

Incorporating Clickers into the High School English
Classroom to Improve Grammar Application to Writing

By

Brittini Darras

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Primary Research Advisor

Date

Secondary Research Advisor

Date

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Chapter One: Introduction

Nature of the Problem

Colorado standards require that students learn how to use proper grammar in English class. In order to address these standards, many teachers choose to give students grammar workbooks to complete. Quizzes and tests over the material covered usually accompany these workbooks. Although teaching students grammar by assigning pages from a grammar workbook may teach them basic grammar knowledge, other problems accompany this teaching method.

Yarrow (2007) states a major problem with assigning students work out of a grammar workbook. She claims that teacher continuously mark incorrect grammar usage in students' writing samples; however they do not spend an appropriate amount of time teaching students how to use and apply correct grammar. As a result, according to Yarrow, students become cautious and frustrated (p. 185). Students often struggle to teach themselves grammar while working through a grammar workbook, yet teachers still expect students to learn and master the material on their own, so students are at a disadvantage.

Students do not have a chance of being successful grammatical writers if they do not receive accurate grammar instruction initially. This grammar instruction must come from a source beyond a grammar workbook. As Yarrow mentioned, students who learn grammar through workbooks fail to use accurate grammar in their writing. As a result, when one examines student writing pieces, it seems as if they were never taught or exposed to grammar rules. The issue of students not applying grammar knowledge to their writing needs to be addressed. In order for this problem to be solved, students need

to do more than just learn grammar rules from a workbook. Students need to practice applying grammar knowledge to their writing.

In order for students to learn grammar and apply it to their writing, grammar instruction must be meaningful. Marand and Dasgoshadeh (2011) explain that if the goal of a classroom is to develop accuracy and fluency, “it is clear that meaningful activities must be integrated with form-focused activities, particularly those requiring output” (60). In other words, the grammar workbooks are not interactive and not meaningful, so alternative ways to teach grammar need to be implemented.

Yarrow similarly insists that grammar workbooks should be replaced with new methods of teaching grammar: “There is a widespread agreement that grammar teaching no longer has to be boring, dead, or dull” (177). It is clear that something needs to be done in order to change the way students are exposed to grammar.

One method that can be used in the classroom that allows students to apply grammar rules to writing is through the audience response system (ARS), more commonly known as clickers. Clickers are hand held devices that allow students to respond to posed questions by selecting an answer on the remote-control-like device.

In this study, I implement clicker usage into my grammar lessons. Clicker lessons address the correct usage of dashes, colons, semi-colons, parallelism, complete sentences, and active voice. Besides using just multiple choice questions with the clickers, I use clickers that allow students to type sentences; therefore, students are able to apply correct grammar usage into their own, unique sentences. I record if and to what extent grammar application through clicker usage decreases the number of grammatical errors found in

revised paragraphs. By using clickers in student writing samples, to what extent will my students apply grammar knowledge to their own writing?

Exploration of the Thesis Question

In a clicker product guide, Bush and McLester (2007) define clickers in detail: “Clickers are individual handheld transmitters that collect learner input and pair with a host software system that electronically collects and tabulates that data for instant display on a computer monitor” (p. 8). More and more people have found clicker usage to be beneficial for a variety of reasons. In the past, clickers have been used for presentations and staff trainings. Recently, there has been a focus on implementing clicker usage into classrooms. In particular, students and professors in math and science classes and college lecture halls have been making greater use of clickers than English teachers have. Classes such as these that use clickers have generally used them in order to review for tests, take attendance, or present quiz questions. Once the system that accompanies clickers is set up, and once questions and their accompanying possible answers are created, clickers are relatively easy to use. Students simply select the answer on their clicker that corresponds with the answer that they believe is correct on the clicker lesson. Students may be assigned a specific clicker so their answers can be tracked, or their answers may remain anonymous depending on the teacher’s preference. Each option has advantages and disadvantages. Either way, clicker usage has both positive and negative impacts on students, which will be discussed further in chapter two.

Beyond the advantages and disadvantages of using clicker, I am interested in observing if using clickers to answer grammar application questions will encourage

students to apply grammar knowledge to their writing. In order to do this, I will initially assign a power paragraph. A power paragraph is a structured paragraph which contains eight sentences. These eight sentences include a topic sentence, a quote, two sentences of analysis, another quote, two more sentences of analysis, and a conclusion. Following the pre-writing, students will participate in clicker lessons in which they learn how to correctly apply grammar to their writing. Clicker lessons will cover six grammatical concepts that are deemed necessary for sophomores to know according to the Colorado State Standards. Clicker questions will allow students to identify a grammatical error, find a solution to the grammatical error, and apply the correct use of grammar. The immediate feedback of clicker questions will allow me to determine if students grasp the concepts being reviewed in the clicker questions. Then, I can examine whether or not the learned concepts are being applied to writing by examining the grammatical usage in a follow-up power paragraph.

Some researchers would disagree with my thesis for several reasons. Researchers have found that clickers do not always result in improved test scores, yet schools still spend a good deal of money on them, and teachers spend a good deal of time creating questions for the clickers. Additional problems include question types and student responses to questions. For example, there is a limitation in the type of questions that can be asked. Also, students may feel helpless if they continue to answer questions incorrectly. Lastly, clickers allow students to remain quiet, and they do not require students to justify their answers. To avoid all of these problems, some people believe that alternatives to clickers should be used. They claim that the alternatives, such as raising hands or writing on dry erase boards, are old-fashioned; however, these alternatives allow

teachers to retain the benefits of clickers while eliminating the disadvantages of clickers. Each of these disadvantages to using clickers will be examined more closely in chapter two. Even though these disadvantages exist, I believe that using clickers will allow students to practice grammar in an educational environment, which will help them to practice applying grammatical knowledge to writing.

Rationale of the Study

At Liberty High School, students often learn grammar from grammar workbooks and received little or no additional grammar instruction. As a result, they quickly learn the grammar rules for the tests and quizzes, but after the tests and quizzes, for many students, the grammar knowledge no longer matters, so they simply forget the rules. Students seem to believe that grammar knowledge is only useful on grammar tests and quizzes. This is why I want to use clicker lessons. I believe that using clickers to learn grammar will encourage students to retain and apply grammar knowledge, especially because the clicker questions will evolve in complexity and will allow students to create their own sentences uses correct grammar.

I am carrying out this action research study because I believe that it is important for students to learn and apply the information they are being taught. If students study a particular topic solely to pass a test, they will not retain the information in long term memory. On the other hand, if they are encouraged to apply the learned information, students will be more likely to recall the knowledge. Increased recall as a positive effect of clickers will be discussed further in chapter two by examining the articles by Hirshman and Bjork, Filer, and Lantz.

Besides the need for students to apply learned information, I am carrying out this study because grammar application in writing is extremely important. After high school, students will need to use proper grammar in writing to fill out job applications, communicate through e-mails, and receive entry into college. If students simply abandon grammar knowledge after tests and quizzes, their writing will suffer, and they will be at a disadvantage.

Framing the Action Research and Context of the Study

This study will take place at Liberty High School, a District 20 school in Colorado Springs, Colorado. Based on my research regarding the overall economic status of students in District 20, the students in this school are from wealthier families in comparison to families in other districts in Colorado Springs. This is indicated by reduced lunch participation. Total, there are 1,531 students at Liberty High School. Out of this total, only 337 are on free or reduced lunch. In other words, only twenty-two percent of the population at Liberty is on free or reduced lunch. With regard to ethnicity, the large majority of students at Liberty are Caucasian. The percent of students at the school who are not Caucasian and not of Hispanic Origin is only twenty-four percent, almost a quarter of the population. The next most common ethnicity at Liberty is Hispanic/Latino. With 193 Hispanic/Latino students, however, they only make up 12.6 percent of the student population.

In particular, my research will be applied to a non-honors sophomore English class titled Sophomore Literature and Composition. The class consists of thirty fifteen and sixteen year olds. Specifically, there are seventeen males and thirteen females.

School records show that the majority of the students in my class are Caucasian, but I do have six Hispanic/Latino students, four two or more race students, and one Native Hawaiian or Other Pacific Islander student as well. It is a year-long class, but the course follows a block schedule. As a result, I will not see my sophomore class each day. Instead, I will see my sophomore class on alternating days throughout the school year. This means that some weeks I will see the class three times. Other weeks, I will only see them twice. Our class begins at 9:40AM and ends at 11:10AM, so I will only be meeting with my students for an hour and a half each class.

In my class of thirty students, I have a range of abilities. Infinite Campus, the school's information system, revealed student limitations and abilities. Three students are classified as talented and gifted, two have English as their second language, one has a 504 plan as a result of his learning disability, two are in AVID, one has Asperger's disorder, one has PTSD, three have ADHD, and one has ADD. A 504 plan lists modifications and accommodations that will be needed for special needs students to perform at the same level as their peers. AVID stands for Advancement Via Individual Determination. It is a program for students who need additional support. The hope is that additional support will make them capable of attending college after high school.

Definitions

1. Clickers are “wireless hand held devices about the size of a small calculator” that are used in classrooms to “answer questions in the form of quizzes or self-assessment, perform instructor or course evaluations, and/or record attendance” (Kenwright, 2009, p. 74).

2. Active learning is “A common active learning technique that educators use is to attempt to engage students by asking a question relevant to the lecture and having students answer the question during class” (Michael Lantz, 2010, p. 557). It can also be defined as the “deliberate and conscious attempt on the part of the teacher to cause students to participate overtly in a lesson” (Pratton and Hales, 1986, p. 211).
3. The generation effect occurs when a student generates the correct answer rather than simply being given the correct answer, and the effect is an increase in future recall (Hirshman and Bjork, 1988, p. 484).
4. Kulhavy (1977) explains that feedback is “any of the numerous procedures that are used to tell a learner if an instructional response is right or wrong” (p. 211).
5. According to Riener and Willingham (2010), learning style theory explains that “Different students have different modes of learning, and their learning could be improved by matching one’s teaching with that preferred learning mode” (p. 33).

Organization of the Remainder of the Study

The remainder of my study will be divided into the following four sections in the order in which they appear:

1. Review and analysis of related literature: In chapter two, I will review the advantages and disadvantages to using clickers based on previous research findings.

2. Methodology: Chapter three discusses the design of my research project, the sample selection which will be part of my research, and an explanation regarding how I will collect and analyze my data.
3. Data Interpretation and Analysis: In chapter four, I explain the results of my study. I also analyze the results to make connections, do comparisons, and discover trends.
4. Conclusions, implications, and future recommendations: Chapter five provides an overview of my research. It also has implications to teaching in a high school English classroom. Finally, I list and explain recommendations for future studies.

Chapter Two: Review and Analysis of Related Literature

Introduction to Literature Review

Organization of the Review

Although the implementation of clicker usage in educational settings is fairly new, a large amount of research regarding the topic already exists; however, the majority of the research focuses on the implementation of clicker usage in nursing schools, math and science classrooms, and college lecture halls. Research fails to examine how using clickers can benefit students and teachers in content areas besides nursing schools, math and science classrooms, and college lecture halls.

Since there is a lack of research with regard to clicker usage in high school English classrooms, this chapter focuses instead on the advantages and disadvantages of clickers in a variety of other settings, including nursing school, math and science classes, and college lecture halls. Yang and Tsai (2010) conducted a quasi-experimental design involving two sixth grade classrooms, one of which acted as a control group while the other acted as an experimental group. Their research examined how integrating technology into the mathematics classroom effected students' number sense and their learning attitudes, so the control group continued to learn number sense based on their usual mathematics instruction, and the experimental group learned number sense in a technology-based environment. Although this study focuses on the effects of using technology in a mathematics classroom, the findings can be applied to other content areas as well. For example, Yang and Tsai claim that "students were excited to explore the mathematics when they were allowed to use and manipulate the computer" (p. 121).

Manipulation of technological devices in other content areas will potentially increase student excitement in those areas as well.

What is Ahead?

Below, this review closely examines several common findings among the articles, focusing on one common finding at a time. Initially, the findings that are considered beneficial to the educational setting are listed. This will include increased student engagement, active learning, participation, and attendance; immediate feedback; increased positive emotional responses; and increased memory and recall. Then, in opposition, the findings that are considered ineffective in the educational environment are examined. Some of these findings include the lack of correlation between clicker usage and improved test scores, time it takes to set up the system, expenses, limitation in regard to the types of questions that can be asked, student feelings of defeat, limitation to taking attendance, and quiet students failing to speak publically or justify their answers. The following paragraphs each describe a particular common finding throughout several studies. Any studies that had different findings regarding the common finding will be discussed briefly underneath the paragraph describing the common finding.

Advantages of Using Clickers

Using Clickers is Engaging for Students

Instead of focusing on technology's ability to engage students in general, in their product guide, Bush and McLester (2007) focused more specifically on clickers' ability to engage students. They explain that clickers engage whole classes of students via ongoing question and answer activities (p. 8). Within a traditional lecture hall as Collins

and Halverson (2010) describe it, students simply sit and are required to absorb knowledge. In contrast, with clickers, students participate in an interactive process of responding to questions with clicker devices in order to absorb knowledge. This process keeps students engaged because they are constantly being asked new questions that they must answer.

In Filer's article (2010), she discusses the findings of her study, which assessed student learning and engagement in a lecture setting in a nursing classroom that incorporated the use of clickers. She explains that students are more engaged in lectures that use clickers because learning becomes a hands-on experience: "students are required to commit to a response and to engage physically with the content as they enter answers via the keypad" (p. 247). In other words, the act of touching and interacting with the clicker encourages student engagement. Clicker usage also holds students accountable for their response. Since students are required to commit to a response, they are likely to be engaged because each student must participate and contribute to lectures by selecting a particular response.

Clicker Usage Encourages Active Learning

Lantz (2010) takes a slightly different approach by closely examining active learning to support the claim that clickers increase student engagement. He explains, "one simple explanation of the effect of active learning may simply be that students that are engaged are paying attention as opposed to students that are not engaged and are thinking about other things or daydreaming" (p. 558). In a typical lecture environment in which students listen and take notes, it is easy for students to avoid listening to the speaker and taking notes. On the other hand, with clickers, students must constantly be alert and ready

to respond to the clicker questions. The ability to keep the students alert allows clickers to keep students engaged.

Filer (2010) also comments on active learning by explaining that active learning strategies “engage students and encourage them to recall and apply information in different contexts” (p. 247). Although some of this may be transfer of knowledge, active learning encourages the retaining of more knowledge than would originally be obtained without active learning. Similarly, students will likely transfer some grammar knowledge regardless of the technique used to teach it; however, using engaging materials such as clickers may be more likely to increase retained knowledge. This is because students will develop a better understanding of the material as a result of their engagement as active learners.

Clicker Usage Results in Increased Participation

According to Lantz (2010), clickers increase participation because students can remain anonymous when answering questions. In a high school environment in which students are concerned with being popular, students often fail to answer questions in class because they fear they will be wrong and will be mocked for being incorrect. Clickers allow students to participate without having to worry about being judged. This creates a more positive environment that encourages student participation in class.

As the title of Filer’s article, “Everyone’s Answering,” (2010) suggests, technology in general can be used to increase classroom participation. She claims, “When combined with other methods of instruction, the presence of talented faculty, and the use of technology, lectures serve as a highly stimulating tool and encourages the active participation of students” (p. 247). Filer points out that technology alone cannot increase

student participation. This is important because it suggests that clickers may not be as likely to increase participation if the teacher is boring or if the questions do not make sense. As Filer states, under the right circumstances, clickers and other forms of technology have proven to increase participation.

According to Caldwell (2007), a benefit of clickers includes increased participation: “Clickers increase participation by allowing all students to respond to all questions asked by the instructor” (p. 11). Instead of the traditional classroom lecture in which a question is posed and one or two students respond by raising their hands, clickers enable every student to answer posed questions by silently submitting their answers via the remote. This allows each student to express his or her opinion, even if it is a silent opinion, thus enabling all students to participate at the same time.

Clicker Usage Results in Increased Attendance

The results of Caldwell’s (2007) study suggest that clicker usage results in increased attendance. Her results show that “With clickers, roughly 4% of students stopped attending by the final exam. This attrition rate was noticeably higher without clickers, ranging from 8% to nearly 12%” (p. 13). According to Caldwell, possible explanations regarding why more students choose to come to a class that uses clickers are because students are held accountable for their attendance through attendance checks, and they are encouraged to be present for daily clicker questions (p. 13). Using clickers to record attendance encourages students to attend class, which can have further benefits.

Clickers Provide Immediate Feedback

According to Smith and Kimball (2010), “Learning theory predicts that immediate feedback should lead to better retention because it more effectively reinforces

correct responses” (p. 82). Similarly, clicker results provide immediate feedback. Not only does immediate feedback exist for each question, but it also exists as an end report that summarizes and shows results for the entire clicker review. This allows teachers to make adjustments regarding guided practice and homework assignments.

Bush and McLester (2007) demonstrate the variety of ways in which immediate feedback is prevalent through clicker usage: Clickers have the ability to “collect data in real time to assess the effectiveness of instruction, facilitate self-paced testing, collect large amounts of data on student performance, and to generate reports in a range of viewing options” (p. 8). This quote is important because it suggests that clickers provide immediate feedback in more ways than one. The feedback not only benefits teachers, but it also benefits students as well. Clicker usage benefits teachers because they are able to collect data to assess the effectiveness of their instruction and collect large amounts of data on student performance in a range of viewing options. Clickers benefit students because they have the opportunity to practice self-paced testing, and they can determine whether or not they know the material covered in the clickers’ question and answer session based on the results.

Whereas Bush and McLester focus on forms of immediate feedback that are prevalent with clicker usage, Kenwright (2009) focuses on who benefits from the immediate feedback. Kenwright argues, “The best application of clickers appears to be the immediate feedback assessment provided to the instructor and the students” (p. 74). The important part of Kenwright’s quote is the use of the word “and” to prove that both instructors and students benefit from clicker usage in the classroom. In particular,

instructors are able to modify instruction based on clicker results, and students can ask their questions right away and avoid later confusion.

Filer (2010) focuses on how immediate feedback positively influences students. According to Filer, “If the student’s response is correct, learning is reinforced. If the response is incorrect, the student may ask for clarification” (p. 247). The immediate reinforcement will make it more likely that the student will recall the correct answer in the future. On the other hand, if the student does not understand why the correct answer is correct, he or she can ask for clarification, thus reinforcing learning once again by inquiring as to why the correct answer is correct. Another alternative is for the teacher to discuss all of the clicker choices with the students and explain why the correct answer is correct. Following the explanation, teachers can ask if there are any clarification questions, once again reinforcing learning.

Lantz (2010) also comments on how immediate feedback of clickers positively influences students. As Lantz declares, immediate feedback “appears to work through a corrective mechanism in which wrong answers can be corrected and the corrected answer can be more easily remembered” (p. 558). In contrast to class exams that students take and may fail to receive back for days, if not weeks, clickers allow students to instantly affirm or change their original opinion when they see if the answer they selected is right or wrong.

On the other end of the spectrum, Lantz also comments on how immediate feedback of clickers positively influences teachers by allowing them to collect data to assess effectiveness of instruction. Lantz explains that “Clicker questions can give immediate feedback to the instructor and, provided the instructor acts to correct the

misconceptions, can lead to better comprehension of material by students” (p. 559). Instructors can use clickers to measure the effectiveness of their lectures based on student responses. This is particularly successful because it allows educators to reflect upon their teaching. They can see where they need to move ahead or spend more time clarifying a concept that students do not understand. In other words, they are able to reteach the content that students struggle the most with. Lance also explains that the immediate feedback of clickers help teachers because by seeing incorrect responses, teachers can see where students were misunderstanding the material (p. 559). By carefully constructing questions and looking closely at incorrect responses, educators can observe where students are uncertain and what inclines them to select the wrong answers; therefore, educators are more aware of ambiguities.

Clickers Increase Positive Emotional Responses

Filer’s (2010) study concluded that the use of clickers in a lecture setting increases positive emotional responses. In particular, she learned that clicker usage “promote[s] a sense of comfort, encourage[s] participation, and motivate[s] students to answer questions correctly” (p. 248). All of these factors are extremely important to create a positive classroom environment.

As Morris (2004) observes, positive emotional benefits result from clicker usage. She explains that in order for students to learn actively, several factors in the environment must be present. According to Morris, two important factors link directly to clicker lessons. One is that gimmicks must be used during instruction in order to hold student attention (p.22). In other words, a successful learning environment must keep students awake and alert so they are capable of taking in and retaining information. Also, Morris

claims that educators must provide meaningful instruction to sustain attention (p. 22).

This means that instruction must be worthwhile to the students in order for them to remember the information. Clickers address both crucial factors that Morris lists. Clickers keep students alert because they must respond to each question. Also, clicker lessons can target specific concepts that teachers must cover, so students know the material is important. For these reasons, clickers can aid in the creation of classroom environments that are emotionally stimulating, and the stimulation of good emotional responses is known to increase retention of information.

Clicker Usage Promotes Memory

Lantz (2010) explains how clickers allow the generation effect to occur. He claims, “Clickers force each student to decide on one answer, promoting memory through the generation effect” (p. 558). Students are forced to submit one answer while using clickers; therefore, they must use the process of elimination to make the best educated decision regarding which answer is most likely to be correct. Lantz points out that the one thing that is worse than having students that narrow down choices but fail to select one: students who simply wait until the correct answer is given by someone else. By making each student decide on an answer on his or her own, each student is actively thinking to select the correct answer, which improves his or her ability to recall that information at a future point in time. That is why it is important for the students to use the process of elimination to select an answer to the clicker question.

Hirshman and Bjork (1988) argue that certain activities can promote memory. They claim, “Research in the last 10 years has provided evidence that items subjects generate are better remembered than items they read” (484). This relates to clickers

because with the device, students are able to hold onto and manipulate the object. In contrast, while reading and filling out a grammar workbook, students simply read and write. Also, the clicker lessons allow students to apply their gained knowledge by creating their own sentences. Grammar workbooks, on the other hand, only allow students to fill out answers. As Hirshman and Bjork argue, creating new sentences using the clickers is more beneficial than working out of a grammar workbook because manipulating, applying, and creating improves student recall of memory.

Disadvantages of Using Clickers

Clicker Usage Does Not Necessarily Correspond with Improved Test Scores

There have been varying results regarding whether or not clicker usage influences a student's grade or not. Filer's results (2010) show that clickers do not improve test scores. Kenwright (2009) holds a middle ground by asserting that it is ambiguous. Caldwell's results (2007) suggest that clicker usage did result in improved test scores.

Filer's results (2010) also showed that the use of clickers did not improve post-lecture quiz scores significantly. Filer gave her nursing students four post-lecture quizzes. The ARS group used clickers, and the control group did not. Her results show that the students using clickers only barely outscored the students not using the clickers on the post-lecture quiz on two of the four post-lecture quizzes. The ARS group had mean scores of 3.33, 3.75, 3.91, and 3.59 on the four post-lecture quizzes. The control group had mean scores of 3.64, 3.88, 3.50, and 3.30 on the quizzes; therefore, the ARS group only had a higher mean score on quizzes three and four.

Watkins and Sabella (2008) conducted clicker research at Chicago State University that found that clicker usage did not improve academic performance. The two compared student responses on exam questions to similar or identical clicker questions that were presented during lecture; however, many students were unable to respond correctly when the questions were on the exam, despite the similarity in questions. Watkins and Sabella explain, “It is interesting that despite these improvements in-class (94% of the students answering correctly on the final clicker questions), students did not perform well on the corresponding exam questions” (p. 226). Although the results suggest that students’ comprehension was increasing during class as a result of the clickers, the results failed to prove that the comprehension lasts long term. Instead, the comprehension is immediate and only lasts short term; therefore, it does not benefit students on final exams.

Kenwright (2009) states that “research on student grade improvement is ambiguous” (p. 74). Her reasoning is that some reviews show that clicker improve grades. Other reviews show that clickers do not improve grades (p. 75). It is unclear whether or not clickers improve grades on post-lecture quizzes or tests. The reason for the variation in results could be that each researcher implements clicker usage in different ways. For example, if clickers are used throughout a lecture compared to solely as a review method, results may differ. Also, teachers who use a variety of questioning techniques may find different results than teachers who use similar questioning techniques. These are big issues that could affect results.

Caldwell’s (2007) study, on the other hand, demonstrates that clicker usage does in fact increase student academic performance. She implemented clicker usage into a

variety of classes at West Virginia University. One class that used clickers at WVU was Mays' trigonometry class. Out of her two sections of trigonometry, Mays implemented clicker usage into only one. Her results showed that the "Use of clickers increased the number of A's earned by 4.7%, reduced the rate of withdrawal by nearly 3%, and decreased the combined proportion of students earning D's, F's, or withdrawing by 3.8%" (p. 13). These particular results support the conclusion that clicker usage not only improved class grades across the board, but it also decreased the number of students who withdraw from the class. According to Caldwell, the results suggest that active engagement in class benefits students in two ways. It boosts achievement for at least some students and prevents others from dropping or failing the course (p. 13). Here, Caldwell claims that the engagement aspect of clicker usage is responsible for the increase in grades and the decrease in withdrawals. Perhaps other activities that encourage active engagement would have a similar outcome.

Preparing Clickers is Time Consuming

Stuart, Brown, and Draper (2004) point out that a major problem with clickers is the time it takes to set up the system. According to the three, "unless you have a lecture theatre that is already fully equipped for ARS use, setting up can be a time-consuming job at the beginning of a lecture, or even in the ten-minute break between lectures" (p. 100). A way to avoid this problem would be to verify days in advance that the system will work in a particular classroom without any problems. By setting up the system ahead of time, teachers can confront and find solutions to problems prior to class time.

Solution to Time Consuming Clicker Preparation

On the other hand, another resource claims that although clickers may be time consuming to set up, it saves time during class. According to Anderson, et al. (2011), “The current research examines the clicker technique as a possible way to shorten (i.e. conserve or compress) classroom teaching time of factual knowledge without sacrificing the amount learned” (p. 1457-1458). In other words, since clickers allow instructors to instantly evaluate the amount of student knowledge regarding a particular concept, instructors can decide whether to move on or spend more time on a particular concept.

Clickers Are Expensive

According to Kenwright (2009), although they are expensive, the cost of clickers has been reduced dramatically over the years: “The only cost is \$100 for a receiver that plugs into a USB port and approximately \$30 for each clicker” (p. 76). Still, it is easy to see why college students would not want to spend \$30 on a clicker that will not serve a purpose after they are done with school.

Solution to Expensive Clickers

Filer (2010) says, “Costs may be a consideration, as the use of clickers can add expense for the student or the department;” however, she also explains that “some publishing companies are agreeing to purchase the equipment upon adoption of textbooks” (p. 249). This deal saves money on clickers; however, not all textbook companies have agreed to purchase clickers for those who purchase their textbooks.

Limited Questions Can Be Asked with Clickers

Stuart, Brown, and Draper (2004) emphasize the complexity in creating clicker questions. They claim that there are particular ways to write questions that are better than others. According to the three, questions with two or three answers were easier to respond

to and quicker to ask (p. 97). Once again, time is an issue; therefore, the questions that are to the point are more appropriate for the classroom. On the other hand, it is also important to include a variety of questions. The three authors mention that “The lecturer did also occasionally ask oral questions that required an open-ended (verbal) answer and then asked the rest of the class if they agreed or disagreed with that answer, using the handsets to record their response” (p. 97). These open answers allow teachers to address more general concepts.

Solution to Limited Questions

Filer (2010) gives teachers tips regarding how to make effective questions: “To maintain enthusiasm and interest in the lecture, it is important to vary the level of difficulty among the questions” (p. 249). If the questions are all simple, students are likely to become bored and stop caring. On the other hand, if the questions are all too complex, students are likely to become frustrated and, as a result, give up on trying. As a solution, questions must be varied in difficulty and form if at all possible.

Caldwell (2007) also has her own idea of how to make good clicker questions. She explains that “examples of good questions include presenting a new concept and asking which ideas (or categories) it is most closely related to, showing an example of a new concept, or applying a mastered concept to a new situation” (p. 17). This will allow students to acquire new information and expand upon prior knowledge.

Clicker Usage May Encourage Feelings of Defeat in Students

Filer (2010) noted that “when students answered several questions incorrectly, they became less interested in providing continued feedback” (p. 249). After they answer so many questions wrong, it is likely that they will begin to feel as if they will never

answer a question correctly. As a result, the students will stop trying altogether in order to avoid feeling worse about their performance.

Taking Attendance with Clickers Can Be Problematic

Kenwright (2009) warns teachers that using clickers to record attendance for points could be problematic. She explains, “If using the clickers to record attendance, be aware that students have been known to bring multiple clickers to class to record the attendance of their friends” (p. 75). This indicates that although clickers can be helpful by encouraging students to come to class for attendance points, it also entices students to cheat the system by clicking in for their friends. In order to prevent this from happening, teachers must be aware of the possibility of students bringing extra clickers to class. A good way to verify that students are not doing this is to count the number of students in the classroom and make sure that the number of clicker recordings match.

Quiet Students Suffer when Allowed to Use Clickers

Although Lantz (2010) appreciates the aspect of anonymity involved in clickers because it encourages participation, he also worries about the same thing. Lantz (2010) explains, “A further possible negative side effect of anonymous responses, as suggested by an anonymous reviewer of this paper, is that quiet students will not learn to respond publicly nor will they be required to logically justify their responses to others” (p. 557). This could prevent quiet students from having to learn social skills; however, at the same time, it will allow them to actively participate in a classroom full of students.

Other Alternatives to Clickers Exist

Lantz (2010) claims that other methods of teaching result in the same benefits of clickers. He states, “It is also recognized that several of the possible benefits of clickers

suggested in this paper could be applied to classes without having to resort to using clickers” (p. 560). For example, giving students dry erase boards and asking them to hold up the correct answer achieves the same effect; however, since technology is so popular, it is beneficial to use technology to appeal to the students’ interests.

Kenwright (2009) also agrees, “There is nothing wrong with reverting to an old-fashioned show of hands, or calling on a particular student for an answer” (p. 76). If calling on a particular student for an answer, however, teachers must call on students at random. Otherwise, the same students will raise their hands every time, allowing the rest of the class to remain unengaged. Clickers are a useful solution to this problem because every student must answer the posed question.

Summary of Literature Review

Overall, recent clicker studies have shown that clicker implementation into classrooms has both advantages and disadvantages. Advantages include increased student engagement, active learning, participation, and attendance; immediate feedback; increased positive emotional responses; and increased memory and recall. Disadvantages include the lack of correlation between clicker usage and improved test scores, time it takes to set up the system, expenses, limitation in regard to the types of questions that can be asked, feelings of student defeat, limitation to taking attendance, and quiet students fail to speak publicly or justify their answers. As a result of the disadvantage, several articles argue that other methods exist that produce the same positive results as clickers.

Chapter Three: Data Collection Methods and Consideration

Research Design

It is essential that I collected multiple forms of data to determine whether or not using clickers to increase application of grammar knowledge to writing is successful. Prior to the study, students received a prompt and were asked to write a power paragraph on that particular prompt. I collected the paragraphs. At the end of the study, students were assigned a new power paragraph prompt to see if they applied their new grammar knowledge to their writing.

Following the initial power paragraph assignment, the students were asked to take a grammar pre-test that I created based on the six concepts that were addressed in the clicker lessons. These six concepts include the dash, colon, semi-colon, parallelism, complete sentence, and active voice. Students did not receive a grade on the grammar pre-test, but I still collected the pre-test and grade it for comparison purposes at the end of the study. Students also took a grammar post-test identical to the grammar pre-test after the clicker lessons are done. The answers to the grammar post-test were embedded in the clicker lessons; therefore, students were exposed to the grammar questions on the post-test twice. They first saw the questions on the grammar pre-test. Then, they learned the correct answer to the question as we go through the clicker lessons.

The clicker lessons addressed the six forms of grammar that sophomores must know according to the Colorado State Standards. Each lesson had a series of questions. At the beginning of the first three lessons, students selected the situation in which a dash, colon, or semi-colon is used. At the beginning of the last three clicker lessons, students identified the correct definition for parallelism, complete sentence, and active voice.

Later in each lesson, students determined whether a sentence correctly uses the grammar in that particular lesson. If it is used incorrectly, students corrected the problem by retyping the sentence with the correct grammar.

I kept track of student progress by assigning each student their own clicker. They were expected to use this clicker throughout the clicker lessons. Each student responded to the multiple choice questions by selecting an appropriate answer. They were also expected to correct grammatical errors in the examples by typing in the correct answer with the correct grammar usage. If students struggled with the application portion in which they have to type the sentence using correct grammar, students were able to write out the correct answer on a sheet of paper.

Following the clicker lessons and the grammar post-test, I also administered a survey (See Appendix E), which asked students a few questions regarding their feelings about the clickers. These questions were left as open-ended questions so that students could expand on and justify their answers.

Sample Selection

I chose my sophomore English class as my sample selection because of their lack of exposure to grammar. Their entire first semester of their sophomore year, they received no grammar instruction from their regular teacher. At Liberty High School, it is expected that all students receive grammar instruction based on state standards. Most freshmen and sophomore teachers assign pages out of a grammar workbook in order to address the need to teach students grammar; however, my sophomore class had not even

been given a grammar workbook first semester. Their writing samples reflected their lack of grammatical knowledge.

Besides their lack of exposure to grammar, my particular class of sophomores only does work because they know it will affect their grade. They have very little motivation, and they are not inspired by any activities I give them. This made me realize that handing them a traditional grammar workbook would not benefit them. Instead, they needed an engaging way to learn grammar that would encourage them to participate.

In addition to their lack of motivation and interest, the context of the class contributes to the need to use more engaging means to educate the students. They have English early in the morning for an hour and a half. The students often complain about being tired. They say they did not get enough sleep the night before, and they wish they were still in bed. Others simply fall asleep at their desks. Besides being tired, the students are looking forward to lunch, which immediately follows class for most of the students. For this reason, they are antsy and distracted, and their attention is not easily focused on English. Also, my sophomore class is a large one with thirty students. With so many students in one classroom, it is difficult to address the needs of all students. I do not always notice when a student is struggling or needs extra time, and unfortunately, these students are easily left behind. All of these unfortunate conditions make it necessary to implement engaging lessons.

Regardless of the makeup of my particular class, it is important for students to learn grammar rules and how to apply them. They need to know, understand, and apply correct grammatical usage regarding concepts that are addressed in Colorado State Standards so that they will be prepared for their junior year of high school. In particular,

students take the ACT their junior year of high school. Without the proper exposure to grammar, students will not be as successful on the test. It is important that students do well on the ACT because it will greatly impact their college career, including which schools they will get into and which scholarships they will receive.

Data Collection

I collected a variety of data as a means to determine whether or not using clickers was successful. I collected students' first and final power paragraphs for comparison. The grammar pre-test and grammar post-test were also collected and compared. Within the clicker lessons, I printed two documents that record student progress throughout each lesson. Since students were assigned a specific clicker, I traced individual progress through these two documents. One document is called the instructor summary. It lists the student's number, the number of correct answers over the number of attempted answers, the percent of correct answers, and their final score. The second document is the response report. It lists the class average for the overall lesson. Then, it breaks down each question to show what percent of students selected each answer. An arrow points to the correct answer. Finally, I collected the surveys with student comments regarding the clickers.

Data Analysis

I analyzed the data sources that I collected to come to a conclusion regarding whether or not clickers encouraged students to apply grammar knowledge to their writing. First, I examined the results of the initial power paragraphs and the concluding power paragraphs. In order to do this, I needed to count the number of errors regarding

usage of dashes, colons, semi-colons, parallelism, complete sentences, and active voice. I also counted the number of instances in which the correct usage of the six grammatical features was used. I then focused on one student at a time by looking at his or her initial power paragraph and concluding power paragraph side-by-side to see if he or she did in fact apply new grammar knowledge to the writing. This was used as my qualitative data because I examined the quality of the paragraphs as a response to the clicker lessons.

The results of the grammar pre-test and the grammar post-test served as my quantitative data. Similar to the method of collecting data for the power paragraphs, I graded both the grammar pre-test and the grammar post-test. I recorded the pre-test and post-test data in a table. Next, I focused on one student at a time by comparing his or her score on the grammar pre-test and the grammar post-test. For each student, I wrote down whether the student improved in performance, stayed the same, or decreased in performance. This data was also recorded in the table. Once all of the data was collected and recorded in the table, I will find the mean, median, mode, and range of each column for discussion and comparison purposes.

Besides the table, I created two graphs to illustrate the data. The first is a basic bar graph which displays each student's score on the pre-test and post-test. The second graph is also a bar graph that illustrates student improvement on the post-test.

In order to triangulate the data and bring it all together, I examined the writing data, the grammar test data, and student comments to discover trends or patterns. I used my own observations to determine if students seemed more engaged and willing to participate. I made note of which students appear more engaged than usual. I also made note of which students appeared to have no interest in the clicker lessons at all. This

information helped me to determine the cause of the change or lack of change in the number of errors. After examining this data, I looked at and discussed particular students who did not follow the overall trend.

Chapter Four: Data Interpretation and Analysis

Introduction to Data Interpretation and Analysis

This chapter closely interprets and analyzes the data I collected for my research. I first interpret and analyze trends in the pre-writing and the post-writing by observing and commenting upon the application of the six grammatical concepts covered in the clicker lessons. Following, I discuss the results of the grammar pre-test and post-test. In particular, I analyze the data by examining the mean, median, mode, and range for each set of data. After examining general changes from the pre-writing to the post-writing and from the grammar pre-test to the grammar post-test, I examine the writing samples of a few students who were not part of the norm in order to hypothesize what happened that caused their unique results.

Pre- Writing and Post-Writing Interpretation and Analysis

Pre-Writing Data						
Student #	Dash Usage		Colon Usage		Semi-Colon Usage	
	Correct	Incorrect	Correct	Incorrect	Correct	Incorrect
1						
2						
3						
4						
5					1	
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29				1		
30						

Post-Writing Data						
Student #	Dash Usage		Colon Usage		Semi-Colon Usage	
	Correct	Incorrect	Correct	Incorrect	Correct	Incorrect
1			2			
2			1			
3						
4			2			
5			1	1		1
6						
7						
8			1	1	1	
9			2			
10						
11			2		1	
12			2			
13			2			1
14						
15			1			
16		1	1	1	1	
17						
18						
19					1	
20			1			1
21			1			1
22		1				2
23			2			1
24			2			1
25						
26						
27						
28						1
29			2			1
30					1	2

Overall, the quality of writing improved in the students' post-writing responses. They became better overall writers because they became better mechanical/grammatical writers. Their writing samples were easier to read as a result of the clicker lessons. Also, students were able to demonstrate advanced academic writing by implementing the concepts the clicker lessons covered.

Several particular changes occurred in their writing, which resulted in overall better post-writing samples. To begin with, students experimented with and applied the six concepts we covered. Also, when comparing the pre-writing and post-writing samples, it is clear that there were fewer errors in the post-writing. Most of all, students improved on and learned how to correctly use varying sentence structure as well as the colon to introduce quotes.

One noticeable difference in the post-writing examples is the application of the six grammatical concepts covered. At first glance, one notices right away that more colons, semi-colons, and complete sentences are present in the post-writing. This shows that students were more willing to experiment with and apply what used to be foreign concepts to their writing after the clicker lessons.

Prior to the clicker lessons, only student #29 used a colon, but it was used incorrectly. She wrote:

I think that teachers like to teach us about him because he used metaphors, similes, and he used a lot of imagery: Romeo and Juliet for example was a very deep play that taught many lessons and is still around today!

Her sentence should have had a semi-colon instead of a colon because it was used to separate two independent clauses.

In contrast to the application of the grammatical devices in the pre-writing, in the post-writing, over half of the class used one or more colons, and the majority of them used colons correctly. Sixteen students used colons to introduce their quotations. Student #13 wrote, “Alliteration is used by Edgar Allan Poe to create suspense: ‘Peep into that darkness peering, long I stood there wondering, fearing, doubting, dreaming dreams no mortals ever dared to dream before.’”

In the pre-writings, only student #5 used a semi-colon, and she did use it correctly. She wrote, “Every fairy tale has love; every scary movie or comedy, they all have some kind of love or affection in them.” Besides this example, nobody else used a semi-colon in the pre-writing sample.

Usage of semi-colons also increased on the post-writing. Thirteen students used semi-colons in their post-writing; however, not all of them used the semi-colons correctly. A few students applied semi-colons incorrectly because they used a semi-colon where a comma or a colon belonged. For instance, in the following quote taken from student #23’s post-writing, he uses a semi-colon where a semi-comma belongs: “Without alliteration in the story; the story would be about how the raven bugged the man without any suspense.” Other students did use semi-colons correctly in their post-writing sample. For example, student #11, whose performance decreased on the grammar post-test, correctly used a semi-colon in his post-writing: “This example of alliteration is used well; therefore, suspense is added to the poem.”

In the pre-writing, students struggled to formulate complete thoughts and sentences. Six students had major sentence formulation errors. These errors consisted of

fragments, run-on sentences, and comma splices. Two students used fragments, three used run-on sentences, and one used a comma splice.

In contrast, in the post-writing samples, there are fewer errors with regard to using complete sentences. Students were able to more successfully apply complete sentences. In the post-writing, students were able to identify and write complete sentences, resulting in fewer fragments and run-on sentences. This made the overall quality of writing better because it was more fluid and easier to read. Only two students had a comma splice in their post-writing, and one had a fragment. This is a huge improvement in comparison to the amount of incomplete sentences in the pre-writing samples.

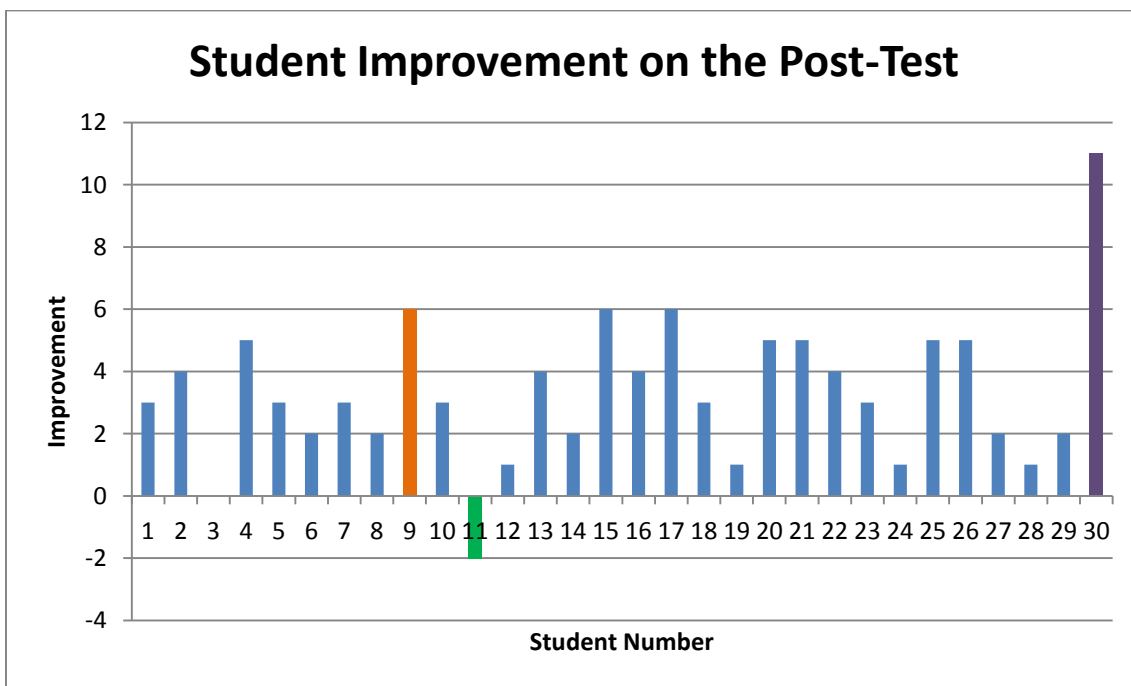
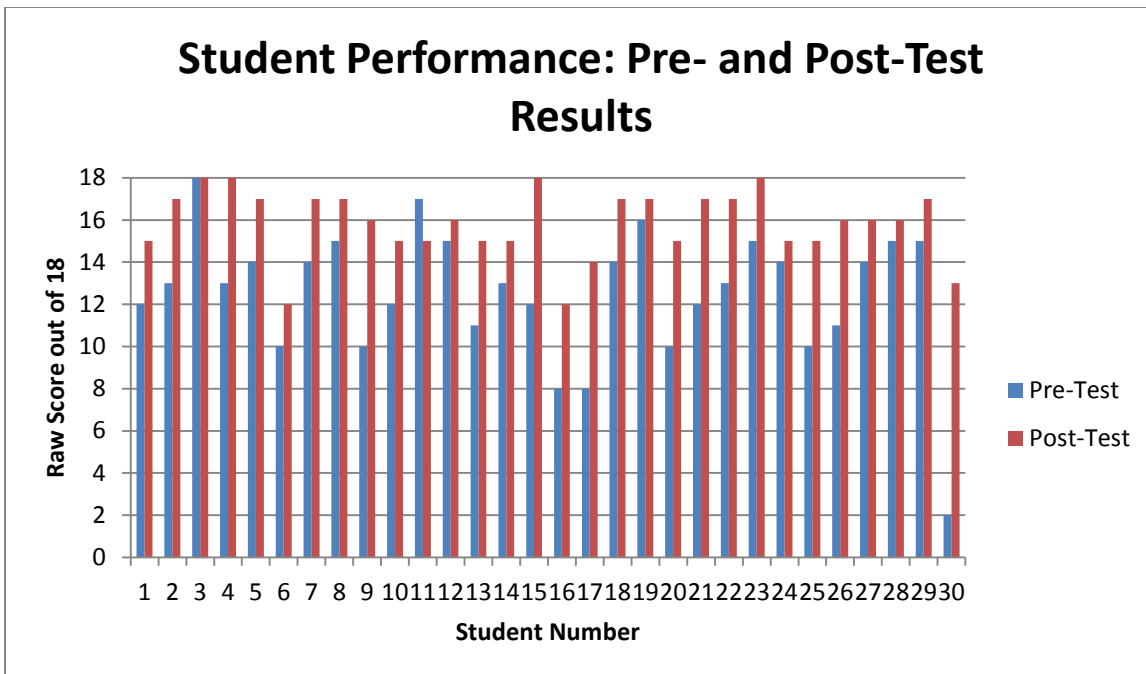
As a result of increased application of colons, semi-colons, and complete sentences, student post-writing samples contained much more variation. Minus a few exceptions, the pre-writing samples were plain and simple; most sentences were simple sentences. Some students used compound and complex sentences, but most of them used the sentences incorrectly because they left out commas where commas belonged. In the post-writing sample, an effect of the grammar application that I did not even think about was much more varied structure. Students varied their sentence structure by creating more compound, complex, and compound-complex sentences.

Grammar Pre-Test and Post-Test Interpretation and Analysis

Student #	Pre-Test	Post-Test	Improvement on Post-Test
1	12	15	3
2	13	17	4
3	18	18	0
4	13	18	5
5	14	17	3
6	10	12	2
7	14	17	3
8	15	17	2
9	10	16	6
10	12	15	3
11	17	15	-2
12	15	16	1
13	11	15	4
14	13	15	2
15	12	18	6
16	8	12	4
17	8	14	6
18	14	17	3
19	16	17	1
20	10	15	5
21	12	17	5
22	13	17	4
23	15	18	3
24	14	15	1
25	10	15	5
26	11	16	5
27	14	16	2
28	15	16	1
29	15	17	2
30	2	13	11

	Pre-Test	Post-Test	Improvement on Post-Test
Mean	12.53	15.87	3.33
Median	13	16	3
Mode	14 and	17	3

	15		
Range	16	6	13



Grammar Pre-Test Data

For the grammar pre-test, the mean or the average score was 12.53 out of 18. This translates to a 69.6%, which is a D+. This shows that on average, students had an under-developed understanding of the six concepts, but they still needed much more exposure to fully understand and be able to apply the concepts.

The median or middle number of the data was 13 out of 18. Again, this translates to a 72.2%. This means that half of my students scored above a 72.2%, and half of my students scored below a 72.2%.

There was a tie for the mode or the most common data point. Five students scored 14 out of 18, and five students scored 15 out of 18. Next most common was a score of 13, 12, and 10. Four students scored 13 points, four scored 12 points, and four scored 10 points. Then two students scored 8 points, and two students scored 11 points. Finally, one student scored 2 points, one scored 16 points, one scored 17 points, and one scored 18 points.

With the lowest score on the pre-test being a 2 out of 18 and the highest being an 18 out of 18, the range of the data points was 16. 16 points is a huge range when one takes into consideration that there were only 18 points total on the test. This presents a problem known as the achievement gap. In my class, I have students who have already mastered the material, and I have students who have no clue how to recognize and apply grammar techniques.

Grammar Post-Test Data

The mean of the grammar post-test was 15.87 out of 18. This translates to an 88.2%. This means that students scored, on average, 18.6% higher than they did on the pre-test. That is almost two letter grades higher.

The median score also increased from 13 out of 18 on the pre-test to 16 out of 18 on the post-test. This means that on the post-test, over half of the class scored above 16 out of 18. In other words, over half of the class scored above an 88.9% on the grammar post-test compared to 72.2% on the pre-test.

In comparison to the pre-test, the mode on the post-test was higher. The mode of the pre-test data was 17 out of 18. Nine students total, almost a third of the class, scored 17 out of 18. Next, eight students scored 15 points. Five students scored 16 points. Four students scored 18 points. Two students scored 12 points. One student scored 13 points, and one student scored 14 points. These larger groupings in the post-test data prove that the students had a more similar understanding of grammar as a result of the lessons. In the pre-test data, smaller groups of students received the same score.

As hoped, the range of scores decreased dramatically on the post-test. Whereas the pre-test had a range of 16, the post-test had only a range of 6. The lowest score on the post-test was 12 out of 18, and the highest score was again an 18 out of 18. This means that implementing the clicker lessons resulted in a decrease in the achievement gap. They successfully brought students to a more common ground, where they had a more similar understanding of grammar.

Grammar Pre-Test and Post-Test Improvements Data

I found the improvements data by comparing each student's pre-test and post-test score. I subtracted the pre-test score from the post-test score to determine their improvement score. The information below is based on these improvement scores.

After comparing scores on the grammar pre-test and the grammar post-test, I discovered a few things. First of all, only two students did not improve on the post-test. One of the students got one-hundred percent on the pre-test and the post-test, so her score stayed consistent. She was unable to improve her initial score. The other student who did not improve on the post-test actually decreased his score. He received a 17 out of 18 on the pre-test and a 15 out of 18 on the post-test; therefore, his score decreased by 2 points. These two exceptions will be analyzed more in-depth in the following section. Similarly, the students who showed the most growth will be analyzed more in-depth as well.

The mean score in which students improved on the post-test was 3.33 points. This translates to an 18.5% increase in scores on the post-test on average. In other words, the average student who participated in the clicker lessons improved their grade by almost two full letter grades.

The median for the improvements on the post-test is 3 points. This means that there are an equal number of data points above and below this number. Three points translates to 16.7%, so half of the class' grade on the post-test improved by more than 16.7%, and half of the class' grade improved by less than 16.7%.

The mode is also 3. Six students improved by three points on the post-test. Next highest, there was a tie between an increase of 2 and 5 points. Five students increased their score by 2 points, and five students increased their score by 5 points. There was also a tie between improvements of 1 and 4 points. Four students increased their score by one

point, and four students increased their score by 4 points. Three students had an increase of 6 points. Another tie occurred between a decrease of 2 points, no improvement, and an increase of 11 points. One student's score decreased by 2 points, one's score stayed the same, and another's score increased by 11 points.

The range of the data points is 13, with 11 points being the greatest improvement and -2 points being the least improvement. This means that all of the data points fall within this 13 point range. More specifically, all of the improvement data points include or are between -2 and 11.

Student Feedback Regarding Clicker Usage

Pro-Clicker Comments

Student feedback and responses to clickers can be grouped into a few main categories. One common claim was that clickers were appreciated because of the immediate feedback which allows students to learn and improve on the next questions. Students also said clickers were engaging, and they would rather use clickers than a grammar workbook. The majority of the class also agreed that clickers helped with content and taught them the material they needed to know better than other methods. Another comment was that clickers are better because they do not require paper or writing.

Similar to what the research stated, instant feedback is a major benefit to using clickers. When asked why he enjoyed clickers, one of my students stated the benefit explicitly: "You get instant feedback." Another student further explained how instant feedback is beneficial. She claimed "After we answer the questions and see what we did

wrong, it is easier to know what my mistakes were.” An additional student mentions the importance of the ability to progress as a result of feedback: “It gives us a chance to see the answer and then progress.” One of my ESL students also said this regarding clickers and instant feedback: “Answering and correcting is a better way to learn than reading out of workbook”

Another common theme mentioned in the research is the clickers’ ability to engage students. The large majority of my students agreed. Words students used to describe clickers included “more interesting,” “fun,” “interactive,” “efficient,” “hands-on,” “entertaining,” and “easier.”

I found the last description surprising. When students said the clickers were easier, and I asked them to expand, they said the clicker lessons were easier than grammar workbook lessons. I found this incredibly ironic since I formatted the clicker questions based on a sophomore grammar workbook used by other teachers in the school. I even used several of the examples from the grammar workbook word for word on the clicker lessons.

Four students explicitly stated that using clickers are better than using a grammar workbook regarding engagement. One expanded and explained why: “I feel as if it is better because it captures the attention of the students better, and we are not reading boring workbooks.” Another reason, as one student stated, is that clickers “go faster.” A third student commented, “It’s more of a class activity.”

Regarding paying attention, several students agreed that clickers kept their attention more so than other methods of grammar instruction would. Similar to the statement of the previous student, another student explained, “The clickers caught your

attention to the lesson. They are a fun, new way to learn.” Another student stated, “It wasn’t boring. I actually paid attention.” The previous quote came from a student who sits in the front row as a result of a seating chart; however, he is constantly disengaged. He does the work when he is asked to, but he always sneaks his iPod and listens to music until asked to remove the ear pieces. Usually, when I ask questions to the class and ask him for a response, he is clueless, and I must re-state the question.

Some students solely expressed their satisfaction with clickers in general. A different ESL student said the following about clickers: “They helped out with fun involved. Clickers are awesome.” Another student said, “I would like to use clickers more often.” A third claimed, “I love clickers. Let’s do it again.” Finally, one student asked, “I enjoy them. Can we do it again?”

Not only were clickers enjoyable and engaging, but students also claimed that they learned a lot. One student said, “I actually learned the grammar a lot better. It was easy and effective.” Another explains that he not only learned the grammar better, but he also knows how to use the six parts of grammar covered in the clicker lessons: “It increased my knowledge of grammar. I know how to properly use [the dash, colon, semi-colon, parallelism, complete sentences, and active voice] now.” A main reason why clickers increased students’ ability to retain knowledge is that, as one student put it, “Everybody finished at the same time so the teacher can explain. I learned a lot from clickers.”

Several students mentioned that the examples in particular helped them to learn the content. As one student briefly mentioned, “The examples were helpful.” Another student expanded by saying, “I can see the examples, so it makes it easier to apply to

writing.” In regard to applying grammar knowledge to writing, one student stated that he had already applied grammar knowledge from the clicker lessons to his writing: “Clickers were very nice and helped me learn a lot. This lesson has already helped me for an essay I had to write up yesterday.” One possible way in which students are already applying their knowledge is that, as another student explained, “The information stays with you.”

Multiple students brought up two other benefits of using clickers that were not found in the research. One of these benefits is that clickers do not require students to actually write. The second comment was that clickers save paper.

Many students were pleased that clickers do not require traditional writing. One student made his claim outright: “It is a lot less writing.” Another student explained, “They’re easy to use, and I don’t have to write.” A final student expanded and explained why in particular less writing is better: “Clickers make learning fun and give my hands and wrist a rest.” Students are overwhelmed with writing in school. They get tired and sick of writing in every class. Clickers give them an opportunity to take a break from writing; however, they are still practicing and learning new material.

The other benefit of clickers addressed by the students but not research was the ability to save paper. As one student put it, “I don’t like using paper.” With such an emphasis on preserving the earth, students have learned that it is important to save and recycle. Another student explained, “They are easy, and you don’t waste paper.” The fact that she used the word “waste” shows that these students are growing up in a generation in which they are more conscious about using natural resources sparingly.

Anti-Clicker Comments

Although the large majority of students enjoyed clickers, some did not. Common complaints include the time restraint, having to write out corrections for the application part of the clicker lessons, and other miscellaneous comments.

Several students felt restrained by the time limit on each question. Although the students originally had a full minute to answer the questions, I noticed that a few students were intentionally procrastinating in order to waste class time. As a result, I began to stop the questions after forty seconds. One student said outright, "I did not like the time limit." Another student explained, "I prefer being able to reread and take my time rather than being timed." This shocked me coming from this particular student because he is my most disengaged student. He frequently falls asleep in class, and he fails to do his work even when he is given class time. I asked him to expand on his comment in private. I learned that he solely becomes bored and frustrated when he does not understand something or have enough time to process it, so he gives up. For students such as him, he genuinely needed the extra time, but his quicker peers became bored if they were given too much time. It is important to take into account students such as these when creating clicker lessons for a class of diverse students.

Other students did not like writing out the sentences. Originally, I got the clickers with a keyboard so that students could type a full sentence in order to correct an incorrect example. Once students started using the keyboard on the clickers, however, we ran into a couple of problems. Many students were not accustomed to using a keyboard in which there are three or more letters per number. Students who had older cell phones picked this up quickly; however, students with new phones with full keyboards were hesitant, and they struggled to find all of the letters. Also, some punctuation marks we covered were

not available. Students had to scroll through a list of punctuation marks just to find the one they wanted to use. A final problem was that the open response section was not necessarily unlimited. Students were only able to type a few words before the space maxed out. As a result, I had students pull out a piece of paper for the questions in which they had to correct a previous error or write their own application sentence. Some students did not enjoy this part. As one student put it, “writing out the sentence” was the worst part of the clickers. Another explained that his least favorite part was, “When we had to write on paper, because I don’t like writing.” A student in the class agreed with his response: “The writing part because then I’d have to write, but I know why we did it.” Not only did students not like the writing portion because they do not like writing, they also did not like it because it was time consuming. A student claimed that it was “time consuming for written information.” Another said, “The writing was too long.” A final student claimed, “The typing portion was confusing.”

Occasional students voiced other negative opinions about clickers that did not seem to be shared by the class as a whole. One girl explained, “I just can’t learn from them. It just doesn’t work.” This same student was incredibly concerned about taking the grammar post-test because she thought she would fail since she claimed to not understand the material; however, she did improve her score.

A couple other students felt as if the clickers were boring. As one stated, “Clickers are a waste of time. They are boring.” One more student agreed: “It helped out but was also boring.” Another said, “Clickers can get a bit old after a while.” A final student explained that the clickers were boring and got old because of “the length of each.”

*Exceptional Students and Connections to Their Writing***Student #3**

As mentioned briefly before, student #3 scored 18 out of 18 on the grammar pre-test and the post-test. As a result, the data shows that she did not improve her knowledge or understanding of grammar; however, her writing samples show otherwise. In her pre-writing sample, she fails to use a comma between two independent clauses combined by a coordinating conjunction. We covered this exact concept in the complete sentence portion of the clicker lessons. As a result, her post-writing sample does not contain this error or any other errors regarding the six concepts we covered.

I asked her how she felt about the clicker lessons since she did not appear to struggle with the content in the first place. She explained that they did not help her a lot because she already knew the material. I then asked her why she is in a regular English class if this material comes so naturally for her. She told me that she just recently moved into a regular English class. She was in an Honors English class first semester, but her lack of organization led to her failure of the course and her placement in a regular class. Student #3 also said she has always been good at vocabulary and grammar. Reflecting back to elementary school, she said that she received 100% on the English portion of the CSAP.

Student #11

Also as mentioned briefly before, student #11 was the only student whose performance on the grammar post-test decreased. He received a 17 out of 18 on the pre-test and a 15 out of 18 on the post-test; therefore, his score decreased by 2 points;

however, when looking at his post-writing, I noticed that he correctly applied five out of the six concepts we covered in the clicker lessons. The sixth concept that he did not apply was the dash. Student #11 does not have any run-on sentences or fragments. He uses active voice throughout the entire paragraph. There are no problems with parallel structure. Also, he correctly uses colons to introduce each of his quotations. Finally, he uses a semi-colon to separate two independent clauses combined with a subordinating conjunction. Although his performance decreased on his grammar post-test, his post-writing shows that he did in fact learn how to correctly apply the concepts.

I asked this student in particular why his performance on the post-test decreased even though his post-writing was flawless. He said that he had absolutely no reason why his performance decreased. The only reason that he could think of was that he was a lucky guesser, and he did not guess as well the second time around. I asked him how he felt about the clickers in general since they did not appear to help him. He said he could not focus on the clicker lessons as a result of distractions. Again, when I asked him what distractions were present, he could not expand upon his answer; however, he did say he believes he would have been more focused if he had been asked to do work out of a workbook instead.

Student #30

A third student who is important to comment upon is student #30. Rather than a decrease in or lack of growth, this student's score improved by 11 points! Initially, he scored 2 out of 18 on the grammar pre-test. On the post-test, however, he received 13 out of 18. In regard to percentage, this means that he went from a failing 11.1% to a passing 72.2%. His writing shows a similar trend. In his pre-writing, he had run-on sentences,

multiple comma errors, and he did not use a semi-colon where one should have been. Unfortunately, his post-writing sample had a run-on sentence as well; however, in his post-writing, his comma errors vanished altogether. He also correctly applied one of the concepts learned in class in his post-essay. Student #30 correctly uses one colon to introduce a quotation; however, for his other two quotations, he did not use colons. Instead, he simply ended the previous sentence with a period, and the quote alone was the next sentence. Although this is not correct, student #30 did show improvement on his paragraph, and he did accurately apply the colon to introduce a quotation one time, which shows that he did learn how to do it.

When I asked this student what caused the increase in performance, he commented on his kinesthetic style of learning. He explained that since the clickers are more interactive, as he referred to it as, he was much more engaged. Student #30 admitted that did not try his hardest on the pre-test because he did not know a lot, so he simply gave up. On the other hand, for the post-test, he actually studied, and he said he felt as if he knew a lot more as a result of using the clickers.

Student #9

Another student worth noting whose performance skyrocketed is my student with Asperger's Disorder, student #9. I was particularly interested in this student's data because he is usually overwhelmed when the class participates in activities such as the clicker lessons. He regularly asks to leave the classroom to work on assignments on his own in order to avoid overstimulation. For the clicker lessons, he was more than willing to participate. Additionally, he actively participated by clarifying when other students struggled. His scores verify that learning took place for student #9. On the pre-test, he

received 10 points out of 18. On the post-test, however, he received 16 points out of 18. This was one of the largest improvements in the entire class. His post-writing shows similar improvement. Student #9 used colons to introduce both of his quotations. Also, the comma errors that were present in his pre-writing are absent in his post-writing.

When I asked student #9 to explain to me what caused the large increase in his post-score, he was thrilled to talk about the clickers. He said the clickers have helped him more than anything else he has ever done because he was more involved. In particular, he said it helped that we discussed the answer as a class after each question. He was able to clarify his understanding through our classroom discussions. As a result, he explained that he learned the material better, resulting in his increase of 6 points on the post-test.

Summary of Data Interpretation and Analysis

The data shows that using clickers in order to learn grammar and apply grammar knowledge to writing was effective. Following the clicker lessons, writing samples showed that students were applying their grammar knowledge. Similarly, minus a couple of exceptions, all students showed improvement on the grammar post-test. Besides academic progress, the surveys showed that students were generally more engaged and excited to learn when using clickers

Chapter Five: Reflections, Conclusions, and Recommendations

Introduction

Chapter five serves as an area of reflection. Initially, I will comment on how my teaching has changed as a result of my research and findings. Then I will explain which problems I encountered with the clickers throughout the project. I will also wrap up my overall thoughts in a conclusion section. Finally, I will offer recommendations for future studies based on my own experience.

Reflections

How My Teaching Has Changed

As a result of this action research study, my teaching has changed drastically. To begin with, my sophomore class is much more successful in their writing. I have seen drastic improvements in their writing, which has eliminated a lot of extra work we would have done had they not learned so well from the clickers. This has allowed me to spend more time on other areas. Because of the application portion of the clickers, my students have continued to apply their grammar knowledge to their writing. In contrast, my junior class who did not use clickers fails to incorporate proper grammar into writing samples. My sophomore class has a huge advantage as a result of the clicker lessons.

Another way my teaching has changed is by my desire to use more technology. Since I implemented the clicker lessons, I have found other ways to use technology in my classroom. I recently used glogster.com, a website that allows students to make posters online. They can embed videos and music clips. In other words, it is an active poster board. Similar to my results with clickers, students seem much more interested in the

project because it involved technology. Even though it was not required, several students worked on their online poster at home as well, making a decorative background and finding graphics to enhance their poster.

Also, I realized the importance of using hands-on, engaging activities as a result of my clicker study. For example, instead of simply lecturing my freshmen and giving them notes regarding how to create an MLA works cited page, I had them participate in a hands-on activity. They were all given notecards with one aspect of the basic citation on it. In other words, one notecard said “author’s first name,” one said “author’s last name,” and another had a comma drawn on it. Students had to work in groups to arrange the notecards and put them in the correct order. Once they learned this skill, I gave them notecards with examples from novels we read. For example, the notecards now said “Orwell,” “George,” and a comma. Students were able to manipulate the notecards and discuss why the correct order was correct. My students are learning much more and retaining much more knowledge as a result of these activities.

Problems with Clickers

Throughout this process, I have learned a lot about clickers; however, there are two concepts in particular worth noting. First of all, I learned that clickers do not allow for differentiation. Also, I learned that creating clicker lessons is extremely time consuming.

One major problem with clickers is that it does not allow for differentiation. On the grammar pre-test, I had one student score as low as a 2 out of 18, and I had one student score as high as an 18 out of 18. The student who scored 18 out of 18 had no choice but to sit through class and participate in the clicker activities even though she

understood the content. The student who scored 2 out of 18, however, had a lot of learning to do. He needed to be present and attentive in order to improve his grammar knowledge.

Also along the lines of lack of differentiation with clickers, I had an incredibly difficult time determining how long students should be given to answer each question. Initially, I gave students one minute to answer each question; however, the majority of students were answering the questions in thirty seconds or less, so I reduced the time to fifty seconds per question. Then, I had other students who intentionally waited until one second was left on the timer to submit their answer, so it made me believe that they were only doing so to waste class time. As a result, I reduced the time per question to forty seconds. Even when the students had forty seconds, the majority of them finished much earlier.

I reduced the time on each clicker question in order to save class time and prevent students from becoming bored from the long wait; however, I encountered another dilemma. As mentioned before, I have two English as Second Language learners in my classroom. While one of them is very successful and remains ahead of his peers regardless of what we are doing, the other one struggles a great deal.

When we first began the clicker lessons, my ESL student who struggles was absent along with a few other students. When all of the students returned the following class period, they caught onto the clickers immediately. I failed to notice until mid-way through the second clicker lesson that my ESL student was not participating. He is a very well-behaved student, and he always does what he is told. I asked him why he was not answering the questions; He simply told me that he did not know how to work the device

he was given. As soon as I turned it on for him and explained how to do it, he had no problem, or so I thought. When I asked the students what they thought about the clicker lessons, he responded, “There were a few I couldn’t answer due to time.” I had failed to take into account that he needs a longer period of time to read the question, process its meaning, devise an answer, and respond. All I noticed was that the large majority of students had already answered; they were bored and ready to move on.

If I were to conduct clicker lessons again, I would print the questions ahead of time to give to my struggling ESL student so that he would be prepared when it came time to answer the clicker questions in class. He did improve on the grammar post-test. He scored 14 out of 18 on the pre-test and 17 out of 18 on the post-test, so he improved by 3 points. He also showed improvements in his writing. His pre-writing sample has three fragments. In contrast, his post-writing sample has no fragments. Regardless of his improvements, he would have been in a less stressful situation if he had time to examine the questions prior to the lessons. That way, he could focus on learning how to use the clickers without worrying about the time restraint.

Another problem I underestimated was the amount of time it takes to create clicker lessons. One of the hardest and most time-consuming aspects was figuring out how to organize the clicker lessons and questions in a way that was beneficial to students. I began by introducing the students to the topic by asking when they would use a certain grammatical device. Then, the following questions asked them to determine which punctuation mark was used correctly. After we discussed the correct answer as a class, the following question asked why the previous answer was correct. For instance, in the dash lesson (See Appendix A), students initially had to determine in which situations a

dash is used. Then, they decided where a dash belonged in an example sentence, such as, “Don’t you think (A) cleaning up will be (B)” Carmen began (C) and then she paused (D) to reconsider (E). After deciding where the dash belonged, they had to choose whether the previous sentence indicated an abrupt break in thought or speech or an unfinished statement or question or namely, that is, or in other words or to otherwise introduce an explanation.

Besides the initial organization of the clicker lessons, it was time consuming to create and enter the questions into the CRP software. For each question, I had to think of and type an appropriate question. Then, I had to provide answers that seemed appropriate. I learned the hard way that the questions cannot be copied and pasted into the CRP software. I initially typed them all into a Word document so that it was easy to change and rearrange questions; however, I later had to type the 13 page document into the CRP software question by question.

Although it is time consuming to create the clicker lessons, once they are created, I can use the same lessons year after year; therefore, it may be time consuming initially, but I believe it pays off in the long run. One way to avoid the time-consuming nature of creating clickers is to create clicker lessons as a department. This way, the work can be split up among department members, and each teacher would have access to all of the clicker lessons.

I have not used clickers again since the grammar lessons; however, I intend to use them again in the future. I can also use clickers in the future for more than solely grammar lessons. Clickers can be used for students to take tests and quizzes. They are also fun to use as a review method before a test or quiz.

Conclusions

The clicker lessons proved to be successful in enhancing grammar knowledge and grammar application to writing. Additionally, students were more engaged and more willing to participate as a result. Although using the clickers did have minor setbacks, there are ways to avoid these setbacks. Overall, students benefited greatly from this study, and I would strongly encourage using clickers or any other kind of technology in English classrooms. This research has proved that using technology in the English classroom enhances student interest; therefore, students pay more attention, and they achieve more as a result. I am passionate about my findings, and I will continue to use technology in my English classrooms in the future.

Recommendations for Future Studies

If someone were to implement the same study as I have, I would recommend doing a few aspects of the study differently. One part I would change is the type of clickers used. It would also be beneficial to compare two groups of students by incorporating a control group and an experimental group into the study. Generally speaking, I would recommend using technology in the classroom, regardless of if it is clickers or another type of technology.

For instance, it would have been beneficial if students were able to use clickers with full keyboards. They were frustrated when they realized they did not have access to a full keyboard such as most of them are used to with their modern cell phones. Also, it was time consuming for students to have to type on the clickers with only nine buttons

because they had to learn how to get to and use each letter. This took up so much time that I ended up having students simply write down the application answers in order to save time; however, they liked the writing even less, and it became the main complaint.

Also, I would recommend using a control group and an experimental group in order to compare data. I would have one group learn grammar through clickers, and I would have a second group of the same ability learn grammar through a grammar workbook. Then, I would assign both groups the same writing assignments and tests to see which group was more successful. I was able to gather wonderful data through the pre- and post-writing assignments, the pre-and post-grammar tests, and student feedback; however, I would have liked to have a comparison group. This would allow me to determine if it genuinely was the engaging nature of the clickers that made students do better on the grammar post-test and the post-writing assignment.

A general recommendation that does not necessarily apply to my study is to incorporate technology in the classroom whenever it is possible and appropriate. My students actually enjoyed learning using clickers. They were excited when they came into class each day, and they always asked me with enthusiasm if we were using clickers that day. I genuinely believe as a result of my research that students will perform better if teachers find engaging methods of teaching. Using technology is particularly engaging because today's students are growing up in a society that revolves around technology, and they enjoy using technological devices. By incorporating technology into the classroom, students find more satisfaction in learning. As a result, teachers should find appropriate ways to implement technology in their classroom in order to appeal to students' interests and desires.

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Appendix

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CO- Colorado Academic Standards (updated)
Subject : Reading, Writing, and Communicating
Standard : Writing and Composition
Grade/Level : Tenth Grade
Concept : 3. Grammar, language usage, mechanics, and clarity are the basics of ongoing refinements and revisions within the writing process
Remove Evidence Outcome : a. Apply dashes, colons, and semi-colons to create varied sentences, to emphasize important ideas, and to show relationships among ideas.
Remove Evidence Outcome : b. Identify instances where sentences are not grammatically parallel and revise sentences to establish parallelism
Remove Evidence Outcome : c. Identify the various types of clauses and use this knowledge to write varied, strong, correct, complete sentences
Remove Evidence Outcome : d. Distinguish between the active and passive voice, and write in the active voice

Grammar Test

Identification

Match the following punctuation mark with its correct name.

- | | |
|--------------|------|
| 1. Dash | a. : |
| 2. Colon | b. - |
| 3. Semicolon | c. ; |

Usage and Definitions

4. In which of the following situations do you use a dash?
 - a. To separate items in a series
 - b. To indicate an abrupt break in thought or speech or an unfinished statement or question
 - c. To indicate *namely, that is, or in other words* or to otherwise introduce an explanation
 - d. A and B
 - e. B and C

5. In which of the following situations do you use a colon?
 - a. Before a list of items
 - b. Before a long, formal statement or quotation
 - c. Between independent clauses when the second clause explains or restates the ideas of the first
 - d. Between the hour and minute, between chapter and verse in Biblical reference, between titles and subtitles, and after a salutation of a business letter.
 - e. All of the above

6. In which of the following situations do you use a semicolon?
 - a. Between independent clauses joined by a conjunctive adverb or transitional expression
 - b. Between independent clauses that are closely related in meaning if they are not joined by and, but, for, nor, or, so, or yet
 - c. Between items in a series if the items contain commas.
 - d. To separate independent clauses joined by a coordinating conjunction when the clauses contain commas that may be confusing.
 - e. All of the above

7. Parallelism occurs when...
 - a. Similar ideas are expressed in a similar way
 - b. Exact phrases or sentences are repeated
 - c. Multiple sentences discuss a common theme
 - d. Sentences are not intersecting
 - e. Two people say the same thing at the same time

8. Which of the following components are essential to make a complete sentence?
- Subject
 - Verb
 - Object
 - A and B
 - A, B, and C
9. Active voice occurs when...
- A verb expresses an action done by its subject
 - Language use multiple verbs to demonstrate intensified action
 - A verb expresses an action done to its subject
 - A speaker excitedly talks about a particular subject
 - All of the above

Application

10. Where do dashes belong in the following sentence?

Shiela's little (A) sister (B) She's only seven years old (C) is already studying (D) algebra.

- A and B
- B and C
- C and D
- A and C
- B and D

11. Where does a colon belong in the following sentence?

Do not forget (A) to bring (B) the following materials (C) entry fees, all photographs and artwork, display stands, a display table, a comfortable chair or stool, (D) a list of prices for any artwork offered for sale, (E) and a calculator.

- A
- B
- C
- D
- E

12. Where does a semicolon belong in the following sentence?

She went (A) to the mall (B) however (C) she could not find (D) the prom dress (E) she wanted.

- a. A
- b. B
- c. C
- d. D
- e. E

Making Corrections

13. Which of the following punctuation marks belongs in the black space in the following sentence?

The following is a list of classes that I have to take next year ____ English, statistics, economics, psychology, and anatomy.

- a. —
- b. :
- c. ;

14. Which of the following punctuation marks belongs in the black space in the following sentence?

She failed to bring her math book home from school ____ therefore, she was unable to complete her homework.

- a. —
- b. :
- c. ;

15. Which of the following punctuation marks belongs in the black space in the following sentence?

“I didn’t do my homework this weekend because I ____” he began to answer, and then he paused to think of an excuse.

- a. —
- b. :
- c. ;

16. How can the underlined portion of the sentence be changed to make the sentence parallel in structure?

After the baseball game, she walked her dog home, and she was singing on the way.

- a. she sang on the way
 - b. she wanted to sing on the way
 - c. she had sung on the way
 - d. singing on the way
 - e. None of the above
17. How can the following phrase be made to express a complete thought?

After the movie

- a. Add “Valerie” after the phrase
- b. Add “Skipping” before the phrase
- c. Add “Betty walked” after the phrase
- d. Add “beyond the coffee shop and through the mountains” after the phrase
- e. None of the above

18. How can the following passive sentence be changed to make it active?

A free ticket was offered to me by the amusement park.

- a. Offered to me by the amusement park was a free ticket
- b. The amusement park offered me a free ticket
- c. A ticket that was free was offered to me by the amusement park
- d. A ticket that the amusement park offered me was free
- e. None of the above

Clicker Lesson #1: Dash

1. In which of the following situations do you use a dash?
 - a. To separate items in a series
 - b. To indicate an abrupt break in thought or speech or an unfinished statement or question
 - c. To indicate *namely, that is, or in other words* or to otherwise introduce an explanation
 - d. A and B
 - e. B and C

2. Where does a dash belong in the following sentence?

“Don’t you think (A) cleaning up will be (B)” Carmen began (C) and then she paused (D) to reconsider (E).

- a. A
 - b. B
 - c. C
 - d. D
 - e. E
3. “Don’t you think cleaning up will be—” Carmen began, and then she paused to reconsider.

The previous sentence indicates...

- a. an abrupt break in thought or speech or an unfinished statement or question
 - b. *namely, that is, or in other words* or to otherwise introduce an explanation
4. Where does a dash belong in the following sentence?

Brushes (A) cans of paint (B) washcloths (C) and scrapers (D) these are the tools (E) of my trade!

- a. A
 - b. B
 - c. C
 - d. D
 - e. E
5. Brushes, cans of paint, washcloths, and scrapers—these are the tools of my trade!

The previous sentence indicates...

- a. an abrupt break in thought or speech or an unfinished statement or question
- b. *namely, that is, or in other words* or to otherwise introduce an explanation

6. Where do dashes belong in the following sentence?

Certain birds (A) cardinals and mockingbirds (B) build (C) their nests in shrubs (D) or low trees.

- a. A and B
- b. B and C
- c. C and D
- d. A and C
- e. B and D

7. Certain birds- cardinals and mockingbirds- build their nests in shrubs or low trees.

The previous sentence indicates...

- a. an abrupt break in thought or speech or an unfinished statement or question
- b. *namely, that is, or in other words* or to otherwise introduce an explanation

8. Where do dashes belong in the following sentence?

Their ancestral homes (A) small mud and straw buildings (B) eroded (C) into dust (D) long ago.

- a. A and B
- b. B and C
- c. C and D
- d. A and C
- e. B and D

9. Their ancestral homes- small mud and straw buildings- eroded into dust long ago.

The previous sentence indicates...

- a. an abrupt break in thought or speech or an unfinished statement or question
- b. *namely, that is, or in other words* or to otherwise introduce an explanation

10. Where do dashes belong in the following sentence?

Shiela's little (A) sister (B) She's only seven years old (C) is already studying (D) algebra.

- a. A and B
- b. B and C
- c. C and D
- d. A and C
- e. B and D

11. Shiela's little sister- She's only seven years old- is already studying algebra.

The previous sentence indicates...

- a. an abrupt break in thought or speech or an unfinished statement or question
- b. *namely, that is, or in other words* or to otherwise introduce an explanation

12. Where does a dash belong in the following sentence?

The Aztec's (A) principal food (B) consisted of (C) cornmeal (D) pancakes (E) tortillas.

- a. A
- b. B
- c. C
- d. D
- e. E

13. The Aztec's principal food consisted of— cornmeal pancakes tortillas.

The previous sentence indicates...

- a. an abrupt break in thought or speech or an unfinished statement or question
- b. *namely, that is, or in other words* or to otherwise introduce an explanation

14. Where does a dash belong in the following sentence?

“So (A) when is this roller coaster (B) going to take (C)” he said (D) and then he shrieked.

- a. A and B
- b. B and C
- c. C and D
- d. A and C
- e. B and D

15. “So when is this roller coaster going to take—” he said, and then he shrieked.

The previous sentence indicates...

- a. an abrupt break in thought or speech or an unfinished statement or question
- b. *namely, that is, or in other words* or to otherwise introduce an explanation

16. Where do dashes belong in the following sentence?

The Taj Mahal (A) one of the most expensive tombs (B) ever built (C) was constructed (D) in memory of an Indian ruler's wife.

- a. A and B
- b. B and C
- c. C and D
- d. A and C
- e. B and D

17. The Taj Mahal- one of the most expensive tombs ever built- was constructed in memory of an Indian ruler's wife.

The previous sentence indicates...

- a. an abrupt break in thought or speech or an unfinished statement or question
- b. *namely, that is, or in other words* or to otherwise introduce an explanation

18. Create your own sentence using dashes to indicate an abrupt break in thought or speech or an unfinished statement or question.

19. Create your own sentence using dashes to indicate *namely, that is, or in other words* or to otherwise introduce an explanation.

Response Reports

Page 1

Session: Parallelism

Class: R2

Class Points A74.79 out of 100.00 (74.79%)

(Includes only students who took assessment)

1 Parallelism occurs when...

- * A 54% Similar ideas are expressed in a similar way
- B 17% Exact phrases or sentences are repeated
- C 17% Multiple sentences discusses a common theme
- D 4% Sentences are not interesting
- E 8% Two people say the same thing at the same time

2 Is the following sentence parallel?

My parents promised to buy a new car and let me drive it.

- * A 58% Yes
- B 42% No

3 Is the following sentence parallel?

After the baseball game, she walked her dog home, and she was singin

- A 23% Yes
- * B 77% No

4 How can the underlined portion of the sentence be changed to make th grammar and structure?

After the baseball game, she walked her dog home, and she was singin

- * A 71% She sang on the way
- B 0% She wanted to sing on the way
- C 8% She had sung on the way
- D 4% Singing on the way
- E 17% None of the above

Session: Parallelism

Class: R2

Class Points A74.79 out of 100.00 (74.79%)
(Includes only students who took assessment)

6 Is the following sentence parallel?

Catching the bird and to keep it in a cage was cruel.

- A 8% Yes
- * B 92% No

7 Is the following sentence parallel?

Ammonia is used for softening water and for dissolving grease.

- * A 96% Yes
- B 4% No

8 Is the following sentence parallel?

The duties of the secretary are receiving visitors, opening the mail

- * A 88% Yes
- B 12% No

9 Is the following sentence parallel?

Katie spent the afternoon reading a novel, and she ate chocolates.

- A 4% Yes
- * B 96% No

Clicker Survey

Complete the following statements by circling strongly disagree, disagree, neutral, agree, or strongly agree.

1. I enjoyed using clickers.

Strongly Disagree Disagree Neutral Agree Strongly Agree

Please explain why you selected your answer in the previous question:

2. I feel as if I knew more about grammar at the end of each clicker lesson than I did at the beginning.

Strongly Disagree Disagree Neutral Agree Strongly Agree

Please explain why you selected your answer in the previous question:

3. I feel as if I can apply the knowledge I gained about grammar to my writing.

Strongly Disagree Disagree Neutral Agree Strongly Agree

Please explain why you selected your answer in the previous question:

4. I would like to use clickers to learn content in the future.

Strongly Disagree Disagree Neutral Agree Strongly Agree

Please explain why you selected your answer in the previous question:

Short Response Questions

1. Was there any part of the clicker lessons that you did not like? Explain.

2. Do you feel as if using clickers to learn grammar is better than learning grammar out of a workbook? Explain?

Please offer any other comments you have regarding using the clickers below.

pre-writing
sample

Student #3

Power Paragraph

We still read Shakespeare today because he is a very controversial and mysterious person and his works can entertain a vast array of audiences. Complete sentence.

There is a lot of debate about whether Shakespeare really wrote all of the works that he is famous for or if it was actually another playwright. I believe that Shakespeare wrote all of his works, even though it was remarkable that he accomplished so much. Also, if he wasn't the author he would be a very bad example for students because he just basically plagiarized everything and was famous because of it. His works range from a comedy like "Much Ado About Nothing" to a tragedy like "Romeo and Juliet" which can interest many different audiences. I personally enjoy Shakespeare because he was so diverse and had many different sonnets and plays that were so different. All in all I believe that reading Shakespeare today is a very good thing.

post-writing
sample

Name: Student # 3 _____ Due Date: _____ Per: _____

Score: _____ /40

Edgar Allan Poe's "The Raven" teems with alliteration. (1) Define alliteration; then (2) define mood. (3) Next, identify several lines where Poe incorporates alliteration in the poem. Finally, (4) write a fully-developed paragraph that analyzes how alliteration creates a *suspenseful* mood in the poem. Stay within the lines [1 point]

1. Alliteration is the repetition of beginning consonate sounds. [2 points]

2. Mood is the atmosphere/emotion of the poem. [2 points]

3. "Ebony bird beguiling" (line 43) [1 point]

"weak and weary" (line 1) [1 point]

"I maddened, nearly rapping" (line 3) [1 point]

4. Using an alliteration repeats sounds and creates the illusion of spinning madness. Through out Edgar Allan Poe's "The Raven" the main character talks about his lost love Lenore. The narrator puts much alliteration and assonance that as you read creates an air of suspense through making your read slightly spin. This slightly spinning bit helps you understand that the man is slowly slipping in madness. The spinning madness effect in Poe's writing is created through alliteration.

. [6 points x 5]

5. In line 17, the word *entreating* appears to mean asking for entrance. [1 point for correct "guess"]

6. In line 43, the word *beguiling* appears to mean enchanting. [1 point for correct "guess"]

pre-writing
sample

Student # 7

We still read Shakespeare is because we can learn from his stories.

We can learn from his historical perspectives.

Such as, language, poetry or how he describes things in the world.

Also, from his way of looking at the world.

Fragment

Fragment

Frag

How people think or how he thinks about, love, passion, perspective of life, jealousy and even revenge.

Tragic and comic would be about, mostly love, but also jealousy or grief and so on.

We can also learn about human relation that might help the way we think of things and others.

post-writing
sampleName: Student # 7 Due Date: _____ Per: _____

Score: _____/40

Edgar Allan Poe's "The Raven" teems with alliteration. (1) Define alliteration; then (2) define mood. (3) Next, identify several lines where Poe incorporates alliteration in the poem. Finally, (4) write a fully-developed paragraph that analyzes how alliteration creates a *suspenseful* mood in the poem. Stay within the lines [1 point]

1. Alliteration is the use of words next to each other starting with the same sound. [2 points]

2. Mood is a state or quality of feeling. [2 points]

3. Weak and weary (line 1) [1 point]

nodded, nearly napping (line 3) [1 point]

stark and store (line 62) [1 point]

4. This is particularly hard to explain, but I think that in poems not only words of rhyming makes the poem more inspiring, interesting, more mind capturing to read, and helping you to keep in rhythm while reading the poem, but also alliteration helps in sort of the same way. Not only the rhyming of words create moods, but alliteration does the same thing also, making the poem more and more interesting.

_____ [6 points x 5]

5. In line 17, the word *entreating* appears to mean waiting [1 point for correct "guess"]

6. In line 43, the word *beguiling* appears to mean lured [1 point for correct "guess"]

pre-writing
sample

Student # 9

Shakespeare
Power Paragraph

Shakespeare is one of the best writers who have ever lived, and still today his work is continuously used in English literature classes. I believe one reason why Shakespeare's work is still used today is because of its historical significance. Now, what is meant by historical significance is the form of writing it is done in, whether it is prose or verse. Another way that his work is historically significant is the language that used within all of its pages and lines, by the use of archaic words such as, "thou, thine, thy, and thee". Now, one more reason why Shakespeare's work is still used today is because it gives writers a kind of inspiration to write. Through Shakespeare's way of writing, people can figure out how much history can impact the way we view pieces of literature and drama productions based on his work. Also, Narnia author C.S. Lewis was inspired by Shakespeare enough to take some elements of *A Midsummer's Night Dream*, as well as various other plays and place them within his own world of Narnia. Despite controversies on why Shakespeare is still used in our day and age is good or bad, without his masterpieces, modern works of fiction and literature would not have had such an inspiration to explore for references.

post-writing
sample

Name: Student # 9

Due Date:

Per:

Score: ____ /40

Edgar Allan Poe's "The Raven" teems with alliteration. (1) Define alliteration; then (2) define mood. (3) Next, identify several lines where Poe incorporates alliteration in the poem. Finally, (4) write a fully-developed paragraph that analyzes how alliteration creates a *suspenseful* mood in the poem. Stay within the lines [1 point]

1. The repetition of a beginning consonant sound. [2 points]

2. The attitude a work of literature is written with. [2 points]

3. Once upon a midnight-dream, while I pondered, weak & weary, (line 1) [1 point]

Doubting, dreaming dreams no mortals ever dared to dream before; (line 26) [1 point]

Followed fast and followed faster till his songs one burden bore- (line 64) [1 point]

4. _____

Using alliteration in the poem "The Raven" is a key factor. One reason alliteration is used in the poem because it increases suspense and anticipation. One line from the poem shows suspense is: "ghastly grim and ancient Raven wandering from the Nightly shore." The words that proves alliteration exists are ghastly and grim. The word grim increases suspense because it means dark or evil. Another example from "The Raven" that uses alliteration is: "What this grim, ungainly, ghastly, gaunt, and ominous bird of yore." Again, the repeated consonant sound is the g sound in grim, ghastly and gaunt. These words increase anticipation because they make your mind imagine everything that is being depicted.

[6 points x 3]

5. In line 17, the word *entreating* appears to mean requesting, demanding [1 point for correct "guess"]

6. In line 43, the word *beguiling* appears to mean reformed, changed, switched [1 point for correct "guess"]

post-writing
sampleName: Student # 11 Due Date: _____ Per: _____

Score: _____/40

Edgar Allan Poe's "The Raven" teems with alliteration. (1) Define alliteration; then (2) define mood. (3) Next, identify several lines where Poe incorporates alliteration in the poem. Finally, (4) write a fully-developed paragraph that analyzes how alliteration creates a *suspenseful* mood in the poem. Stay within the lines [1 point]

1. alliteration - the repetition of beginning consonant sounds [2 points]

2. mood - a state or quality of feeling at a particular time [2 points]

3. "weath and weary" (line 1) [1 point]

"Doubting, dreaming dreams" (line 26) [1 point]

"velvet violet" (line 77) [1 point]

4. In the poem by Edgar Allan Poe, alliteration creates a suspenseful mood in a couple of ways. In the sixth stanza many examples of alliteration are present: "stepped a stately" (38). The alliteration we here gives the line a sort of beat or rhythm to it. It became catchy from it. Also in the sixth stanza Poe said: "with many a flit and flutter" (37). This example of alliteration is used well therefore, suspense is added to the poem. Poe used alliteration very well in this poem thus it adds suspense.

. [6 points x 5]

5. In line 17, the word *entreating* appears to mean wanting. [1 point for correct "guess"]

6. In line 43, the word *beguiling* appears to mean changing. [1 point for correct "guess"]

pre-writing
sample

Student # 30

Shakespeare still has a big influence on people's lives today. For example, people read his plays for love or hate even believe. Another reason is, Shakespeare professionals are still trying to decode his plays and exactly what the message is in them. When people read Shakespeare's plays, they get engulfed in the story like they are really there. People start getting attached to the characters and relating to them. That's the effect Shakespeare has in his plays. He makes people feel true emotion for the characters. In his play Romeo and Juliet, he tells us that they are going to die at some point. Even though we know they are going to die, we still don't want them to because we become attached to them. Shakespeare was an amazing play writer who was way ahead of his time, and he will be read for centuries to come.

Could be a
semi colon

Run-on

post-writing
sample

Name: Student # 30

Due Date: March 23-12 Per: _____

Score: _____/40

Edgar Allan Poe's "The Raven" teems with alliteration. (1) Define alliteration; then (2) define mood. (3) Next, identify several lines where Poe incorporates alliteration in the poem. Finally, (4) write a fully-developed paragraph that analyzes how alliteration creates a *suspenseful* mood in the poem. Stay within the lines [1 point]

1. The repeated use of a constant sound [2 points]

2. A state or quality of feeling at a particular time [2 points]

3. "wean and weary" (line 1) [1 point]

"lost and lenore" (line 10) [1 point]

"entreat and Entreat" (line 16) [1 point]

4. Alliteration is the repetition of constant sound. This form of writing creates suspense and a feeling of helplessness. Once upon a midnight dreary, while I pondered, weak and weary. This line gives off an ominous vibe because it is a really late dreary night. After the raven flies in then his alliteration use really picks up. "Prophet said I thing of evil - prophet still, if bird or devil. Whether Tempter sent, or whether Tempteressed thee here ashore." The suspense is so great that he runs after the bird finally, beaten he bids thee and so. My soul from out that shadow that lies floating on the floor shall be lifted - nevermore.

[6 points x 5]

5. In line 17, the word *entreat* appears to mean An unwelcomed person trying to enter my door [1 point for correct "guess"]

6. In line 43, the word *beguiling* appears to mean The bird made the man smile reluctantly [1 point for correct "guess"]