Action Research Project: SCOPE Metacognitive Strategy

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Abstract

This study deals with teaching 11th graders metacogntivie strategies to aid in general writing mechanics with the overall goal of testing how well the SCOPE strategy can help fluent English-speaking eleventh graders improve their writing fluency and English mechanics in five weeks while also increasing student metacognitive awareness in an American high school English class. This action research project had a student-teacher teach students SCOPE once a week in order to help the students become more aware of their own thought processes and to help the students become more aware of different learning tools at their aid. Students were then graded on a five-point rubric once a week with an essay-prompt for five total weeks. The rubric used was the SCOPE strategies' elements itself: spelling, capitalization, etc. The entire data collection process took seven weeks from pre-test to post-test. Results indicate that students scored higher on the post-test than the pre-test thus implying that the SCOPE metacognitive strategy worked. Of the 20 participants, 18 of them improved their score while two students remained stagnant. No one decreased. While data shows that students struggled with Expression of thought and Order of words the most, scores in each SCOPE element category increased from benchmark one to benchmark five. Students had the highest consistent accuracy with Capitalization and Spelling. Part of this may be due to word processing programs not being generally designed to catch Expression of thought mistakes, but more so of the punctuation-type errors.

Keywords: metacognition, self-regulation, motivation, self-efficacy, English, high-school, SCOPE, SRSD

Introduction

Eleventh-grade students need to spell correctly; correction, everyone needs to be able to spell correctly. One letter in the wrong place can ruin people's lives or even worse, kill people. And it all starts when the student is in the classroom, and it is a teacher's job to make sure students can spell words properly. As an intern with Frederick Count Public Schools, I have graded tests where students are unable to spell "corps," "corporeal," and "corporation". I have been asked how to spell "Edwards" by an eleventh grader. My students need support in spelling and in using English mechanics properly, which is why I want to incorporate a writing intervention designed to improve one's overall English writing mechanics: SCOPE. SCOPE is a metacognitive writing intervention strategy that takes the form of a checklist. The SCOPE proofreading elements are: (1) SPELLING: Are my words spelled correctly?; (2) CAPITALIZATION: Have I capitalized all appropriate words, including first words of sentences, proper nouns, and proper names?; (3) ORDER of words: Is my word order (syntax) correct?; (4) PUNCTUATION: Did I use end punctuation and other punctuation marks appropriately? (5) EXPRESSION of complete thoughts: Do all of my sentences contain a noun and verb to convey a complete thought? The goal is to introduce this strategy to the students and then give warm-up activities that every week that rely on students needing to edit sentences using all the elements of SCOPE.

My question is: to what extent can introducing the SCOPE strategy help fluent English-speaking eleventh graders improve their writing fluency and English mechanics in five weeks while also increasing student metacognitive awareness in an American high school English class?

Literature Review

Standardized Assessments

In 2010, the United States Department of Education started a new initiative called the Common Core State Standards. The new set of standards was designed to challenge students to greater levels of achievement across all subject areas. In the field of English Language Arts (ELA), "The Common Core asks students to read stories and literature, as well as more complex texts that provide facts and background knowledge in areas such as science and social studies. Students will be challenged and asked questions that push them to refer back to what they've read. This stresses critical-thinking, problem-solving, and analytical skills that are required for success in college, career, and life" (Common Core, 2019). Thus, a major goal of public schools in America is to prepare students for college and consequently, the various college admissions tests.

Despite the Common Core's goal of trying to prepare students for the rigors of college and life, there is a growing problem in America's education system. Many students are not developing proficiency in their writing (Penner-Williams, Smith, & Gartin, 2009) as hinted at by the downward year-to-year trends in average scores on national assessments. Scores from the two major standardized tests that American high schoolers take to get into college, the ACT (American College Testing) and the SAT (Scholastic Aptitude Test), over the last five to 10 years have shown a downward trend in English/Writing proficiency. Over the last decade, scores on the SAT's Writing section have declined steadily. In 2006, the average score was 497 out of 800 and except from 2007-2008 and 2012-2013 where scores were stagnant, each year the scores have decreased to fall at an average of 482 in 2016 (SAT, 2019). This downward trend is also reflected in the ACT's scores between 2014-2018. In 2014, the percentage of students who took

the ACT and met the benchmark set by the Common Core on the English section was 64%. The average in 2015 was 64%, the average in 2016 and 2017 was 61%, and the average in 2018 was 60% (ACT, 2018). This trend is concerning because many colleges require, or strongly recommend that students take the typically, optional written portion of a standardized college admissions test (Ray, Graham, Liu, 2018), and because after McNamara, Crossley, & McCarthy (2010) analyzed 120 essays written by freshmen at Mississippi State University, they found that those students in college whose writings contained more syntactic complexity, lexical diversity, and word frequency were more likely to receive higher scores on their essays which led the researchers to surmise that "for high school seniors, writing skills are among the best predictors of success in course work during their freshmen year of college" (p. 27). The correlation between having strong writing skills and performing well in college-level writing tasks is clear (McNamara et al., 2010), so why are students not performing well on these tests?

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Relationship between Self-regulation, Self-efficacy, and Motivation

One reason suggested is a lack of student self-efficacy that correlates negatively with self-regulation behavior/tendencies in an age where increased academic expectations are prevalent is leading to these lower writing scores. Keshi & Ahmadi (2013) have shown that there is a strong correlation between a student's self-efficacy and their grades with a stronger self-efficacy score correlating to higher academic performance, and a strong correlation between self-efficacy and self-regulation. To find this, they took high schoolers with behavioral problems such as skipping school frequently, and high schoolers without any behavioral problems and gave them the General Self Efficacy Scale (GSES) and the Self-Regulation Scale (SRS) to fill out. Keshi & Ahmadi (2013) found that students from both groups felt that they performed better academically when they perceived their own selves as having a higher self-efficacy and felt that

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they also performed better academically when they reported themselves as having a high level of self-regulation. Thus, it is logical to assume that a lack of strategies that target self-regulation, with the addition of intentional teacher-led discussion on metacogntivie strategies, is a factor in decreased writing proficiency.

A correlation between motivation and self-regulation is also another possible factor in decreased academic performance across the board (Morosanova, Tsyganov, Vanin & Philippova, 2014). After giving 249 high school students aged 14–18 the Self-Regulatory Profile of Learning Activity-SPLAQ and State-Trait Personality Inventory-STPI to see the relationship between self-regulation and motivation on future academic success on exams, using three factors: self-regulation, motivation, and adaptation, Morosanova et al. (2014) found that those students who had a higher correlation between self-regulation and stress, had higher exam scores on the post-test than those with high correlations between stress and anger/anxiety. In terms of real-world application, the increased academic expectations of getting into a good college, or the teaching-the-test mindset (Penner-Williams et al., 2009) that seems to have become commonplace in schools and in the curriculum such as in the Common Core's own standards, places stress on students and thus decreases their self-efficacy, which in turn decreases self-regulation.

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This correlation has been observed in the classroom by Miller, Heafner, & Massey (2008). The results of Miller et al.'s study and Morosonova et al.'s study agrees with the findings of Keshi & Ahmadi, but also points out that a teacher's physical presence contributes to increased motivation from students to complete work, thus boosting self-efficacy and showing that motivation levels do play a small factor. They argue that "students need to acquire greater self-regulatory skills in order to become more independent in their academic endeavors; it appears as if this milestone will not occur without additional teacher support and

encouragement." (Miller et al., 2009, p.134). That positive support and encouragement by teachers increases a student's motivation to get work done, thus increasing self-efficacy is demonstrated by one student in the study who "responded positively to his teacher's modeling of strategies, [and] eagerly discussed his studying efforts, and experienced improved grades. He predicted a B+ on the final exam and mentioned a sudden interest in science as a college major" (Miller et al., 2009, 135). However, that student failed to employ those memorization strategies (self-regulation) that were the mainstay of his prior studying efforts and failed the exam. The teacher was not with the student at home, so the student did not have the motivation or encouragement from the teacher, thus lowering the student's self-efficacy, which in turn discouraged self-regulatory behaviors. Afterwards, it was reported that the student lost interest in pursuing the field of science (self-motivation), thus showing a correlation between self-efficacy and self-regulation.

This correlation is further shown in the study done by Miller et al. with high schoolers in an English class, with the goal of increasing overall academic performance, that though students were provided with self-regulation tools (reading logs), taught metacognitive writing strategies, and given opportunities to reflect on how they thought they were doing in school (promoting metacognitive awareness), outside the classroom, students were unable to regulate their study behaviors because of an absence of the teacher. Students did not regularly use the modeled strategies, relied on limited memorization strategies to comprehend texts, and constructed awkward sentences to express their ideas. Moreover, they had difficulties explaining how they might improve their academic performances during the classroom discussions and blamed any of their difficulties on limited academic abilities (Miller et al., 2009). The students did demonstrate increased class participation throughout the 9-week study, which shows that self-regulation and

metacognitive strategies do indeed work, but outside of the school environment, they become mute because of the absence of the teacher, thus implying that a relationship between self-regulation and self-efficacy, and a relationship between self-efficacy and motivation exists. However, in order to increase self-motivation, self-efficacy, and self-regulation at once, what can be done?

Metacognitive Strategies

Metacognitive strategies are designed to allow a student to realize their own thought processes. Joseph (2010) recommends "that teachers should design lessons comprising three main components: direct instruction through teacher modeling, ongoing discussions about metacognition, and active classroom practice" (p. 101). She further suggests that encouraging students verbally, incorporating problem-solving activities in the classroom, using effective questioning to activate students' background knowledge, and teaching self-assessment techniques will be beneficial to students. The successful teaching of metacognition in the classroom relies on teaching students metacognitive strategies that promote self-regulation and self-assessment. The goal is to teach the strategies that students need in order to write, while supporting them to be motivated" (Parent, Rodrigue, Myre-Bisaillon, Boudreau & Tremblay-Bouchard, 2014) because if a student can understand the reasons behind why they write a certain way, they can adapt their approach to writing to better suit the task at hand.

A common metacognitive strategy is the Self-Regulated Strategy Development (SRSD) plan which is a model that combines instructional strategies with a means to self-regulate. Another metacognitive strategy aid commonly seen with SRSD and used in tangent with it is the mnemonic device. Both strategies have seen success both on low-achieving students and students with disabilities. As Ray, Graham & Liu (2018) discovered, using the Self-Regulated Strategy

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Development (SRSD) model in conjunction with mnemonic devices on high school students with disabilities or at-risk for writing difficulties increased students' performance on the overall ACT writing score (p. 1518). In addition, following instruction, students increased the quality of their plans, number of argumentative elements, overall ACT essay score, number of words, and number of transition words in their ACT essays. Students were also positive about the strategy, learning process, and its effects thus showing an increase in student efficacy and student motivation. Since the intervention involving the SRSD plan and the mnemonic device HIT SONG improved the performance of high schoolers with learning disabilities, then it is logical to assume that the combined tandem of the two when used would work with high school students without learning impairments. This can especially be seen in the case of sixth and seventh graders at an urban middle school. Coker & Erwin (2010) found that teaching students mnemonic devices STOP and DARE, an SRSD tactic, allowed the students to develop stronger and fuller arguments in the post-test than they did at the baseline test. This demonstrates that self-regulation strategies (SRSD) and mnemonic devices (DARE and STOP) do help students perform better when taught over a long period of time.

SCOPE

Despite there being solid evidence showing that students who recognize why and how they perform academic tasks doing better academically and feeling more positive about their learning (Miller et al., 2009) there is still a lack of conscious awareness of metacognitive processes by students in secondary education as shown by the downward trend of standardized test scores in English and Writing (ACT, 2018) (SAT, 2019). Teachers can help students recognize these metacognitive processes through modeling metacogntivie strategies such as SCOPE, a mnemonic device that stands for Spelling: Are my words spelled correctly?;

Capitalization: Have I capitalized all appropriate words, including first words of sentences, proper nouns, and proper names?; Order of words: Is my word order (syntax) correct?; Punctuation: Did I use end punctuation and other punctuation marks appropriately?; and Expression of complete thoughts: Do all of my sentences contain a noun and verb to convey a complete thought?

The support for mnemonic devices and metacognitive strategies alike is there. In their study, Jacobson & Reid (2010) taught two mnemonic devices (STOP and DARE) to three high school students and observed their progress over three weeks in an English class by looking at the average number of words each student wrote in an essay responding to a prompt, how many parts of an essay each student had, number of transition words, and how long each student took to plan/prewrite their response to the prompt. Each student had ADHD, and the researchers found that after three weeks of the writing intervention, each student wrote more, wrote better (because of prewriting/taking time to plan essay), and wrote more succinctly. Despite this study being done on kids with ADHD, the study proves that if mnemonic devices can help students with disabilities, those without disabilities should be able to benefit at least just as much just as the SRSD plan worked with students with writing disabilities.

Conclusion

Metacognition is important for students in English classes. English is a vast language that has many rules. The rules can be confusing, and mistakes can easily be made. Getting students to recognize when they might need to use different shortcuts or strategies when writing is a push should be made in the classroom. Since every story or idea begins with a word, a strong writing ability is rooted in a solid foundation and understanding of the English language. The SCOPE strategy attempts to direct a student's mind towards common basic errors made by students in

high school-level writing. But to what extent can introducing the SCOPE strategy help fluent English-speaking eleventh graders improve their writing fluency and English mechanics in five weeks while also increasing student metacognitive awareness in an American high school English class?

Methodology

Setting

This study was done in a rural, public high school in Maryland across seven total weeks. The class studied was during the first block of school (7:30-8:55am). The high school enrolls approximately 750 students in total. The student teacher ratio is 17:1 and the number of minorities enrolled is approximately 7%, which is lower than the Maryland average of 62%. 93% of the student population is White, 5% are Hispanic, and 2% are two or more races. The school ranks in the top 10% of all schools in Maryland in overall academic achievement.

The class used was identified and decided on because it was determined that out of the three English classes access was allowed to, the first Block would benefit most from any potential benefits of the intervention as historical data and outside teacher anecdotes suggested that this class would perform sub-par as compared to the other two classes.

Participants

This study was done with 20 eleventh-grade students taking a grade level American Literature class. There were two females and 18 males in this study. All participants were native English speakers. 19 of the participants identified as White and one participant identified as Hispanic. The lone Hispanic student is male.

Design

The study's goal was to see to what extent the writing intervention strategy SCOPE could increase a student's performance in writing according to proper spelling, capitalization, order of thoughts, punctuation, and explanation of ideas. The intervention lasted five weeks with data collection taking a total of seven weeks. This was an action-research study. There was a pre-test, five benchmark tests, and then a single post-test.

Instruments

Each student submission was graded on a five-point scale with zero points being the lowest a student could score and a 5 being the highest. Each of the elements of the SCOPE acronym represented one tally (one tally equals one point). If a student did not follow one of the SCOPE elements entirely in their writing, then they lost one point/tally.

Procedure

The first pre-test data sample was taken the second week of school in September. Students were asked to respond to one of the multiple 2018 Common Application Essay prompts. Students were required to type at least one page double-spaced with Times New Roman, 12pt. font. During the first week of intervention, students were taught the Mnemonic device, SCOPE by a student-teacher. Students were explained what the acronym stood for and the acronym was kept on the whiteboard in the front of the classroom for the duration of the study. Each student was given a paper with the SCOPE mnemonic device written on it with each element of the acronym written out.

Each subsequent week, on either a Monday or a Thursday, students were asked by the student-teacher to explain what each letter of the acronym stood for. This was to check for

comprehension of the strategy and to see if the students attempted to memorize the acronym, thus demonstrating metacognitive awareness. In addition, students were given one writing prompt a week. Each writing prompt covered a different type of writing style; the acronym SCOPE was also printed on each essay prompt's page as well. Teacher-to-student instruction on during the intervention took no more than 10 minutes a week. The essays were typically assigned on a Friday, unless there was no school that Friday, then they were assigned on a Thursday. The students were given the prompt via Schoology, and the student had the entire weekend to work on the essay prompt. Students were then asked to either upload their essay into Schoology, or to turn in the handwritten copy on Monday in class. The essays were then either hand collected or viewed/accessed from a computer.

The first week's essay prompt asked students to identify the author's theme in a novel the class read together. The second week's essay prompt asked students to choose a law in the USA they believed should be changed and argue using ethos, pathos, and logos their case. The third week's essay prompt asked students to identify how the characters in a specific novel exemplified the traits of an American Romantic Hero. The fourth week's essay prompt asked students to compare and contrast two different poet's poetry concerning style, theme, and tone. The fifth week's essay prompt asked students to examine the backgrounds of Harriet Harrison and Frederick Douglass and argue how their upbringings influenced a piece of writing that each abolitionist wrote.

The post-test's essay prompt asked students to argue whether Shakespeare should still be taught in school today. Each writing sample received was scored and then returned back to the student within three days. The post-test was administered in the second week of October.

Data collection

After the score of each student was tabulated, it was recorded on a separate piece of paper held by the examiner. All of the data was then transferred to an excel spreadsheet. In the spreadsheet, the total score of each writing submission was recorded and the points lost or earned from each category of SCOPE was recorded weekly as well.

If a student was not present when the essay prompt was announced or did not complete the assignment, then an "x" was put as their total score for that week. An "x" equals a 0.

Data Analysis

After all the scores were received and entered into the spreadsheet, analysis of the data began. There were eight spreadsheets, one for each week of the intervention, the post-test and the pre-test, a final table combining all of the student's results per week and across the post-test and pre-test, and then a table listing all of the points accumulated across the five weeks and the post-test and pre-test for each SCOPE element. For each of the five essay prompts, a spreadsheet was created to represent that week. Each element of SCOPE was written in one column in the spreadsheet going across horizontally at the bottom of the document. Each student's initials were written going down the y-axis of the spreadsheet. The total number of tallies earned for that assignment for each SCOPE element column was tallied and the total was recorded. For example, the total number of tallies for the Capitalization column for each week was added and then recorded. The total number of tallies for the Spelling column was added up and then recorded, etc. In addition, the total score earned for that assignment was tallied and then recorded. The mean score from each week's essay prompt was calculated and then recorded. The post and pre-test data were also recorded in this fashion. Each student's single score from each

week's writing samples were recorded, as well as each student's mean score from all essays assigned during the entire intervention.

The final results table shows each student's name and race going down the y-axis, and then each student's total score for the post and pre-test and the five benchmark tests, in addition to each student's mean score across the five benchmark tests on the x-axis.

Results

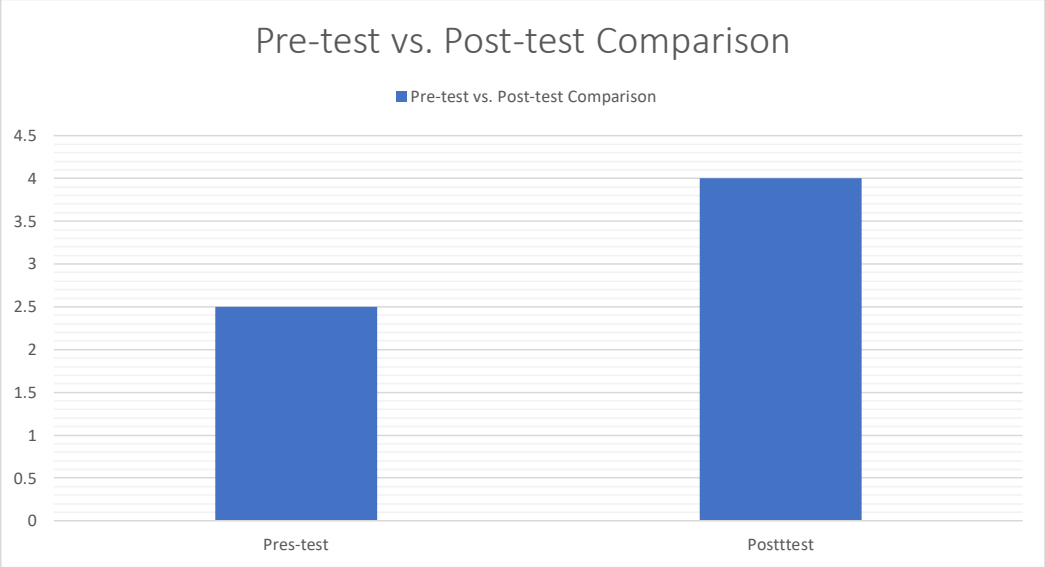

Figure 1

Of the 20 students that participated in this study, 85% (n=17) of the students improved their score on the post-test from the pre-test. Three of the students received the same post-test and pre-test score. Seven students demonstrated 5s on the post-test; one student demonstrated a 5 on the pre-test. Nine students demonstrated a 4 on the post-test as opposed to four students on the

pre-test. Three students demonstrated 3s on the post-test as opposed to four students on the pre-test. One student demonstrated a 2 on the post-test as opposed to eight students on the pre-test. Zero students demonstrated a 1 on the post-test as opposed to three students on the pre-test. Zero students received a 0 on the post or pre-test.

The average score was a 3.05 for all five benchmark tests administered. Week one's average score was a 2.65. Week two's average score was a 2.90. Week three's average score was a 3.20. Week four's average score was a 3.35. Week five's average score was a 3.15. The average score on the pre-test was a 2.50 and the average score on the post-test was a 4.10. A growth of 1.60 points was achieved from pre to post-test. The highest average score for one student from all five benchmarks tests given was a five, and that was accomplished by CM and RH (see *Appendix A*). The lowest average score for one student from all five benchmarks was a 1.8, accomplished by LM, MS, and BS.

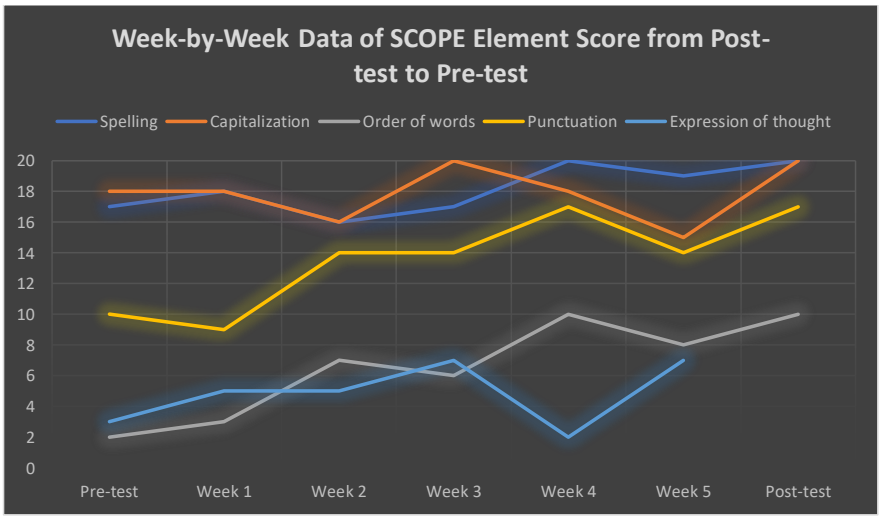

Figure 2: SCOPE Element Totals per Week

In the pre-test, most students struggled with Order of words and Expression of thoughts, as shown by two points and three points being earned across the 20 participants respectively. Seventeen points were earned in the Spelling category and 18 points were earned in the Capitalization category. Ten points were earned in the punctuation category. In the post-test, 100% of the participants earned a point in both the Spelling category and Capitalization category. Ten points were earned in the Order of words category, 17 points were earned in the Punctuation category, and 15 points were earned in the Expression of thought category. The total number of points earned in the pre-test was 50 out of 100.

In week one, 18 points were earned in the Spelling category, 18 points were earned in the Capitalization category, 3 points were earned in the Order of words category, 9 points were earned in the Punctuation category, and 5 points were earned in the Expression of thought category. A total of 53 points were earned out of a total of 95 points. The total was 95 points rather than 100 (5 points maximum x20 participants =100 possible points) because one student was absent (Student GB). As compared to the benchmark, growth was shown in the Spelling category, Order of words category, and Expression of thought category.

During week two, 16 points were earned in the Spelling category, 16 points were earned in the Capitalization category, 7 points were earned in the Order of words category, 14 points were earned in the punctuation category, and 5 points were earned in the Expression of thought category. A total of 58 points were earned during this week out of a possible 90 points because two students were absent (Student CS and Student LM). Growth was seen in the Order of words category as compared to week 1 and in the Punctuation category.

In week 3, 17 points were earned in the Spelling category, 20 points were earned in the Capitalization category, 6 points were earned in the Order of words category, 14 points were

earned in the Punctuation category, and 7 points were earned in the Expression of thought category. A total of 64 points were earned out of a possible 100 points. Growth from the previous week was seen in the Spelling category, Punctuation category, and Capitalization category.

For week four, 20 points were earned in the Spelling category, 18 points were earned in the Capitalization category, 10 points were earned in the Order of words category, 17 points were earned in the Punctuation category, and 2 points were earned in the Expression of thoughts category. A total of 67 points were amassed out of a possible 100 points. Growth from the previous week was seen in the Spelling category, Order of words category, and Punctuation category.

During week 5, 19 points were earned in the Spelling category, 15 points were earned in the Capitalization category, 8 points were earned in the Order of words category, 14 points were earned in the Punctuation category, and 7 points were earned in the Expression of though category. A total of 63 points were earned out of a possible 95 points because one student was absent (Student CD). Growth from the previous week was seen in the Expression of thought category.

The post-test results showed growth from the pre-test results. Twenty points were earned in the Spelling category and Capitalization category in the post-test, as compared to 17 points and 18 points respectively during the pre-test. Ten points were earned in the Order of words category in the post-test as opposed to 2 points earned in the pre-test. Seventeen points were earned in the Punctuation category in the post-test as opposed to 10 points earned in the pre-test. Fifteen points were earned in the Expression of though category in the post-test as opposed to 3

points earned in the pre-test. A total of 82 points out of 100 possible points were earned in the post-test as opposed to 50 total points earned in the pre-test.

Findings

The goal of this study was to improve writing fluency in students, focusing specifically on their spelling, capitalization, order of words, overall punctuation, and expression of thought using the SCOPE mnemonic. The idea was that by introducing the metacognitive strategy mentioned, students would consciously recognize strategies available to them, and use them to improve their writing mechanics. The SCOPE acronym was shown to the students daily on the board in hopes of letting the students to ingrain in their minds a strategy that can be use. Over a five-week period, the acronym was verbally reminded to the students.

The intervention, according to the results, was successful. The pre-test showed students earning a mean score of 2.50 points out of 5. The post-test showed that the mean score was 4.10 out of 5 points. That is a growth of 1.60 points over five weeks. That translates to a student earning over a full point in one category of the SCOPE mnemonic in the post-test form the pre-test, thus showing that on average, a student demonstrated a correct application of a proper writing mechanic after five weeks that they did not demonstrate before the intervention began. Overall, I believe that the metacognitive strategy had a positive impact on student writing. Since each student was reminded of the SCOPE strategy weekly, and the SCOPE strategy was written on the board for all students to see daily, I believe that the students ingrained the strategy in their minds. Support for this method of repetition in teaching a metacognitive strategy using a mnemonic device has been shown previously effective by Ray, Graham & Liu (2018).

The average mean score for each week increased from the previous week as well. the mean score from week 1 was 2.52, a growth of 0.05 from the pre-test. Week two’s mean score

was 2.71, a growth of 0.19 from week 1 and week 3's mean score was 2.5, a growth of .24 from week 2. Week 4's mean score was 3.14, a growth of 0.19 from week three. I believe this growth is due to the intervention working and the fact that students were getting more comfortable in their classroom environment. Since a correlation between stress and anxiety and academic performance exists (Morosonva et al, 2018), I believe that as the students became accustomed to school starting again and accustomed to their new classroom environment and accustomed to the academic expectations set by the regular classroom teacher, the students' confidence grew and thus average classroom scores increased per week. Being asked to write a college application essay after the first week of school is probably not going to yield fantastic results as the students had been out of school for over two months. It should be noted that the mean score for week 5's essay was a 3.0, a .14 decrease from week four. I believe that this is a result of having a four-day school week, as there was a teacher workday that week, in which students had a three-day weekend. So, loss of instructional time for the week's normal classroom lesson affected the student's understanding of the essay topic. In addition, one student was absent this week, Student CD. I believe this student's absence also contributed to the lower weekly mean because this student received 0 points for Week 5's assignment.

Two students received perfect scores across the five benchmark tests: Student RH and Student CM. Student CM, as I was informed by my mentor teacher, is an honor's level student in a on-level class. Student CM was put into the on-level class for 11th grade because this student is transgender, and due to the anxiety and stress that this student felt the year prior in 10th grade, the decision was made to put the student into a low-level class because of the decreased workload that would be given as compared to the honor's level class. Morosonova et al. (2018) showed that the tactic of improving grades by decreasing stress levels is a possible and valid strategy. As

a result, Student CM, I suspect, already had a firm grasp on writing mechanics, and the decreased workload, coupled with the lower levels of stress, led to this student's perfect scores on the benchmark. Student RH, I believe, is a studious student who understood the content from the get-go. This student's pre-test score of 4 tells me that this student had a strong background in writing already.

The categories that students struggled the most in were Order of words and Expression of thought. I believe this is due to the nature of the essay topics. Only 3 points and 5 points were earned respectively during week one. Since this was a grade level class, students struggled with conceptualizing the information learned during the week from regular teacher-taught lessons. Week two yielded higher point totals in the Order of words category with 7 points, but Expression of thought was stagnant at 5 points. I believe this modest gain in the Order of words category is due to the topic of the essay being easier. Since students were asked to choose a law and argue against it, students had more freedom in how they chose to write about their law. Week three showed a two-point jump in the Expression of thought category (7pts.), but then dropped 5 points during week four (2pts.) I believe that this is again, due to the nature of the essay task at hand. Week four's essay prompt asked students to compare and contrast different poetry. Poetry is very complicated and hard and asking grade-level students to write about poetry probably contributed to stress level, which affects self-efficacy. In addition, the piling up of other work from other classes might have decreased motivation to complete this assignment with a whole heart thus affecting performance (Morosonova, 2018).

Students scored most consistently in the Spelling and Capitalization categories throughout the intervention as shown by the 90 total points accumulated through five weeks out of the possible 100 points in the Spelling category and 87 points in the Capitalization category. I

chalk this up to the intervention working and the notion that students were beginning to think about strategies to double check their work. I presume students would go over the essay using the mnemonic device given and catch spelling or capitalization errors thus showing that self-regulation was indeed happening, which is quite plausible given the studies that show that teaching student with writing deficiencies mnemonic devices helps to improve overall writing skills (Ray, Graham & Liu, 2018). These errors are relatively easy to catch as well with computer typing software. Since students could opt to type the essay, many word editing software most likely autocorrected spelling and capitalization errors, which is another possible factor that contributed to students scoring high in both categories.

Implications for Practice

The results of this study show that metacognitive strategies with deliberate and intentional purposeful instruction do work. That being said, the students' basic writing skills were not perfect. An increased awareness for the writing elements relating to the elements of SCOPE by teachers to students could help students long-term. Because this study was with 11th grade students, imagine how much better student writing could have been if intentional instruction was started at a younger age such as elementary school. One should not assume that because writing mechanics were taught once at a young age that it stuck to the students. Yearly lessons should be taught, not just with writing mechanics, but also with the English language as a whole. Part of speech, types of sentences, and the like would benefit everyone in school because a person is typically judged on their appearance, which includes how they string words together aloud. If instruction on the dos and don'ts of academic writing are taught every year consistently, overall writing for a student would improve by the time they get to the age where they are taking the SATs and ACTs, which would then raise the overall ACT writing score and SAT scores

nationally. In addition, yearly instruction seems logical because students do lose a lot of knowledge over summer vacation where they are out of school for over two months. Like in the study, I surmised that the students did poorly on my pre-test because they just came back from Summer break. If yearly instruction was a thing in schools, overall writing would improve I hypothesize.

Appendix

Appendix A

Final Results

Race	Initials	Pre-test	Week 1	Week 2	Week 3	Week 4	Week 5	Five-Week Mean	Post-test
English	MB	2	1	4	2	3	3	2.6	3
English	GB	2	x	3	4	2	5	2.8	4
English	DC	2	2	2	3	3	3	2.8	4
English	LD	1	1	4	5	3	2	3	4
English	CD	2	3	x	4	5	x	2.4	4
English	MH	3	3	3	5	5	4	4	5
English	JH	2	4	4	5	5	5	4.6	5
English	RH	5	5	5	5	5	5	5	5
English	AK	4	3	3	2	2	4	2.8	5
English	CM	4	5	5	5	5	5	5	5
Spanish	AM	2	3	3	x	3	2	2.6	4
English	LM	2	2	x	1	3	3	1.8	2
English	AR	3	4	5	2	4	3	3.6	5
English	DR	1	3	3	3	2	2	2.6	3
English	GS	4	4	4	4	4	2	3.6	5
English	MS	1	1	1	1	3	3	1.8	3
English	BS	2	1	1	3	1	3	1.8	4
English	CW	4	4	3	4	3	3	3.4	4
English	KW	3	3	3	2	4	3	3	4
English	MW	3	1	2	2	2	3	2	4
Average Mean per Week		2.50	2.65	2.90	3.20	3.35	3.15		4.1

Table 3 Final Results - x=0 points. Maximum of 5 points, minimum of 0 points.

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