

HOW DO VARIOUS SOCIAL STUDIES INSTRUCTIONAL METHODS AFFECT
STUDENT ACHIEVEMENT IN MIDDLE SCHOOLS?

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CHAPTER ONE

INTRODUCTION

This purpose of this paper was to examine the effects of different instructional methods on students in a middle school social studies classroom. Many researchers have examined whether there is a difference in the achievement levels of students as a result of the methods of instruction that are used in their classroom. This Master's Research Project includes a review of the literature and reports on its findings.

Statement of Problem

Historically, the most commonly used style of instruction in social studies classrooms has been a lecture format. This method of instruction has been criticized as not being the best way to teach middle school students. Over the years both educators and non-educators have conducted research on how to teach students best. For the most part their research findings have been inconclusive as not all instructional methods appear to work equally for all children.

Research Question

The research question this paper sought to answer was, "How do different instructional methods affect social studies achievement in the middle school?" This is an important question to ask and research by middle school educators because it will allow them to better understand how to teach their students. It will also allow them to see how to get their students more involved in the classroom and take more responsibility for their own learning.

Purpose of the Study

The purpose of this study is to find out what is the best way to teach students in a middle school social studies class. This will allow educators to get their students more involved in the

class. When students are being taught effectively they have ownership in their learning. When students take ownership in their learning, they are more apt to excel academically.

Limitations

There are some limitations to this study. The first of these limitations was the limited amount of time available to conduct the study. The research was conducted over a seven-week period. However, the researcher only had about three weeks to complete her research because of school closings due to adverse weather conditions, a winter holiday, and the cooperating teachers alternating schedule.

Another limitation of this study was the sample size. There was a small population to draw a sample from and the selection of students who participated in this study was not a random sample. Since minors were involved in this study, there was a need to obtain parental permission. The only students who were involved in this study were those who returned the parental permission slip. Out of 46 students in two selected classes, 25 participated in the study.

A third limitation of this study was that the classroom teacher could have influenced participation when she offered bonus points to the students who returned their parental permission slips. This could have caused students who would not otherwise have volunteered to do so thus skewing the sample's representativeness of the student population in the two classes. This could have affected both low and high achieving students. Low achieving students could have seen it as a way possible to increase their overall grade, and the higher achieving students could have seen it either as a disincentive or incentive to increase their already high grade in class.

Methodology

The research for this paper was completed in two parts. The first part was the literature review, the second was the actual field research. The literature review was completed determine what other researchers in the field have found. The field research was completed in a local school in the area to substantiate these findings in the literature.

Organization of Study

Chapter Two will be a review of the research literature on social studies methods. Chapter Three will focus on the methodology that was used in gathering the data. Chapter Four will discuss the findings of the field research. This will allow the reader to see if there is a difference in student achievement when taught with lecture or with a cooperative learning approach. The final chapter, Chapter Five, will summarize the findings and include the conclusions and implications of this project.

CHAPTER TWO

LITERATURE REVIEW

The purpose of this literature review is to examine the use of cooperative learning and lecture in the classroom. It is divided into eight distinct areas, 1) metasearch, 2) classroom culture, 3) support for cooperative learning, 4) cooperative learning methods, 5) support for lecture, 6) using textbooks & books, 7) incorporating technology in the classroom, and 8) conclusion. All of the articles that have been reviewed in this section will help answer the question “How do different social studies instructional methods affect student achievement in middle schools?” It is important to look at each of these areas. Many authors have studied this question in an attempt to find a specific answer. However, this has not happened yet. The literature review will examine some of the previous research in an attempt to answer this question.

Metasearch

In 1982, Tyrell examined some of the research that had been completed on the issue of lecture versus inquiry. In his article “The Effects of Lecture Versus Inquiry Methods of Presentation on Student Achievement in Social Studies: A Review of the Research,” Tyrell concluded that the research was inconclusive. He found support for both lecture and inquiry methods of teaching. Tyrell commented several times throughout this article that not all students learn in the same manner. Some students learn best from a lecture style of instruction while others learn better from inquiry method of instruction.

Classroom Culture

Classroom culture is an important aspect to examine when discussing the best method for students to learn. Carroll and Taylor defined classroom culture in their 1998 article, “Understanding the Culture of a Classroom.” Culture develops between the students and the

teacher. The authors examined how the “personality” or culture of the class develops over time. Carroll observed Taylor’s seventh grade class to gain insight into the culture that forms within the classroom. This paper consisted of both research-based information and personal observations in the classroom.

Throughout the article, Carroll used events in Taylor’s classroom in conjunction with the research to formulate a conclusion. This allows the reader to understand better what the research stated by use of examples. The authors discussed the collaborative process as it occurred in the classroom and how it helped the classroom culture to develop. The framework the authors discussed had five basic elements. These elements were “1) the classroom as a setting and the class as a social group, 2) life as holistic, 3) experience as continuous and intertextual, 4) referential systems of classroom communication, and 5) how the culture can be broken, and the results of a broken culture” (p. 11). Carroll and Taylor concluded by asking six questions (p 17). These questions allow the reader to think about the answers and how they are related to the classroom. This article allows the reader to see the research and what it looks like as it is happening in the classroom. It also allows the reader to see the way that a classroom operates determines the culture of the classroom.

This classroom culture affects the interaction between the students and the teacher. Once the classroom culture has been set, the students and the teacher know exactly what to expect from each other. This allows the class to run smoothly. When the classroom culture is broken, the class becomes discombobulated. At this point, the teacher and the students will not know what to expect from each other. This can create tension in the classroom until that culture is re-established.

In 1991, the National Council of Social Studies (NCSS) formed a task force to look at social studies in the middle school. Its report “Social Studies in the Middle School” briefly discussed how middle schools came into the main stream of education in the United States. This report focused on is the changes that middle school students go through and the way that instruction can accommodate those changes. The changes that middle school students go through are physical, social-emotional, and intellectual (pp. 67 – 68). This coincides with Carroll and Taylor’s (1998) first element. The authors give examples of activities that social studies teachers can incorporate into their lesson plans. Some of these examples include the use of journals, role-play, oral history projects, and international pen pals (pp 68 – 69). This article also discussed some different instructional strategies that are useful in a middle school social studies classroom. These are useful not only because they are an effective way to teach the material, but also because they incorporate some of the issues that the students are dealing with on a daily basis. Some of these instructional strategies include experimental learning, interdisciplinary instruction, cooperative learning, heterogeneous grouping, addressing controversial issues, and performance-based assessment. By using some of these activities and instructional strategies, the students will be able to make a connection with the material that they are learning. When a student makes a connection with the material, they gain a deeper understanding of that material.

Hawkins discussed what is included in teaching history in her 1997 article, “It's More Than Teaching History”. The argument that Hawkins made is that “teaching history is more than just teaching historical facts” (p 108). The author asserts that teachers need to create a climate in the classroom in which everyone feels safe. This also coincides with Carroll and Taylor’s (1998) first element. She then lists seven things that teachers can do with their students to create that climate of safety, one where learning can take place (p 108). Hawkins proceeds to examine how

the individual needs of the students must be met in the classroom. Hawkins gives a couple of examples of how to complete these tasks. One is to let the students choose how they will be assessed. This allows the students to use their strengths to show that they have mastered the material. Another way is to let the students have a say in what they are going to learn in class. This is similar to the NCSS (1991) suggestions of activities that teachers can incorporate into their classroom. If the students are given a choice of activities or assessments, they will choose the one that will allow them to succeed and thus take ownership of their learning experiences.

Hawkins also focused on the responsibility that teachers have. This is shown in her statement “I can humiliate or humor, hurt or heal” (p 109). Teachers can have a tremendous impact on their students, both good and bad, they can cause students to like or dislike a subject, sometimes even school in general. Hawkins also discussed the time issue when it comes to teaching. Not only are students in school for a very limited amount of time, but when testing and “important subjects” like math and reading are the focus, other subjects such as social studies suffer.

Textbooks are another important area that Hawkins studied. She examined how textbooks are written. Along with being “biased, bland, superficial and dull” (p 111), Hawkins concludes “that textbooks are written at a higher level of understanding than most students can attain and, that some of the concepts presented are ones that students are not developmentally able to appreciate or comprehend” (p 112). This is why it is important to use other instructional materials in addition to the textbook or to use the textbook as a supplemental tool. There is more support for incorporating other instructional materials, such as books and using the text as a supplemental tool in the section “Using Textbooks and other Books”.

Hawkins also explained that it is more important to know where to find the information than it is to know it all or to be an expert in the area. Hawkins proceeds to discuss teaching, here she

examined the way history is taught and concludes history is taught is very similar to way it was taught over twenty years ago, “it was not effective then; it is even less effective today” (p 112). Knowing and understanding how all of these factors work together is what makes a good teacher, one who teaches more than just history.

Chiodo and Byford contradict the statement that history is taught very similar to the way it was taught over twenty years ago. In their 2004 article “Do they Really Dislike Social Studies? A Study of Middle School and High School Students”, they argue that over the years there have been changes in the way social studies is taught, the way the curriculum is designed, and changes from the administrative level, that may be related to how students today perceive social studies (p 16). The authors examined the perceptions that students held about social studies. They found that students had a negative view of social studies. The students who were interviewed over the years saw no correlation between social studies and their life. They also saw the teacher as one reason why they did or did not like social studies.

Chiodo and Byford decided to take a new look at students’ perceptions of social studies. They interviewed and observed an eighth grade and an eleventh grade social studies class. Both of these classes, however, were in the same school district, which could have contributed to the similarities in their findings. The authors used two themes in their research. The first suggested that “active involvement and teacher enthusiasm led to positive images of social studies by middle and high school students,” and the second theme suggested that “utilitarian value or lack of it was a major factor regarding middle and high school student views of social studies” (p 19). When the students were interviewed, they discussed the importance of “active learning, teacher enthusiasm, and the relevancy of the material” (p 19). When students feel engaged in the class, they enjoy it more. When the instructional methodology does not change then the students tend

to get bored. This appears to be true when the instructional methodology is lecture-based (p 20). Another point that the authors made was that not all students learn in the same way, and therefore it is important for teachers to use a variety of instructional methods (p 22). This not only helps all of the students learn, but it helps the class from becoming stagnant.

The use of the strategies mentioned by NCSS (1991) and Hootstein can avoid the stagnation that Chiodo and Byford mention. In his 1994 article “Motivating Students to Learn”, Hootstein examined the research that reported that students disliked social studies and were not motivated to learn it. After surveying teachers and students, Hootstein compiled a list of strategies that teachers and students thought were motivating. One of the most common strategies used by teachers was simulation. The teachers thought that it was motivating for the students, because it allowed the students to get into the role of an actual person during an actual historical event (p 214). Another strategy that topped the teachers’ list was the use of projects. Projects allowed the students to have hands-on experiences. The students also had role-playing high on their list of motivational teaching methods, because the strategy allowed them to confer with their classmates (p 215). Students also liked discussions; they liked to connect what they were learning with their everyday lives. However, this strategy was not high on the teachers’ list. However, students and teachers have some of the same ideas about what it takes to motivate students to learn. The trick becomes reaching a consensus in the classroom of what strategies to use and how the assessments will occur. It needs to be something that benefits the students as well as the teachers.

Field, Wilhelm, Nickell, Culligan and Sparks (2001) examined various teaching methods and adaptations made for whole class instruction. In their article “Teaching Middle School Social Studies: Who is at Risk?” (2001), these authors discussed which students were at risk in a middle

school setting and how those students could be classified. The first clarification about at-risk students that the authors made is that any student can be at-risk (p. 225). The authors informed the reader about two different reports and their findings. The first report was the Carnegie Council on Adolescent Development, written in 1989 and titled “Turning Points: Preparing American Youth for the 21st Century.” The main idea of this report was that all children could be successful in school if provided with the appropriate opportunities (p 225). These appropriate opportunities do not include tracking or ability grouping but should consist of cooperative learning and inquiry learning among other teaching methods that get students involved (p 225). The second report that the authors examined was “Expectations of Excellence: Curriculum Standards for the Social Studies.” This report concurred with the report completed by the Carnegie Council, in the fact that children need to be actively engaged, work together in groups, and develop their higher level thinking skills (p 226).

The second part of this article focused on two middle school social studies teachers who used various methods to engage actively all students. The first teacher taught at a middle school in Georgia, where they created Success Teams. These teams were made up of approximately 14 students and 1 teacher (p 227). In these teams the teacher is more than a teacher, they get to know the students on a more personal level and is more able to make lessons that will get the students thinking about how modern day can be related to history (p 226 – 228). The other teacher taught in Texas, where there is a large ESL population. The teacher also used interactive ways of teaching. She did this so that her students did not feel that they were being left behind. They used group reading as a way to get the information out and they incorporated art as a way to show what the students had learned. The teacher used what she knew of Spanish in class, usually being corrected by her students (pp. 228 – 230). This allowed the students to become a

part of the classroom culture. These are just two examples of what a teacher can incorporate in class that will get everyone in the class involved and learning.

Support for Cooperative Learning

Cooperative learning has garnered a great deal of support over the past few years. As researchers look at the impacts of teaching methods on students, many have shown that cooperative learning is beneficial to all students. This is not the case with every report that has studied cooperative learning: some are inconclusive and some have stated that cooperative learning is not beneficial to all students. The following articles address this issue.

Bump described how to use cooperative learning in social studies classrooms in middle school, in her article, "Utilizing Cooperative Learning to Teach Social Studies in the Middle School" (1989). She starts out by providing examples of what her students have said about cooperative learning, such as "cooperative learning helps me understand what I'm doing" (p.32). Bump discussed how research has shown that cooperative learning is beneficial for students in all facets of school. She proceeds to explain how cooperative learning should be set up in the classroom. Bump examined about the size of the groups and what the roles of each student in the group should be. She also discussed how to assess the groups, whether it is individually or by group. Bump concludes the article by giving some examples of cooperative learning exercises.

Not only does Bump argue what cooperative learning should look in the classroom, she also provides a few examples of cooperative learning projects. Bump quoted students supporting cooperative learning. This allows the reader to see that students do respond to this method of teaching. The biggest limitation of this article is that Bump did not examine at great deal of

research. She used two outside references in addition to her own experiences using cooperative learning in her classroom.

Hendrix also discussed the use of cooperative learning, in his 1999 article “Connection Cooperative Learning in Social Studies,” in social studies classes, by looking at middle and high schools. The research that Hendrix examined favored using cooperative learning methods in social studies classrooms. He found that “students learn better through active involvement in activities, small group interaction, and cooperative learning” (p 57), as opposed to individual seatwork that fosters competition among students. The individual seatwork that benefits the high-achieving students hinders the low-achieving students in the classroom.

Hendrix lists “five basic elements that occur in cooperative learning. These are: 1) positive interdependence, 2) face-to-face interaction, 3) individual accountability, 4) social skills, and 5) group processing” (p 58). Using positive interdependence, students learn to rely on each other, as they are all part of something bigger. In groups, students have to interact face-to-face in order for the group to be successful. The students are held accountable, not only do they hold themselves accountable; they also hold their group members accountable. Groups allow students to gain social skills that they will need throughout their lives. The group processing allows the members to reflect on what worked well in the group and what did not work well.

Hendrix also provides five examples of cooperative learning activities that can be used in social studies classes. These are 1) group investigation, 2) jigsaw, 3) learning together, 4) student teams-achievement divisions, and 5) teams-games-tournaments (pp 58-59). Not only does Hendrix briefly explain how to use each of these methods, but he also provides an example of how to use them in a class. Hendrix concludes his article by declaring that not only does

cooperative learning methods help students gain mastery over the information, but it also “nurtures democratic values and interpersonal skills” (p. 60).

The 1997 article that Karnes and Collins authored “Using Cooperative Learning Strategies to Improve Literacy Skills in Social Studies” concurs with Hendrix (1999). They discussed how cooperative learning does more than teach the material; cooperative learning provides the students the skills that are needed to live in today’s society. Some of these skills are working together, learning to listen, and valuing the opinions and beliefs of others.

The authors start by providing a brief review of the literature that supports their position that cooperative learning is effective in social studies classrooms. Next, they discussed a few cooperative learning strategies that can be used in social studies classrooms. The authors categorized the cooperative learning strategies into four categories, 1) mastery building structures, 2) thinking skills structures, 3) information sharing structures, and 4) communication skills structures (pp 5-9). Mastery building is focused on learning the material. Thinking skills is focused on developing the thinking skills that students need. The information and communication skills, teach the students to share information with each other by working together. These learning strategies can be utilized in any classroom, but they work well in a social studies classroom, because it teaches the students “values consistent with active participation in a democratic society” (p 3).

Johnson and Johnson discussed the same five basic elements of cooperative learning that Hendrix (1999) did, in their 1999 article “Making Cooperative Learning Work”. The authors also discussed what cooperative learning is and what it is not. After the authors made this distinction, they examined the three types of cooperative learning. They are “1) formal cooperative learning, 2) informal cooperative learning, and 3) cooperative base groups” (pp 68-

69). A formal cooperative learning group is a group that works together for more than one class period. An informal group works together for less than one class period, and a cooperative base group is a long-term group that lasts over many years.

The authors proceed to discuss how cooperative learning increases achievement in students and how it “ensures that all students are meaningfully and actively involved in learning” (p 72). The authors made the argument that cooperative learning enhances student relationships. This happens because the students learn to work together and come to respect each other. Through cooperative learning, students not only increase their own learning, but they also help other students increase their learning.

The conditions that are present in the classroom set the stage for cooperative learning. In 1994 Lotan wrote an article “Talking and Working Together: Conditions for Learning in Complex Instruction” that discussed these conditions. One of the conditions that the author claimed to be ideal for cooperative learning is having small groups, ranging from three to five members. Keeping the group size small allows for more face-to-face interaction that Johnson and Johnson (1999) discussed. Another condition is having limited teacher interaction once the groups have started working. The more the teacher is involved, the less the students will talk and work out the problems. The teacher can become a distraction to group.

Lee, Ng, and Phang (1999) examined the effects of cooperative learning their article “A School-Based Study of Cooperative Learning and its Effects on Social Studies Achievement, Attitude towards the Subject and Classroom Climate in Four Social Studies Classrooms.”

The authors discussed the results from a study they completed in Singapore on cooperative learning and its effects on social studies achievement. The purpose of the study was to show that cooperative learning would improve the achievement of the students. The authors studied eight

classes in two different schools. Four of the classes were taught with cooperative learning methods, they were from one school, and the four control classes came from a different school. These schools were similar in their makeup and used the same syllabi and textbooks. The four classes were categorized based on their makeup of student achievement; one was made up of high achieving students, two had average achieving students, and one was made up of low achieving students. After a year of teaching, the researchers found that in the high achieving classes there was no difference in achievement between those students taught with cooperative learning, and those taught with traditional methods. However, the average and low achieving classes that were taught using the cooperative learning methods did better than those taught by traditional methods did. This study supports using cooperative learning methods, especially in classrooms with lower achieving students.

Cooperative Learning Methods

A teacher can choose from many different cooperative learning methods. By utilizing a variety of these methods in the classroom, teachers can keep the students involved and informed. Three cooperative learning activities that Platte discussed in his article “Cooperative Learning: A Practical Application Strategy” (1991), are, 1) Jigsaw, 2) Group Investigation, and 3) Cybernetics. When discussing each of these methods Platte offered suggestions for how to implement these methods in the classroom. This allows the reader to see the functionality of the methods, and will easily allow educators to try them out in their classrooms.

Evans discussed group investigation in the article, “Group Investigation,” (1991). This is a method of teaching in which the students investigate a topic, usually in small groups. Evans discussed the different stages or phases that a group investigation should involve. Evans explained each phase by using an example of how this method can work in the classroom.

There are six steps in completing a Group Investigation. The first step is “establishing a focus, identifying subtopics, and forming groups” (p 65). It is in this step that groups are formed and the students learn what they are going to investigate. The second step is “planning the investigation” (p 66); in this stage the group formulates the plan they are going to use to complete the investigation. The third step is “carrying out the investigation” (p 66); this is when the learning actually takes place for the students. At this stage that they are gathering information they will use. The fourth step is “preparing to share.”(p 66) In this stage the students put the information they find together in a way that will make it understandable for the rest of the class. The fifth step is “sharing.”(p 67) At this stage the groups share the information they found with the rest of the class. The sixth step is “assessment and evaluation.” (p 67) Even though this is listed as the last step, assessment should be a continuing occurrence. It should occur in every stage of the group investigation. By providing an example of how to use Group Investigation, Evans allows her readers to gain a clear understanding of how to use this method in the classroom. This makes Group Investigation a valuable tool for any educator who is looking for additional ways to teach the students in the classroom.

Sullivan also focused on Group Investigation in the article, “Implementing a Cooperative Learning Research Model: How it Applies to a Social Studies Unit” (1996). Sullivan discussed what cooperative learning is and how it improves students’ attitudes (p 210). Sullivan defined the Group Investigation model, as a model that focuses on asking questions and researching to find the answers (p 210). Evan (1991) described the steps in performing the Group Investigation in class. Sullivan examined a teacher who used this method while teaching about the Civil War. Prior to using Group Investigation, the teacher was using traditional teaching styles and the students were not interested or involved in classroom activities. The Group Investigation method

changed all that and the students became actively involved. The students asked the questions, predicted the answers, and then researched their questions. This allowed them to become fully involved in class.

The jigsaw method was the focus of Ferguson's article "Cooperative Team Learning: Theory into Practice for the Prospective Middle School Teacher" (1990). Ferguson offered suggestions for implementing cooperative team learning. He explained the seven steps that one needs to follow when implementing the Jigsaw method. These seven steps are, "1) apportion the material to be taught into several component parts, 2) arrange the students into heterogeneous small groups and provide each member with a different lesson segment, 3) inform the members of the group that they are responsible for teaching their segment of the lesson to the rest of the group, 4) redistribute the students into "expert groups" consisting of those individuals who are responsible for teaching the same lesson segment, 5) instruct the students to design a lesson plan for presenting their segment and rehearse it, 6) return the students to their original jigsaw groups and have them take turns teaching their part of the material to the rest of the group, 7) test the students on the material or have them participate in a culminating activity in which they must apply the entire range of knowledge or skills for the lesson" (p25). Ferguson concluded that, in addition to being good for rote learning, the jigsaw method is also good for higher order thinking skills.

The Reverse Jigsaw is derived from the jigsaw method. It is described in Hedeem's article "The Reverse Jigsaw: A Process of Cooperative Learning and Discussion" (2003). Hedeem starts his article by explaining what the Jigsaw method is and how it should be used. This gives the reader the background knowledge needed to understand the Reverse Jigsaw method. Hedeem

proceeds to discuss briefly the three adaptations of the original Jigsaw (Jigsaw II, Jigsaw III, and Jigsaw IV). Hedeem emphasized the point that cooperation is a goal of the Jigsaw (p 326).

The Reverse Jigsaw has three steps. In the first step, students form groups where each student receives a question or a prompt to talk about. Each student then leads a discussion within the group on his/her topic. In step two, the students move into different groups based on similar question prompts. In this group, the students share the results from their first group discussion. One person is named the reporter for each group. In the third step, the whole class comes together and each reporter talks about his or her group's topic. The Reverse Jigsaw fosters "respect and responsibility on the part of students through engagement and participation" (p 331).

Foster and Padgett discussed the Inquiry Method in a middle school social studies classroom in the article, "Authentic Historical Inquiry in the Social Studies Classroom" (1999). The authors explained how social studies is normally taught in schools in the United States, and how it is often seen as boring, and does not give the students a feeling of connection (p 357). The authors provide three reasons why it is important for middle schools students use the inquiry method in social studies classes (pp 357 – 358). The first reason is that "students who are engaged in constructing historical accounts have the opportunity to develop perspectives, attributes, and critical thinking skills" (p 357). The second reason is that "knowledge is constructed by learners" (p 358). When the students execute historical inquiry, they are learning by *doing*. The third reason is that "historical inquiry helps students appreciate and understand people who are different" (p 358). The authors provide suggestions and steps that an educator can follow when implementing an inquiry lesson. This is helpful for educators who have never attempted this method in their classroom before and need guidance. Historical inquiry allows

students to learn history actively instead of receiving it passively. It allows them to own it and thus be involved in it.

Reiser and Butzin examined a teaching method called TEAMS (Technology Enhancing Achievement in Middle School) in the article, “Using Teaming, Active Learning, and Technology to Improve Instruction” (2000). This method uses a team of teachers from the same grade level and whose classrooms are in the same area. They work together in developing their lessons, for each of their individual disciplines. This interdisciplinary instruction is the first of three foundations of the TEAMS approach. The second foundation is active learning. It is in this step or area that cooperative learning can be incorporated. The students are engaged in their learning and they move around in stations to learn the material. The third and final foundation of TEAMS is the use of technology. The use of technology in the classroom promotes active learning because the students are actively finding or gathering the information themselves (p 22).

The author’s proceed to discuss how the classrooms should be set up when using TEAMS. This allows educators to adopt this setup in their classrooms. Not only do the authors examine the types of activities that should be used, but also ways to assess student learning. The authors continue to discuss some of the results of the TEAMS approach. Some of the results are that students have a better attitude towards school and learning, they enjoy working in groups, their computer skills increased, and their scores on standardized tests had improved (pp 27 – 28). The authors drew the conclusion that “after educational reforms are properly implemented, improvements in teacher and student attitudes precede improvements in student achievement” (p 28).

Support for Lecture

With all the focus being on cooperative learning, lecture is losing its support as an effective instructional method. In 1979, McMann wrote an article, "In Defense of Lecture" in which he defended lecture as an effective method of instruction. McMann stated that lecture can be an effective method by itself, but also that it can be coupled with other methods such as inquiry learning. McMann informed the reader how to construct a lecture for maximum effectiveness. He cautioned the reader that a lecture is not just the giving of facts, but should be used to enhance the material that the students already have, such as textbooks. This method can provide students with a more complete view of the information. This is based on the definition that McMann provided: "the traditional definition of lecture evolves from one of merely giving information by the teacher to one of applying, analyzing, synthesizing, and evaluating specific information for specific purposes by the teacher and students" (p 270). Lecture can be implemented prior to a class activity. It allows the teacher to set the background that the students need. Lecture can also provide a more in-depth look at an important aspect that the textbook mentions, but does not elaborate upon.

Although McMann focused on how to use lecture effectively, he also showed the reader how to use lecture ineffectively. An ineffective lecture is one that only gives facts without context. McMann provides guideline to forming an effective lecture. The guidelines are: "1) the lecture should always provide new or supplemental information, 2) students must be cognizant of the lecture topic and goals, the skills to be learned, and the logical development of the lecture, 3) students can be required to analyze the lecture through a developed model, 4) students should participate by asking questions, clarifying ideas, challenging the evidence, suggesting alternative conclusion and evidence, 5) questions must be formulated and asked by the instructor during the

lecture to emphasize the importance of significant information, 6) facts as facts have an importance secondary to their use as evidence in supporting an interpretation or point of view, 7) teachers must know their students and the factors which influence their receptivity to lecture, 8) lecture information must not remain in a vacuum, 9) teachers must exhibit an enthusiastic attitude towards lecture as an effective method, its content and the skills demanded, and 10) if a teacher is uncomfortable with the lecture, does not have the time for proper preparation, has philosophical reservations about lecture, or generally feels he/she is a poor lecturer, he/she should avoid its use” (pp 273 – 274). This allows the reader to see the difference in the ways lecture is used. In addition, it does not just say that lecture is the only method to use or that it cannot be used in conjunction with other teaching methods. This is a more complete way of teaching. This keeps the information more interesting not only for the students, but for the teacher as well.

Using Textbooks and Other Books

Textbooks are just one source of information that can be found in the classroom, another source of information is other books such as diaries and historical fiction. This gives the student more places to find information that is needed, and allow him or her to make connections between his or her life and the social studies that is being learned. The following articles discuss this aspect. Hawkins (1997) mentioned the use of the textbook as a supplemental tool, and the following articles will expand on that notion.

Dunn examined how teachers can teach effectively without relying solely on the textbook, in the article, “Closing the Book on Social Studies: Four Classroom Teachers go Beyond the Text” (2000), she argued that the textbook is just another source for students and teachers to use. She discussed four approaches to teaching social studies that does not rely solely on the textbook.

These approaches are: 1) multidisciplinary, 2) inquiry-oriented, 3) student-centered, and 4) multisensory (p 132). The multidisciplinary approach is when more than one subject is used to teach the material; this usually involves team teaching. The inquiry-oriented approach is when students do their own investigations to find answers to questions; these questions are usually higher order thinking questions. In the student-centered approach, the student is located at the center of learning. In using a multisensory approach, the teacher uses different teaching strategies that will allow all students to learn, no matter what their learning style may be.

Dunn studied four teachers who do not rely on the textbook when they teach. Dunn provides examples of what these teachers do in their classrooms and how their students react to the way they teach. This allows readers to see that, as an educator, they do not have to rely on the textbook. If there are teachers, who can cover the material that is required without relying on the textbook and can keep the classroom interesting for both the students and the teachers, any educator should be able to do the same. It may take some work at the beginning, but once the educators develop an instructional strategy and put in place, the methodology should come naturally.

Harmon, Katims and Whittington discussed an instructional method that can be used to help middle school students learn with and understand textbooks. They discuss this method in their 1999 article, "Helping Middle School Students Learn with Social Studies Texts." The method that the authors discuss is PEP (Person, Event, and Place) (p 70). PEP is a strategy in which students learn to ask themselves questions about the material while reading it. This includes the general "who, what, when, where, and why" questions. In addition to using the PEP method, it is useful to use the road map activity and a critique sheet (p 70 - 71). The road map activity is one in which the students write questions from notes they have taken from the section, or

questions they have about the section (p 71). This is a useful activity because not only does it allow an individual or a group to work on the PEP strategy, it allows others to critique their work, whether it be an individual or another small group. This strategy needs to be modeled to the students by the teacher. The modeling of the strategy allows the students to see how PEP is used and what is expected of them to successfully implement it.

The authors included a small study that was conducted using this method. In this study, some students had identified learning disabilities while others did not (p 74). Both groups showed a significant increase of test scores from pretest to posttest. By including this study, the authors showed that the method or learning strategy is effective in helping all students learn from a textbook.

Katims and Harmon also examined PEP in their article, "Strategic Instruction in Middle School Social Studies: Enhancing Academic and Literacy Outcomes for At-Risk Students" (2000). They focused on at-risk students and how the PEP instructional method can help these students become more involved in their education. The main focus of the authors was the road map strategy that they formulated to go along with the PEP strategy. This learning method helps students learn to interact with the textbook. While reading a section of the text, the students ask themselves questions, and make notes throughout the section. After they finish reading, they go back to the notes that they took, and change them into questions. From these questions, they set up a road map, to help others read that section. Other students then read that section following the road map created by their classmates. The students then critique the road maps that were created by their fellow students. This strategy works well in cooperative groups where students can read the section together, and discuss while they read, or they can read independently and then discuss what they noted. The authors conclude by stating that "the PEP road map strategy

represents a realistic way for helping low-achieving, at-risk, and special education students in heterogeneous social studies classes become strategic readers of expository texts”(p 288).

Fink examined a few different ways to supplement traditional social studies teaching methods in the article, “New Tidings for History Education, or Lessons we should Have Learned by Now” (2001). The first way to supplement a traditional social studies classroom is to add books that provide the students an in-depth look at a person or event that happened in the past (p 237). An example of this is using Anne Frank’s diary when discussing WWII and the Holocaust. This gives the students a snapshot of an actual person and allows them to see how that person was affected by the events as they happened.

Another way to supplement traditional teaching methods is to use popular culture in the classroom, such as movies about events or people, and songs about or from a time-period (p 240). Students are immersed in the popular culture, and it can be used to give them an understanding of history. When students see a real life implication of history, it can cause them to think of history as more than just facts. Real life examples in popular culture can help bring history alive for some students.

Fuhler, like Fink (2001), discussed how an educator can use books to supplement the textbook in a middle school social studies class in the article, “Add Spark and Sizzle to Middle School Social Studies” (1991). The use of books can allow the students to experience what was happening in history. The students can read the words that were written by someone who was experiencing life. The students can also study pictures from a time that are included in books. Using books allows the students to see how the facts are intertwined with people and the effects thereof. Fuhler also informs the reader that this can be done with all students, it does not matter

what their reading level is, because a book that fits the individual can be found. Not only will this help students in social studies, but it can also help in other classes.

Incorporating Technology

Using technology in the classroom is another way to get the students more involved in class, and does not rely on one specific type of instructional style. This benefits the students because it provides them another option of showing what they have accomplished.

Dils discussed ways to use technology effectively in a middle school social studies classroom in the article, “Using Technology in a Middle School Social Studies Classroom” (2000). Prior to Dils discussing some of the ways that he has used technology in his classroom, he defines what a constructivist learning approach is and how technology connects with it. Dils defined constructivism as “experiential learning” (p 102). Experiential learning happens when the students learn by *doing*. Not only can technology enhance experiential learning, it can also enhance teacher-centered instruction (p 107). It does this by giving visuals to students during a lecture/discussion lesson.

Risinger examined some different instructional strategies that educators can use in their classrooms that involve using the Internet in the article, “Instructional Strategies for the World Wide Web” (1998). Risinger begins by telling the reader that there is no best way to teach using the Internet (p 110). He proceeds to give examples of lessons that can be accomplished with the Internet. If the classroom has only a teacher computer teachers can find things such as photos and primary sources on the Web to share with their students. This provides more information than they can get from their textbook. A second type of activity that can be accomplished with computers in the classroom is creating student projects, which can be published on the Web. This can be completed in conjunction with students in another community or in another country.

Risinger then gives a list of web sites that educators can use to get more ideas for using the Internet in the classroom.

Zukas discussed different ways to use technology in the classroom, he looks specifically at world history classrooms in the article, “Active Learning, World History, and the Internet: Creating Knowledge in the Classroom” (2000). The first point that Zukas makes in regards to using technology is that “information is not knowledge” (p 62). The World Wide Web is full of information about history, but one has to look at it with a critical eye to determine what is accurate and what is not. Before Zukas starts discussing some of the ways to incorporate technology in the classroom, he discussed curricular goals and the constructivist approach to education. Dils (2000) discussed this same approach.

Zukas connects the constructivist approach to learning with using the Internet in the classroom because “constructivism asserts that individuals actively construct their knowledge of the world” (p 64). When students use the Internet and other technology they are constructing their own knowledge, they are problem solving and using higher order and critical thinking skills.

Some of the uses that Zukas examines are WebQuests, virtual treasure hunts, and building and maintaining a classroom website. These different activities can be modified to fit any educational level. For younger children the teacher can find all of the websites and make readily available to the students. The older students can find the information that they need on their own. These different activities can be used either in a student-centered classroom, where cooperative learning takes place, or the students can do some of these activities independently. This depends on the resources available in the classroom.

A WebQuest is a type of cooperative learning activity can be utilized in the classroom. Lipscomb defines it as “an inquiry-oriented activity in which some or all of the information that learners interact with come(s) from resources on the Internet” (p 152), in the article, ““I Guess it Was Pretty Fun” Using WebQuests in the Middle School Classroom” (2003). There are three reasons WebQuests are useful and appropriate to use in middle schools (p 152 - 153). The first is that WebQuests are often a motivational tool that allows students to see an assignment as being realistic. The second reason is that WebQuests provide a framework for the students to follow. The final reason is that WebQuests encourage cooperation between students. These three reasons separately can motivate a student, but when they are combined, they can be a significant motivational force.

Lipscomb proceeds to describe briefly a WebQuest that was completed in class and discusses different ideas that a teacher can do to help make a WebQuest successful. He offers ten suggestions for teachers on how to implement a WebQuest in their classroom. This article is good introduction to the topic of WebQuests. Lipscomb tells the reader about the major components of a WebQuest without going into deep detail.

Strickland also examines the use of WebQuests in the classroom her article, “Using WebQuests to Teach Content: Comparing Instructional Strategies” (2005). Strickland discusses how technology is not utilized fully in many classrooms. It is mainly used for lecture supplements, such as a PowerPoint, or for word processing (p 138), as Risinger (1998) stated as a use of the Internet. Strickland, like Lipscomb (2003) defines a WebQuest as an “inquiry-oriented activity in which some or all of the information that learners interact with comes from resources on the Internet” (p 139).

Strickland then discusses a study that she did on WebQuest and compares them to another instructional activity. In the study, Strickland had two groups of students. One group completed a WebQuest for an end-of-the-unit review and the other group created posters. In her study, the students who created the posters did better on the end-of-the-unit test than did those students who completed the WebQuest. Strickland's article not only gives exact directions on how to complete a WebQuest but also informs the reader that more research needs to be done on the subject. Strickland's article disagrees with Lipscomb's article in when it comes to determining if WebQuests are useful in helping students learn. Lipscomb suggested that WebQuests were a useful way to teach and states that "educators are already applauding its impact and encouraging its use" (p 153), whereas Strickland's study stated that there needed to be more research on this subject because the study she completed the students who completed WebQuests did worse than students who did a different activity (p 145).

Summary

This chapter has examined various ways to teach students in middle school social studies classrooms. These methods range from traditional lecture formats to the newer methods that incorporate technology. Lecture is the most traditional instructional methodology used in classrooms. However, support for lecture is waning as the constructivist approach to learning is gaining ground. Nonetheless, there remains support for lecture, especially lecture that incorporates other instructional methodologies.

Some of the first cooperative learning methods are becoming the more traditional instructional methodologies. This is because preservice teachers are being instructed in cooperative learning methodologies. Some of these more traditional types of cooperative

learning methods are the jigsaw, group investigation and student inquiry. These methods have been around longer and thus are more easily identifiable and usable.

As instruction continues to move from a teacher-centered approach to a more student-centered, or a constructivist approach, cooperative learning methodologies are being emphasized in which students learn by doing or experimenting. These types of instructional methods often include using computers in the classroom as can be observed in WebQuests. Not only do students work together, they also find information on their own, and thus invent their learning.

There are pros and cons to using both lecture style instruction and cooperative learning strategies. It can be argued that the best thing about the lecture method of instruction is that the students receive the information that is necessary for them to learn the material, as perceived by the teacher. However, it can be, and has been argued, that in a lecture environment the students are not involved in the class and come to feel disenfranchised. This can cause the students to not be interested in or like the class or school. The biggest pro to using any cooperative learning method is that cooperative learning fosters democratic values in students and also increases their interpersonal skills. These are important aspects for students to learn because they will be used them throughout their entire lives. In contrast, the biggest con to using any cooperative learning method is that students may see it as a way of letting someone else do the work for them.

Overall, these articles seem to indicate that cooperative learning is a better way to teach middle school social studies students. Students can become more involved in their learning when cooperative learning strategies are used. Most of the research, however, indicates that more research is needed. This is especially true since there is no conclusive evidence to illustrate which is the best way to teach students. Given that no two students learn in exactly the same way, it appears that the best way to teach a middle school social studies class is to use as many

different instructional methods as possible. Not only will this keep students from becoming bored but it will also tap more into their strengths. When working with the strengths of the students, a social studies class will be more productive and conducive to student learning.

I chose the methods in this master's research project because I wanted to examine whether there is indeed a difference in the academic achievement that can be ascribed to students being taught in different ways. Since the two main categories of instructional methodologies are lecture and cooperative learning, those were my obvious choices. However, although cooperative learning includes many different types of instructional methods, I chose to focus on the jigsaw method.

CHAPTER THREE

METHODS

Setting

This study was conducted at Delta Middle School in the Midwest and focused on two class periods of seventh grade social studies. The research question to be answered in this study was “How do different social studies instructional methods affect student achievement in middle schools?”

Delta Middle School is part of a complex that houses students in Pre-Kindergarten – 12th grades. The total enrollment was 383 students in grades 6 – 8. Out of the 383 students who attended this middle school, 96.8 % were white, 48.6 % of the students were economically disadvantaged, and 21 % were students with learning disabilities.

The classroom was typical. However, one atypical thing was that the desks were not in rows but grouped into quads. This allowed for more interaction between the students. This arrangement worked particularly well in this classroom because the regular teacher used many cooperative learning methodologies. Located in the classroom were four computers that were lined against the wall. These computers were connected to the Internet. The teachers’ desk was located in a corner of the room. The room had a dry erase board as well as a Smart Board.

The students I taught included special education students. Since I conducted this study blindly, I did not know which, if any, of the students who participated were special needs students. Throughout the entire time I was at the school, I did not know who did and who did not participate in the study. The cooperating teacher collected the permission slips, and the students used numbers to identify themselves on the tests. Once the study was completed, the cooperating teacher provided me with a list of numbers that corresponded with the students who

participated in the study. This was done so that I would not inadvertently affect the results by paying more attention to certain students knowing that they were involved.

The cooperating teacher wants every student to succeed, whether he or she is one of her middle school students or a university student who has been placed in her classroom for a field experience. I have had the pleasure of spending many hours in her classroom. She provided constructive feedback as well as support whenever needed.

In the Alpha class, 14 out of the 24 students participated in the study. In the Beta class, 11 students out of the 22 students did. Thus 25 out of a possible total of 46 students chose to participate.

The cooperating teacher selected the two classes that participated in this study. She chose the classes based on their overall academic achievement, the number of special needs students in the class, and the number of students in the classroom. She closely matched the two classes based on their level of academic achievement as well as the total number of students and the number of special needs students. She believed the two classes were similar enough to be able to make appropriate comparisons. They were arbitrarily assigned the names Alpha and Beta after the study was completed.

Prior to beginning this research study I spent several weeks in the two classrooms in order to become familiar with the students. This was done in order to not unbalance the classroom culture. One week prior to teaching the two class periods, I obtained parental permission.

Data Collection

The first lesson's content pertained to Athens and Sparta before to the Peloponnesian War. In order to gauge prior knowledge, the students completed a pretest (see Appendix A). The pretest contained two definitions, six questions for which the students had to decide if the city-state was

Athens or Sparta, and a short answer question that asked the students to compare and contrast Athens and Sparta. The Alpha class was taught using lecture with PowerPoint (see Appendix B). The information the students were expected to master was projected on a Smart Board and explained verbally while the students took notes. A Smart board is a tool that allows PowerPoint and other computer-based applications to become interactive. The PowerPoint can be projected onto the Smart Board, and then can be written on, or enhanced in other ways. The Beta Class was taught the same information using cooperative learning. The class was divided into five groups of four students. Two students, who were not included in any of the groups, were designated as representatives: one from Athens, and one from Sparta. The representative's task was to convince the different groups to join his league. These two individuals used information provided by the teacher. I formed the groups randomly. The two students who were chosen to be the representatives were the last two students after each group had its allotment of students. The groups represented individual city-states that were not part of any alliance with Athens or Sparta. They were Thebes, Argos, Delos, Mantinea, and Syracuse. Each group received background information about its city-state. This information included the city-states' location, their economy, and government. The location is important because it determined whether the economy of the city-state was based on agriculture based or trade. Athens and Sparta had different economies, Athens was trade based and Sparta was agriculture based. The type of government is important because Athens and Sparta had different types of governments. This information allowed the groups to make their decision. This background information was necessary for the students so that they could make informed decisions on the issues that would determine which league to join. Each group divided itself into two delegations, with each delegation going to hear either the representatives of Athens or Sparta speak. This occurred four

times, each on a different issue. These issues were government, quality of life, treatment of non-citizens, and trade and prosperity. After each speech the delegations returned to their group, and shared the information they had obtained. These speeches were to be the basis for their decision about to which league to join. Each representative chose one side of the classroom and read his/her speech from information I provided them with. It was the job of the group to decide after each speech, which league to join. After all four speeches were given and the groups had all their information, they were asked to make one final decision on which league to join. Next, each group informally shared its decision with the rest of the class while explaining the reasons for doing so. After finishing the lesson, both classes completed a posttest, which was a duplicate of the pretest (see Appendix A).

The second lesson pertained to Alexander the Great. In the Alpha Class, I used the jigsaw method, while in the Beta Class I used a PowerPoint presentation. Prior to the lesson I gave the students a pretest to assess their prior knowledge. The pretest contained two definitions, six multiple choice questions and one short answer (see Appendix C). The multiple-choice questions covered information about Alexander the Great's native land, his conquests, his death and the fate of his empire.

For the jigsaw in the Alpha Class, I relied on the textbook. The students were divided into six groups of four students. The corresponding section of the textbook was divided into four sections. I randomly picked the groups the students would be in. Each student in the group had a different section to read and take notes on. After each group had completed the task of reading and noting its section, the students were regrouped based on the material they had been assigned. These expert groups allowed the students to compare notes, and discuss what they thought was the important information from the section they read. Once this step was completed, the students

returned to their original groups and shared the information from their section with their original group. The Beta Class was taught using a PowerPoint lecture and the Smart Board (see Appendix D). As with the first lesson in the Alpha Class, this allowed the students to receive the information visually as well as auditory while they took notes. After the lesson, the students were given a posttest to assess what they had learned (see Appendix C). This posttest was an exact replica of the pretest.

After completing the two lessons in both classes, all students completed a questionnaire about which learning method they liked the best and helped them learn the best (see Appendix F). Also included in this questionnaire were questions about the pros and cons of the lecture method as well as cooperative learning. The questionnaire gave the students an opportunity to express their voice.

Data Analysis

The data for this study consists of the results of a pretest and posttest for each lesson as well as a written questionnaire that the students completed after both lessons were taught, thus providing quantitative as well as qualitative data. For each of the four lessons, the pretest scores were compared to those of the posttest. The test scores between the two classes were compared likewise.

This study includes several limitations. The reader has to take into account that the classes were composed of different students, and although they were chosen based on their overall level of achievement, they were not identical. Another issue that needs to be taken into consideration is that Alpha Class was taught during first period class while the Beta Class was a fourth-period class, which occurred immediately prior to school lunch. Both of these factors could affect the students' motivation. Students who are in the first period class might still have been tired and not

ready to learn, while students in fourth period class might have been hungry and focused on lunch.

The questionnaire was analyzed by identifying the students' preferences for direct instruction or cooperative learning. Finally, the analysis included discerning themes in the reasons students gave for preferring one method over the other.

CHAPTER FOUR

FINDINGS

This chapter will graphically present the data collected from the pretests and posttests. Each graph will display the pretest score, the posttest score and the change in score for each individual student.

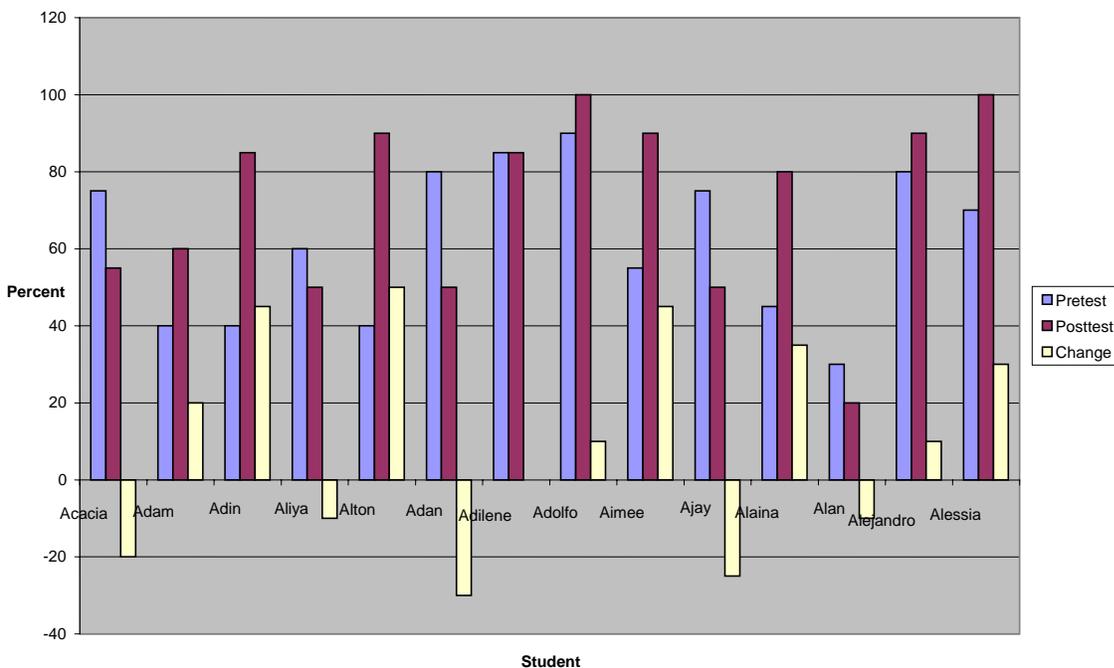
Test Score Analysis

Graph 1 (see p. 38) displays the pretest and posttest scores of the Alpha class for the lecture method. The mean pretest score was 62%. The mean posttest score was 72%. The mean score increased by 10% from the pretest to the posttest. The median score increased by 18% and shifted in a positive direction from 65% on the pretest to 83% on the posttest. The mode increased as well. While the mode on the pretest was 40%, it became bimodal on the posttest at 50% and 90%. The range on the pretest was 60% (30% – 90%) compared to 80% (20% – 100%) on the posttest. A comparison of the pre and post-test indicates that 36% of the students' scores declined, 7% stayed the same, and 57% increased. The range of the change in scores was 80%, (-30% to 50%). The mean as well as the median of the change were 10%. The mode of the change in scores was -10%, 10%, and 35%.

For the lecture method of instruction the overall achievement level for the entire class increased. The class mean increased 10%, indicating that on average the class performed better on the posttest than on the pretest. The median score increased as well. It increased by 18%. This indicates that for the most part, the students improved their scores. The mode changed from pretest to posttest as well. On the pretest it was 40%, whereas on the posttest it was bimodal at 50% and 90%. This suggests that more of the students performed better on the posttest than on the pretest. However, the range increased indicating that the students' scores were more spread

out on the posttest than they were on the pretest. Therefore, even though the class average increased, some students actually performed significantly worse on the posttest, thus increasing the range.

Graph 1. Alpha Lecture



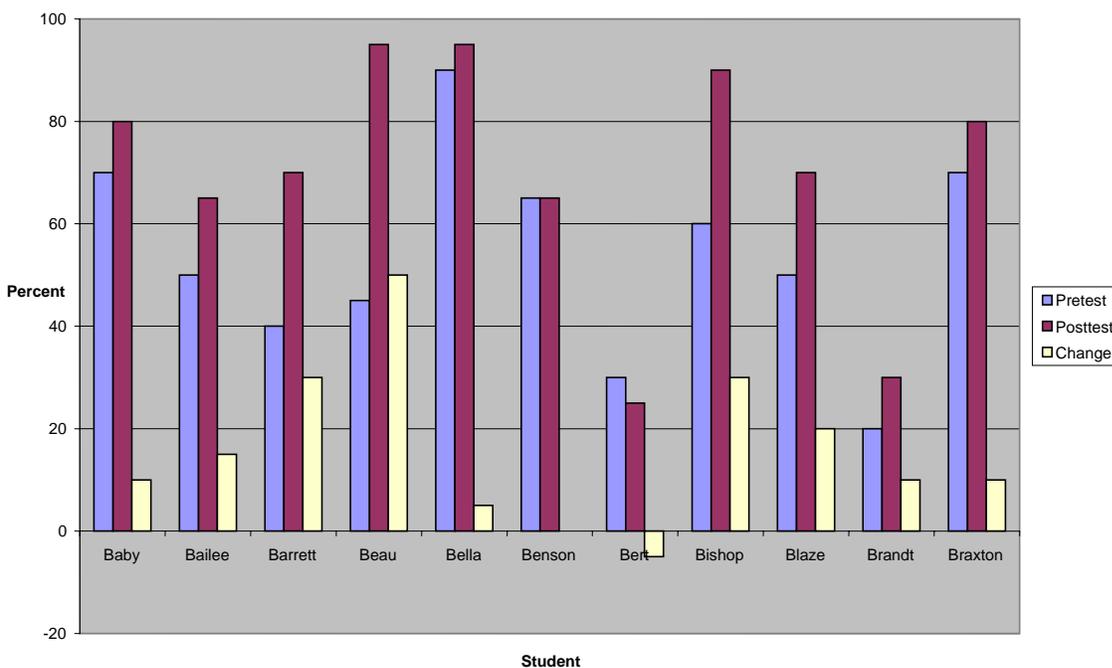
Graph 2 (see p. 39) displays the pre and posttest scores of the Beta class from the cooperative learning method. The mean on the pretest was 54%. The mean on the posttest increased 16% to 70%. The median score on the pretest was 50% while the median score on the posttest was 70%, representing an increase of 20%. There was also a significant change in the modes from pretest to posttest. The pretest was bimodal, 50% and 70%, while the posttest was quad-modal, 65%, 70%, 80%, and 95%. The range on the pretest was 70% (20% – 90%) compared to the range on the posttest, which was also 70% (25% – 95%).

In the Beta class, 9% of the students performed worse on the posttest. Nine percent of the students had the same score on the posttest. Eighty-two percent of the students improved their

scores. The range of the change in scores on the posttest was 55% (-5% to 50%). The mean of the change in scores was 16%. The median of the change in scores was 10% while the mode was 10%.

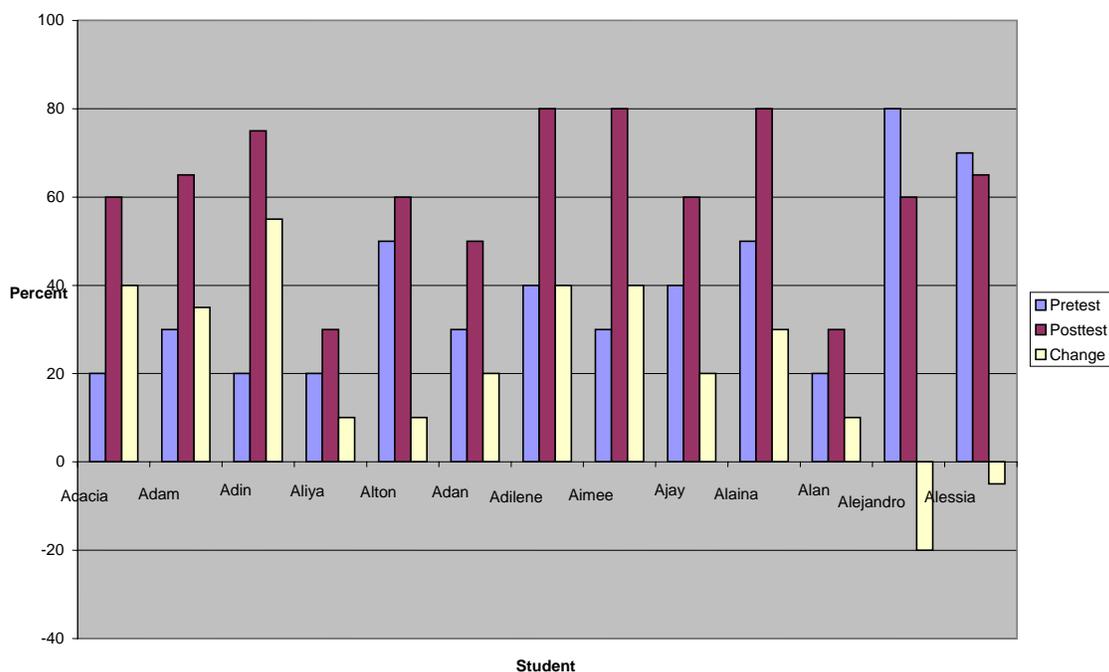
This graph displays the scores of the Beta class for the cooperative learning method. A large majority of the students increased their scores from pretest to posttest. Overall, the mean of the class increased by 16% while the median increased by 20%. On the posttest the median and the mean were almost the same and differed by less than 1%. The posttest had four modes; 65%, 70%, 80%, and 95%. The first mode listed (65%) is the only mode that fell below the mean and median scores. The second mode listed (70%) occurred at the same percentage as the mean and median. The two remaining modes (80% and 95%) were both above the mean and median. The range remained the same from pretest to posttest.

Graph 2. Beta Cooperative Learning



Graph 3 (see p. 40) displays the pretest and posttest scores of the Alpha class for the cooperative learning method. The mean on the pretest was 39%. The mean on the posttest was 63%, representing an increase of 23%. The median score increased from 40% to 63%, representing an improvement of 23%. The mode on the pretest was 20%. The posttest was bimodal, 60% and 80%. The range on the pretest was 60% (20% – 80%) compared to the range on the posttest, which was 50% (30% – 80%). The range decreased in size indicating that the scores on the posttest were all grouped closer together than on the pretest.

Graph 3. Alpha Cooperative Learning

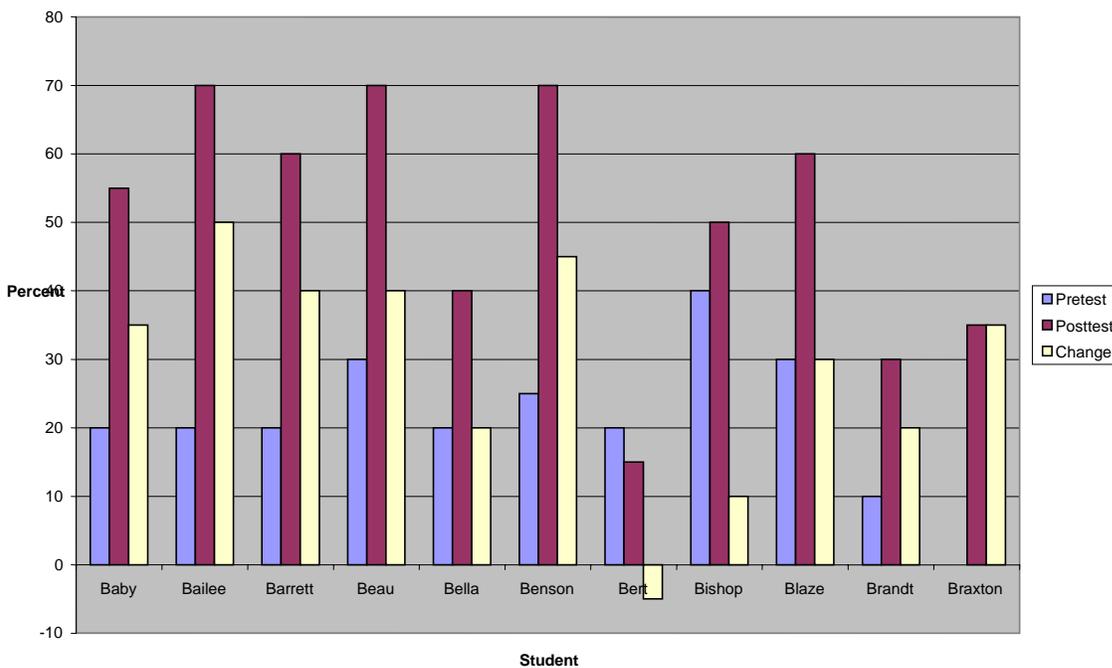


While 15% of the students' scores decreased from the pretest to the posttest, 85% of the students increased their scores. The range of the change in scores was 75% (-20% to +55%). The mean and median of the change in scores were 22% and 20%. The change was bimodal at 10% and 40%.

Graph 3 displays Alpha's achievement from the cooperative learning method. The mean and median on the posttest were the same at 63%. The mean increased from 39% on the pretest and the median increased from 40% on the pretest. The modes on the posttest also improved, the first mode was at 60%, which is just below the mean and median score, and the second mode is higher at 80%. The range decreased as the scores were more centered about the mean and median.

Graph 4 (see p. 41) shows the scores of the Beta class for the lecture method. The mean score on the pretest was 21%. The mean from the posttest was 50%, representing an increase of 29%. The median increased by 35% from 20% on the pretest to 55% on the posttest. In addition, the mode increased by 50% from 20% on the pretest to 70% on the posttest. The range increased from 40% (0% – 40%) on the pretest to 55 % (15% – 70%) on the posttest.

Graph 4. Beta Lecture



Nine percent of the students' scores decreased from pretest to posttest, while 91% of the students improved their score. The range of the change in scores was 60% (-5% – +55 %). The mean and median of the change in scores was 30% and 35%. The change in scores data was tri-modal, at 20%, 35%, and 40%.

Graph 4 displays the data for the Beta class for the lecture method. The achievement level of this class increased. The mean and median on the posttest did not increase at the same rate. The median (55%) was higher than the mean (50%) by 5%. The mode increased dramatically from pretest to posttest; it was 20% on the pretest and 70% on the posttest. This mode was 20% higher than the mean. The range also increased from pretest to posttest indicating a greater spread in the scores. This means that the data set was more spread out, and less centered around the mean and median score. Based on the percent of students whose score increased from pretest to posttest, the performance level of the students increased.

Comparative Analysis

The findings from this study are ambiguous. The data collected came from two different classes that were taught the same material using two different instructional methods. They were selected based on the similarity of their levels of academic achievement and other factors such as the number of special needs students in each, as well as class size. However, I was not able to access data on the prior academic performance of the students who participated in the study. Therefore, it is unclear whether the students were evenly matched academically in both classes.

The students in the Alpha class had a higher mean score on the pretest for both lessons than the Beta class. The mean score for the Alpha class on the pretest for the Lesson One [lecture] was 62% compared to a mean score of 54% for the Beta class [cooperative learning]. The mean score for the Alpha class on the pretest for Lesson Two [cooperative learning] was 39%

compared to a mean of 21% for the Beta class [lecture]. Not only were the mean pretests scores of the Alpha class higher than those of the Beta class for both lessons, so was their mean posttest scores. On Lesson One, the Alpha class [lecture] had a mean posttest score of 72% compared to the mean for the Beta class [cooperative learning] which was 50%. On Lesson Two, the Alpha class [cooperative learning] had a mean posttest score of 63% compared to the mean posttest score for the Beta class [lecture] which was 50%.

However, for both lessons more students in the Beta class improved their scores from pretest to posttest than in the Alpha class. For Lesson One [cooperative learning] in the Beta class 82% of the students improved their scores whereas for Lesson One [lecture] in the Alpha class only 57% did. For Lesson Two [lecture method] in the Beta class 90% of the students improved their scores whereas as for Lesson Two [cooperative learning] 85% in the Alpha class did. In addition, the increase in the class mean and median were larger in the Beta class than in the Alpha for both lessons.

Analysis of the scores for each class indicates there is no correlation between the teaching method used and the level of class achievement. Students in the Alpha class generally improved their performance more with the cooperative learning method. The change in their class mean was 23% for the cooperative learning method; whereas it was 10% for the lecture method. The median class scores followed the same pattern. For the cooperative learning method the median score increased by 23%, whereas the median score increased by 18% for the lecture method.

Analysis of the scores for the Beta class indicates the opposite outcome. The Beta class mean scores improved more from lecture (30%) than from cooperative learning (16%). The same results were found for the median score. The median score from the lecture method increased 35%, whereas the median score for the cooperative learning method increased by 20%.

A comparison of the change in scores between Alpha and Beta following the lecture each class received indicated a greater improvement in the Beta class than in the Alpha class. The mean in the Beta class increased 29%, compared to the Alpha class whose mean increased 10%. Likewise, the median score in the Beta class increased 35% while in the Alpha class it increased 18%.

A comparison of the change in scores between the Alpha and Beta class following the cooperative learning activity indicated a greater improvement in the Alpha class. The mean in the Alpha class improved by 23% while the mean in the Beta class increased 16%. Likewise, the median score in the Alpha class improved by 23% while the median score in the Beta class improved by 20%.

Questionnaire

The questionnaire included four questions. In response to the question which method they liked best, 56% of the students in both classes liked the cooperative learning method best. However, in response to the question which method they thought helped them learn better, 52% of all students answered that the lecture helped them learn better. A comparison of the two classes indicated that although 57% of the students in the Alpha class said they preferred the cooperative learning method, the same percentage suggested they learned better from lectures. Fifty-five percent of the Beta students (6 out of 11) preferred to learn by cooperative learning methods. The same percentage suggested it helped them learn better.

When asked to suggest positive as well as negative aspects of lecturing with PowerPoint, the students offered a variety of responses. The most positive aspect was that the notes were visible. Not only did the students hear the information but they were able to see it as well. Similarly, some students commented on the explanations and the fact that they received the information

verbally. A number of students also commented that they learned the information better. In addition, the students also commented on the negative aspects of PowerPoint lectures. The most common response was that it was boring. Some of the students also commented on the use of a Smart Board and listening to the teacher. About the Smart Board the student commented they were able to see the information as well as hear it. While some students indicated they had a hard time seeing the Smart Board, they also stated that the teacher allowed them to move closer. The comments that were made regarding teaching were both positive and negative. One student suggested the “teacher explained it great” whereas another said the teacher was “not so good at explaining”. They also commented on the fast pace of the lecture.

In their responses about the positive and negative aspects of cooperative learning, the students offered a variety of comments. They liked being able to work with friends, and suggested that the activity was fun. They also commented on the negative aspects of cooperative learning. One of the recurring themes was that some students in the group did not find the correct information causing everyone to have incomplete information. Another issue was that not all students always do their share of the work.

The questionnaire allowed the students to offer comments and suggestions about what they thought of the different instructional methods. Some students made broad comments about how the class or other students acted or perceived the situation, whereas others kept their comments more personal and talked about how it affected them individually. It was important to get feedback from the students because it made them more aware of their preferences.

Summary

Analysis of the findings from the pretests and posttests for the Alpha and Beta class on lecture and cooperative learning does not suggest one distinct conclusion. The findings are too

ambiguous to answer the research question and do not allow for one simple conclusion about the correlation between instructional methodology and student achievement. Although in general the Alpha class performed better than the Beta class did for both instructional methods, based on the mean and median scores the Beta class showed greater improvement from pretest to posttest for both instructional methods. This suggests that different classes may respond differently to different types of instructional methodologies and that context matters.

CHAPTER FIVE

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Summary

This paper had two objectives. The first was to examine the research that has been completed in regards to teaching methodologies in middle school social studies classrooms. The second was to present findings from a field research study which was conducted in a 7th grade classroom. The literature review focused on two types of instructional methodologies: lecture and cooperative learning. The review examined the way lecture can be used in the classroom as well as a variety of cooperative learning methods that can be used in the classroom.

The research occurred in a seventh grade classroom where two classes were each taught two lessons. The classroom teacher chose the two classes that participated based on similarities. These similarities were overall class achievement, number of special needs students, and the total number of students in each class. Each class was taught one lesson using lecture and one lesson using a cooperative learning activity. The first lesson in the Alpha class was lecture. The first lesson in the Beta class used cooperative learning. The second lesson the Alpha class used cooperative learning, while the Beta class was taught by lecture. The data came from pretests and posttests administered to each class after each lesson. The data was compared three ways. The first comparison analyzed the scores of Alpha and Beta for Lesson One [lecture and cooperative learning respectively] and Alpha and Beta for Lesson Two [cooperative learning and lecture respectively]. The second comparison analyzed Alpha's score for Lesson One [lecture] with Alpha's score for Lesson Two [cooperative learning] as well as Beta's scores for Lesson One [cooperative learning] and Lesson Two [lecture]. The third comparison analyzed the scores by instructional methods, i.e. Alpha and Beta's score for lecture and Alpha and Beta's scores for

the cooperative learning activity. This was done to determine if there is an effect of instructional methodology on the achievement level of students. After each class had completed its two lessons, the students completed a questionnaire to solicit their thoughts about which teaching method they preferred.

Conclusions

After analyzing the data from the pretests and posttests in both classes for lecture and cooperative learning, it is clear that no *one* distinct conclusion can be drawn. The data is too ambiguous to give a specific answer to this Master's Research Project's research question. However, it can be argued that there is one overarching conclusion that can be drawn from this study, which is that context matters.

The Alpha class performed better overall than the Beta class and had a higher class mean and median for both instructional methodologies. However, the Beta class improved more than the Alpha class for both instructional methodologies. While it is possible to argue that the Alpha class performed better than the Beta class, it is also possible to argue that the Beta class performed better because the students' score in this class improved more.

A second conclusion is that both classes improved their scores more after the second lesson than after the first lesson. This increase may well be attributed to my becoming part of the classroom culture. The students had become used to my presence and teaching style in the classroom. Once this occurred, the students began to perform at a higher level because they knew what to expect.

A third conclusion, based on the findings from the questionnaire, suggests that even though students may suggest they prefer a specific method of instruction, they may yet feel they learn

better from a different one. It can also be concluded that the students in this study were aware of what they liked and what worked better for them.

In summary, the overarching conclusion of this study is that context matters. Students react differently to different material. Since not all students learn in the same way, the way that the material is presented affects students differently. For students who prefer lecture, a cooperative learning activity may inhibit their achievement. The same can be said for students who prefer cooperative learning activities as lecture may well inhibit their achievement.

Context is also related to the information that is being presented to the students. Some information can be transmitted better through a lecture, whereas other information can be better transmitted through a cooperative learning activity. Therefore, what matters is to know your students and understand what it is they need to be successful.

Recommendations

This study needs to be completed on a larger scale to draw any definite conclusions. Having a limited time, and a small sample size inhibited the collection of data. If this study were to be completed on a larger scale, such as using all of the classes that a teacher has in a given day as opposed to only using two class periods and if the data were collected over a longer period of time, it could produce results that are more definitive.

The validity of this study may well be enhanced if it were to be conducted by someone who is already part of the classroom culture. This would allow the students to feel more comfortable with the person who teaches the lessons, which might eliminate the issue of having greater improvement in scores on the second lesson. As such, one could have the regular classroom teacher actually teach all lessons, and provide the data to the researcher.

When deciding upon the best instructional methodologies to use, teachers need to *know* their students. The teacher and the students should work together to determine the best instructional methodologies to use in their class. They should be the ones to determine what methods are used. When teachers use methods that are matched to their students' needs, achievement levels will improve and everyone, including the teacher, will enjoy the learning process more.

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APPENDIX A

PRETEST/POSTTEST ATHENS VS. SPARTA

Define each term. (1 point each)

Democracy-

Oligarchy-

Athens or Sparta (1 point each)

Indicate by "A" (Athens) or "S" (Sparta) which statement belongs to which city-state.

Which city-state was located on a large plain surrounded by mountains? _____

Which city-state was located on the Peloponnesian peninsula? _____

Which city-state created the Delian League? _____

Which city-state created the Peloponnesian League? _____

Which city-state built temples and statues? _____

Which city-state did not have a slave trade? _____

Short Answer (2 points)

Answer in complete sentences.

Based on what you know about Athens and Sparta write a short essay explaining two or three similarities and differences of the two city-states.

APPENDIX B

Athens vs. Sparta PowerPoint

APPENDIX C

PRETEST/POSTTEST ALEXANDER THE GREAT

Define (1 point each)

Provide a definition for each term.

Conquest

Hellenistic

Multiple Choice (1 point each)

Choose the best answer.

- 1) Macedonia is located
 - a) North of Greece
 - b) East of Greece
 - c) West of Greece
 - d) South of Greece

- 2) In 338 BCE Phillip, Alexander's father, became ruler of
 - a) Greece
 - b) Athens
 - c) Sparta
 - d) Albany

- 3) Throughout Alexander's rule, 336 BCE – 323 BCE how did he spread Greek culture throughout the ancient world?
 - a) War
 - b) Trade
 - c) Formed Alliances
 - d) None of the above

- 4) As Alexander took control of new lands, which did he model the cities after.
 - a) Italy
 - b) Egypt
 - c) Rome
 - d) Greece

- 5) What happened to the cultures of the cities that Alexander the Great conquered?
- a) Created a new unique culture
 - b) Adopted the Greek culture
 - c) Kept their own culture
 - d) Both (b) and (c)
- 6) After Alexander died his empire was
- a) Split up into various different sections
 - b) Stayed as a whole
 - c) Split into two sections
 - d) Dissolved completely
-

Short Answer (2 points)

Answer in complete sentences.

Why was Alexander so Great? Explain.

APPENDIX D

Alexander the Great PowerPoint

