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# Gram Slam! Teaching Contextualized Grammar through Cooperative Learning

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Gram Slam! Teaching Contextualized Grammar through Cooperative Learning

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**Abstract**

Grammar in the classroom is often set aside as a minor part of the curriculum. This study analyzed why grammar is difficult to incorporate in the classroom as well as how that can be changed.  Strategies that might impact the way grammar is taught in the classroom include cooperative learning among small groups, Student Teams-Achievement Divisions (STAD), Teams-Games-Tournament (TGT), and online quizzing formats, such as Kahoot! and No Red Ink.  The mixed method study analyzed whether these strategies have an influence over student retention of grammatical rules and their usage in writing in the 9th grade Language Arts classroom.  As it turns out, teaching grammar through cooperative learning and competition does not have a significant effect on student improvement on grammar skills.  Students from the treatment group, however, demonstrated more enthusiasm for incorporating games in order to learn the concept.

English is a complicated language when it is written down.  Think about it.  There are many punctuation marks a writer could possibly use when writing: comma, period, quotation marks, question mark, exclamation mark, hyphen, colon, semicolon, apostrophe, or period.  These punctuation marks are crucial in writing because they have the power to change the meaning of a simple idea.  For example, the phrase "let's eat, Grandma" has a whole new meaning when it drops the comma and becomes "let's eat Grandma."  A life is spared by using a single comma.

So how many rules on how to use these tools can a writer list at the top of his or her head?  Use a semicolon to break apart two independent clauses rather than a conjunction; use the Oxford comma when listing, use an apostrophe for possession; and use an apostrophe "s" for a contraction.  Now factor in sentence structure and what could go wrong with that: sentence fragments, comma splices, and run-ons.  It is safe to say that the English language is complex even for those who own it as a first language.  There are many rules and regulations that it may be hard to keep up with sometimes.  These rules, however, help us communicate to one another in a way that makes sense both in writing and aloud.

Burke (2013) states that "grammar and our language use are inextricably connected--through writing, reading, and speaking--to our own sense of competency and our general identity" (p. 271).  Grammar, thus, is a key part of education.  Yet, it is often an iffy point for discussion among teachers.  The first issue is how to define grammar and the stigmas that trail closely behind it.

 Grammar can be punctuation, and because there are so many rules that follow it, those who are well aware of its correct usage are associated with perfection but of course,

not in a good way.  These people are able to find mistakes at an almost constant rate;

Truss (2003) puts it into perspective by saying that "we are like the little boy in *The Sixth*

*Sense* who can see dead people, except that we can see dead punctuation" (p. 3).

Sticklers, grammar Nazis, police are all labels assigned to people familiar with this area

of mechanics.  This way of thinking makes grammar a limitation more so than a way to

help structure communication.  When perfection is on the line, writers are "occupied with

the question of whether things are right or wrong, [and] they are even liable to feel

nervous when they speak" (Elbow, 1998, p. 168).  Grammar is, thus, labeled with a

notion to be correct almost all the time.  But grammar is not perfect; it is, instead, "an

ever-evolving set of rules for using words in ways that we can all agree on" (O'Conner,

1996, p. ix).

Grammar can also be syntax and word choice.  Unlike punctuation, this aspect of

grammar is considered to be beautiful and full of voice.  Short sentences and long

sentences swirled together in writing creates a symphony of wonder within a single

paragraph.  It is an art.  It is grammar.  When studying grammar in school, this is often

the part that gets set aside as a different subject.  Here is where traditional grammar

comes into play.

Traditional grammar is grammar taught typically in isolation.  Students simply

learn the rules.  There are no examples or application of how to use a rule in a sentence.

There lies a problem with students learning.  Compare these two methods:

1. *Place a comma before a conjunction when separating two clauses.*

2. *The dog chased the ball and he brought it back.*

   *The dog chased the ball, and he brought it back.*

*[The dog chased the ball], and [he brought it back].*

*Both clauses can stand on their own and are therefore independent clauses. Independent clauses that are connected by a conjunction (in this case "and") require a comma that separates the first clause from the conjunction and second clause.*

The first method of teaching was isolated rules. There are no examples that follow up with it; students should simply know and remember the rule for when they write. The second method of teaching was in context. There was an example that was broken down so that students can see and hear that there are two independent clauses and learn that there needs to be a comma to separate them.

Incorporating contextualized grammar in the classroom is essential to student knowledge. The next concern is how educators can teach this material effectively and efficiently to their students. As a teenager, I learned grammar through worksheets, and honestly, I can hardly recall the content that lesson was focused on. When I got to college, however, I learned grammar through having my classmates teach it to me and vice-versa. We worked our way up to demonstrating our knowledge of grammar through a game of Jeopardy. My motivation was high; I wanted to learn as much as I could to help my team beat my other classmates. In addition to that, we kept a journal to practice writing, and I was able to see personal improvement in my writing from start to finish. This method of teaching really stuck with me, and I can remember it vividly. As an incoming teacher, I thought that if that method could make such an impact on a college student, it could possibly impact high school freshmen as well. The purpose of this study was to determine if teaching contextualized grammar through small groups and

competition affects students' ability to retain grammatical rules as well as their ability to

use it in writing.

**Literature Review**

With increasing technology and various methods of teaching, the classroom is rapidly expanding its horizons to new possibilities and ways to teach different concepts, including grammar. There are websites that incorporate practice and competition into learning such as No Red Ink and Kahoot!. The purpose of this literature review is to go over the factors that will play a connected role in this research: grammar, cooperative group learning, and technology. The perspective on grammar in the classroom, the ways it has been taught, technology, and different classroom methods are taken into consideration during this literature review. Education Research Complete, ERIC, and JSTOR are all databases that contributed the studies and articles which range from 1966 to 2015. The earlier articles were selected to include in this literature review because they either discussed small group teaching methods or it was the beginning of research testing contextualized grammar.

**Grammar in the Classroom**

For many years, educators have been discussing the placement of grammar within the curriculum. With this type of material, "there is no clarity or agreement about the role of grammar in the English curriculum and it remains a strongly contested issue" (Jones, Myhill, & Bailey, 2013, p. 1242) and for many reasons too. Because they do not fully understand it, "high school teachers ranked grammar and usage as the least important skill students need" (Bullard & Anderson, 2014, p. 3). It is a hard concept to define, and it has many labels and sub-categories that add to its complex nature. For students, it is so tedious to absorb and remember every single rule and function of the English language that it is impossible. Watson (2015) revealed in her study that even

teachers "reflected difficulty in defining grammar, particularly in separating it out from other areas of language study" (p. 6).  Therefore, grammar is often left as a minimal part of the curriculum (Bullard & Anderson, 2014; Smagorinsky et al., 2011)

According to studies dating back to the 1950's, traditional grammar was deemed to have no effect on thinking or writing.  The reason for that finding was that traditional grammar was taught in isolation and without any application.  It appeared that because grammar was taught separately, "there seemed to be an inconclusive relationship--or perhaps, a lack of relationship--between the grammar taught and the supposed improvement in writing" (Bateman & Zidonis, 1966, p. v).  Myhill and Jones (2007) confirm this unfortunate truth because "it would appear that over fifty years of educational research on the teaching of grammar has failed to generate "evidence" to inform theory, policy or practice" (p. 62).  It can thus be concluded that one of those reasons for minimizing the importance of grammar and increased difficulty of implementing it now is that teachers do not have a solid method to teach it. Smagorinsky, Wilson, and Moore (2011) more recently noted that "the evidence against traditional grammar instruction as a pedagogical tool appears to be sufficiently solid that . . . few researchers have found the need to study grammar instruction" (p. 264).

**Teaching grammar and its effects.**  Multiple studies repeat the same response that there is little evidence to support that traditional grammar has an effect on students and their writing (Bates & Zidonis, 1966; Jones, et al., 2013; Smagorinsky, et al., 2011). Jones, et al., (2013) specifically note that it has been "concluded that there is no evidence that teaching grammar is of benefit in supporting writing development" (p. 1242).  So far, no theory or practice that can be applied in the classroom has been developed from

research (Jones et al., 2013, p. 1242).  When it comes to grammatical practices in the classroom, there is no clear approach to teaching it.

Some methods of teaching grammar are used not based on effectiveness but based on the appeal that they provide to teachers.  In their article, Hunt and Hunt (2006) talk about grammar warm-ups and how "they are prepackaged, easily reproducible, and can kill a good fifteen minutes of a forty-five- to fifty-minute class period" (p. 88).  Grammar can be convenient and easily taught to the test: fill in the blank, identify, rearrange.  The concern, however, falls on whether the students are retaining the information and are able to apply it.  Jones, Myhill, and Bailey (2013) established that these results--retention and application--depend on the type of intervention used in the classroom.

These studies, however, also suggested that just because there is minimal evidence does not mean that grammar has absolutely no potential for effect.  Andrews, Torgerson, Beverton, Freeman, Locke, Low, Robinson, and Zhu (2006) compiled a meta-analysis of studies to identify whether or not grammar affected students' skills when it comes to syntax and sentence combining. They found from other studies that syntax is hardly affected and that grammar lessons do affect sentence combining in some way (Andrews et al., 2006, p. 51).  These findings do not make a huge stride in the field of grammatical studies, but it does not necessarily mean that grammar is absolutely ineffective.  It is possible that "future researchers may wish to return to questions of the effectiveness of formal grammar approaches to improving writing, but will do so with the lessons of previous studies to build on" (Andrews et al., 2006, p. 52).  Jones, et, al., (2013) does that with their study of contextualized grammar and writing.  They reviewed previous studies including Bates and Zidonis (1966) as well as their own to formulate a

new study that focuses on "a theory of grammar centered upon rhetorical understanding"

(Jones, et al., 2013, p. 1245).  This theory allows for students to understand the language

and grammatical mechanics through writing.  The focus of the teaching needs to involve

writing in order for students to establish a foundation for grammar.  This is evidence to

support that more research and theories has the potential to expand this very narrow field

in the curriculum.

       **Grammar in context.**  As previously stated, grammar has been found to have

little to no effect on students in the classroom because grammar has been taught in

isolation.  According to Lawrence and Lawrence (2013),"'Teaching the grammar of

English is not simply a question of handing our clear, linguistic information to the

learners rather the success lies in using it with perfection in oral and written day-to-day

communications" (p. 66).  The information was not material that students can simply

memorize; the students have to be able to apply it, and understand why we structure

sentences or place punctuation in certain places.  If students are taught, for instance, to

use commas when the reader should take a breath, they are unlikely to grasp the concept

because "decontextualized grammar teaching that was unrelated to pupils' other language

work was likely to do more harm than good" (Andrews et al., 2006, p. 40).  Students

would be tempted to use commas in places where they do not need them.  In addition,

adding big words to the mix will not help students when grammar is taught in isolation

because "technical terms in grammar seemed to confuse rather than enlighten young

people." (Andrews et al., 2006, p. 40).  It is critical that educators teach grammar in

context.  Context can be as simple as teaching grammar in a unit when students are

writing.  Jones, et al., (2013) noted that "the embedded teaching of grammar relevant to

the writing being studied had an overall beneficial effect on students' achievement in

writing" (Jones et al., 2013, 1252).  With writing, students have a better foundation to

understand the material presented to them and have a chance to apply it on paper.

Jones, et al., (2013) confirms the hypothesis of teaching grammar in context has a

positive effect on students' writing (p. 1256).  It is crucial to note that "the results of this

study are important not only in providing robust empirical evidence of the potential

benefit of teaching grammar in the context of writing, but also in highlighting the

complex interaction effects between student, teacher, school and intervention (Jones et

al., 2013, p. 1257).  This shows that teaching grammar is not the only factor that

determines whether a student retains the information or not; it also depends on the

environment of the classroom and the dynamics between the teacher and students.

Theories that are developed about contextualized grammar are not a basic recipe to

follow, and the teacher must adjust it based on the students' needs.  Contextualized

grammar is still so broad of a concept that new ways or interventions can be tested in the

schools.

Factors that determine whether or not the grammar instruction will be effective is

not strictly limited to the intervention used.  Age and experience can also add to how

educators teach lessons on grammar.  Throughout their research, Jones, et al., (2013)

found that "experienced teachers, in particular, made more adaptations to the teaching

materials than others, often substituting in their own preferred ways of working . . .

[while] the least experienced teachers often followed the teaching materials more rigidly

and inflexibly" (p. 1255).  Smagorinsky, et al., (2011) follows a similar idea in his

qualitative study of a new English teacher who is teaching grammar and writing.  New

teachers come in prepared for the literature, and because they are weaker with grammar and writing instruction, these teachers "rely on supports such as curriculum materials--including grammar and composition textbooks and the preparation materials that accompany high-stakes assessments--to assist them in areas in which they feel unprepared" (Smagorinsky, et al., 2011, p. 266). Teachers new to the field tend to stay close to what they know from college which does not include a focus on grammatical strategy.

**Small Group Cooperative Learning.**

Often times, students will be placed in small groups to work with one another on assignments or concepts in the classroom. This collaborative form of learning has the potential to unlock a new avenue to teaching various materials. Bullard and Anderson (2014) explain that "a classroom that fosters a social environment in which students actively participate in a game with their peers may help students take responsibility for constructing their own knowledge" (p. 3). Studies in the past have found small group learning to be effective in the classroom. One study took a look at two groups: an experimental group that learned through cooperative learning and a control group taught by an instructor. Yamarik (2007) states that the research "reported that the experimental cohort achieved higher academic performance (retention, grades) and interest levels compared to an instructor-taught cohort" (p. 260). He confirms those results with his own experiment in which student interest, participation, and preparation were all positively impacted by cooperative learning (Yamarik, 2007, p. 265). The reason behind that type of success is because "the environment is open, interaction between group members is positive and nonthreatening, heterogeneous groups effectively open the group

to new and different ways of approaching the task of creativity, and that divergent

thinking is a result of the group process" (Golovin, 1993, p. 2). These results reflect back

to the interactions that occur between students, teacher, school, and intervention that

Jones, et al. (2013) stressed about in his study (p. 1257).

 Golovin's (1993) study even presents quantitative data that shows that working in

groups makes a difference in learning (p. 36). Although the results were not immediately

distinct, "the importance of group membership remained a strong influence over time"

(Golovin, 1993, p. 38). This further supports the idea that the environment of cooperative

learning has an impact on student retention of concepts.

 **TGT and STAD model.** Two forms of cooperative learning include Teams-

Games-Tournament (TGT) and Student Teams-Achievement divisions (STAD). With

STAD, students are broken up into teams with which they work with in order to complete

an assignment, or they can work on individual assignments to add points to their team.

With TGT, students are still in their teams only this time they compete with other teams

to gain points. These two work well with concrete concepts or material with that is based

off of correct and incorrect answers. Grammar can fall into that type of category, but

again, the field of research for grammar is limited at present time, and studies connecting

grammar and STAD or TGT are almost non-existent.

 There are studies, however, that connect STAD and TGT to student achievement

levels. Devries, Edwards, and Wells (1974), for example, have research that sets out to

identify whether TGT affects students of lower academic ability and how the approach

looks like with "educational contexts not before utilized" (p. 2). Their findings indicated

that " TGT made doing well in class more important to the students [and] created greater perceived efficacy" (Devries et al., 1974), p. 20).

What can be tricky with STAD and TGT is how students respond to the success or failure of the team.  Chambers and Abrami's (1991) study indicated that although "students low in prior achievement who work in successful teams can benefit academically, . . . students low in prior achievement who work in unsuccessful teams are at a disadvantage academically" (p. 145).  The study had the teams evened out with academic status (higher and lower), but not according to student ability.  Even with careful consideration of placing students, one might not be in the best position to learn.

There are ways to create motivation for students to do better within their groups. In their research, Yusuf, Natsir, and Hanum (2015) utilized a system of improvement points created by Robert Slavin (1995) for individual work.  These points increase by however many more points a student earns on a quiz compared to his or her prior results. Depending on the academic level, some students who are considered lower achievers might possess the intrinsic motivation to gain points through this individual improvement system.  Another study points out that "constructivist theories of cognitive development emphasize social interaction and student-driven knowledge construction as essential to the learning process" (qtd. in Bullard & Anderson, 2014, p. 3).  In these games, the students are the critical source for determining meaning of a subject.  The findings that their research produced was that STAD had beneficial results and that the "technique promoted student centered learning, in which the interactions were not only between teacher-student, but also between student-student" (Yusuf et al., 2015, p. 110).

**Mixing Games, Grammar, and Technology**

Teaching has come a long way from solely teaching from the chalkboard to active engagement with the students.  Learning grammar has the ability to shift into many forms: lectures, group work, projects, and even games.  Games allow for the students to actively engage themselves with the content that is presented to them.  It is an outlet for friendly competition with a goal to achieve accuracy, and "Students greet games with excitement rather than dread when faced with another round of exercises" (Bullard & Anderson, 2014, p. 4).

Although incorporating grammar games within the classroom is good in thought, when it comes to practice, teachers have mixed feelings about it.  Dur (2013), for instance, believes that incorporating grammar into games grabs students' attention and hooks them into the material.  On the other hand, Lawrence and Lawrence (2013) gained feedback from incoming teachers that were on the fence.  They explained their results that the neutral teachers were not for or against grammar games but were simply not prepared or experienced enough to judge this type of teaching that is geared toward student friendliness (Lawrence & Lawrence, 2013, p. 71).  Again, the issue of inexperienced teachers comes up into the mix of grammar.  The tendency for those teachers is to stick to the familiar which over the years has not involved competition and games.

The study conducted by Bullard and Anderson (2014) compared classes that were taught grammar through normal instruction and grammar taught through Jeopardy.  Although their quantitative data found that students from both groups improved on the posttest, the students provided feedback to support the engagement that games bring to

the classroom.  Students in the experimental group explained that the games "put it in

actual scenarios that we might see in real life that we could compare the rules with"

(Bullard & Anderson, 2014, p. 9).  On the other hand, students in the control group told

the researcher that they did not "know if there was anything in the lesson that would

make it stand out from other lectures" (Bullard & Anderson, 2014, p. 10).  The test scores

might not have been statistically significant, but the qualitative feedback defined the

perspective students have on the different learning formats.

Unlike Lawrence and Lawrence (2013), Dur's (2013) study went beyond

identifying opinions behind grammar games and tested students to analyze the results.

Some of her findings included a more positive and engaging classroom environment,

student success with certain games that they played in class, and students were able to use

prior knowledge of previous grammar lessons within the activities (Dur, 2013, p. 104).

When it came to comparing the test results to a control group who utilized a more

traditional style of learning grammar, there were no significant differences.  Dur (2013)

emphasizes that "traditional methods work too–generations of students acquired a lot of

knowledge by using them" (p. 105).  It has to be noted, however, that time goes on,

teaching and learning, much like technology, has to evolve to keep up with the needs of

society.

That brings in technological resources that can help advance the teaching of

grammar in schools today.  There are two resources that is a crucial aspect to this

research: Kahoot! and No Red Ink.  Unfortunately, because these programs are very

recent, there is not a lot of credible research to support their effectiveness in the

classroom. The information available includes descriptions of each resource and reviews from educators and students.

To begin, Kahoot! is an online resource that allows teachers to create educational games for their students to participate in. These quizzing games can be tailored to different educational concepts and is versatile when it comes to game day in class. It can be played by the students' phones or by using class-laptops which not only enriches students about the material covered but also with technology (Wang, 2015, p. 220).

No Red Ink is a quizzing format, but it was created as a program to help students with grammar skills. The website provides viewers with studies that are, as stated before, not entirely credible due to some of the characteristics of the article structure and content. For the purposes of this literature review and because No Red Ink will play a role in this research, it was important to include one of those studies. The research had No Red Ink replace normal grammar instruction within the classroom and followed up by measuring their progress through the measures of progress, MAP, Language Usage test scores (Perez, 2015, p. 2). Perez (2015) found that No Red Ink "usage is correlated with gains on the MAP Language Usage Test" (p. 7). Although it is not a reliable source, it still provides results that create a deeper curiosity in knowing whether this online resource can be an effective method to teaching or not. Like Dur (2013) mentions in her study, the atmosphere in the classroom can get dull sometimes, and games are a way to engage the students with the material (p.104).

**Conclusion**

Grammar is not a perfectly shaped concept. There are many rules as well as exceptions and just as many categories for everything punctuation mark and clause to fall

under.  It is an element that helps make people communicate and actually make sense to one another both aloud and on paper.  It is an important skill to learn early on and to keep building.  It is, however, a difficult concept to grapple and share with students.

Previous studies from the twentieth century failed to come up with any solid theories or practices to utilize in the classroom.  Grammar was found to have no distinguished effect on students and their writing because it had been taught in isolation. Grammar concepts were thrown around the classroom without any proper application or practice; they were simply rules for students to memorize.  As this literature review reveals, there is a huge margin for trial and error for future grammar instruction.

Teaching grammar in context has been found to affect student writing and retention of rules and concepts.  If grammar is presented with examples, and students are given ample opportunity to apply what they have learned, the lessons will stick with them.

Writing is not the only way to keep grammar in context.  Technology has changed the face of many classrooms and new methods of teaching old concepts has emerged. Dur (2013) presents her audience with the idea that "the modern methods make students put their brain to use, communicate better, engage in conversation, thus acquiring the new knowledge during the English classes at school" (p. 90).  Modern Methods including STAD and TGT in the classroom and, more recently, online educational games.  If grammar is put into context through these innovative methods, the field for teaching it as a whole can be an engaging process that can lead to student achievement in the classroom and with writing.

**Methods**

As identified in the literature review, there is limited research that supports how grammar should be taught in the classroom.  It has been found that grammar is most effective when taught in context, particularly with writing.  This action research attempted to further expand that effective way of teaching through teaching contextualized grammar accompanied with small groups and competition.  The research ultimately aimed to answer the following question: what is the effect of cooperative learning and a competitive environment on student retention of grammar and usage in writing?

**Participants**

This study was conducted in two 9th grade Honors English classes.  The site where the research took place was a suburban school that teaches grades 9-12 on a block schedule (X and Y Days).  The school has a Gifted and Talented program for students who are identified as gifted as well as a bilingual program for ELL students.  The school has a student population that reaches to roughly 2,000 students—predominantly white students—and about 22% of that student population in the school are eligible for Free and Reduced Lunch.

For this particular study, there was a total number of forty-two students split up between two ninth grade Honors English classes.  The first class (2Y) had a total of twenty-three students, twenty female and three male students.  Six of those students (five female and one male) were classified as gifted students.  The second class (4X) had a total of nineteen students, seventeen female students and two male students.

**Research Methods**

The primary form of data was quantitative and was collected through a pretest and posttest. The two classes received the same pretest and posttest to determine the outcome of the research. This ensured that both classes were given equal opportunity to demonstrate knowledge. The test contained a total of four parts: semi-colons and colons, active and passive voice, commas, and subject/verb agreement. A paired t-test was used to analyze two dependent variables in the pretest and the posttest. Those variables were retention of the material and the ability to apply the rule in writing. The paired t-test then determined whether or not cooperative learning in a competitive environment had an effect on students' ability to retain grammatical information and to use it in writing. In addition to the two primary tests, check-point quizzes, which were created through the online program No Red Ink, also provided comparative data during the research period. Both forms of data measured retention of the material learned.

Qualitative data was also collected through the use of semi-structured interviews. A total of three students from each class were randomly selected to participate in an interview before and after the research period. This form of data measured the students' perspective of both retention and their ability to use the grammatical rules in writing.

The final form of measurement was in the form of a journal that students kept throughout the research period. This form of data measured if there is any effect on students' personal writing. This journal provided the opportunity for students to execute what they have learned in the classroom, and measured their improvement as a writer. The journal was an out of class assignment. Journals from both classes were analyzed through error analysis that will specifically look for semi-colon/colon and comma usage.

**Data Analysis**

This research was a mixed methods study that centralizes around quantitative data over qualitative data.  The 2Y class was the control group, while the 4X class retrieved the treatment.  Before the research period began, students from both classes took the pretest on grammar to measure where they stood when it came to the material.  Three select students from each class (total of six) were interviewed.  Their responses contributed qualitative feedback on how they felt about the topic of grammar.  The conclusion of the research period consisted of the posttest and follow-up interviews with the same three students from each class.

**Procedure.**  The action research began with the same factors for both classes. The research period initiated with a pretest and then go into the grammatical concepts. The research period followed the pattern in Figure 1.

Figure 1. Pattern of grammar concepts throughout the research.

| Pretest | → | Semi-Colon and Colon | → | NRI | → | Active/Passive Voice | → | NRI | → | Commas | → | NRI | → | Subject/Verb Agreement | → | NRI | → | Posttest |

Although the goal was to learn one grammatical concept per week, this timeline was flexible depending on the students' needs and primary instruction time.  If in the pretest, the students demonstrated high understanding, then the class moved into more advanced forms of application of the grammatical rules.  This included creating sentences and editing incorrect ones.

Both classes began the same way before the pretest and then went into their different learning formats—groups and individual.  First, three students from each class were pulled aside for a brief interview to find out the perspectives of students on the

subject of grammar.  Next, a pretest was administered to both 4X and 2Y to establish

what students have learned during their time in school.  Following the pretest, students

were given their journal assignment and rubric sheet that they wrote for approximately

once a week outside of class.

   **Treatment group.**  Following the pretest, interviews, and journal assignment,

4X established their small team groups that they were in throughout the research period.

The grammar lessons for these students consisted of working in their teams to achieve

accuracy.  Lessons primarily were centralized around students teaching certain

grammatical rules to their teammates so that their entire group understood a concept.  It

was in this way that the students created meaning for themselves, and saw how it works

with writing.  Following the initial learning of the grammatical concept, students engaged

in speed competitions.  These speed competitions consisted of each group receiving the

same worksheet face down on the desk.  Students completed one section at a time, and

the first group done was given the opportunity to give answers for points.  If every

question was correct, the full amount of points were given.  If they missed a problem, the

other teams got a chance to raise their hands to steal that point.  Then the students

repeated the same process for the next section.

*Table 1: Guidelines for Speed Competition Points*

| # of Correct Responses | Points |
|---|---|
| 5 | 5 |
| 4 | 4 |
| 3 | 3 |
| 2 | 2 |
| 1 | 1 |

  **1 Point Awarded for each steal**

Points will also be awarded during the individual No Red Ink quizzes.

*Table 2: Guidelines for NRI Points*

| *Score* | *Points* |
|---|---|
| Perfect | 10 |
| -2 | 8 |
| -4 | 6 |
| -6 | 4 |
| -8 | 2 |

Kahoot! also allowed for students to add points to their teams in review competitions.

**Control group.** Students in 2Y completed the same grammar lessons in the form of warm-up activities at the beginning of class.  This was individual work followed by an explanation about the grammar rules through examples before the class gets into the primary instruction for the day.  These students also participated in No Red Ink assignments to monitor their progress with the material at the end of each grammar use instruction.  Throughout the research period, students kept a journal with various prompts.  This allowed for the student to free write and apply some of the grammatical rules learned in class.  Following the research period, 2Y students completed the posttest.

**Results**

**Pretest/Posttest**

**Treatment group.** The treatment group (4X) consisted of nineteen students, two male students and seventeen female students. The class average did increase by the end of research period from 78.5% to 80.5%. The *p*-value, however, did not reflect any significance for this group. The *p*-value was equal to 0.56.

*Figure 2. Treatment Group Pretest/Posttest Averages*
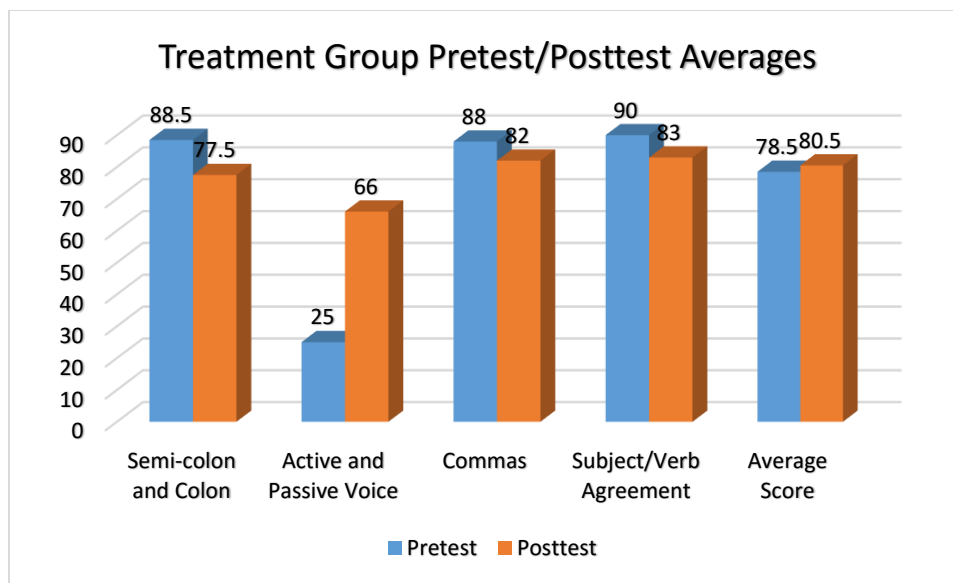


Students did improve on active and passive section of the test. The class average went from 25% to 66%. The semi-colon and colon section took a slight dip during the posttest. That average went down from 88.5% to 77.5%. Commas and subject/verb agreement also decreased from the averages of the pretest (88%-82% and 90%-83%).

Table 3 shows the pretest and posttest averages that were found during this study.

Table 3: *Treatment and Control Group Pretest/Posttest Averages*

| Section | T. Pretest | **C. Pretest** | T. Posttest | **C. Posttest** |
|---|---|---|---|---|
| Semi-Colon and Colons | 88.5% | **80%** | 77.5% | **85%** |
| Active and Passive Voice | 25% | **20%** | 66% | **85%** |
| Commas | 88% | **82%** | 82% | **80.3%** |
| Subject/Verb Agreement | 90% | **83.1%** | 83% | **76.3%** |
| Class Average | 78.5% | **72%** | 80.5% | **81%** |

During the pretest, students struggled the most with active and passive voice. On more than one occasion, students responded to the free write prompt "*Create your own sentence using PASSIVE voice*" with either a past tense sentence or not recording an answer at all. A few examples of the past tense sentence responses have been charted in table 4**.**

Table 4: *Treatment Group Passive Voice Errors*

| |
|---|
| "I heard a crowd who shouted out the lyrics to a Neck Deep song at this festival." |
| "I was in love with the Wiggles when I was younger." |
| "She sat on the sofa." |
| "After the bell rang out, the student in the building fled from the classroom." |

There was also error present within the subject/verb agreement section of the test. This error was, however, not a misunderstanding of the concept but a misunderstanding of the directions and example problem. Instead of taking the infinitive and conjugating it to agree with the subject, students left the verb in its infinitive form and improvised with

another verb such as to be or to like.  Students would also make the subject of the

sentence the direct object of the sentence and create a new subject such as "I."  The

subject/verb agreement was not incorrect.  The other sections on the test appeared to be

more familiar to students.

        **Control group.**  The control group (2Y) consisted of twenty-three students, three

male students and twenty female students.  The class average for the control group went

from 72% to 81%.  The *p*-value suggests that there is a significance within this part of the

study.  The *p*-value equals 0.00041.

*Figure 3. Control Group Pretest/Posttest Averages*
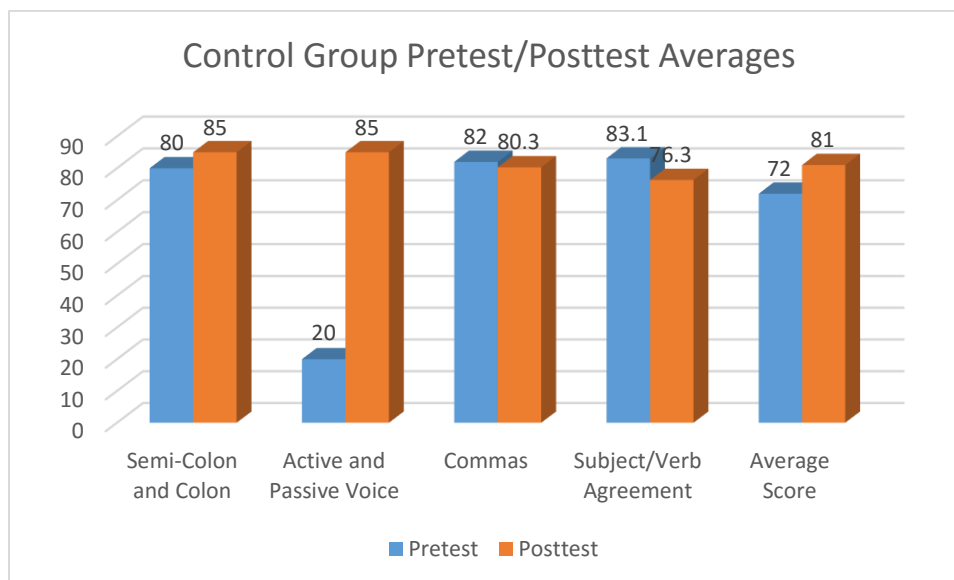


The control group also greatly improved in the active and passive voice section of

the posttest.  Their class average climbed from 20% to 85%.  Semi-colons and colons

increased from 80% to 85%.  Commas dipped down slightly during the posttest from

82% to 80.3% as well as subject/verb agreement (83.1%-76.3%).  Again, there is a low

average for accuracy in the passive voice section for this group.  For the section that

prompted the student to create their own sentence in passive voice was either written in past tense or left blank.

Again, there is a low average for accuracy in the passive voice section for this group.  For the section that prompted the student to create their own sentence in passive voice was either written in past tense or left blank.  Some of their error samples have been documented in Table 5.  Compared to the treatment group, the averages of the control group leave a little bit more room for improvement during the research period.

Table 5: *Control Group Passive Voice Errors*

| "Alyssa was preparing for the race ahead by taking her stance." |
| --- |
| "The stairs were steep, and I had to catch my breath before heading to my next class." |
| "They ran a half marathon in under 2 hours." |
| "My dog likes to play outside." |

Much like the treatment group, the control group missed some of the subject/verb agreement questions due to misunderstanding the directions.  They also left the verb in its infinitive verb and added in another verb. Students in this group did not change the intended subject of the sentence.  The subject/verb agreement was not incorrect.  The other sections on the test appeared to be more familiar to students.

**No Red Ink**

In order to measure students' immediate retention of the material, students from both groups took the grammar checkpoints through *No Red Ink.* This interactive website recorded student responses to each topic and graded them based on how well they did. The data, as seen in Figure 4, shows that the treatment group performed better during the checkpoint quizzes than the control group.

*Figure 4. No Red Ink Average Scores*



**No Red Ink Checkpoint Averages**
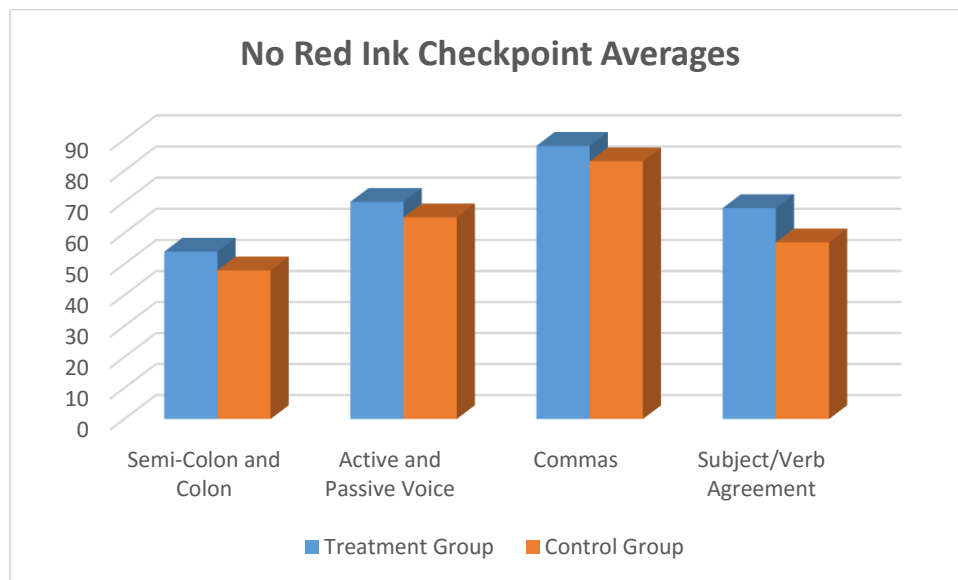
**I. Semi-colons and colons.** The treatment group showed the most retention of the material after the learning period with an average of 54% rate of accuracy. The control group on the other hand had an average of 48%. Despite this 4% difference, the *p*-value (0.60) was found to not be significant.

**II. Active vs. Passive Voice.** For active and passive voice, the treatment group showed the most retention of the material with an average of 70% rate of accuracy. The control group followed behind with a 65% rate of accuracy. The results of the test did

not, however, reveal a *p*-value that was significant.  The *p*-value of these two groups was equal to 0.59 and therefore, not significant.

      **III. Commas.**  As for the comma portion of this research, the treatment group showed the most retention of the material with an average of 88% rate of accuracy.  The control group followed behind with an 83% rate of accuracy.  The results of the test did not, however, revealed a *p*-value that was significant.  The *p*-value of these two groups was equal to 0.51.

      **IV. Subject/Verb Agreement.**  For the last checkpoint, the treatment group showed the most retention after the learning period.  Those students had an average of 68% rate of accuracy while the control group showed a 57% rate of accuracy.  This part of the research proved to be significant with a *p*-value of 0.04.

**Writing**

      **Treatment Group.**  Fifty-six journals (four per student) were collected by the end of the research period.

      ***Semi-Colons and Colons.*** Twenty-three percent of the total amount of journals contained a semi-colon or a colon.  Out of that percent, only forty-six percent of students used the semi-colon or colon incorrectly.  In Table 6, there is a few samples of the errors present in the collection of journals.

Table 6: *Treatment Group Errors (Semi-colons/Colons)*

| | |
|---|---|
| "Hank lied down with his nose to the wall, and my first thought was**;** oh no, now I have to give him a bath!" | The first clause in this sentence is a statement that is left hanging for a follow-up clause.  The second clause is a thought that the narrator has which acts like a quote from that person. Therefore, a colon is needed to separate those two clauses and not a semi-colon. |

| | |
|---|---|
| "Standing in the doorway are Niall, Louis, Liam, and Harry**;** the four members of my most favorite boy band, One Direction." | The writer in this sentence uses a semi-colon to separate one independent clause and one dependent clause. **Semi-colons are used to separate <u>two independent clauses.</u>** Because the last sentence is dependent, it needs to have a colon instead. |

*Commas.* The error found within this portion of the research was not the misuse of commas but the lack of. There were numerous areas in which students should have added a comma but did not. All fifty-six of the journals used commas, and only twenty-one percent left commas out of where they should have been.

Table 7: *Treatment Group Errors (Commas)*

| | |
|---|---|
| "After asking a few more questions the boys take me into the other room and I get pictures with the boys and my best friend and we talk for a little while." | This sentence is missing three commas. One is needed after the prepositional phrase "After asking . . ." and one after "room" because the next part of the sentence is an independent clause and it can stand on its own. Another comma is needed after "my best friend" |
| "We both split up and I find some rusted pots and tools, while Jane finds a lot of wood." | There are two independent clauses within this sentence that are connected by the conjunction "and." Therefore, there needs to be a comma after split up. |

**Control Group.** Forty journals (four from each student) were collected from the control group.

*Semi-Colons and Colons.* For this group, only twenty percent of the journals contained either a semi-colon or a colon. Out of that percentage, sixty-two percent either did not use the semi-colon or colon correctly. Table 8 displays error samples found within these journals.

Table 8: *Control Group Errors (Semi-colon and Colon)*

| | |
|---|---|
| "No person roamed the streets; no animal." | Semi-colons can be used to separate two independent clauses.  In this case, the first clause is independent while the second clause is dependent.  Therefore, a semi-colon should not have been used.  The writer needs to rephrase this sentence/idea. |
| "One boy and two girls; I plan to take lots of family pictures." | Again, there is one dependent clause and then an independent clause so a semi-colon should not be used.  The two ideas are also not related to each other and do not make sense in the same sentence. |

*Commas.* Out of all the journals for the control group, ninety percent of them

contained commas.  Out of that percentage, thirty-eight percent either used a comma

incorrectly or left it out where there should have been one.  Table 9 shows some samples

of these errors.

Table 9: *Control Group Errors (Commas)*

| | |
|---|---|
| "I gesture to her to come over to me but she stays put, "There is someone downstairs" she says in whisper." | This sentence misuses a comma and is also missing two.  It should also be broken up into two sentences.<br>**Correction:** I gesture to her to come over to me**,** but she stays put**.**  "There is someone downstairs," she says in a whisper. |
| "We were putting on jackets to come inside, and taking them off to go outside." | This sentence contains one independent clause joined together with the conjunction "and" to a dependent clause.  No comma is needed to separate the two. |

**Interviews**

Before the pre-test, three students were randomly selected to participate in a pre- and post-interview.  Those students answered a short range of questions that was meant to assess their prior knowledge at the beginning of the research period and to also assess
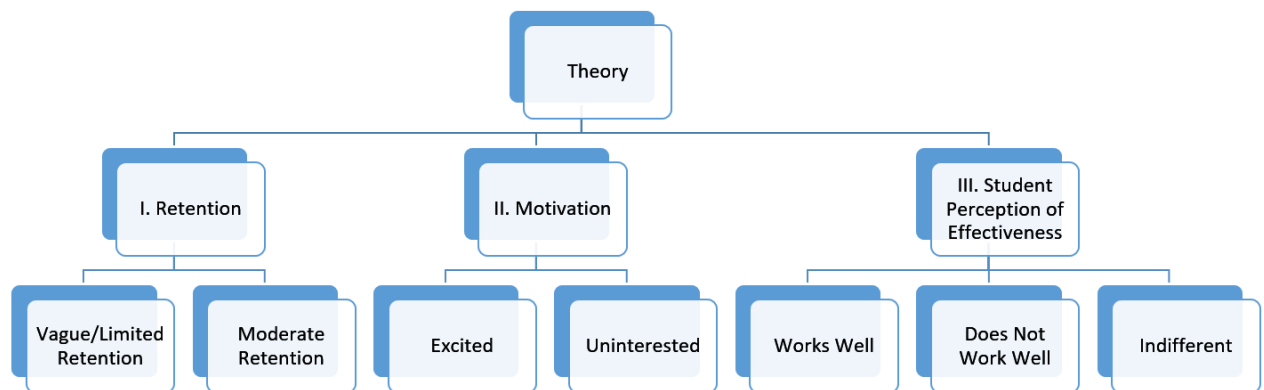


*Figure 5. Interview Coding Chart*

their retention of the material at the end of the research.  Students' physical behavior was also observed during the interview.  Behaviors such as body language, tone of voice, and rate at which they were able to respond to the question were noted.  The interviews were coded according to three themes: retention, motivation, and student perception of effectiveness.

**I. Retention**

Students were asked to verbally respond to a few questions that tested their retention of the material.  The pre-research interview unveiled what they had known before the experiment, while the post-research interview revealed if they were able to retain some of the rules that they had learned.

***Vague/limited Retention.***  The experiment group exhibited some limited remembrance of grammar rules as they had learned in the past.  Some students, including

Robert (pseudonym), from the treatment group were unable to give some examples of grammatical rules. When asked to recall grammatical rules, he replied with "words, and sounds of different words and like poetry basically everything to do with English." This response demonstrated vague knowledge of grammar as a whole which suggests vague retention.

In the control group, vague retention was also present in the prior knowledge of those select students. For example, Rachel (pseudonym) associated grammar with "school, pencil, and English." Her connection also failed to identify rules associated with grammar. Candace, who is also in the control group, associated grammar with "poems . . . like, a lot of personification, and long words, basically." This student confused this concept with that of literary terms also associated with English class. When asked to talk about some grammar rules that she knew, Candace paused to think and then replied with alliteration. Again the two concepts of grammar and literary elements, in this case, had been confused which suggested a limited prior knowledge of grammar to start with.

During the post-research interview, there were still students who did not retain any of the grammar rules learned throughout the research period. Rachel, again, connected grammar to "school, punctuation, and English class." Her connection for the second interview also failed to identify rules associated with grammar that the class had covered in their warm-ups. Candace had a similar interview. She associated grammar with "figurative language, commas, and semi-colons." Although she was able to identify some punctuation marks, she was unable to follow up with rules that those marks applied to in the next question. She merely paused and shook her head when prompted to elaborate on some of those rules that go along with commas and semi-colons.

*Moderate Retention.*  During the pre-research interview, the experiment group

showed some moderate retention of grammatical material.  Sydney (pseudonym), for

example, was able to associate grammar with "commas, writing, and using it correctly."

By having these terms correctly categorized as being related to grammar and by being

able to state that commas are used to separate items in a list shows moderate, prior

knowledge of some of the material.  Another example is Angela (pseudonym) who

replied with "Like commas, and like, wording in sentencings and how you use it, or use it

in a story . . . [pause] always put the colon when you are listing stuff, and use commas to

separate things.  That is pretty much on the top of my head."  Angela could remember

two types of punctuation marks and two rules associated with them.

The control group was also able to demonstrate moderate retention of grammar

rules learned before the research period.  To begin, Billy was able to state the rule that

"when someone owns something, you have to put an apostrophe, like an apostrophe's.'"

As for the post-research interview, both students from the treatment group and the

control group exhibited moderate retention of the material learned during the research

period.  The first example was from Billy, who again was part of the control group.  He

paused to think after being asked to talk about some grammatical rules, but then replied:

"you have plurals, you put an apostrophe's,' if you have a listing, you put a colon, [and] a

semi-colon separates two independent clauses."  Although this student talks about

irrelevant material that was not covered in the research, he was still able to talk about

some of the rules that were covered in the grammar warm-ups.  Rules such as introducing

a list by inserting a colon is one; separating two independent clauses with a semi-colon is

the second.  Sydney, from the treatment group, was also able to come up some

grammatical rules as well during the post-research interview.  She said "when you go to start a list, you put a colon before it or if you are about to start a quote, put a colon before it.  You also put commas in a series of lists."  She added in the rule of using a colon to introduce a quote.  From the treatment group as well, Angela incorporated her knowledge on passive voice.  She stated that "if it is passive voice, you use . . . 'by something.'"  Passive voice during the research period was definitely an area that students struggled with the most, and she was able to retain and mention that aspect during the interview.

### II. Motivation

*Excited.*  During the pre-research, the treatment group was prompted with the anticipation of working in teams in the environment of a competition.  The responses varied, but they all reflected a positive response.  With the idea of working together in a team, Angela, for example, said, "I think it is more fun to learn and to have other people to bounce ideas off of and, like, figure out the different parts of grammar." Angela also followed up with her thoughts on a competitive environment by saying, "I like it because I like the challenge.  I'm very competitive . . . [and] to be up against other kids, it pushes you to further learn more about [material]."  Robert also agreed with Angela's idea by saying, "I'm a pretty competitive person so I like competition."

During the post-research interview, the treatment group showed more enthusiasm to the method with which they learned grammar than they had during the anticipation time before the research had begun.  Angela, for instance, explained her thoughts on learning in a competition: "I think it helps you strive to do better and do good work because you are part of a team, and they rely on you to do good."  The manner in which she responded to the question was confident and eager to get her thoughts across.  She

also laughed during the interview when asked if working in teams during a competition

impacted her motivation. She responded "Yes! I'm very competitive so [laughs]."

Sydney, on the other hand, compared it to a more average way of learning grammar. She

said, "[learning through competition] made it a lot more fun than it would have been if

we had just sat there and just wrote stuff down."

     ***Moderate to Uninterested.*** For the pre-research interviews, students were asked

how they perceived the concept of grammar as a whole and whether it had a positive or

negative connotation that tagged along with it. Billy (pseudonym), who was from the

control group, and Sydney (pseudonym), who was from the treatment group, added

another factor into student perception: the connotation they associate with the word

grammar. These two students both associated the term grammar with perfection and

being correct. Billy, for example, said "[grammar] has got to be correct like when you

are writing and make people know what you are talking about." And when asked

whether he liked grammar or not, this student expressed a very straightforward answer

that he did not like the grammar aspect of English. Much like Billy, Sydney also

expressed dislike for grammar as well. When asked how she felt about grammar in her

pre-research interview, Sydney responded that she felt more negative towards the topic

because "a lot of it is harder to think about when you have to think harder about it and

pay more attention to it, and it is a lot of small details." Her interview touched on the

topic that there are so many grammatical rules that they become tedious to learn and

remember.

     During the post-research interview, the students selected from the control

demonstrated less enthusiasm toward learning grammar through warm-ups. Their

answers were dry and straightforward. When asked how those warm-ups affected his writing, Billy responded that "it made [him] realize where I need to use the specific quotations, commas, colons, semi-colons." Candace, however, gave a more vague response to that same question by stating "[grammar warm-ups] help you improve when you're writing and makes it occur more." The response did not have a lot of information which reflects the warm-ups not having a strong effect on the student's learning.

### III. Student Perception of Effectiveness

Student perception of effectiveness varies within both the control group and the treatment group before and after the research period. During the pre-research interview, students were asked how they learned grammar in the past. Students either gave the response of doing grammar worksheets or not remembering at all. During the post-research interview, students were asked if their method of learning grammar was effective in their opinion or not.

*Works Well.* During the pre-research interview, some of those students stated that those worksheets were relatively effect according to their own opinion. Angela, from the treatment group, said, "after [the teacher] taught it, they gave us stuff to practice with and a hands-on, like, figure out the pieces of grammar." According to her grammar worksheets proved effective. Sydney felt the same way as well by stating that method "made you remember a lot of things that you would normally skip over." The control group did not have students who contributed to the idea that grammar worksheets worked well during the pre-research period.

In the post-research interview, students were asked if their method of learning grammar was effective or not. The treatment group's response was that it had been

effective from their point of view.  Angela responded that learning grammar through

cooperative learning "helped to get different points of views out and to teach [her] what

[she] was doing wrong."  Her classmate, Sydney, also added that it impacted the way she

thought about writing.  She said "when we would write stuff in class . . . I would

remember where you put the colons and semi-colons."

The control group also responded positively about the effectiveness of learning

grammar through warm-ups.  For instance, Billy stated that grammar warm-ups "helped

because it helped teach [grammar] better by having something right in front of you."

This relates back to having a hands-on experience to practice grammar.  Candace also

added that these warm-ups are "needed more because it is actually helping me with

writing."

*Does Not Work Well.* During the pre-research interview, some students from both

the control group and the treatment group felt like the grammar methods that they had

been taught before did not work so well.  For instance, Candace, from the control group,

stated that "we learned a lot in English, but they never taught [grammar] thoroughly

enough to understand it.  Worksheets maybe once a week, but they never did a full

lesson."  When asked if those worksheets helped her remember grammatical rules or not,

she replied that they did not.  Robert, from the treatment group, felt similar toward the

ways that he had learned grammar in the past.  He said "it was iffy, I think we should

have more papers."  Again, his response indicated that the topic was skimmed upon and

not a lot of emphasis was placed on grammar concepts.  Rachel, from the control group,

also noted that learning grammar through worksheets made it difficult to remember the

rules; she said "it was hard to remember, but for the most part it was easy."

In the post-research interview, did not show any indication that either method did not work so well.

*Indifferent.* The only students who showed indifference were from the control group during the post-research interview. The first example of this can be analyzed in Billy's interview. When asked if he felt that teaching grammar through warm-ups helped him remember the rules, he replied "kind of, yeah, a little bit." His answer lacked conviction as if he were uncertain about the answer. Rachel also had a response to the same question that had little confidence. In her post-research interview, she said, "I mean, I don't know . . . I actually like doing [grammar warm-ups], I just like it better." When prompted what she liked it better than, the student was unable to come up with a response.

**Discussion and Conclusion**

The data showed a variety of possible answers to the question *what is the effect on cooperative learning and a competitive environment have on student retention of grammatical rules and its use in their writing?* The method of cooperative learning and a competitive environment has no significant effect on student retention of the material and its use in writing. It did, however, create a positive outlook on the subject of grammar and made students more motivated to work with grammar according to their verbal feedback.

Based off of the test scores, working on grammar warm-ups individually proved in this case to be more effective student performance. Working independently allows for the students to quietly work on their own skills and own learning ability for new material. Analyzing the scores from the pre-test from both groups indicates that the control group had a wider margin to improve upon (class average for the experiment group was 78.5% while the control group's was a 72%). It should also be noted that the control group had the lowest pre-test score of 52% while the treatment group's lowest score was 72%.

The journals were a chance for students to practice what they learned in class. Each journal gave students a prompt that allowed for them to expand creatively upon while still being able to improve their writing abilities. The data analysis focused only on comma, semi-colon, and colon usage. Both groups had a similar percentage of papers that included either semi-colons or colons. The treatment group had twenty-three percent of its journals contained either a semi-colon or colon and the control group had twenty percent of its journals containing either one. This shows that students are willing to try out using this type of punctuation even though some of them were used incorrectly. The

punctuation usage might also just reflect that maturity level in writing.  These are high

school freshmen who, based off the interviews, have learned some grammar concepts in

the past including commas.  Given that the research took place in the middle of the year,

students from both classes also had written a few essays by the time they had to write

journals.

The behavior and responses found in the interview portion of the research

reflected each class's overall feelings about the manner in how they were learning

grammar.  The treatment group was more excited to participate in the games and got

really competitive at some points during the research.  The control group, on the other

hand, seemed more indifferent to learning grammar.  Each time they were given grammar

warm-ups, they groaned and went through the exercise.

**Limitations**

One form of limitation was time constraints due to both weather and other

academic content.  We were out of school for a week and a half which impacted the time

in which this research could be conducted.  Expanding on individual grammar concepts

became limited; students had more time on only two concepts—semi-colons/colons and

active/passive voice.  In addition to weather restrictions, the students were also moving

through poetry and a *Romeo and Juliet* unit during the research period.  I encouraged

students to shift quickly between grammar time and time dedicated to literary content.

This worked well for the most part, but some students would often be concerned with

assignments from the literary content during the time dedicated to learning grammar.

Some students were, therefore, distracted at some points during the research period.

Another factor to incorporate in this part of the discussion is the cooperative learning aspect of the treatment group. The treatment group was given the same information sheet as the control group, but instead of having the teacher walk them through each step, each group was responsible for teaching one another the concept. In class observation of this activity showed that students were off topic and talking about other matters rather than the grammar rules. This was a reason that could have potentially impacted the students' overall performance and explain why their method was not as effective as the individual grammar warm-ups.

Academic levels were also a limitation. Those levels definitely varied within these two classes, but each class did improve to some extent. Most students in both classes were having trouble with passive voice. As stated before, students either left it blank that part of the test blank or wrote a sentence that was past tense. Passive voice is a concept that is easier to understand if the opposite, meaning active voice, is learned alongside of it. Students write both active and passive voice and are not entirely conscience about it; learning this concept puts a name tag on both types of sentences. It is in that way that students are able to differentiate the two from one another. After learning both active and passive voice, each class was able to increase their class average for accuracy in that section of the test. The treatment group increased their average from 25% to 66% and the control group increased from 20% to 85%. Individually working on grammar warm-ups, thus, has a higher rate of improvement in that section over learning grammar through games and teams.

**Further Research**


     If this study were to continue on, the researcher could follow up on these students and ask if the rule has stuck with them over a certain period of time.  Then they can see if that retention is effective in the student's writing by analyzing a sample of the student's writing to see if they were able to execute certain grammatical rules.

     Since this study took place in two classrooms that had students who were in advanced English classes, it would be interesting to see if this study has any impact on students in lower level classes.  Often times, students in lower level English classes lack motivation to learn at the level of advanced-level students.  Gram Slam can help incorporate a game-like scenario in which these students can develop motivation to compete against their classmates while also learning grammar.  It could impact the way they perceive writing and English class for the rest of their high school career.

**Implications**

     Based off of this research, the following conclusion and implications have been made to answer the question *what is the effect on cooperative learning and a competitive environment have on student retention of grammatical rules and its use in their writing?*

     The quantitative data developed in this research suggests that learning grammar through cooperative learning does not impact student performance as compared to learning grammar through warm-ups.  In fact, the control group who worked through grammar warm-ups improved more than the treatment group.  It has to be taken into account, however, that both groups improved their overall score average.

     The qualitative data told a different story from the student perspective.  Students in the treatment group were more excited and were able to retain certain grammar rules

covered during the research period. Those students were able to recall those rules on the spot, whereas the control group students could not. It has to be noted, however, that the retention is short term recollection. The control group students also were not as motivated to participate in their grammar activity as the treatment group. The treatment group got very competitive during the Gram Slam competitions. The control group would often sigh or give slight protest when prompted to get started on their warm-ups.

Maturity level is definitely a factor that impacted this study. As previously stated, the behavior of the treatment group was observed as being somewhat distracted during their cooperative learning portion of the grammar activity. This is normal for this age level to get off topic. This could possibly mean that this method should be implicated when students are older and at a higher maturity level (11th and 12th grade).

Despite not being as effective as grammar warm-ups, this method of teaching grammar could potentially create a strong foundation for beginning writers. Grammar is something that is continuous and builds as students become more skilled at writing. For freshmen in high school, it is essential that they establish a strong foundation for those grammatical rules that they will use and get better at throughout their high school career and possibly beyond that. Learning grammar through cooperative learning and a competitive environment seems to have a positive effect on students' approach to grammar. It is more game-like and easier to take in according to the students that I had a chance to interview. If this method has the same effect on students' writing as learning it through warm-ups, then it might be a useful tool to use in the classroom because it drives motivation and an interest in the subject through competition.

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**Appendix A**
Student Assent Form: Control Group

Dear Student,

I am very excited to be your student teacher throughout the spring! For this half of the school year, I will be conducting research on grammar in the classroom. I am writing this letter to ask if you would like to participate in my study and to explain what you would do if you agree to participate. Your participation is completely voluntary, but please read this letter before deciding whether to participate or not.

You will have warm-ups that focus on various grammatical rules. While you work on these warm-ups, I will be collecting information for a research project that I am doing to see how retention of grammar rules is affected by the way that it is taught. During my study, all students in the class will do the same activities, tests and assignments. The only difference for those who agree to participate in the study is that I will interview three students to see how you feel about this way of learning grammar and I will use your tests and assignments as part of the data for my study.

*Your parents were given a letter about taking part in this study. If your parents did not allow you to participate in this study, you will not be asked to sign this form. However, if your parents did allow you to participate, I encourage you to participate in this study.*

*You do not have to be in this study. No one will be mad at you if you decide not to do this study. Nothing bad will happen if you take part in the study and nothing bad will happen if you do not. However, if you decide not to participate you still do all of the work that we will do; I will just not use your work in my research. Even if you start, you can stop later if you want. You may ask questions about the study.*

*If you decide to be in the study, I will keep your information confidential. This means that I will not use your names or the name of the school in anything I write and I will not reveal any personal, identifying information about you.*

*Signing this form means that you have read it or have had it read to you, and that you are willing to be in this study.* If at any point you have any questions, please ask me!


Thanks,

Ms. Rampey

I have been read the above letter, all my questions have been answered, and I agree to participate in the project.


_____          _____

(Student Signature)                                    (Student Print Name)


_____

     (Date)


I, _____Courtney Rampey_____ will keep your names confidential.


_____          _____.

**Appendix B**

Student Assent Form: Experimental Group

Dear Student,

I am very excited to be your student teacher throughout the spring!  I will be doing a research project that is part of my Master's degree requirements at the University of Mary Washington. The goal of my research is to find out how students like you feel about small group work when it comes to learning grammar. I am writing this letter to ask if you would like to participate in my study and to explain what you would do if you agree to participate. Your participation is completely voluntary, but please read this letter before deciding whether to participate or not.

You all will be placed into teams that you will work with in order to earn points; it's a competition!  While you work in your teams, I will be collecting information for a research project that I am doing to see how group work affects how you all learn grammar. During my study, all students in the class will do the same activities, tests and assignments. The only difference for those who agree to participate in the study is that I will interview three students to see how you feel about this way of learning grammar and I will use your tests and assignments as part of the data for my study.

*Your parents were given a letter about taking part in this study. If your parents did not allow you to participate in this study, you will not be asked to sign this form. However, if your parents did allow you to participate, I encourage you to participate in this study.*

*You do not have to be in this study. No one will be mad at you if you decide not to do this study. Nothing bad will happen if you take part in the study and nothing bad will happen if you do not. However, if you decide not to participate you still will work in groups and do all of the work that we will do; I will just not use your work in my research. Even if you start, you can stop later if you want. You may ask questions about the study.*

*If you decide to be in the study, I will keep your information confidential. This means that I will not use your names or the name of the school in anything I write and I will not reveal any personal, identifying information about you.*

*Signing this form means that you have read it or have had it read to you, and that you are willing to be in this study.* If at any point you have any questions, please ask me!
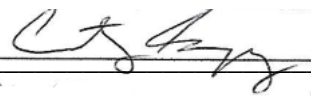
Thanks,
Ms. Rampey

I have been read the above letter, all my questions have been answered, and I agree to participate in the project.


_____          _____

(Student Signature)                                              (Student Print Name)


_____

        (Date)


I, _____Courtney Rampey_____ will keep your names confidential.


_____          _____.

(Student Teacher/Researcher Signature)                (Date)

**Appendix C**

Consent Letter

Dear Parent or Guardian,

Hello, my name is Courtney Rampey, and I am a student teacher in your child's classroom. I am currently a graduate student at the University of Mary Washington working towards my Masters in Secondary Education. A requirement of our program is to conduct an action research study in an area related to our studies. *I am inviting your child to participate in a research study I am doing. Involvement in the study is voluntary, so you may choose to have your child participate or not. I am now going to explain the study to you.*

*I am interested in finding out if cooperative learning combined with a competitive environment has an effect on student retention of grammar as well as its usage in writing.* Grammar is often a subject that gets neglected in the classroom because we as teachers do not have a solid method to teach it other than teach it in context. This study will basically compare a class in which students are working in teams to learn contextualized grammar with another class that is taught in a more traditional form of learning. *I am requesting to interview your child for information about grammar and the way it has been taught in his or her school experience. I will also use your child's results from the pre/posttest, journals, and assignments as feedback for the research. This research will be part of your child's work for class. It will in no way require extra work for him or her.*

Your child's work will be kept confidential. His or her name will not appear in the research. All names will be changed to protect his or her privacy. Following the project, all re/posttests, class assignments, and journals I collect will be returned to the student, and the interview notes and all other data still in my possession will be destroyed. Participation in this research will not affect your child's grade in any way. His or her participation in the study is voluntary, and you have the right to keep your child out of the study. Also, your child is free to stop participating in the study at any time. Your child would still participate in all of the activities that the rest class will complete, but data for the research study would not be collected from him or her.

*The benefit of this research is that you will be helping me understand the influence of cooperative learning groups on student retention of grammar and its overall effect on writing. Risks involved with the research include students being uncomfortable working in a group, students being uncomfortable during an interview, and some students feeling inadequate for not winning or earning points. The risk of student discomfort will be minimized by making sure that the student is not in the presence of his or her classmates*

*during the interview which will reduce the amount of pressure on the student on how he or she answers a question. I will also purposely place students in groups that they will work best in, and students will also go through a team-bonding activity that aims to strengthen the function of the cohort. As for the risk of inadequate feelings, students will have multiple opportunities to earn points for their team, including individual work done through No Red Ink. This will not be as high speed as the in class competition days.*

If you have any further questions or concerns, please do not hesitate to contact my university supervisor, Dr. Pei-ni Causarano ([pcausara@umw.edu](mailto:pcausara@umw.edu)), myself ([crampey@mail.umw.edu](mailto:crampey@mail.umw.edu)).

 The research described above has been approved by the University of Mary Washington IRB which is a committee responsible for ensuring that research is being conducted safely and that risks to participants are minimized. For information about the review of this research, contact the IRB chair, Dr. Jo Tyler at [jtyler@umw.edu](mailto:jtyler@umw.edu).
 Please return this form by January 15, 2016. I look forward to working with you and your student!

Thank you,

Courtney Rampey

I have read the above letter and give my child, _____, permission to participate in this project.

_____   _____
(Parent/Guardian Signature)    (Parent/Guardian Printed Name)

_____
(Date)

I, _____Courtney Rampey_____ agree to keep all information and data collected during this research project confidential.

_____   _____. (Date)
(Researcher Signature)

**Appendix D**

**Pretest:**

*I. Semi-colon/colon. Determine which sentence needs a semi-colon and which one needs*

*a colon:*

1.  This was first said by Shakespeare **[ ]** "To thine own self be true."

    a)  Semi-colon          b) Colon

2.  I had a huge meal **[ ]** however, I am already hungry again.

     a) Semi-colon          b) Colon

3.  I kept knocking on the door **[ ]** no one was in the house.

    a)  Semi-colon          b) Colon

*Write your own sentence that uses a **semi-colon**.*

*Write your own sentence that uses a **colon**.*

*II. Active/Passive Voice. Depending on each sentence, rewrite the sentence from passive to active **OR** from active to passive.*

1.  One Direction was chased by the fans and paparazzi shortly after the concert was over.

2.  Holtby stopped the shot before the clock ran out, leaving the Capitals tied with the Rangers.

*Create your own sentence using **ACTIVE** voice.*

*Create your own sentence using **PASSIVE** voice.*

***III. Commas,*** *There are **9 commas** missing from this paragraph.  Place a comma where it is needed.*

Jenny my best friend from summer camp is coming for a visit this weekend. Although she is from a big city with a lot of exciting things to do I am sure she will enjoy visiting our farm. She will enjoy swimming in our pond riding horses and picking berries for pies. My brother is afraid she will get bored on our farm but I think she will love it here. With all of the things Mom and I have planned she won't have time to be bored. I'm afraid she will however be very tired each night. Maybe this visit will be so much fun she will want to come back again next summer.

*Retrieved from teach-nology.com*

*Create your own sentence that uses at least two commas.*


***IV. Subject-Verb Agreement.*** *Identify and circle the correct form of the verb.*

1. Annie and her brothers (is, are) at school.


2. Either my shoes or your coat (is, are) always on the floor.


3. Everyone (has, have) done his or her homework.


*Create your own sentence using the following pairs of verbs and subjects:*

   *Ex: To give, Noah*

       *Noah gives the dog a bone.*

1. To know, everybody




2. To run, Felicia




3. To imagine, Eric and his friends

**Appendix E**

**Posttest:**

*I. Semi-colon/colon. Determine which sentence needs a semi-colon and which one needs*

*a colon:*

1.  *Frasier* was my favorite television show during the 1990's **[ ]** in fact, it is my
    favorite television show of all time.

           b)  Semi-colon           b) Colon

2.  These are my favorite colors **[ ]** orange, yellow, and purple.

            a) Semi-colon           b) Colon

3.

*Write your own sentence that uses a **semi-colon**.*

*Write your own sentence that uses a **colon**.*

*II. Active/Passive Voice. Depending on each sentence, rewrite the sentence from passive*
*to active **OR** from active to passive.*

1.  A safety video will be watched by the staff every year.

2.  The saltwater eventually corroded the metal beams.

*Create your own sentence using **ACTIVE** voice.*

*Create your own sentence using **PASSIVE** voice.*

***III. Commas.** There are **11 commas** missing from this paragraph.  Place a comma where it is needed.*

If you want to know where to buy the most amazing ice cream in the state of Texas I can tell you. Amy's ice cream owned by my cousin has the creamiest most flavorful ice cream in the South. She offers some really exotic flavors like stinky fruit swirl and chocolate covered grasshopper delight, but she also offers normal flavors like chocolate vanilla strawberry etc. This variety is what makes her shop so popular. If you are ever in Houston you need to be sure and stop in for a taste. She is located at 298 Wesson Avenue Houston Texas. You won't be disappointed.

*Retrieved from teach-nology.com*

*Create your own sentence that uses two commas.*

***IV. Subject-Verb Agreement.** Identify and circle the correct form of the verb.*

 1.  Either answer (is, are) acceptable.

2. Either my shoes or your coat (is, are) always on the floor.

3. Everyone (has, have) done his or her homework.

*Create your own sentence using the following pairs of verbs and subjects:*
    *Ex: To give, Noah*

       *Noah gives the dog a bone.*

*4.* To gather, researchers

*5.* To say, Marlow

*6.* To be, everyone

**Appendix F**

iJournal Assignment and Rubric

For about five weeks, you will be completing an iJournal.  This journal is a chance to write and for you to develop as a writer.  It will take the form of one of your warm-ups so it is an in-class assignment—homework if you are absent or don't have it.  There are a total of five prompts that you will complete during the next five weeks.

Each iJournal entry should be at least three *well-put together* paragraphs.  Your prompts will be given to you on the day of the first warm-up.

You are encouraged to apply what you learn from your warm-ups in your writing; this is your chance to practice what you know :)
Due Dates:

> Journal #1 → ...February 22
> Journal #2 → ...March 1
> Journal #3 → ...March 9
> Journal #4 → ...March 16
> Journal #5 → ...March 23

You will be evaluated based on the following rubric:

| | **1**<br>**Does Not Meet** | **2**<br>**Partially Meets** | **3**<br>**Does Not Fully Meet** | **4**<br>**Meets** | **5**<br>**More Than Meets** | **6**<br>**Exceeds** |
|---|---|---|---|---|---|---|
| **CONTENT/IDEAS** | Writing is extremely limited in communicating knowledge, with no central theme. | Writing is limited in communicating knowledge. Length is not adequate for development. | Writing does not clearly communicate knowledge. The reader is left with questions. | Writes related, quality paragraphs, with little or no details. | Writing is purposeful and focused. Piece contains some details. | Writing is confident and clearly focused. It holds the reader's attention. Relevant details enrich writing. |
| **ORGANIZATION** | Writing is disorganized and underdeveloped with no transitions or closure. | Writing is brief and underdeveloped with very weak transitions and closure. | Writing is confused and loosely organized. Transitions are weak and closure is ineffective. | Uses correct writing format. Incorporates a coherent closure. | Writing includes a strong beginning, middle, and end, with some transitions and good closure. | Writing includes a strong, beginning, middle, and end with clear transitions and a focused closure. |
| **VOCABULARY/ WORD CHOICE** | Careless or inaccurate word choice, which obscures meaning. | Language is trite, vague or flat. | Shows some use of varied word choice. | Uses a variety of word choice to make writing interesting. | Purposeful use of word choice. | Effective and engaging use of word choice. |
| **VOICE** | Writer's voice/ point of view shows no sense of audience. | Writer's voice/ point of view shows little sense of audience. | Writer's voice/ point of view shows that sense of audience is vague. | Writer uses voice/point of view. Writes with the understanding of a specific audience. | Writer has strong voice/ point of view.  Writing engages the audience. | Writes with a distinct, unique voice/point of view.  Writing is skillfully adapted to the audience. |
| **SENTENCE FLUENCY** | Frequent run-ons or fragments, with no variety in sentence structure. | Many run-ons or fragments. Little variety in sentence structure. | Some run-ons or fragments. Limited variety in sentence structure. | Uses simple compound, and complex, sentences. | Frequent and varied sentence structure. | Consistent variety of sentence structure throughout. |
| **CONVENTIONS** | Parts of speech show lack of agreement. Frequent errors in mechanics. Little or no evidence of spelling strategies. | Inconsistent agreement between parts of speech.  Many errors in mechanics. Limited evidence of spelling strategies. | Occasional errors between parts of speech.  Some errors in mechanics. Some evidence of spelling strategies. | Maintains agreement between parts of speech. Few errors in mechanics. Applies basic grade level spelling. | Consistent agreement between parts of speech.  Uses correct punctuation, capitalization, etc. Consistent use of spelling strategies. | Uses consistent agreement between parts of speech.  No errors in mechanics. Creative and effective use of spelling strategies. |

Retrieved from readwritethink.org

**Appendix G**

Student Interview Questions

**Pre-Research Period:**

1.  When I say the word grammar, what are the first thoughts that pop up in your head?
2.  Do you remember some grammar rules on the top of your head?  If so, which ones?
3.  Do you follow through with these rules in your writing?  How?
4.  How did you learn grammar in middle school or elementary school?
5.  Did you feel that they way of teaching helped you remember those rules?  How so?
6.  E.G: What are your thoughts of working in a team to learn grammar?

**Post-Research Period:**

1.  When I say the word grammar, what are the first thoughts that pop up in your head?
2.  Do you remember some grammar rules on the top of your head?  If so, which ones?
3.  Do you follow through with these rules in your writing?  How?
4.  E.G: How did working in a team affect the way you think about grammar?
5.  E.G: What are your thoughts on learning in teams and competitions overall?

    Does it affect your motivation?
6.  E.G: How did learning through teamwork affect your writing?
7.  C.G: If it did, how did focusing warm-ups around grammar affect your writing?
8.  C.G: What are your thoughts on learning grammar through warm-ups?