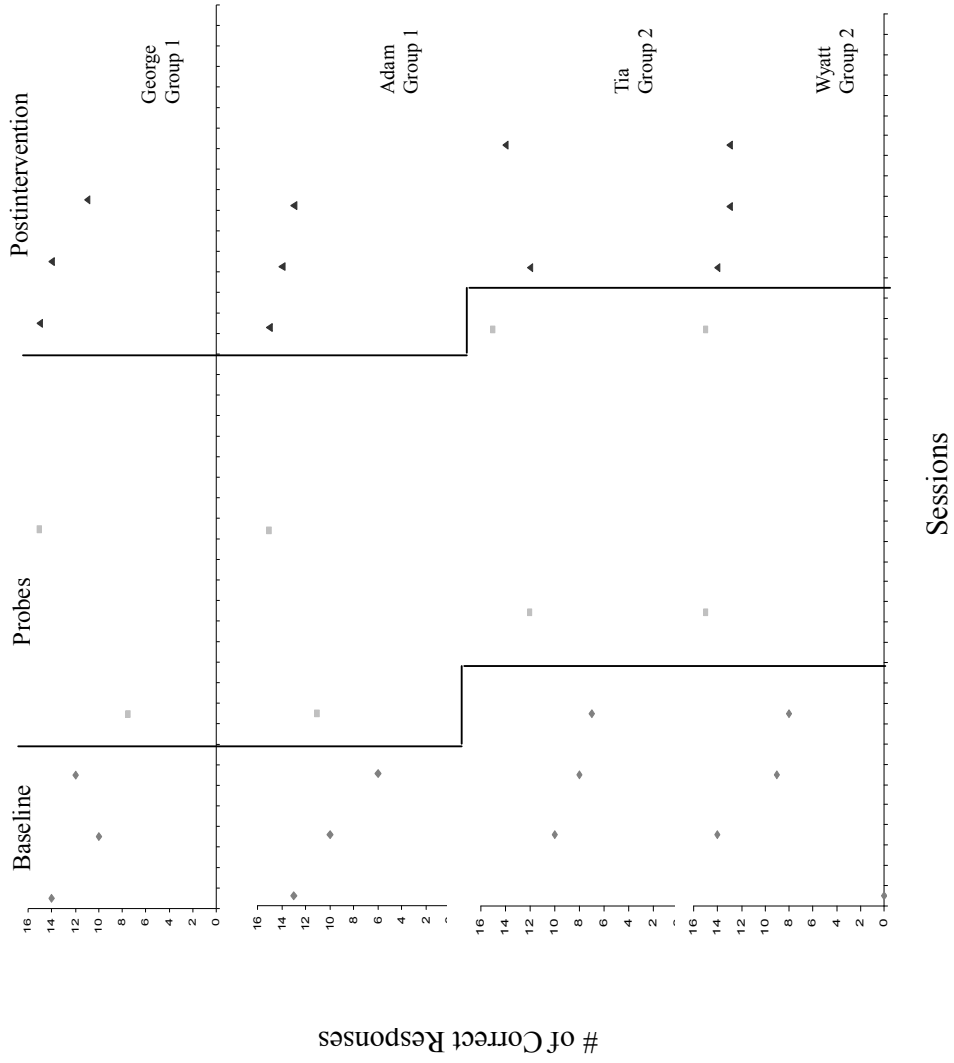
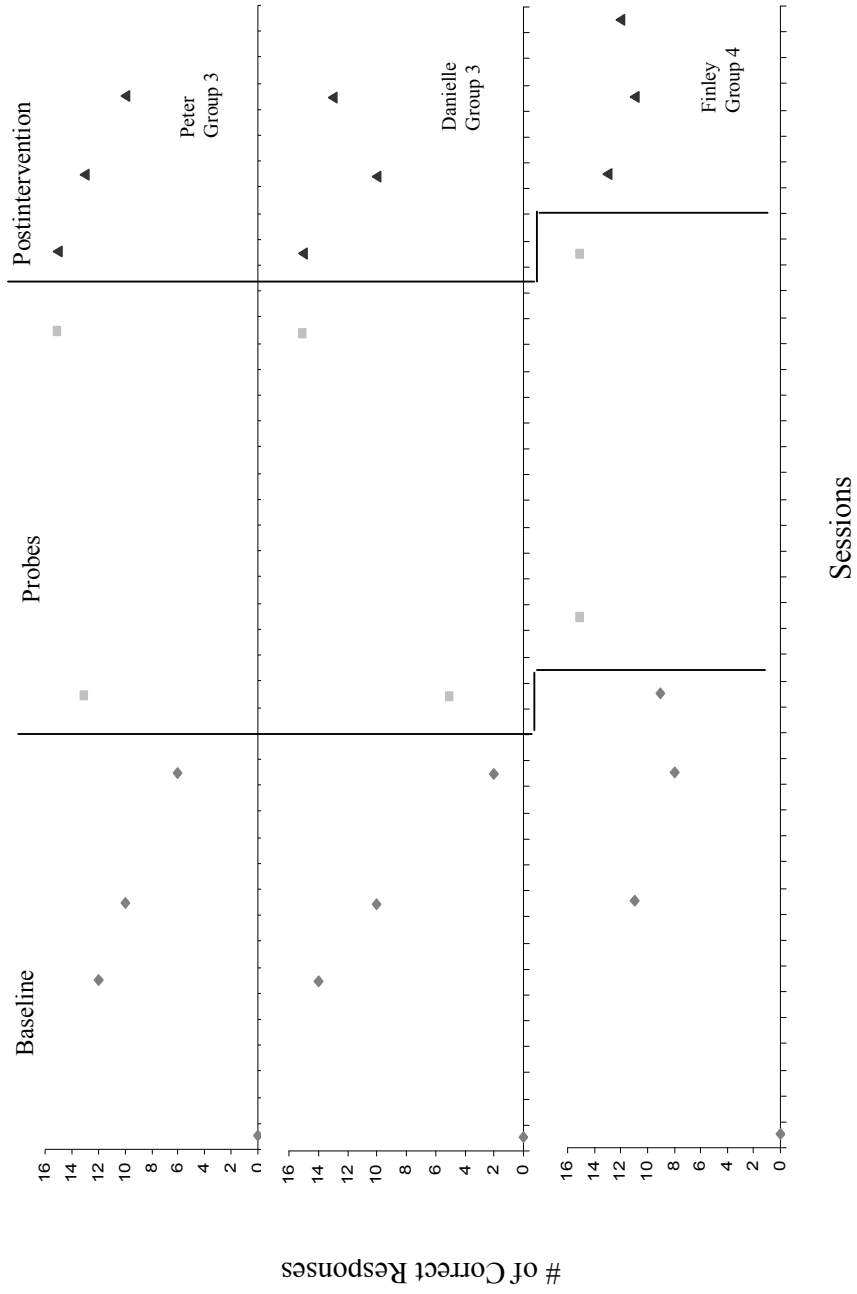


Figure 4.2. Effects of Phase I and Phase II on Performance on Criterion Measures Across Item Types (Group 3-4)



In addition, to overall improvements in performance there was significant improvement from baseline to postintervention on each passage. Student performance improved significantly on each of the passages for 9th, 10th, and 11th grade level criterion measures. These results can be seen in Table 2.

Table 2

Overall Results of Criterion Reference Tests

	Baseline Mean (SD) (N = 7)	Postintervention Mean (SD) (N = 7)
9 th Grade Passage	12.57 (1.62)	14.14 (1.21) ^a <i>ES</i> = .82 ^b
10 th Grade Passage	9.29 (.95)	12.50 (1.64) ^a <i>ES</i> = 1.82
11 th Grade Passage	7.14 (3.08)	12.29 (1.38) ^a <i>ES</i> = 1.70
Average on Passages	9.76 (1.20)	13.00 (.70) ^a <i>ES</i> = 2.51

^a Significantly greater than baseline, $p < .05$, according to the Wilcoxon matched-pairs, signed ranks test
^b Effect sizes were calculated using a pooled SD

Probes. Students received two probes during intervention. George received a 7.5 on his first probe and a perfect score of 15 on his second probe. Adam received an 11 on his first probe and a perfect score of 15 on his second probe. Tia received a 12 on the initial probe and perfect score as well on her second probe. Wyatt received a perfect score on both probes. Peter received a 13 on his first probe and a 15 on his second probe. Danielle received a 5 on her first probe and 15 on her second probe. Finally, Finley received a perfect score on both probes. Overall, all students either improved from one probe to the next or remained the same. None of the students declined in their knowledge of the strategies presented.

Short Answer. Since, the test portion of the activity was broken down into three types of questions; analyses were also performed looking at each question type: short answer, true/false, and multiple choice. Analysis on the short answer portion of the measure demonstrated that students made significant improvements from baseline to postintervention on the 10th and 11th grade passages, as well as overall. Students did not show any significant improvement on the 9th grade passage from baseline to postintervention. Table 3 presents these findings.

Individual student performance on short answer questions varied; however, Appendix R demonstrates each students performance on the short answer questions.

Table 3

Short Answer Results of Criterion Reference Tests

	Baseline Mean (SD) (N = 7)	Postintervention Mean (SD) (N = 7)
9 th Grade Passage	3.86 (.69)	4.71 (.49) <i>ES</i> = .44
10 th Grade Passage	2.14 (.69)	4.83 (.41) ^a <i>ES</i> = 1.49
11 th Grade Passage	1.29 (1.11)	3.71 (.76) ^a <i>ES</i> = .79
Overall on Passages	2.43 (.53)	4.44 (.18) ^a <i>ES</i> = 1.73

^a Significantly greater than baseline, $p < .05$, according to the Wilcoxon matched-pairs, signed ranks test

^b Effect sizes were calculated using a pooled SD

True/ False. Analysis on the true/ false questions demonstrated that no significant difference occurred on student performance from baseline to postintervention. There was also no significant improvement on any individual

passage as demonstrated in Table 4. This is also depicted graphically for each student in Appendix S.

Table 4

True/ False Results of Criterion Reference Tests

	Baseline Mean (SD) (N = 7)	Postintervention Mean (SD) (N = 7)
9 th Grade Passage	4.71 (.49)	4.57 (.79) <i>ES</i> = .07
10 th Grade Passage	4.14 (.69)	3.83 (.75) <i>ES</i> = .13
11 th Grade Passage	3.43 (.79)	4.43 (.53) <i>ES</i> = .45
Average on Passages	4.10 (.31)	4.39 (.44) <i>ES</i> = .23

^a Significantly greater than baseline, $p < .05$, according to the Wilcoxon matched-pairs, signed ranks test

^b Effect sizes were calculated using a pooled SD

Multiple Choice. Student performance on multiple choice questions significantly improved overall, as well as, on the 11th grade passages. There was no significant change from baseline to postintervention on the 9th and 10th grade level passages. A summary of these results can be seen in Table 5. Individual student performance on multiple choice questions varied; however, Appendix T demonstrates each students performance on the multiple choice questions. (All gains were statistically significant to the $p < .05$ level using the Wilcoxon matched-pairs, signed rank test.)

Table 5

Multiple Choice Results of Criterion Reference Tests

	Baseline Mean (SD) (N = 7)	Postintervention Mean (SD) (N = 7)
9 th Grade Passage	4.00 (1.00)	4.86 (.38) <i>ES</i> = .53
10 th Grade Passage	3.29 (.76)	3.67 (1.37) <i>ES</i> = .15
11 th Grade Passage	2.00 (1.29)	4.00 (.82) ^a <i>ES</i> = .81
Average on Passages	3.10 (.60)	4.17 (.55) ^a <i>ES</i> = .79

^a Significantly greater than baseline, $p < .05$, according to the Wilcoxon matched-pairs, signed ranks test

^b Effect sizes were calculated using a pooled SD.

Self-regulatory processes from SMA Interview

The strategy microanalytic assessment (SMA) was developed to target students’ motivational and self-regulation processes as well as their use of specific learning strategies (Cleary & Zimmerman, 2004). This interview was used to identify the specific processes these students lacked or struggled to comprehend (i.e. goal-setting, planning, or strategy use) and focus on those specific areas within the intervention. The SMA offered very useful material about each of the students’ strategy use, how they studied, how they motivated themselves, how they planned for tests and the types of tests they had difficulty with. (For a list of the questions asked, please see Appendix I.)

In relation to goal-setting the students focused on grade goals for each test; rather than, understanding. “Usually, I try to make an A or a B on the test just try to

keep my grades up.” The goals were also very general, “I want to do well on the test.” They were not able to articulate specific areas of performance.

The majority of students interviewed did not have any strategies that they consistently used to prepare for a test. Only two of the students mentioned strategies, which consisted of using “flashcards for everything.” Other students mentioned that they, “read over [their] notes or the book until [they] remember it.” The interviews demonstrated that the students found that their strategy or way of preparing for a test only worked “sometimes” or “somewhat.” However, each student continued to use the same way of preparing despite the lack of success.

Every student stated that he/she did not like to study and had to motivate themselves in one way or another to study. “Its [studying] stressful and it takes a long time and I want to be doing something else rather than spending a long time studying also I’ve other homework to do sometimes.” The students often had inventive ways of motivating themselves, “I yell at myself in my head” or “shake my head or like hit my head sometimes like tapping it.” Overall, there was clear difficulty with motivating themselves to prepare for a test.

The SMA also offered information about the types of tests the students struggled with the most. Four of the students mentioned difficulty with short-answer and multiple choice questions. “Toughest is short answer mainly and essay because I’m not much of a fan of writing out things.” Similar to this student, the other two students mentioned difficulty with writing as well.

To determine the students’ ability to plan they were given a scenario. Each student was asked how they would plan for a test on Monday when it is the Thursday before. There was some variation with the students’ explanation of planning for this

test. Some of them explained that they would begin several days before planning what tasks they would do on what days to prepare; “I would start collecting up everything that day then on Friday I would begin to study.” Compared to the other students who would not begin until 1-2 days before or just the day before. “I wouldn’t probably study till Sunday, if it was something that I didn’t know very well, but if I knew it well I’d study Mon am.” Even the students who demonstrated the initiative to plan ahead did not have a clear strategy for where to start the preparation process. For a summary of these results refer to Table 6.

The information gathered from the SMA interviews was very helpful in structuring the intervention. The information from the interviews allowed the researcher to focus on particular processes; such as goal-setting or planning in addition to strategy-use, during the instruction of the intervention. The use of this assessment prior to the intervention likely enhanced the significant effects of the intervention.

Table 6

Summary of Results from SMA

Phases of Zimmerman's Self-regulatory Model	Self-Regulation Processes	Themes in Relation to Self-Regulation Processes (Baseline)	Themes in Relation to Self-Regulation Processes (Postintervention)
Forethought	Goal Setting	Achieve a good grade. Knowing and understanding the material.	Create study plan and weekly plan for homework.
	Strategy Choice	Reviewing notes, quizzes, class material, and reading. A few said memorizing material to remember.	Organize note cards and other notes prior to test. Try using MIND and WAR to prepare, review notes, note cards, and highlighted material.
	Self-efficacy	Most said how well they do depends on the test and how well they remember the material. None of the students thought they were good at taking tests.	Many still believed it depended on the test; however, all said they felt more confidence in their ability to study material. Most still maintained that they were not good at taking tests.
	Intrinsic Interest	None of the students enjoyed studying for tests, stating it was stressful, boring, a chore, hard or tedious.	Students still did not enjoy studying and felt it was boring or a chore.
Performance	Attention Focusing	All said they had to try to motivate themselves and found this difficult to do. Students had a variety of solutions for motivation. Focus on their grade, just doing it, moving on to something else - something fun, or taking a break with TV or computer & going back, yelling at myself, play music, talk to myself, caffeine or just procrastinating & not doing it at all.	Many said it was easier to motivate themselves when they had a plan and were organized; however, they also mentioned that maintaining organization was difficult. Most were going to try to start preparing for tests earlier that way they only had to focus for a short period of time a few days and not a long period all at once.
	Self-recording	Students did not consistently keep track of where they studied or for how long, but all explicitly stated needing quiet. Sometimes they studied in the kitchen, their room, the basement at home or the library at school.	This did not change during the study.

Table 6

Summary of Results from SMA Continued

Self-Reflection	Self-Evaluation	All of the students felt their grade determined whether or not they had performed well. If they received a good grade (A or B) they had done well studying, but if they had received a poor grade (C or below) they did not study well.	Most of the students focused on the strategy and how that assisted them on the test. They also said that grades on a test were still a way gauging their performance.
	Satisfaction	Most of the students were indecisive about how they felt about their last test. Some said they couldn't remember and other just said they did poorly.	Most said they felt more prepared for their tests, but were still unsure about their performance.
	Causal Attributions	Almost all said they did poorly on their last test because they are not good at taking tests.	Many of the students began saying how they performed depended on how well or to what extent they used the strategy. A few of the students said they were poor test-takers.
	Adaptive Inferences	None of the students had any recommendations of how they could change their study habits or strategies. Most just said study more.	Most of the students offered a way they could change the strategy they used for a particular or how it would be more useful if they changed x or y.

Attributions for Strategy-use.

Students made statistically significant gains on the scenario based attributions measure, with pre-test means of 51.79 (SD= 13.82) and post-test means of 70.0 (SD= 11.73). In particular students demonstrated statistically significant improvement from pre-test to post-test on scenario 4, which focused on correct strategy-use of the reading comprehension portion of the note-taking strategy. However, students did not demonstrate statistically significant gains on any of the other three scenarios. (All gains were statistically significant to the $p < .05$ level using the Wilcoxon matched-pairs, signed rank test. Please see Table 7.)

Table 7

Summary of Results for Attribution Measure

Attribution Scenario	Baseline Mean (SD) (N = 7)	Postintervention Mean (SD) (N = 7)
Scenario 1: Incorrect use of reading strategy	71.43 (31.85)	81.43 (9.00)
Scenario 2: Incorrect use of study strategy	37.14 (30.39)	62.86 (24.30)
Scenario 3: Correct use of study strategy	54.29 (26.99)	67.14 (14.96)
Scenario 4: Correct use of reading strategy	44.29 (31.01)	68.57 (29.68) ^a
Overall Score	51.79 (13.82)	70.00 (11.73) ^a

^a Significantly greater than baseline, $p < .05$, according to the Wilcoxon matched-pairs, signed ranks test

Self-efficacy for Learning

The students significantly improved on overall self-efficacy for learning, with pre-test means of 58.2 (SD= 13.9) and post-test means of 68.3 (SD= 10.1). There were also significant gains in the students' self-efficacy for note-taking with pre-test means of 55.7 (SD= 14.6) and post-test means of 68.7 (SD= 12.3). In addition there was a significant gain in the students' self-efficacy for studying, with pre-test means of 55.8 (SD= 13.1) and post-test means of 66.0 (SD= 10.9). Students did not significantly improve on reading, writing, or test-preparation. (All gains were statistically significant to the $p < .05$ level using the Wilcoxon matched-pairs, signed rank test. Please see Table 8.)

Table 8

Summary of Results for Self-Efficacy for Learning

Areas of Self-Efficacy for Learning Measured	Baseline Mean (SD) (N = 7)	Postintervention Mean (SD) (N = 7)
Overall	58.2 (13.89)	68.34 (10.14) ^a
Reading	58.2 (16.45)	72.08 (8.39) ^a
Writing	60.73 (15.16)	70.32 (10.96)
Note-taking	55.71 (14.58)	68.69 (12.27) ^a
Studying	55.77 (13.10)	66.02 (10.93) ^a
Testing	62.01 (15.58)	65.58 (13.05)

^a Significantly greater than baseline, $p < .05$, according to the Wilcoxon matched-pairs, signed ranks test

CHAPTER 5

Discussion

The overall findings for this multiple base line design study revealed the following (a) positive effects on strategy training on the reading comprehension for all students; (b) positive gains on the SMA measure; (c) positive gains on the SELF measure; and (d) positive gains on the attribution measure. Each area is discussed in sequence next.

Effects of Strategy Instruction

The present study found that all students improved on reading comprehension measures after a two phase strategy instruction in highlighting, note-taking, and test-preparation. Explicit instruction on reading comprehension components; such as, the main idea of a passage have been shown to improve the reading comprehension ability of students with learning disabilities (Berkeley, Mastropieri, & Scruggs, 2011; Crabtree, Alber-Morgan, & Konrad, 2010). These findings may be attributed to focusing the students on important story elements (highlighting main idea) and encouraging them to actively respond to the text (finding important details) (Crabtree et al, 2010; Malone & Mastropieri, 1992). This study extends previous research that high school students with learning disabilities can improve their reading comprehension with explicit strategy instruction in a single-subject design.

While students demonstrated overall improvement in reading comprehension there were some inconsistencies in performance on the short answer, true/false, and

multiple choice question sub types. Student performance did not improve on true/false items from baseline to postintervention, which may be due to low reliability associated with true/false format (Pinglia, 1992). There was also variability in performance on the subtypes depending on the grade level of the passage. This is likely due to the students reading level.

Both strategies have a mnemonic base, MIND and WAR, that assisted students in remembering the steps involved in the strategies. Scruggs, Mastropieri, Berkeley, and Graetz (2010) in a metaanalysis found that mnemonic strategies are highly effective in intervention instruction. (See Research Design for explanation of strategy.) The students demonstrated significant improvement from baseline to postintervention on both strategies. These strategies were designed to be generalized across the curriculum to give LD high school students a ‘tool’ that they could apply in all academic areas. Scruggs et al. (2010) also noted that mnemonic strategies were an effective instructional tool across content areas, which supports the use of the mnemonic for two strategies intended for use across all academic content areas.

Self-Regulation Micro-analytic Assessment

The SMA was developed to target students’ motivational and self-regulatory processes, as well as, their use of specific learning strategies (Cleary et al., 2004). The SMA interview offered insight into each student’s understanding of the different self-regulatory processes such as goal setting, strategy-use, and self-evaluation. The detailed information about each student’s study habits, their current strategies for studying, and their behavior prior to and during a test was a useful template for structuring the intervention around. The postintervention interviews also offered an understanding about how comfortable the students felt using the new strategies and

whether or not the strategies had become a part of the homework routine. It is difficult to determine how consistent these findings are with previous research, as the SMA has not been used with high school students in this manner.

The SMA demonstrated that the majority of the students in the intervention did not have a consistent strategy or plan for preparing for a test. It also showed that all of them struggled with motivation. While the diagnostic component of the SMA involves identifying the motivational and strategic weaknesses of the students, the goal of the intervention is to modify or change these deficits into strengths (Cleary & Zimmerman, 2004).

Student Attributionss

Attribution retraining was a key aspect of the intervention because high school students with learning disabilities often feel that they have little control over academic outcomes (Nelson & Manset-Williamson, 2006) and are less likely to attribute outcomes to effort than their non-disabled peers (Berkeley, Mastropieri, & Scruggs, 2011). Combining attribution training with strategy instruction resulted in a significant improvement overall in both strategy-use and effort attributions. These findings are consistent with those of Berkeley et al. (2011), which also demonstrated that attribution training can alter effort attributions for success in students with learning disabilities.

Students specifically improved on the scenario focusing on strategy-use attributions for reading comprehension; however, they did not improve on the scenarios focusing on effort and strategy-use attributions toward test performance. This may be due to the composition of the strategies taught during intervention. The strategies focused on reading comprehension, note-taking, and studying. There was

not a component of the strategies that explicitly focused on improving test-taking; however, it was expected that the students' effort and strategy-use attributions were transfer over to test-taking.

Students' attributions also transitioned from uncontrollable in baseline to more controllable through strategy-use by postintervention. By trying to change their maladaptive attribution styles to more controllable attributions such as strategy-use, students were more likely to believe in the importance of practice to complete a task (Anderson & Jennings, 1980). Attributing academic success to controllable factors is related to a number of positive metacognitive, cognitive, motivational, affective, and academic achievement outcomes (Ferla, Valcke, & Schuyten, 2008; Schunk & Ertmer, 2000).

Student Self-Efficacy

Students' improvement in attribution style is likely what led to an increase in their self-efficacy or belief in their ability to complete the task through use of a strategy. The students' demonstrated significant improvement in their self-efficacy for learning overall on this measure, which is consistent with Zimmerman and Kitsantas (2005) findings. The students also demonstrated significant improvement in note-taking and studying, which departs from previous findings. Previous uses of the SELF have not demonstrated correlation factors for each of the academic contexts, only for the overall score. This change may be due to the focus of the intervention on two specific areas of the SELF; the note-taking and studying. The lack of significant correlation from the other academic contexts may be because the interventions did not focus specifically on those areas of learning.

By improving a student's self-efficacy for note-taking and studying the

likelihood of a student with LDs performing this task again increases (Klassen et al., 2007). Students are more likely to approach studying for a test or maintain motivation for studying now that they believe they can be successful at it.

Limitations

The results of the study clearly demonstrate that the intervention was effective in improving self-efficacy, attribution style, and test-preparation. However, the small sample size limits the reliability of the results. While steps were taken to improve reliability this is still a limitation. Due to the time constraints surrounding the study a maintenance and generalization were not conducted. This limits the understanding of the effectiveness of the strategies for long-term use. The results of the intervention also demonstrate that the students did not generalize the strategies into their beliefs about test-taking. Students beliefs about their ability to prepare or study for a test improved; however, beliefs in their ability to perform well on a test did not. This may be due to the time constraints, as well.

For this particular study, the researcher was both a teacher and a researcher. The dual relationship presents some issue of researcher bias because of the pre-existing relationship with participants, as well as, the continued interaction as teacher as well as researcher. This was a sample of convenience, so researcher bias was expected.

During the intervention there were also some unavoidable interruptions that may have effected the success of the intervention. At the beginning of the intervention there were seven snow days that occurred over a period of three weeks that interrupted the baseline phase of the study. At the beginning of the post-intervention phase spring break occurred, which meant the students were away for

two weeks.

Implications for Practice

Given the minimal amount of intervention research with high school students the current study offers teachers, tutors, and administrators tools for practice. In particular, this study offers two strategies that are generalizable across the curriculum. The intervention also demonstrates that attribution instruction can improve students attributions for learning, as well as improve their academic self-efficacy. Improving these two areas for LD students increases the likelihood that they will attempt a task again despite failure (Baird et al., 2009). Overall, the intervention presents itself as tool for teachers to support their LD students.

Implications for Research

This intervention demonstrates the benefit of teaching a global strategy to LD high school students and also improving their attribution. However, further interventions need to be performed that contain both a maintenance, as well as, generalization. It would also be useful if future interventions had a way of tracking LD students' improvement on tests in the classroom; rather than, relying solely on baseline and postintervention measures. Future research may also want to apply the intervention to a larger population of LD students.

APPENDIX A

Steps of Intervention: Note-taking Strategy

Step 1: Describe the purpose of the new strategy.

Step 2: Describe the important role of effort in attributing outcomes to controllable causes. The students will be told the importance of trying, focusing, and paying attention in the development of notes. If they perform these actions when taking notes their notes will be much more complete.

Step 3: Provide examples and non-examples of how the strategy works. The students will be given examples of how to take notes on a white board in the classroom. For instance, if they are learning about the Cold War. The Cold War would be their topic and I would be Communism. The note examples will be context specific to the classes that the student is taking.

Step 4: Provide models of positive attributions combined with strategy use. (e.g., “I got this one right because I used the strategy and tried hard”). I will be emulating the type of attribution style, I would like the student to demonstrate.

Step 5: Have students practice combined strategy –attribution sequence with feedback. (e.g., “That’s great! You worked hard to use the strategy and got the right answer”).

Step 6: Have students do independent practice of strategy with continued monitoring and corrective feedback as needed (e.g., “Remember to attribute

your outcomes to effort plus these steps”).

Steps of Intervention: Test-preparation Strategy

The test-preparation strategy will be taught in conjunction with the note-taking strategy.

Step 1: Describe the purpose of the new strategy.

Step 2: Describe the important role of effort in attributing outcomes to controllable causes. The students will be told the importance of spending time reviewing, organizing to study, and putting effort into studying. If they perform these actions when studying they will be much more successful on tests.

Step 3: Provide examples and non-examples of how the strategy works. The students will be given examples of how to create note cards from their notes on a white board in the classroom. They will also be shown how to quiz themselves using the note cards. The note card examples will be context specific to the classes that the student is taking.

Step 4: Provide models of positive attributions combined with strategy use. (e.g., “I got this one right because I used the strategy and tried hard”). I will be emulating the type of attribution style, I would like the student to demonstrate.

Step 5: Have students practice combined strategy –attribution sequence with feedback. (e.g., “That’s great! You worked hard to use the strategy and got the right answer”).

Step 6: Have students do independent practice of strategy with continued monitoring and corrective feedback as needed (e.g., “Remember to attribute

your outcomes to effort plus these steps”).

APPENDIX B

Baseline and Post Intervention Passage 1

Please read the following passage. When you have finished reading the passage, please take notes on what you have read. When you have finished taking notes, please turn the passage back into me.

As summer comes near, many children are really happy to forget about school for a few months. However, they might be taking that goal too seriously. Studies have found that children typically forget between one and three months' worth of school learning during the summer months. Spelling and math abilities suffer the most, while reading is not really influenced by the time off. The most probable reason for this is that most children read at least occasionally outside of the classroom, whether newspapers, magazines, books, or video game guides. However, their math and spelling skills only get exercised in the school setting. The original purpose of summer vacations was to let farm children have time off to help work in the fields in the high growing season, but this reason is no longer valid since fewer kids actually work on farms today. Some cities in the United States, such as Los Angeles, have moved to a year-round school calendar, which may help reduce the academic decline that occurs during the long summer vacation. Most cities maintain the normal nine and a half-month calendars. To improve skills and to maintain a good level of preparation, superintendents recommend trips to museums, summer camps, vacations with educational components, and visits to libraries to keep kids mentally alert and interested throughout the summer. There are other educational systems that provide vacations while still keeping students' skills sharp. For example, in Japan students attend class for seven weeks consecutively, followed by two weeks of vacation. This continues throughout the year. In Italy, students attend class six days per week, but finish at 1:30 PM each day, so that school does not dominate their life the way that it does in America, where students attend high school from 7:45 AM until 3:00 PM each week day. In areas where there are not enough classrooms—in Afghanistan or Somalia, for example—older students attend classes in the morning while the younger kids go to school in the afternoon. School administrators and educational specialists fear that the three-month summer vacation halts the continuity of learning. Just as students become accustomed to new math equations or new concepts in reading, writing, or critical thinking skills, they “shut down” for an extended period. When they

go back to school after the long summer vacation, they take up to two months to return to their previous level of proficiency. And so the debate continues: whether to continue the status-quo in terms of vacations or to seek changes based on the Los Angeles or the Japanese models.

Baseline Assessment 1

Please answer the following questions.

1. What is the meaning of the second sentence of the passage: “However, they might be taking that goal too seriously.”
2. According to the passage, how can students keep up their skills during summer vacation?
3. Describe two alternatives to the traditional nine-month school year with a long summer vacation.
4. Explain why the long summer vacation was originally started.
5. Why are educational professionals concerned about the summer vacation?

Please answer True or False to the following statements.

1. All school systems around the world have long summer vacations.
2. Taking long summer vacations improves reading ability.
3. Students in Italy go to school until 1:30 Monday through Saturday.
4. Spelling and math abilities improve over summer vacation.
5. Students in Los Angeles and Japan go to school year-round.

Choose the correct answer:

1. Which skills suffer the most over the summer vacation?
 - a. math and reading
 - b. math and spelling
 - c. reading and writing
 - d. history and math

2. Why is reading not so much of a problem?
 - a. Students read in the summer.
 - b. Their parents read to them.
 - c. They visit libraries often.
 - d. They receive reading homework in the summer.

3. In Japan
 - a. there is a long summer vacation
 - b. there is a short summer vacation
 - c. the school vacations are constant throughout the year
 - d. there is no vacation at all

4. The original reason for summer vacation
 - a. is still valid
 - b. is no longer valid
 - c. was an urban phenomenon
 - d. was more for teachers than for students

5. According to the reading, countries without enough school facilities have
 - a. given longer vacations to students
 - b. divided the school day between older and younger students
 - c. built many new buildings
 - d. stopped some students from attending school

APPENDIX C

Baseline and Post Intervention Passage 2

Please read the following passage. When you have finished reading the passage, please take notes on what you have read. When you have finished taking notes, please turn the passage back into me.

One in three households across Britain is now dependent on the state for at least half its income, it emerged today. Official government figures indicate that more than seven million households are getting most of their income from government welfare payments. The figures also reveal the huge gulf in welfare dependency between single parent and two-parent households.

The figures were quoted in a report by Civitas, a right-wing think-tank, and it is scathing about how New Labor welfare policy has been designed to "create grateful voters rather than independent people". In many single-parent homes with two children, the proportion of families that would be financially crippled without state support is now as high as 61 per cent. That compares with just 9% in a two-parent home.

The figures, prepared by the Department for Work and Pensions but cited today in the new report from Civitas, paint a stark picture of how Britain 's dependency culture has grown over the last few decades. Gordon Brown has been repeatedly attacked for building up a society heavily reliant on tax credits and other state aid. The Chancellor's tax credits scheme was "only the most prominent example of welfare policies intended to create a grateful electorate rather than free-thinking citizens", the report says.

However, the report also suggests that David Cameron's Conservatives are worried about seeming uncaring, and therefore not ready to take drastic action and copy American-style policies that have produced huge drops in benefit claims in the United States . The claim was denied by a spokesman for the shadow chancellor, George Osborne, who said the Tories were developing policies to reduce the size of Mr. Brown's state.

According to David Green from Civitas, the author of the report, data on the real scale of state dependency have only been collected for the last five years or so. But he estimated that the proportion of households dependent on state handouts for at least 50 per cent of income had been probably as low as five per cent in the 1960s. It rose during the 1970s and 1980s, especially because of soaring unemployment under the

Thatcher government.

His report in the current issue of Civitas Review makes the wider point that politics is no longer providing the answers to Britain's problems. The Blair years had "tested to destruction" the notion that big spending on health, education and welfare was the answer. There was a widespread perception that high crime, failing schools, unsustainable immigration and the low quality of the NHS were "not being properly confronted by our political leaders".

Mr. Green went on: "Even Conservatives who are concerned about the failure of public sector monopolies in health and education are slow to criticise the Blair Government's approach". That was because "they know that calling for a reduced role for the state in health and education is to invite being caricatured as uncaring". Mr Green urged the Tories not to accept the modern view that individual action and liberty were the same as "selfish individualism".

A government spokesman last night defended the scale of state help, saying: "It is thanks to our system of tax credits and the New Deal that we have two million more people in work than in 1997. We have also raised hundreds of thousands of children out of poverty."

The analysis of benefit dependency, based on the latest DWP statistics, will strike a chord with a report from the Reform, another right-wing think-tank. Last year it warned that the Government had created a benefits regime that "actively dissuades millions from bettering their position".

Frank Field, the Labour former welfare minister, has also called for the system to be reformed. Welfare should be "a floor on which people built and not a ceiling which made it impossible for them to pass through", Mr Field said. Last night David Laws, the Liberal Democrat's welfare spokesman, also accused the Chancellor of helping to bolster the dependency culture.

The shadow chancellor Mr Osborne said: "Under Gordon Brown the role of the state has multiplied and government has got bigger and bigger. This is exactly the opposite of what a competitive enterprise economy needs."

Baseline Assessment 2: Questions

Please answer the following questions with complete sentences.

1. What does the term welfare mean in this article?
2. Is Chancellor Osborne for or against the welfare used by Prime Minister Gordon? Why or Why not?
3. Why did welfare dependency increase during the 1970s and 1980s?
4. Would Frank Field agree with Civitas or Reform? Why or why not?
5. What does Reform believe about welfare payments?

Please answer True or False to the following questions.

1. Most single-parent families are now dependent on government welfare payments.
2. The Civitas report suggests that the government policies encourage people not to work.
3. The Conservatives are unwilling to challenge Brown's policies because they don't want their policies to resemble American policies too closely.
4. The Thatcher government was the initial cause of the rising rates of welfare payments.
5. The report suggests that providing additional funds will not in itself improve health and education in the UK .

Choose the correct answer:

1. How many households in Britain are dependent on the state for at least half of their income?
 - a. 1 out of 4 households
 - b. 2 out of 3 households
 - c. 1 out of 3 households
 - d. 3 out of 5 households
2. The statistics presented in the article came from which government department:
 - a. Department of Work and Pension
 - b. Department of Health
 - c. Department of Social Security
 - d. Department of Unemployment
3. Who wrote the report discussed in the article?
 - a. Gordon Brown
 - b. David Green
 - c. David Cameron
 - d. George Osborne
4. What percent of two-parent households are dependent on welfare?
 - a. 7%
 - b. 8%

- c. 9%
- d. 10%

5. How long has information been collected on state dependency in Britain?

- a. 5 years
- b. 6 years
- c. 7 years
- d. 8 years

APPENDIX D

Baseline and Post Intervention Passage 3

Please read the following passage. When you have finished reading the passage, please take notes on what you have read. When you have finished taking notes, please turn the passage back into me.

The eruption of a volcano in the Canary Islands could trigger a "mega-tsunami" that would devastate Atlantic coastlines with waves as high as 330 feet, scientists said on Wednesday. They said an eruption of the Cumbre Vieja volcano on La Palma, part of the Spanish island chain off West Africa, was likely to cause a massive chunk of rock to break off, crashing into the sea and kicking up huge walls of water higher than any other in recorded history.

The tsunami would be capable of traveling huge distances at up to 500 miles an hour, the scientists said in a research paper to be published in September's Geophysical Research Letters.

Simon Day, of the Benfield Greig Hazard Research Centre at the University College of London, said that as the volcano was not erupting at present, the short-term and medium-term risks were "negligible."

But Cumbre Vieja should be monitored closely for any signs of activity so that emergency services could plan an effective response, he said.

"Eruptions of Cumbre Vieja occur at intervals of decades to a century or so and there may be a number of eruptions before its collapse," said Day, who collaborated on the research with Steven Ward of the University of California.

"Although the year-to-year probability of a collapse is therefore low, the resulting tsunami would be a major disaster with indirect effects around the world."

The effects would spread north, west and south of the Canaries, with the west Sahara bearing the worst of the wave's energy.

The energy released by the collapse would be equal to the electricity consumption of the entire United States in half a year.

Immediately after the landslide, a dome of water 93,000 feet high and tens of miles wide would form, only to collapse and rebound.

As the landslide rubble moved deeper under water, a tsunami would develop. Within 10 minutes, the tsunami would have moved a distance of almost 155 miles.

On the west Saharan shore, waves would probably reach heights of 330 feet.

Florida and the Caribbean, the final north Atlantic destinations to be affected by the tsunami, would have to brace themselves for 165 foot waves some eight to nine hours after the landslide.

Wave heights toward Europe would be smaller, but substantial waves would hit the coasts of Britain, Spain, Portugal and France.

The research paper estimated water would penetrate several miles inland and that the devastation would cause trillions of dollars in damage.

Baseline Assessment 3: Questions

Please answer the following questions.

1. What would happen in the Sahara Desert if this tsunami hit?
2. What would happen across the Atlantic Ocean in Florida and the Caribbean?
How high would the tsunami be there?
3. How long would it be before the tsunami reached the United States and the Caribbean?
4. What countries in Europe would be affected by the tsunami?
5. What is likely to cause this massive tsunami?

Please answer True or False to the following statements.

1. The name of the volcano likely to erupt is La Palma.
2. The tsunami would be capable of travelling up to 500 miles an hour.
3. On the west Sahara shore waves would reach a height of 165 feet.
4. Wave heights toward Europe would be larger than those in the Sahara.
5. Britain, Spain, Portugal, and France would be hit by substantial waves.

Choose the correct answer:

1. The "mega-tsunami" is
 - (a) an island.
 - (b) a volcano.
 - (c) a high wave
 - (d) canary.
2. What would be the result of a big rock falling into the sea?

- (a) waves would be very high.
- (b) the volcano would stop.
- (c) walls would kick up a storm.
- (d) it would fall into the sea.

3. How often does the volcano go off?

- (a) every year.
- (b) every 5 years to 9 years.
- (c) every 10 to 100 years.
- (d) every day.

4. The worst part of the disaster would be

- (a) in the Atlantic Ocean.
- (b) in the United States.
- (c) in the Caribbean.
- (d) in the Sahara Desert.

5. How high would the water be?

- (a) 155 miles.
- (b) 93,000 feet.
- (c) 330 feet.
- (d) 165 feet.

APPENDIX E

Baseline and Post Intervention Passage 4(11)

Please read the following passage. When you have finished reading the passage, please take notes on what you have read. When you have finished taking notes, please turn the passage back into me.

Gentlemen of the Senate and Gentlemen of the House of Representatives:

Immediately after the adjournment of Congress at their last session in Philadelphia I gave directions, in compliance with the laws, for the removal of the public offices, records, and property. These directions have been executed, and the public officers have since resided and conducted the ordinary business of the Government in this place.

I congratulate the people of the United States on the assembling of Congress at the permanent seat of their Government, and I congratulate you, gentlemen, on the prospect of a residence not to be changed. Although there is cause to apprehend that accommodations are not now so complete as might be wished, yet there is great reason to believe that this inconvenience will cease with the present session.

It would be unbecoming the representatives of this nation to assemble for the first time in this solemn temple without looking up to the Supreme Ruler of the Universe and imploring His blessing.

May this territory be the residence of virtue and happiness! In this city may that piety and virtue, that wisdom and magnanimity, that constancy and self-government, which adorned the great character whose name it bears be forever held in veneration! Here and throughout our country may simple manners, pure morals, and true religion flourish forever!

It is with you, gentlemen, to consider whether the local powers over the District of Columbia vested by the Constitution in the Congress of the United States shall be immediately exercised. If in your opinion this important trust ought now to be executed, you can not fail while performing it to take into view the future probable

situation of the territory for the happiness of which you are about to provide. You will consider it as the capital of a great nation advancing with unexampled rapidity in arts, in commerce, in wealth, and in population, and possessing within itself those energies and resources which, if not thrown away or lamentably misdirected, will secure to it a long course of prosperity and self-government.

In compliance with a law of the last session of Congress, the officers and soldiers of the temporary army have been discharged. It affords real pleasure to recollect the honorable testimony they gave of the patriotic motives which brought them into the service of their country, by the readiness and regularity with which they returned to the station of private citizens.

It is in every point of view of such primary importance to carry the laws into prompt and faithful execution, and to render that part of the administration of justice which the Constitution and laws devolve on the Federal courts as convenient to the people as may consist with their present circumstances, that I can not omit once more to recommend to your serious consideration the judiciary system of the United States. No subject is more interesting than this to the public happiness, and to none can those improvements which may have been suggested by experience be more beneficially applied.

A treaty of amity and commerce with the King of Prussia has been concluded and ratified. The ratifications have been exchanged, and I have directed the treaty to be promulgated by proclamation.

The difficulties which suspended the execution of the 6th article of our treaty of amity, commerce, and navigation with Great Britain have not yet been removed. The negotiation on this subject is still depending. As it must be for the interest and honor of both nations to adjust this difference with good faith, I indulge confidently the expectation that the sincere endeavors of the Government of the United States to bring it to an amicable termination will not be disappointed.

The envoys extraordinary and ministers plenipotentiary from the United States to France were received by the First Consul with the respect due to their character, and 3 persons with equal powers were appointed to treat with them. Although at the date of the last official intelligence the negotiation had not terminated, yet it is to be hoped that our efforts to effect an accommodation will at length meet with a success proportioned to the sincerity with which they have been so often repeated.

While our best endeavors for the preservation of harmony with all nations will continue to be used, the experience of the world and our own experience admonish us of the insecurity of trusting too confidently to their success. We can not, without committing a dangerous imprudence, abandon those measures of self protection which are adapted to our situation and to which, notwithstanding our pacific policy, the violence and injustice of others may again compel us to resort. While our vast

extent of sea coast, the commercial and agriculture habits of our people, the great capital they will continue to trust on the ocean, suggest the system of defense which will be most beneficial to ourselves, our distance from Europe and our resources for maritime strength will enable us to employ it with effect. Seasonable and systematic arrangements, so far as our resources will justify, for a navy adapted to defensive war, and which may in case of necessity be quickly brought into use, seem to be as much recommended by a wise and true economy as by a just regard for our future tranquility, for the safety of our shores, and for the protection of our property committed to the ocean.

The present Navy of the United States, called suddenly into existence by a great national exigency, has raised us in our own esteem, and by the protection afforded to our commerce has effected to the extent of our expectations the objects for which it was created.

In connection with a navy ought to be contemplated the fortification of some of our principal sea ports and harbors. A variety of considerations, which will readily suggest themselves, urge an attention to this measure of precaution. To give security to our principal ports considerable sums have already been expended, but the works remain incomplete. It is for Congress to determine whether additional appropriations shall be made in order to render competent to the intended purposes the fortifications which have been commenced.

The manufacture of arms within the United States still invites the attention of the National Legislature. At a considerable expense to the public this manufacture has been brought to such a state of maturity as, with continued encouragement, will supersede the necessity of future importations from foreign countries.

Gentlemen of the House of Representatives:

I shall direct the estimates of the appropriations necessary for the ensuing year, together with an account of the public revenue and expenditure to a late period, to be laid before you. I observe with much satisfaction that the product of the revenue during the present year has been more considerable than during any former equal period. This result affords conclusive evidence of the great resources of this country and of the wisdom and efficiency of the measures which have been adopted by Congress for the protection of commerce and preservation of public credit.

Gentlemen of the Senate and Gentlemen of the House of Representatives:

As one of the grand community of nations, our attention is irresistibly drawn to the important scenes which surround us. If they have exhibited an uncommon portion of calamity, it is the province of humanity to deplore and of wisdom to avoid the causes which may have produced it. If, turning our eyes homeward, we find reason to rejoice

at the prospect which presents itself; if we perceive the interior of our country prosperous, free, and happy; if all enjoy in safety, under the protection of laws emanating only from the general will, the fruits of their own labor, we ought to fortify and cling to those institutions which have been the source of such real felicity and resist with unabating perseverance the progress of those dangerous innovations which may diminish their influence.

To your patriotism, gentlemen, has been confided the honorable duty of guarding the public interests; and while the past is to your country a sure pledge that it will be faithfully discharged, permit me to assure you that your labors to promote the general happiness will receive from me the most zealous cooperation.

[The end] John Adams's writing: State Of The Union Address 11/11/1800

Baseline Assessment 4: Questions

Please answer the following questions with complete sentences.

1. What areas did John Adams see this “great nation” advancing in over the years?
2. With whom did John Adams ratify a treaty of amity and commerce?
3. What country does John Adams mention as a country the United States was having difficulty with and why?
4. Why does John Adams think we need a strong navy?
5. What does John Adams say about the revenue of the country for the last year?

Please answer True or False to the following questions.

1. This is John Adams' State of the Union Address.
2. He speaks to the House of Representatives about the military and defense.
3. He speaks to both the House and Senate about safety and security of the country.
4. Adams mentions that there were envoys sent to France by the United States.
5. John Adams does not think that the laws should be faithfully executed.

Choose the correct answer:

1. John Adams thinks which of the following needs to be fortified:

- banks
- ports
- train stations
- buildings

2. Who were the envoys for France received by?

- 1. the president
- 2. the first consul
- 3. a lawyer
- 4. a senator

3. What does John Adams think the National Legislature needs to pay attention to?

- manufacture of arms
- building ships
- development of navy
- creation of army

4. What does John Adams think they need to look up at during the speech?

- 3. the Supreme Ruler
- 4. the sky
- 5. the earth
- 6. the president

5. What was the capital of the United States at the time of this speech?

- 1. Philadelphia
- 2. Houston
- 3. Baltimore
- 4. Washington D.C.

APPENDIX F

Baseline and Post Intervention Passage 5

Please read the following passage. When you have finished reading the passage, please take notes on what you have read. When you have finished taking notes, please turn the passage back into me.

The Mysterious Creature of Lake Champlain

When we think of lake monsters, most of us think of Nessie, the long-necked serpent that allegedly resides in the waters of Scotland's Loch Ness; however, we might have our own lake serpent right here in North America! Over hundreds of years, numerous recorded sightings of monsters have occurred at Lake Champlain.

Lake Champlain, located between New York's Adirondack Mountains and Vermont's Green Mountains, empties into the St. Lawrence River in Canada. According to reports, a prehistoric monster named Champ, strikingly reminiscent of Nessie, may live in this lake. In 1609 the French adventurer Samuel de Champlain explored the lake and reportedly saw the monster (Stephenson 30). Before him, however, the native people in the area had long been familiar with the lake's unusual inhabitant. "The mythology of the Iroquois Indians, who lived on the western shores of Lake Champlain, included a belief in giant underwater serpents" (Tiburón 49). One of these storied creatures, the "Great Horned Serpent" (50), has similarities to some of the later eyewitness descriptions of Champ. Both were reported to have long necks and ears or horns at the tops of their heads.

During the 1800s trying to catch a glimpse of Lake Champlain's monster was a popular pastime. The famous showman P. T. Barnum wanted "to display the creature in his museum, [and] offered a \$50,000 reward to anyone who could capture the creature and deliver it to him" (Bernelli 51). Needless to say, the reward was never paid. However, the offer attracted many monster hunters to the lake.

Interest in Champ during the twentieth century was primarily limited to these devoted monster pursuers and the people who lived near the lake or visited it for recreational purposes. On July 5, 1977, though, an event occurred that would increase the scope of Champ's notoriety. Standing at the edge of Lake Champlain near St. Albans, Vermont, a young woman named Sandra Mansi noticed a disturbance in the water. "I was scared to death," Mrs. Mansi said later, but at the time she managed to gather her wits about her and snap a picture of what she saw (Stephenson 30). The developed photograph showed a long-necked creature

emerging from the water.

Concerned that people would consider her either crazy or dishonest, Mrs. Mansi chose to keep the photograph a secret. As more and more sightings continued to be reported during the early 1980s, Mrs. Mansi finally decided to reveal her amazing photograph. It appeared in *The New York Times* in June of 1981.

Photographs of Champ are rare; the Mansi photograph is considered the classic.

An expert who examined the photograph could find no evidence of tampering, so it appears to be legitimate. “The image is in color, and it is fairly clear; however, because it was taken with an Instamatic camera, it is too small to reveal any details” (Drummond 10). There are two additional factors preventing any in-depth investigation of the photograph. First, Mrs. Mansi cannot recall with certitude exactly where she was standing when she took the picture. Second, the negative has, unfortunately, been lost.

Are the Champ sightings all part of a perpetrated hoax? This is highly unlikely because “it would have required collusion among pranksters, seemingly otherwise unrelated, scheming together secretly across several generations” (Drummond 17). This leaves two other possibilities. The first possibility is that the monster is a fantasy or an illusion—what anthropologist Aaron Drummond prefers to call an “honest misinterpretation” (17). One might say that the idea that a wide variety of people, over several hundred years, would experience the same illusion or fantasy is as unlikely as the idea that a wide variety of people worked together to create a grand hoax. The only remaining theory—perhaps the only possibility that warrants serious consideration—is that some sort of mysterious creature actually does live in the cold, deep waters of beautiful Lake Champlain.

Works Cited

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*Take from the Virginia SOL 10th Grade English Test from 1995

Baseline Assessment 5: Questions

Please answer the following questions.

1. In what ways are Nessie and Champ similar?
2. Who offered a reward if someone could catch Champ and why?
3. Are the champ sightings a hoax?
4. Why didn't Mrs. Mansi publish her picture initially?
5. What is the remaining theory about Champ?

Please answer True or False to the following statements.

1. Champ is a mythical monster in Loch Ness.
2. Lake Champlain contains many long necked monsters.
3. Lake Champlain is located between the Adirondack Mountains and the Green Mountains.
4. The Iriquois Indian mythology mentions underwater serpents.
5. Lake Champlain empties into the Colorado River.

Choose the correct answer:

1. Champ is:
(a) a whale.
(b) a myth.
(c) a long necked monster.
(d) a horned underwater animal.
2. When did Mrs. Mansi take her picture of Champ?
(a) 1972

- (b) 1971.
- (c) 1977
- (d) 1981

3. P.T. Barnum offered how much money as a reward to catch Champ?

- (a) \$40,000
- (b) \$30,000
- (c) no reward existed
- (d) \$50,000

4. About how many years have people believed a monster lives in Lake Champlain?

- (a) 300 years
- (b) 100 years
- (c) 200 years
- (d) 30 years

5. What year did Samuel de Champlain explore Lake Champlain?

- (a) 1907.
- (b) 1609.
- (c) 1727.
- (d) 1981t.

APPENDIX G

Baseline and Post Intervention Passage 6

Please read the following passage. When you have finished reading the passage, please take notes on what you have read. When you have finished taking notes, please turn the passage back into me.

The Yarn Spinner

In the early American West, tall tales were told over a cup of black coffee and a plate of bacon and beans. These oral histories told stories of heroic deeds performed by extraordinary men. Known as yarn spinners, these storytellers captured the spirit of their times in their wild tales, and that spirit was preserved in their stories. One of the most notable of these yarn spinners was African-American mountain man James Beckwourth.

Beckwourth's experiences provided the basic elements of his stories. To add interest, he embellished his stories with a heavy sprinkling of exaggerated claims. However, not many men in the 1800s could claim to have been a slave, an explorer, a trapper, and a Crow Nation war chief. Beckwourth's adventures took him from Florida to California, up the Mississippi River and across the Rocky Mountains. James Beckwourth is believed to have been born in 1798, though records are inconclusive. His mother was an enslaved African woman and his father was her Irish-American master. Beckwourth was himself a slave until the 1820s, when his father arranged to free him legally. It was around this time that Beckwourth left the family home in search of adventure.

As a young man, James Beckwourth was gripped by restlessness. He eventually contracted with the Rocky Mountain Fur Company to trap beaver throughout northern Colorado. Trappers lived solitary lives throughout trapping season. They came to town only to turn in their pelts, collect their pay, and purchase supplies for the next season's trapping. In an effort to bring these isolated people together, the fur company decided to convene a gathering for the mountain men at Henry's Fork of the Green River in 1825. The event drew mountain men, trappers, Native Americans, and anyone willing to swap

goods and stories with the most rugged men of their time.

A few years later, Beckwourth experienced a dramatic change. In about 1828, Beckwourth was captured by a party of Crow warriors while on a trapping expedition with another mountain man, Jim Bridger. By Beckwourth's account, he was mistaken for the long-lost son of a tribal chieftain and adopted into the tribe. Beckwourth spent the next six to eight years with the Crow. He is believed to have gained considerable influence within the tribe, and numerous documents from his contemporaries corroborate his claims and confirm his position of leadership. Within the ranks of the Crow, Beckwourth rose to at least the level of War Chief. The tribe gave new names to its warriors for courageous acts of daring, and Beckwourth collected many Crow names, including Morning Star, Antelope, and Medicine Calf.

In the mid-1830s Beckwourth left the Crow and returned to a more staid, civilized life in Missouri. However, he found city life tedious. When Beckwourth heard of an opportunity to fight in the second Seminole War, he joined a Missouri contingent and headed to Florida. Beckwourth signed on as an express rider and muleteer for a salary of fifty dollars per month. He soon, however, grew bored with the structured routine of the Florida military. As he would do many times in his life, James Beckwourth simply packed up his belongings and moved on to try something else as soon as he became restless and felt the need for a change.

When the California Gold Rush erupted in 1849, Beckwourth joined the throng of prospectors looking to make a quick fortune. Panning for gold was a laborious process, however, and it did not suit his restless nature. Instead, he discovered a pass and created a trail through the Sierra Nevada Mountains that eased wagon train travel over the last obstacle before reaching California. Beckwourth Trail became the preferred route to northern California, and Beckwourth opened a ranch and trading post to serve the travel weary settlers. At his ranch, Beckwourth dictated his autobiography to Justice of the Peace Thomas Bonner. *The Life and Adventures of James P. Beckwourth, Mountaineer, Scout, and Pioneer, and Chief of the Crow Nation of Indians* was published in 1856.

Among early frontiersmen of the American West, the ability to "spin a good yarn" was a skill that was highly valued, much like marksmanship or woodsmanship. While Beckwourth certainly had a tendency to inflate numbers or to occasionally make himself the hero of events that may have actually involved other people, many of the claims made in his autobiography have been verified by later historians. Operating a trading post enabled Beckwourth to spin his wild yarns to an ever-changing audience. Whenever wanderlust overwhelmed Beckwourth, he simply moved to another post, another city, another frontier. In 1866 Beckwourth returned to Colorado to live again with the Crow, where it is reported that he died under mysterious circumstances. Because of prejudice, Beckwourth's role in American history was often dismissed by historians of the late 19th and early 20th centuries. However, the tales of James Pierson Beckwourth provide both an accurate and engaging account of what 19th-century life was like for a fur trapper, soldier, member of the Crow Nation, pioneer of the Southwest, California gold miner, and trading post operator in the American West.

*Taken from the Virginia SOL 9th Grade English Test 1995

Baseline Assessment 6: Questions

Please answer the following questions.

1. What is the main idea of the first paragraph?
2. What was a yarn spinner during the early days of the American West?
3. How did trappers live?
4. Why was Beckwourth adopted into the Crow Nation?
5. What did Beckwourth create in the Sierra Nevada Mountains and why?

Please answer True or False to the following statements.

1. James Beckwourth was scout, pioneer, fur trapper, and soldier.
2. James Beckwourth died on his ranch in the Sierra Nevada Mountains.
3. “Spin a good yarn” meant that you could tell a good story.
4. James Beckwourth was the lost son of a Crow Nation war chief.
5. James Beckwourth became rich as a gold miner.

Choose the correct answer:

1. The Crow Nation Beckwourth lived in was in:
(a) Colorado.
(b) Florida.
(c) California
(d) Missouri.
2. Beckwourth's father was:
(a) a slave

- (b) an Irish-American
- (c) a refugee.
- (d) a Crow Indian.

3. Beckwourth was a slave until:

- (a) the 1830s
- (b) the 1820s
- (c) the 1840s
- (d) he was never a slave

4. Which war did Beckwourth fight in?

- (a) French and Indian War
- (b) Civil War
- (c) Seminole War
- (d) War for Independence

5. What was Beckwourth trapping in Colorado?

- (a) Beaver
- (b) Bear
- (c) Fox
- (d) Marmots

APPENDIX H

Attributions Measures (Four Scenarios)

Please answer each of the questions on a scale of 0-100. Please see the scale below as a guideline.

Definitely Definitely Not Useful												Useful
0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%		

Scenario 1: You get an A on your test.

a) How important was the correct use of study strategies in doing well on this test?

Scenario 2: You read a book, but cannot remember what you read when you finish.

a) How much did not using reading comprehension strategies affect your ability to remember?

Scenario 3: You get an F on your test.

a) How much did not using study skills strategies affect your ability to do well on the test?

Scenario 4: You are reading a book and you remember all that you read when you are finished.

a) How important was the correct use of reading comprehension strategies?

APPENDIX I

Strategy Microanalytic Assessment

Please answer the following questions on a scale 0-100 and where possible explain your answer.

Definitely Cannot Do it	Probably Cannot	Maybe	Probably Can	Definitely Can Do It						
0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%

6. Do you have a goal when studying for a test? Explain.

7. Do you have a goal you are trying to achieve on your test? Explain.

8. Do you have a strategy that you use regularly to prepare for tests?

9. How did you decide to use this strategy when preparing for tests?

10. How sure are you that you can get an 85 on your next test?

11. How sure are you that you can answer 70% of the questions?

12. How much do you enjoy studying/preparing for your tests?

13. Do you have to try to motivate yourself when studying for tests?

14. What do you do when you don't feel like studying for your tests?
15. Do you keep track of where you study for your tests?
16. Do you keep track of how long you study for your tests?
17. How do you determine if you performed well on your test?
18. How satisfied are you with your performance on your last test?
19. What is the main reason why you did well or poorly on your last test?
20. What do you need to do to improve your performance on your next test?

APPENDIX J

SELF-EFFICACY FOR LEARNING FORM (SELF)

Please answer the following questions on a scale 0-100 and where possible explain your answer.

Definitely			Probably		Maybe		Probably		
	Definitely								
Cannot Do it			Cannot			Can			Can Do It
0%	10%	20%	30%	40%	50%	60%	70%	80%	90%
		100%							

Choose a percentage to indicate your answer

- _____ 1. When you notice you are having trouble concentrating on a reading assignment, can you refocus your attention and learn the material? (R)
- _____ 2. When you don't understand a paragraph you have just read, can you clarify it by careful rereading? (R)
- _____ 3. When you have trouble recalling key facts in a reading assignment, can you find a way to remember all of these two weeks later? (R)
- _____ 4. When you have trouble remembering complex definitions from a textbook, can you redefine them so that you will recall them? (S)
- _____ 5. When you feel very anxious before taking a test, can you remember all the material you studied? (T)
- _____ 6. When you have tried unsuccessfully to study for an hour, can you set and attain an important study goal during your remaining time? (S)
- _____ 7. When you are given an extensive reading assignment to cover before class the next day, can you set aside enough time in your schedule to finish it? (R)
- _____ 8. When you don't understand your teacher, can you ask the right question to clarify matters? (N)
- _____ 9. When your teacher gives a rambling disorganized lecture, can you

reorganize and rewrite your notes before the next class meeting? (N)

_____ 10. When you find your homework assignments vary greatly in length each day, can you adjust your time schedule to complete them? (S)

_____ 11. When you notice that your notes are much less complete than another student's, can you write down all the teacher's points during the next lecture? (N)

_____ 12. When you notice that you are getting behind in your homework during the week, can you catch up during the next weekend? (S)

_____ 13. When another student asks you to study together for a course in which you are experiencing difficulty, can you be an effective study partner? (S)

_____ 14. When you have missed several classes, can you make up the work within a week? (S)

_____ 15. When you find the assignment you are reading doesn't make sense, can you interpret it by using text clues, such as headings or italics? (R)

_____ 16. When you miss a class, can you find another student who can explain the lecture notes as clearly as your teacher did? (N)

_____ 17. When problems with friends and peers conflict with school work, can you keep up with your assignments? (S)

_____ 18. When the assigned reading is boring, can you find a way to motivate yourself to learn it fully? (R)

_____ 19. When a homework assignment, such as learning vocabulary words, is repetitive and uninteresting, can you make it into an exciting challenge? (S)

_____ 20. When an assigned reading is poorly written, can you figure out its meaning so you can explain it well on an essay test? (R)

_____ 21. When a teacher's lecture is over your head, can you find a way to get the information clarified before the next class meeting? (N)

_____ 22. When your teacher's lecture is very complex, can you write an effective summary of your original notes before the next class? (N)

_____ 23. When you are having trouble understanding assigned reading

material, can
you find a classmate who can explain everything clearly to you? (R)

_____ 24. When you feel moody or restless during studying, can
you focus your attention well enough to finish your assigned work? (S)

_____ 25. When you are trying to understand a new topic, can you associate new
concepts with old ones sufficiently well to remember them? (S)

_____ 26. When a lecture is especially boring, can you motivate yourself to keep
good notes? (N)

_____ 27. When you are having trouble comprehending a reading assignment,
can
you find key sentences that will help you understand each paragraph? (R)

_____ 28. When you have to take a test in a school subject you dislike, can you
find
a way to motivate yourself to earn a good grade? (T)

_____ 29. When you have time available between classes, can you motivate
yourself
to use it for studying? (S)

_____ 30. When you had trouble understanding your instructor's lecture, can
you
clarify the confusion before the next class meeting by comparing notes with a
classmate?
(N)

_____ 31. When you feel anxious during an exam and have trouble controlling
information, can you relax and concentrate well enough to remember it? (T)

_____ 32. When you are feeling depressed about a forthcoming test, can you
find a
way to motivate yourself to do well? (T)

_____ 33. When you are tired, but have not finished writing a paper, can you
find a
way to motivate yourself until it is completed? (W)

_____ 34. When you suddenly realize that you can't remember any material
you
have read during the last half hour, can you create self-questions to help you
review the
material successfully? (R)

_____ 35. When you find yourself putting off writing of an assigned paper, can
you
motivate yourself to begin the task immediately? (W)

_____ 36. When you have trouble recalling an abstract concept, can you think
of a
good example that will help you remember it on a test? (T)

- _____37. When your friends want to see a movie when you need to study for a test, can you find a way to decline without offending them? (T)
- _____38. When your last test results were poor, can you figure out potential questions before the next test that will improve your score greatly? (T)
- _____39. When you are taking a course covering a huge amount of material, can you condense your notes down to just the essential facts? (N)
- _____40. When you find yourself getting increasingly behind in a new course, can you increase your study time sufficiently to catch up? (S)
- _____41. When you are struggling to remember technical details of a concept for a test, can you find a way to associate them together that will ensure recall? (T)
- _____42. When your teacher lectures so rapidly you can't write everything down, can you record all the important points in your notes? (N)
- _____43. When you are angry about a course because of a teacher's demanding requirements, can you find a way to channel your anger to help you succeed? (S)
- _____44. When your concentration wanders while writing an important paper, can you refocus it sufficiently to finish the paper on time? (W)
- _____45. When describing a complex principle in a written paper, can you create an analogy that a reader will understand? (W)
- _____46. When you find that your first draft of a paper is wordy, ungrammatical, or confusing, can you revise it so that it is completely clear and grammatical? (W)
- _____47. When you are asked to write a concise, well-organized paper over night, can you find a way to do it? (W)
- _____48. When you are dissatisfied with an important paper you are writing, can you find another person who will show you how to remove all the problems? (W)
- _____49. When you are asked to write a paper on an unfamiliar topic, can you find good enough information to please your teacher? (W)
- _____50. When you learn that a paper you just finished writing is confusing

and
needs to be completely rewritten, can you delay your other plans for a day to
revise it?(W)

_____51. When you discover that your homework assignments for the
semester
are much longer than expected, can you change your other priorities to have
enough time
for studying? (S)

_____52. When you think you did poorly on a test you just finished, can you
go
back to your notes and locate all the information you had forgotten? (T)

_____53. When you are struggling to remember the details of a complex
reading
assignment, can you write summary notes that will greatly improve your recall?
(R)

_____54. When you find that you had to “cram” at the last minute for a test,
can
you begin your test preparation much earlier so you won’t need to cram the next
time? (T)

_____55. When other students from your class emphasize parts of the teacher’s
lecture that you excluded from your notes, can you correct this omission before the
next
class meeting? (N)

_____56. When you are struggling to understand a body of information for a
test,
can you diagram it or chart it so you will remember it all two weeks later? (T)

_____57. When you have trouble studying your class notes because they are
incomplete or confusing, can you revise and rewrite them clearly after every
lecture? (N)

APPENDIX K

Probe

Please list and describe the steps in the note-taking strategy.

How comfortable would you feeling using this strategy tomorrow to prepare for a test?

Can' t Do it	Probably Cannot	Maybe	Probably Can	Definitely Can Do It
0% 10%	20% 30%	40% 50%	60% 70% 80%	90% 100%

APPENDIX L

Probe

Please list and describe the steps in the test-prep strategy.

How comfortable would you feeling using this strategy tomorrow to prepare for a test?

Probably Can' t Do it	Maybe Cannot	Probably	Definitely Can	Can Do It						
0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%

APPENDIX M

Table 2: Timeline

	Baseline			Intervention						Post Intervention										
				Phase I			Phase II													
Student 1	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7	Day 8	Day 9	Day 10	Day 11	Day 12	Day 13							
Student 2	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7	Day 8	Day 9	Day 10	Day 11	Day 12	Day 13							
Student 3			Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7	Day 8	Day 9	Day 10	Day 11	Day 12	Day 13					
Student 4			Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7	Day 8	Day 9	Day 10	Day 11	Day 12	Day 13					
Student 5				Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7	Day 8	Day 9	Day 10	Day 11	Day 12	Day 13				
Student 6					Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7	Day 8	Day 9	Day 10	Day 11	Day 12	Day 13			
Student 7						Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7	Day 8	Day 9	Day 10	Day 11	Day 12	Day 13		
Student 8							Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7	Day 8	Day 9	Day 10	Day 11	Day 12	Day 13	

* The first day of baseline for the first student was January 4th and all students followed subsequently from that day.

APPENDIX N

Lesson Plan 1

- 0-10 minutes: Goal Setting/ Planning (SMA Influence)
 - goal sheet will be given at this time

- 10-40 minutes: Note-Taking Strategy Instruction
 - Introduce strategy
 - Discuss steps to strategy
 - Introduce Mnemonic (MIND)
 - M= Main Idea (find the main idea in each paragraph of your reading)
 - I= Important Details (find the important details that support your main idea)
 - N= Name them in your notes (write them as headings)
 - D= Define them using what you underlined for Main Idea and Important Details
 - Focus on M, Main Idea., today. How to find it, how much you should highlight, and why it is important.
 - Practice finding Main Idea in sample readings or reading that needs to be completed for homework for another class
 - Wrap-up/ Review Mnemonic

- 40-45 minutes: Weekly Planner
 - Organize weekly planner with assignments and necessary homework

APPENDIX O

Treatment Fidelity Checklist Phase I and Phase II

- 0-10 minutes: Goal Setting/ Planning Completed
- 10-40 minutes: Note-Taking Strategy Instruction
 - Introduce strategy
 - Discuss steps to strategy
 - Attribution Training discussed with strategy
 - If I use the strategy correctly and practice it, I will perform better remember my reading. (Phase I)
 - If I do not use the strategy properly or at all, I am not likely to remember my reading. (Phase I)
 - If I use the strategy correctly I will feel more prepared for my test and perform better. (Phase II)
 - If I do not use the strategy I will not feel prepared for my tests and will not perform as well I would have liked. (Phase II)
 - How well I remember and how well I do also depends on the amount of effort I put into getting ready. (Phase I and Phase II)
 - Introduce or Review Mnemonic (MIND)
 - M= Main Idea (find the main idea in each paragraph of your reading)
 - I= Important Details (find the important details that support your main idea)
 - N= Name them in your notes (write them as headings)
 - D= Define them using what you underlined for Main Idea and Important Details
 - Focus on particular step of mnemonic (M, I, N, or D Phase I) OR (W, A, or R Phase II)
 - Practice performing the step from above using samples or actual class or homework
 - Wrap-up/ Review Mnemonic

– 40-45 minutes: Weekly Planner Completed

APPENDIX P

Weekly Goal

What goal would you like to achieve this week? Why?

GOAL REVIEW (end of the week)

Do you feel you achieved your goal this week? YES or NO

If you answered yes, how well do you think you achieved your goal?

Not at all			Kind of		Well		Really Well		Completely	
0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%

If you answered no, why didn't you achieve your goal?

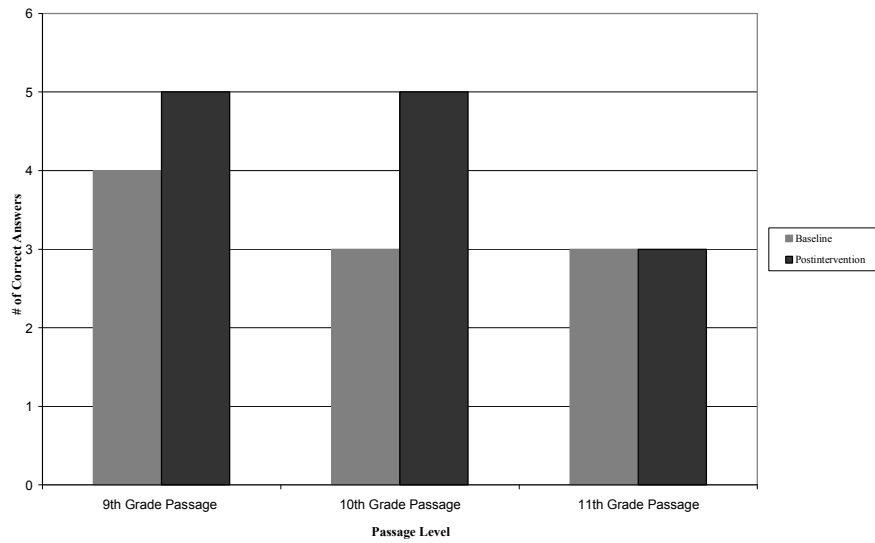
APPENDIX Q

	Mon	Tues	Wed	Thurs	Fri	Sat	Sun
8-9							
9-10							
10-11	----11:15---- - ----12:30---- ----1:45-----		----11:15----- ----12:30----- ----1:45-----		----11:15----- ----12:30----- ----1:45-----		
11-12							
12-1							
1-2							
2-3							
3-4							
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10-11							

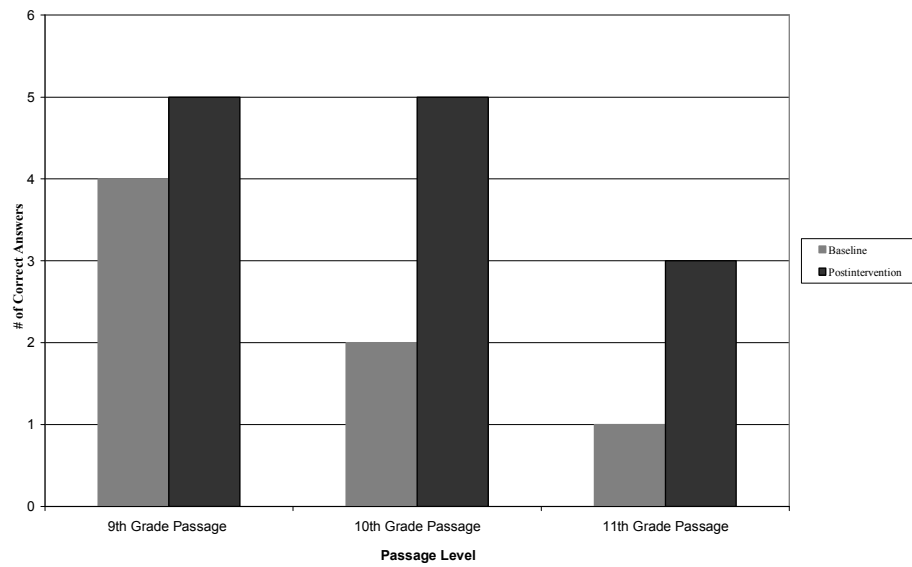
APPENDIX R

Individual Student Performance on Short Answer Items

George.

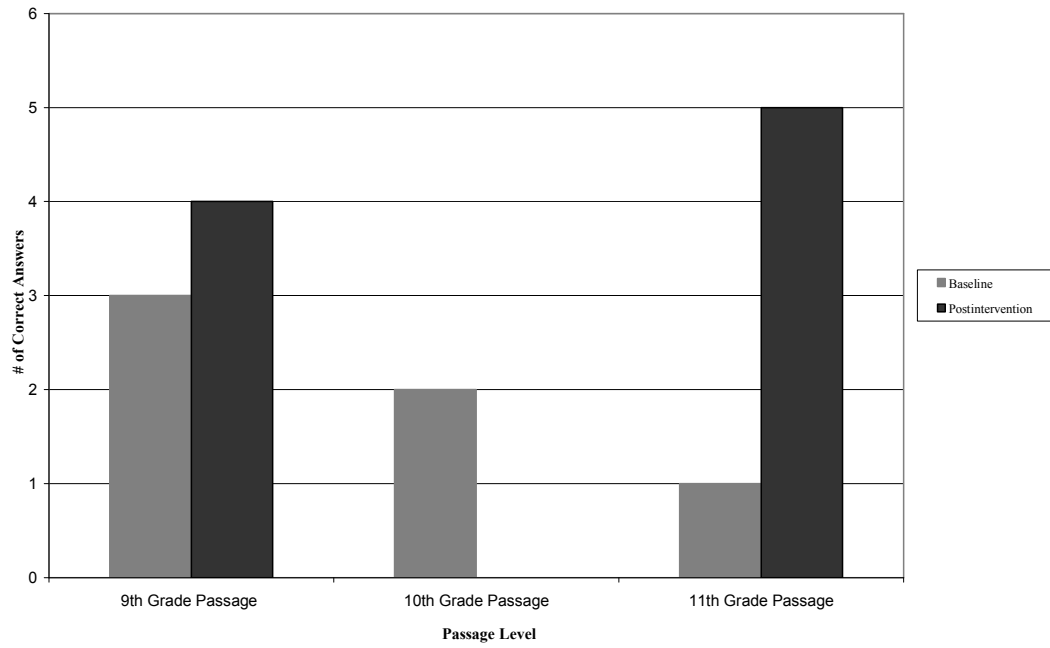


Adam.

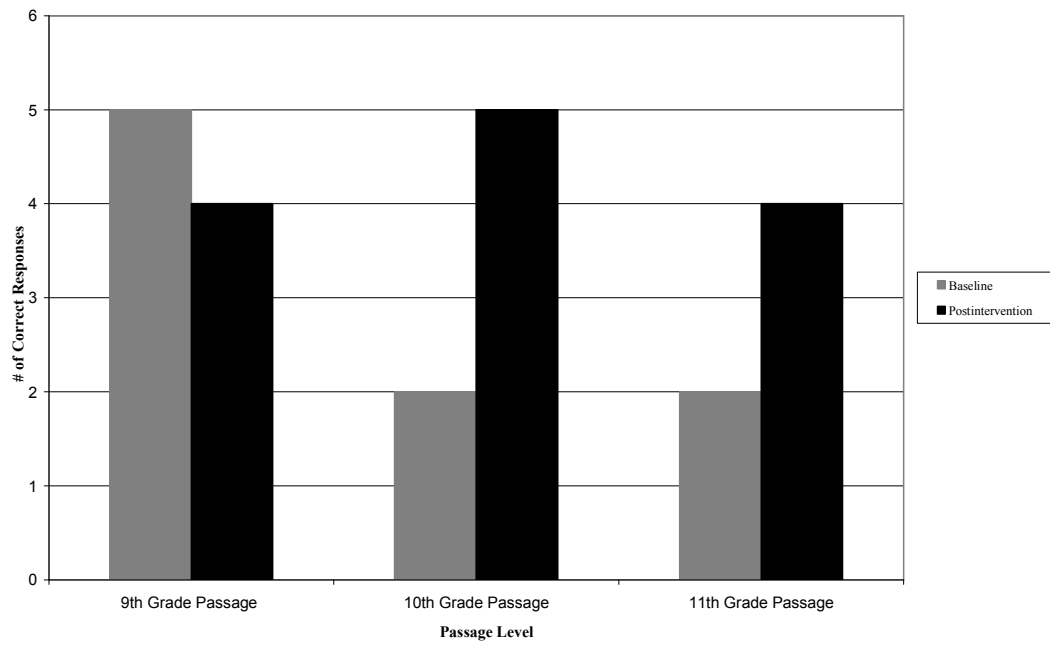


Individual Student Performance on Short Answer Items Continued.

Tia.

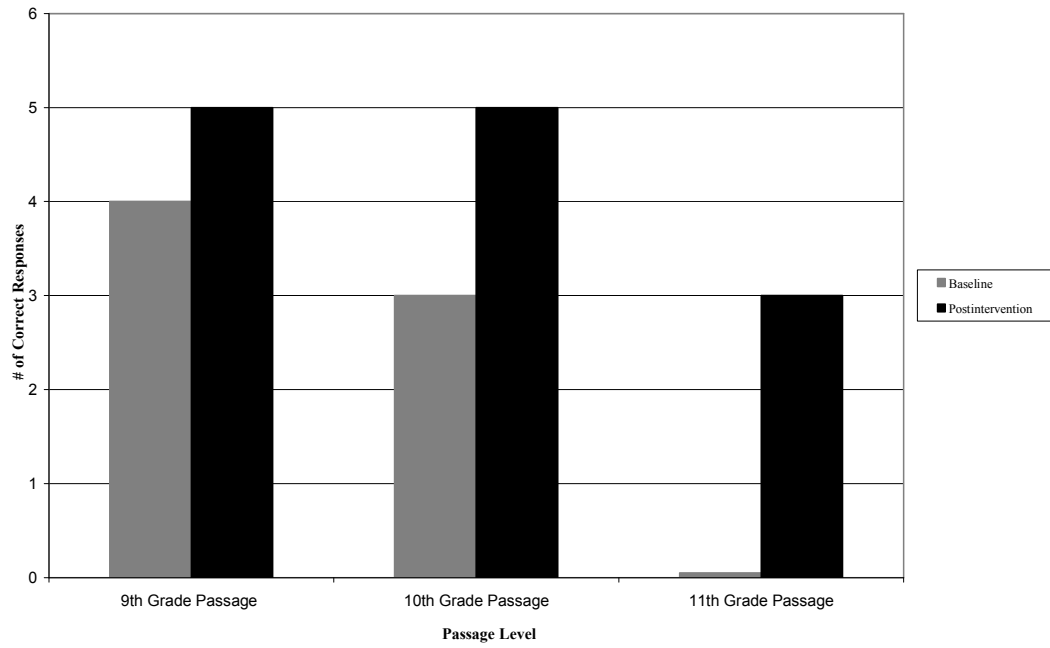


Wyatt.

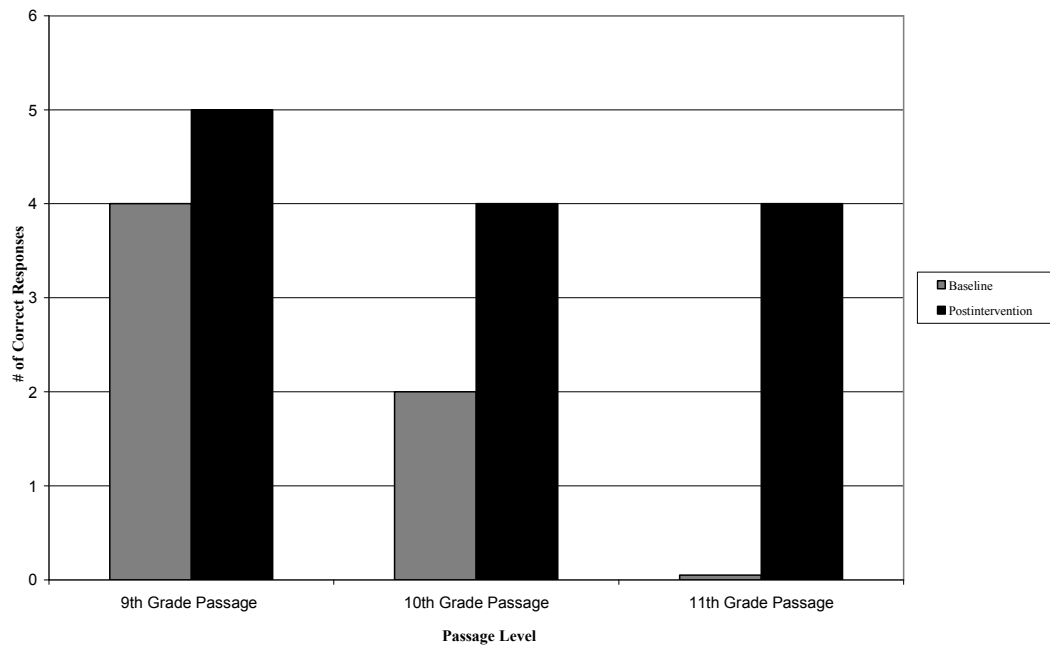


Individual Student Performance on Short Answer Items Continued.

Peter.

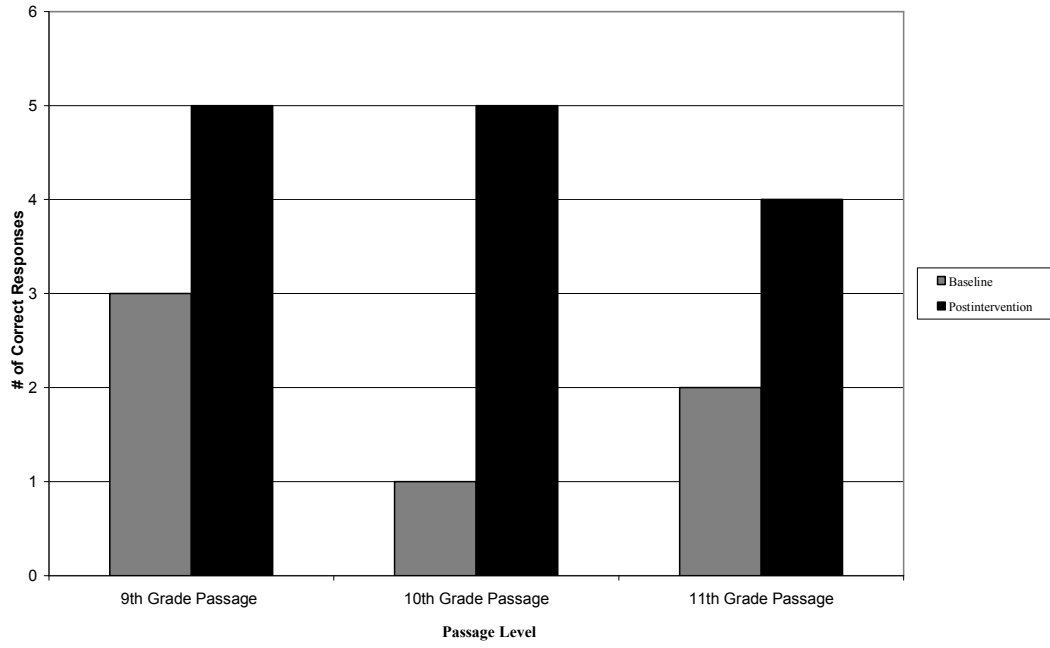


Danielle.



Individual Student Performance on Short Answer Items Continued.

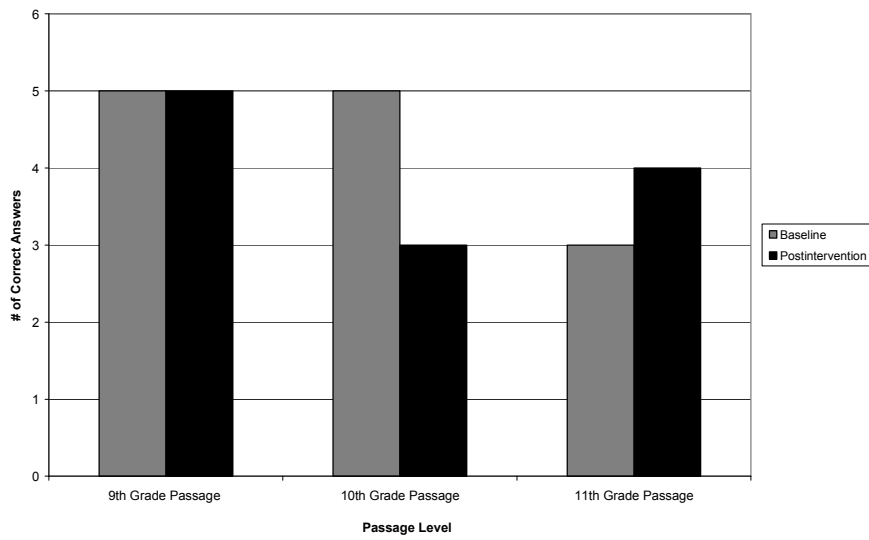
Finley.



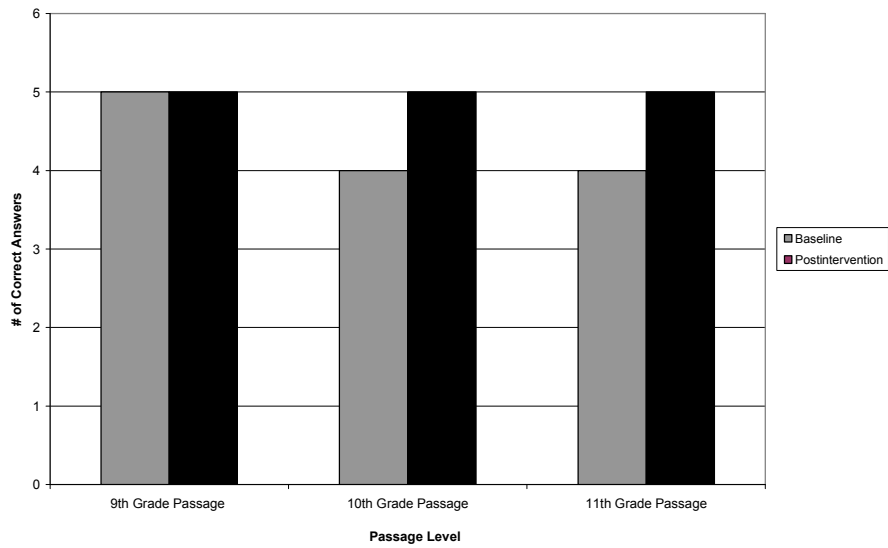
APPENDIX S

Individual Student Performance on True/ False Items.

George.

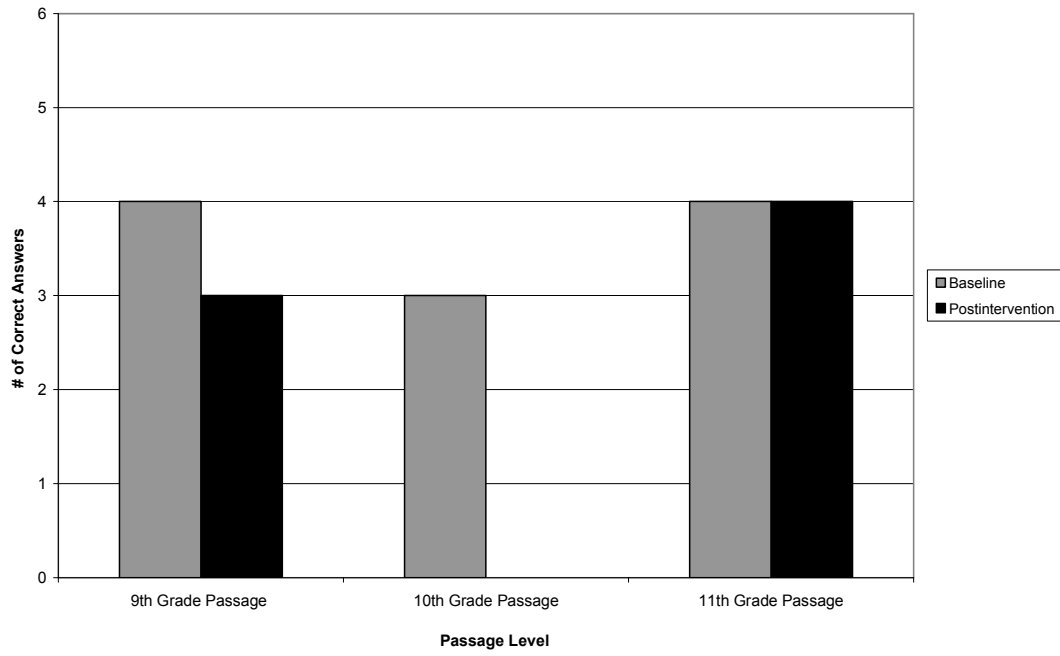


Adam.

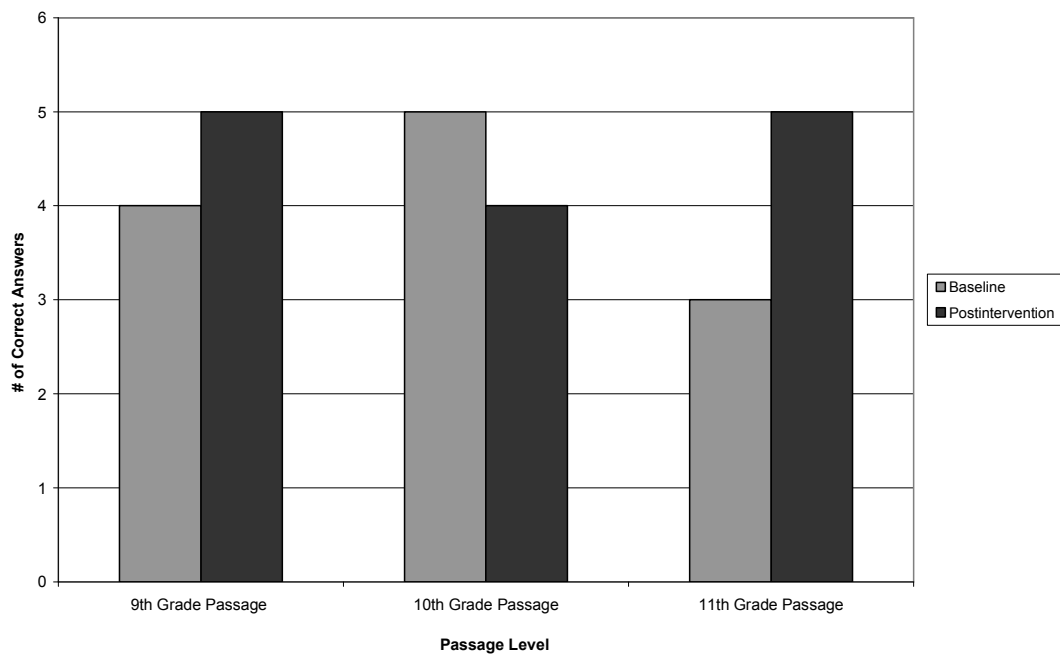


Individual Student Performance on True/ False Items.

Tia.

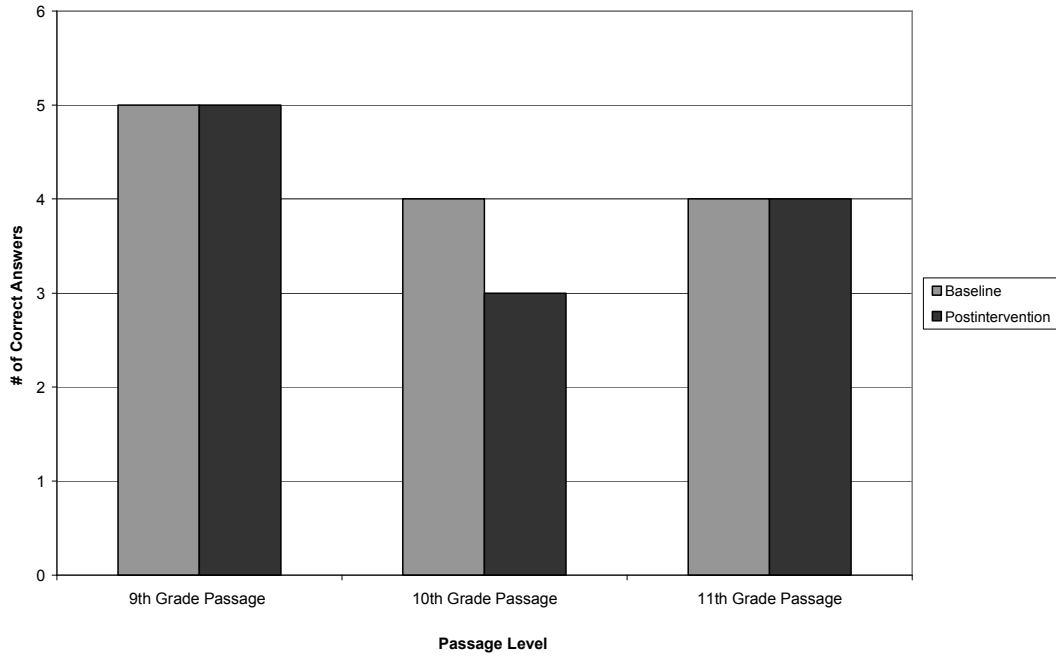


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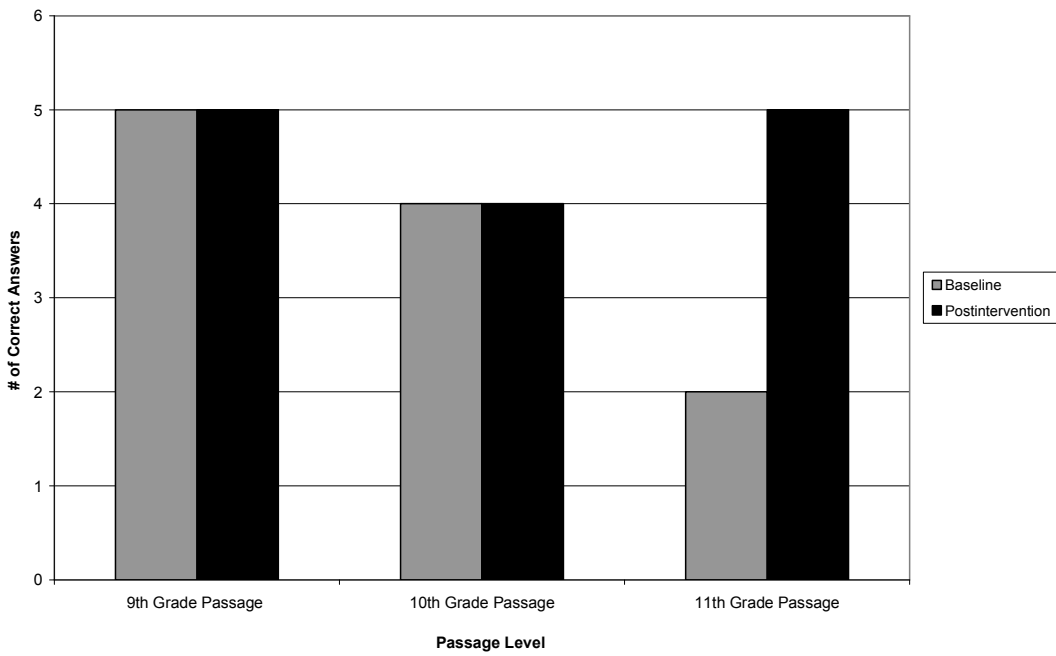


Individual Student Performance on True/ False Items.

Peter.

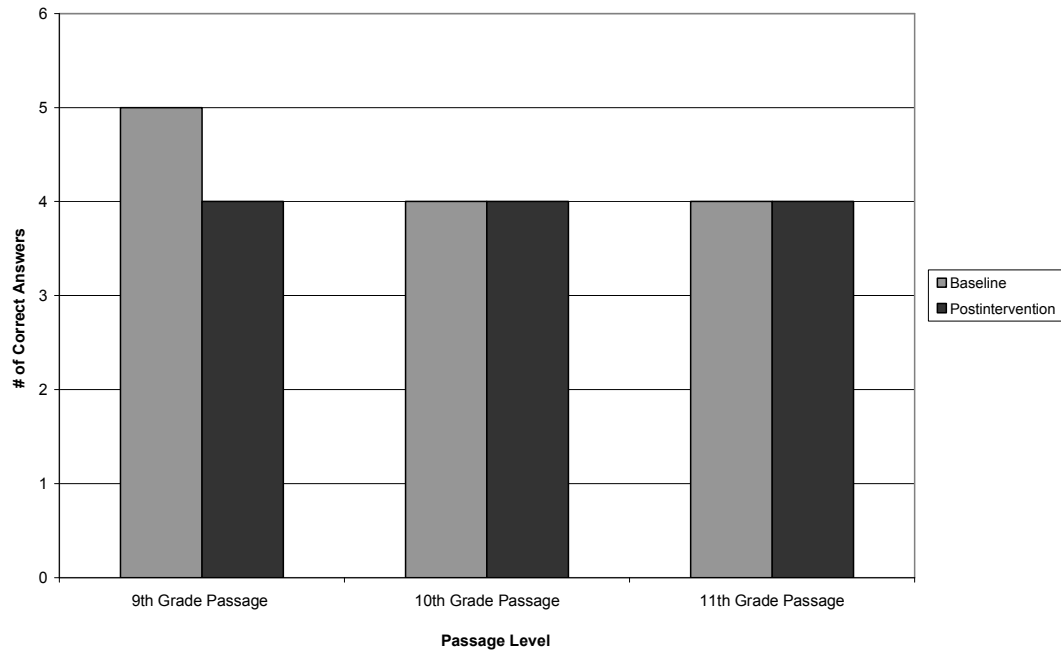


Danielle.



Individual Student Performance on True/ False Items.

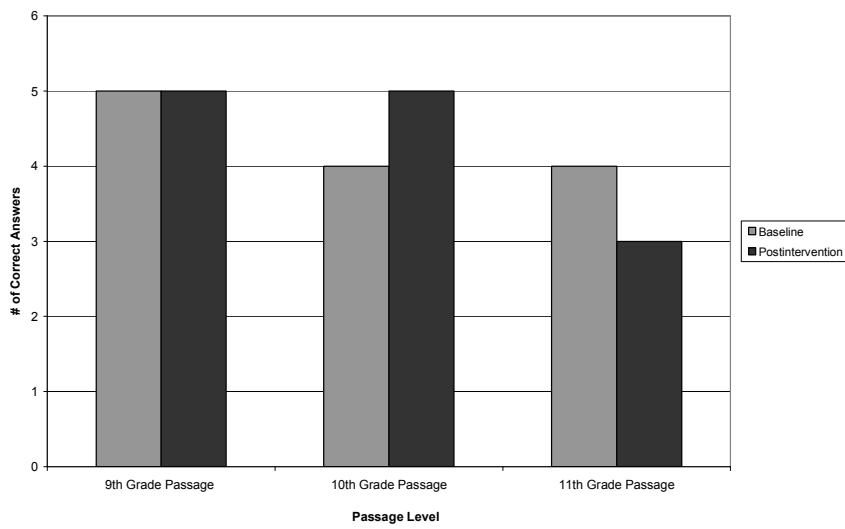
Finley.



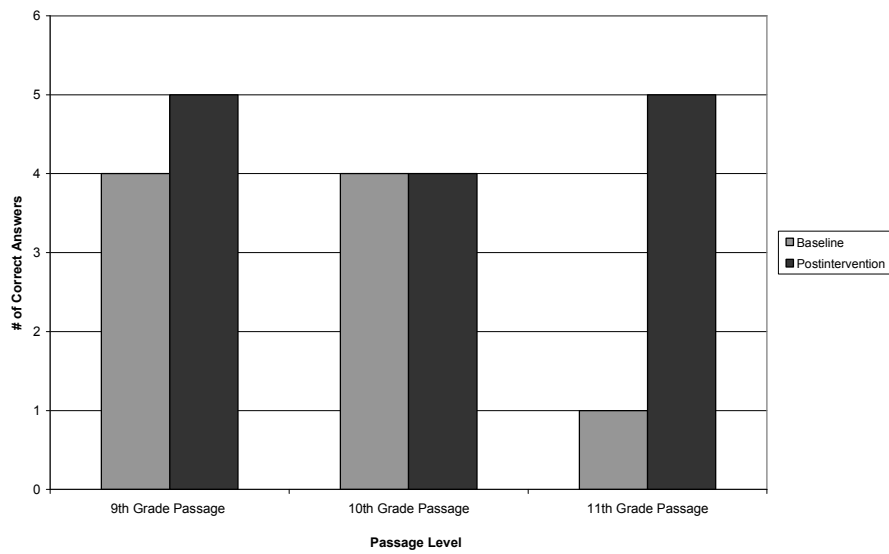
APPENDIX T

Individual Student Performance on Multiple Choice Items.

George.

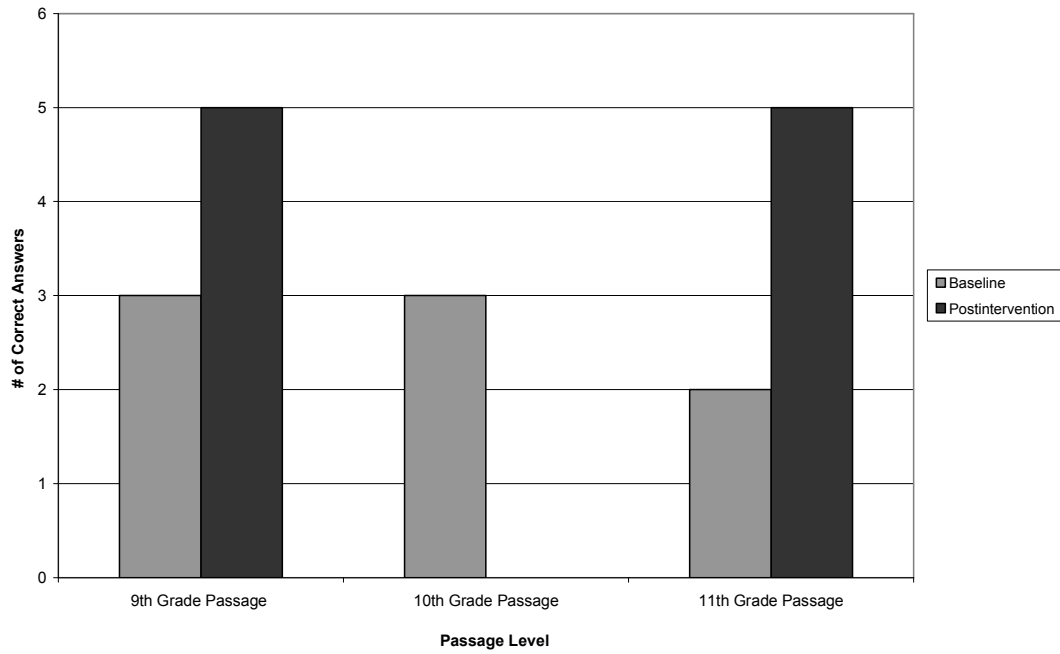


Adam.

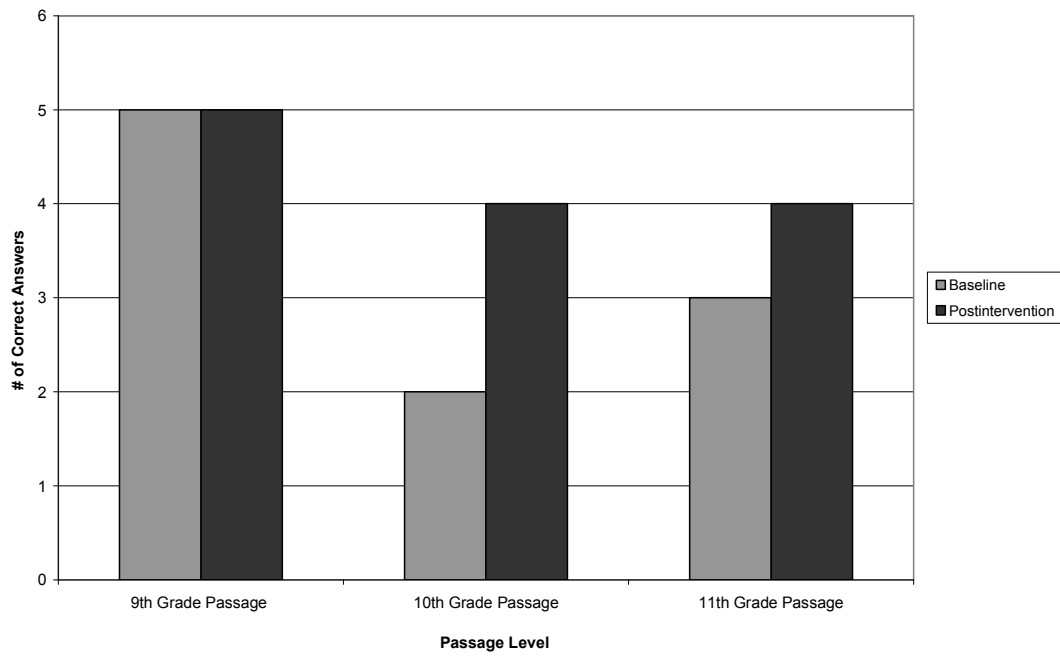


Individual Student Performance on Multiple Choice Items.

Tia.

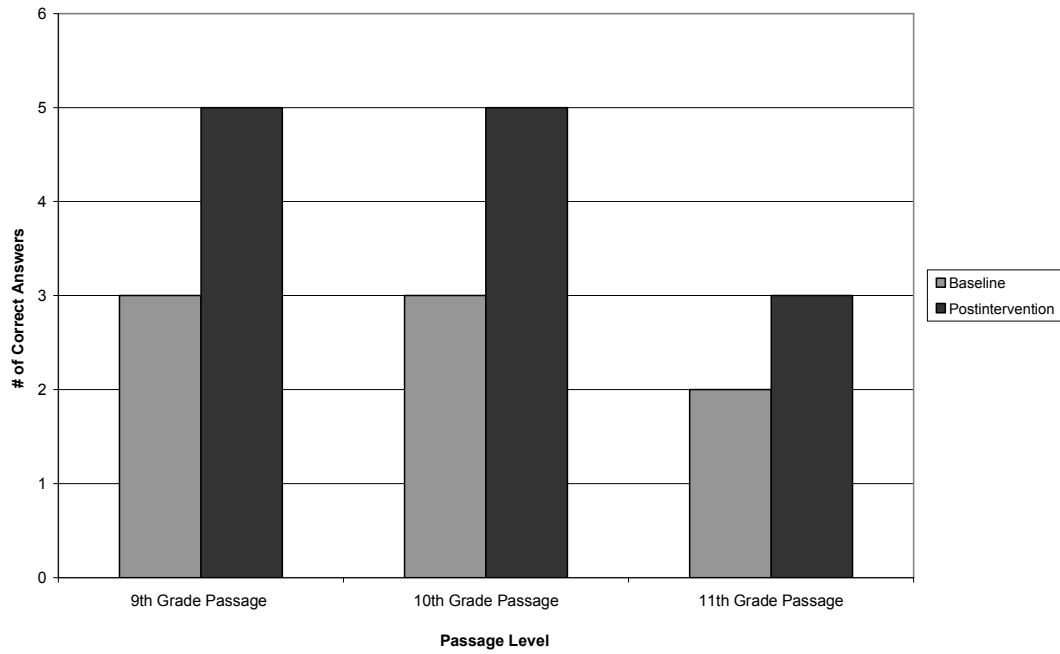


Wyatt.

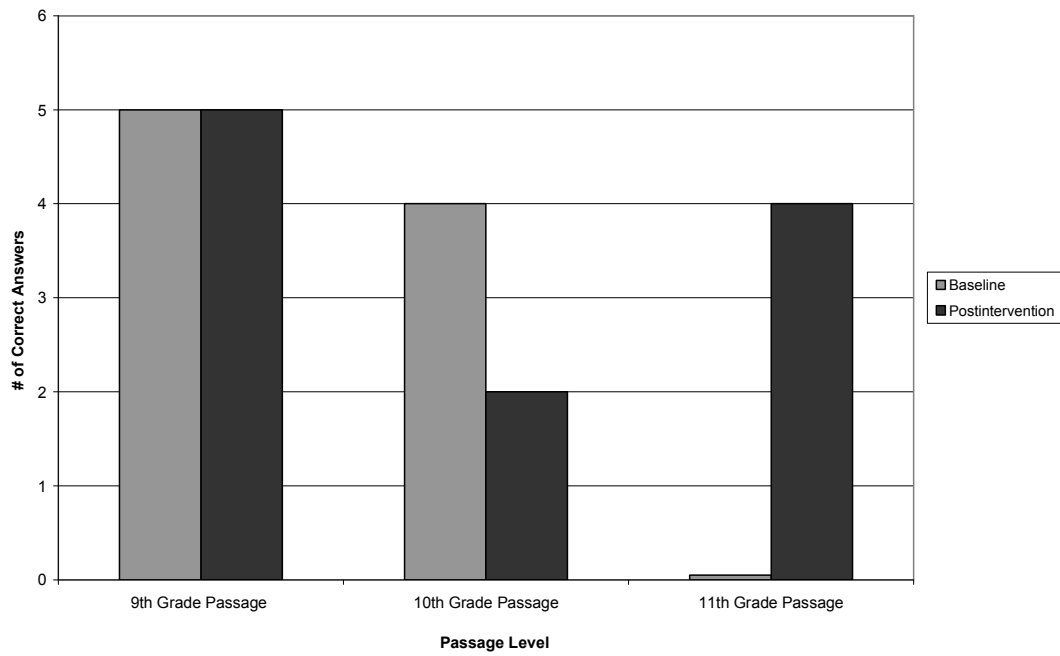


Individual Student Performance on Multiple Choice Items.

Peter.

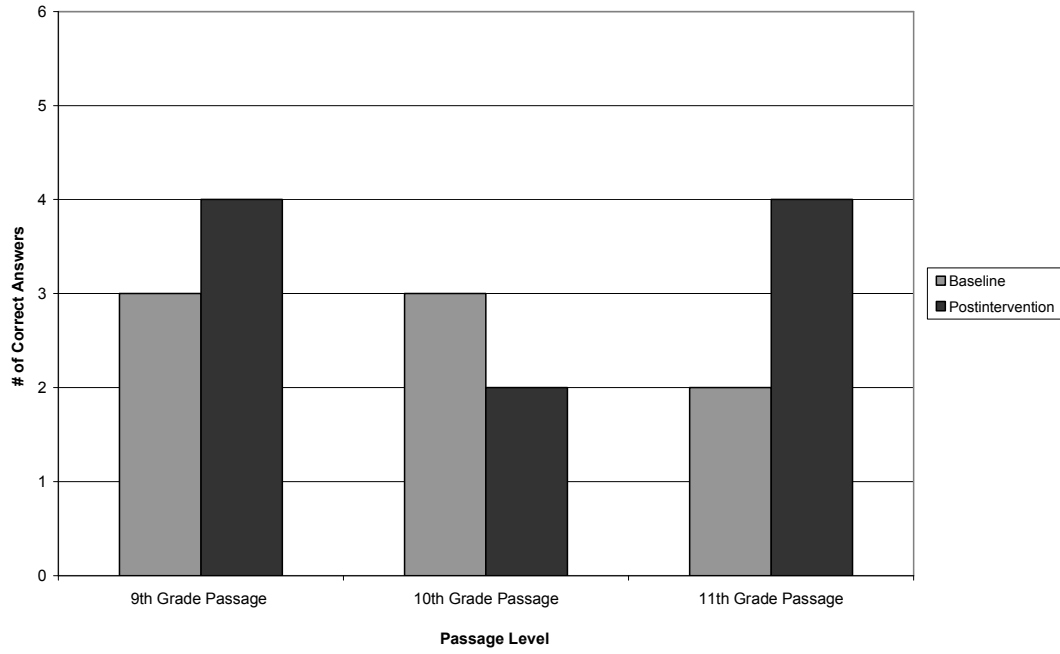


Danielle.



Individual Student Performance on Multiple Choice Items.

Finley.



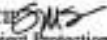
APPENDIX U



Office of Research Subject Protections

Research 1 Building
4400 University Drive, MS 406, Fairfax, Virginia 22038
Phone: 703-993-4021, Fax: 703-993-9398

TO: Margo Mastropieri, College of Education and Human Development

FROM: Sandra M. Sanford, RN, MSN, CDE 
Director, Office of Research Subject Protections

PROTOCOL NO.: 7102 Research Category: Masters Thesis

PROPOSAL NO.: N/A

TITLE: The Improvement of Self-Regulation and Motivation in High School Students with Learning Disabilities through the use of SRSD

DATE: September 9, 2010

Cc: Jesse Leins

On 9/9/2010, the George Mason University Human Subjects Review Board (GMU HSRB) reviewed and approved the above-cited protocol following expedited review procedures.

Please note the following:

1. A copy of the final approved consent document is attached. You must use this copy with the HSRB stamp of approval for your research. Please keep copies of the signed consent forms used for this research for three years after the completion of the research.
2. Any modification to your research (including the protocol, consent, advertisements, instruments, funding, etc.) must be submitted to the Office of Research Subject Protections for review and approval prior to implementation.
3. Any adverse events or unanticipated problems involving risks to subjects including problems involving confidentiality of the data identifying the participants must be reported to Office of Research Subject Protections and reviewed by the HSRB.

The anniversary date of this study is 9/8/2011. You may not collect data beyond that date without GMU HSRB approval. A continuing review form must be completed and submitted to the Office of Research Subject Protections 30 days prior to the anniversary date or upon completion of the project. A copy of the continuing review form is attached. In addition, prior to that date, the Office of Research Subject Protections will send you a reminder regarding continuing review procedures.

If you have any questions, please do not hesitate to contact me at 703-993-4015.

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CURRICULUM VITAE

Jesse E. Leins graduated from Clarke County High School, Berryville, Virginia, in 2001. She received her Bachelor of Arts from Smith College in 2005. She spent three years developing her own tutoring company and received her Master of Science in Educational Psychology from George Mason University in 2011.