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ACTIVE STUDENT ENGAGEMENT BY USING **COOPERATIVE LEARNING STRATEGIES**

by Austin Martinez

A Thesis

Submitted in partial fulfillment of the requirements of the Master of Science in Teaching Degree of

The Graduate School at Rowan University 7/28/09

Approved by _____ Dr. Maria Sudeck

Date Approved 7/88/09-----

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ABSTRACT

Austin Martinez ACTIVE STUDENT ENGAGEMENT BY USING COOPERATIVE LEARNING STRATEGIES 2008/09 Dr. Maria Sudeck Master of Science in Teaching

The purpose of this study was to explore possible solutions to student interaction and product quality in a ninth grade English class by using strategies in cooperative learning. Reciprocal learning, jigsaw, and skills practice were used to promote student interaction and cooperation during a lesson on William Shakespeare's "Romeo and Juliet". The data reveals that the three student participants have the skills necessary to succeed and excel in cooperative learning strategies, and previous student achievements may not necessarily indicate an ability or inability to master a cooperative learning activity. Implications for using cooperative learning strategies in the classroom are discussed.

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CHAPTER I

Introduction

Statement of the Problem

Through informal observations, I had noticed that the students in my class had difficulties with staying on task. I observed that most of the students would rather socialize during class time and talk to their peers about friends, drama, after-school plans, and any current event in the student body. When I asked that they stay on task, some students rolled their eyes at me and were back to talking to their peers within minutes.

My cooperating teacher had very little experience with student teachers. Rather than collaborating with me, my cooperating teacher had left me on my own with the students. After my first week with this class, I had informally observed that the students did not care about their grades; the students had difficulty paying attention to the lessons and activities. However, once I had begun to enter their poor grades into the online grading system, the students' attitudes had changed. While some students still spoke during lessons and did not pay attention, a majority of the students had begun trying to pay attention.

Within the first two weeks, I realized that the students were only interested when there is a grade is at stake. They paid close attention only when we were reviewing for a quiz or a test; they had a lot of difficulty paying attention when they were first presented with new material. This is a problem, because by simply memorizing and reciting oneword answers, my students were only skimming the surface of an entire world of education.

Significance of the Study

In a time where the national academic test scores are consistently low (Bridges, 2007), there is a 30% national high school dropout rate (Grey, 2008), and The Internet is a common resource of information for students, teachers will face the immense challenge of facing student indifference at the secondary level; students may have a continued lack of interest in the subject matter for many reasons. As a result researched, implemented, and evaluated possible solutions to student apathy within the classroom. Educators may also find this study to be significant because even if it does not offer a possible solution to student indifference, it will demonstrate a way for educators to find their own solutions to problems within their own classroom.

Question(s)

How can I encourage active student engagement by using cooperative learning strategies in a 9th grade English class?

Integrated Action and Purpose

In my studies and research, I became very interested in the possibilities with cooperative learning, which relies on direct student interaction in a lesson or activity. Because of my own interest in this area, I will use and assess three facets of cooperative learning. I have decided to use the students' propensity for talking to my advantage, and my goal is to harness their talkativeness. The first strategy I will use is reciprocal teaching, which allows students, in pairs or groups, to explore their own inquiries and

topics of interest by summarizing, question generating, clarifying, and predicting. The second strategy is Slavin's Jigsaw, which involves students learning a new concept and teaching other students within groups. The third strategy is skills practice, which allows students to explore and practice new concepts in groups. I plan to incorporate each of these three strategies in a unit and evaluate their effectiveness.

Assumptions and Limitations

There were several limitations to the extent of my research for this study. First, there is a general lack of motivation in my class. During the first two weeks of student teaching, I observed that students were submitting incomplete work, complained of most assignments, and acted more interested in life outside of school than within the classroom. Second, the results may not be accurate because the students are aware that they are the subjects of my research. Their approach to their work may differ from their normal lackadaisical approach because their work is suddenly under a microscope. Therefore, this study may not accurately reflect the students' performance and the strategy's efficacy in real time classroom applications.

Definitions

Action Research – Action research is a research format that allows the researcher to assess an issue, research relevant data on the issue, and develop, implement, and assess a solution to the problem.

Cooperative Learning - Cooperative learning is a set of related instructional strategies where students are grouped into learning teams for a set amount of time or assignments with the expectation that all students will contribute to the learning process and outcomes (Kane, 2007).

Differentiation - Differentiation is the adaption of a lesson, activity, or assessment to cater towards various learning types.

Engagement - Engagement is when a student is physically, mentally, emotionally, and willingly involved with a given lesson or activity.

Indifference – Indifference is when one has a lack of motivation, interest, concern, or sympathy.

CHAPTER II

Literature Review

Approximately halfway through my student teaching experience, I began to sense that the lessons and activities were becoming too mundane and routine in my 9^{th} grade class. The students seem uninterested and I felt my lessons are predictable, boring, and disengaging in their eyes. However, others had previously been in my situation; according to Putnam and Burke (2006), the first step toward getting unstuck is to acknowledge being stuck. The students had trouble staying engaged, and I felt stuck – I wanted to find a new and invigorating way to grab their attention and keep the students engaged for a good part of the lesson. Therefore, I needed to understand what was not working in order to develop a plan of action to attack this problem.

I wanted the students to engage with their work and become genuinely interested in the topics discussed and studied in class. It follows that the person who does the work is the only one doing any learning (Wong & Wong, 2004). Students need to do the work in order to learn and walk away with the concepts in class. My challenge was for students to find relevance in the work that I assign to them. Sagor (2003) inquired that if, in the past, effort has repeatedly produced failure, why should the student now expect anything different? Young people need to receive feedback and see concrete evidence of the value of their work as much, if not more, than adults (Sagor, 2003).

Throughout my research. I have kept returning to a teaching strategy called cooperative learning. Cooperative learning is a set of related instructional strategies where students are grouped into learning teams for a set amount of time or assignments with the expectation that all students will contribute to the learning process and outcomes (Kane, 2007). People working in groups is not a new idea; Robert Slavin notes that the idea that people working together toward a common goal can accomplish more than people working by themselves is a well-established principle of social psychology (Wong& Wong, 2004). Studies show that students are more positive about one another when they learn to work cooperatively, regardless of ability, handicap, or ethnic background (Wong & Wong, 2004). Cooperative learning is a useful strategy because when done correctly, it fosters positive interaction among the students, and this is important because when we have good reason to believe that others value our opinions and hear our voice, we feel that we belong (Sagor 2003). It is also important to note that Johnson & Johnson (1999) and Summers (2006) report that students who work in collaborative groups also appear more satisfied with their classes, complete more assignments, and generally like school better (as cited in Fisher & Frey, 2008). It is important for students to feel that they belong and that their voice is heard, which is one of the multiple facets of cooperative learning.

There are many different ways to incorporate cooperative learning within my classroom, but there are three specific methods that have garnered my interest. The first kind is reciprocal teaching. In reciprocal teaching, groups of students read a text and engage in conversation using the following structure: summarizing, question generating, clarifying, and predicting (Fisher & Frey, 2008). In this method, with the guidance and

collaboration of the teacher, the groups may explore their own inquiries and topics of interest; this will encourage student engagement because they have the opportunity to pursue their own interests. This is also important because rather than the teacher telling the students what they need to learn, both students and teachers should be collaborators in learning (Tomlinson, 1999).

The second method of cooperative learning is jigsaw. In this structure, group members are each assigned some unique material to learn and then teach to other group members (Fisher & Frey, 2008). As cited by Aronson (1978) and Slavin (1988), the purpose of the jigsaw strategy is to create close working relationships among teammates (Frank, Grossi, and Stanfield, 2006). This approach is strong because aside from working with the group, each student is held directly accountable for a piece of the information. Furthermore, all students participate in respectful work (Tomlinson, 1999). Finally, Wiggins (2005) inquires that without clarifying the desired results of our teaching, how will we ever know whether our designs are appropriate or arbitrary? Jigsawing allows the student the freedom to work at his or her own pace while abiding by the teacher's specified rules and desired outcomes.

The third method of cooperative learning is skills practice. While students may practice new skills on their own, students need time to practice new concepts in the company of peers who are learning along with them (Fisher & Frey, 2008). It is important for students to collaborate while working with new skills because cooperative learners use higher-quality reasoning strategies, higher-level processing, and deeper thinking than isolated students (Wong & Wong, 2004). Furthermore, Goldberg (2001)

notes that when three or four people can discuss the topic themselves and support each other in the early stages, the environment creating interest in development is much healthier.

In addition to the strategies, I needed to understand the most effective and efficient way to implement them within my setting. First and foremost, it is necessary to teach participants in cooperative groups the roles they will play in making the group effective (Putnam & Burke, 2006). In addition to individual responsibilities within the group, goals or tasks must be structured so that the students concern themselves with the performance of all members of the group, not just their own performance (Wong & Wong, 2004). Finally, Shapon-Shevin (2007) notes that the roles in collaborative groups must be purposefully constructed to ensure maximum success (as cited in Fisher & Frey, 2008). I foresee some challenges in this because teaching students to be responsible and accountable and eliminate their dependence on external control is difficult (Putnam & Burke, 2006); however, I believe that through repetition and positive role modeling, students will successfully work collaboratively together.

Another major facet of cooperative learning is the way instruction for a strategy a teacher uses is presented. New information should typically be introduced during focus lessons and should be reinforced during guided instruction (Fisher & Frey, 2008). Only after this instruction is completed should students practice their new skills and concepts in collaborative group work. Furthermore, when students are to work in groups, instruction time is vital for both the students and the teacher. For this reason, the teacher should not give students directions that do not apply to them; it wastes time, it's confusing, and it calls too much attention to task variance (Tomlinson, 1999). Students

should be fully aware of their own personal tasks. In addition to task instruction, it is important for teachers to anticipate confusion. Anticipating confusion means taking steps to clear up confusion before students encounter it (Jackson, 2009). Jackson (2009) further notes that this is difficult for us as experts because we have already done the work of making connections and giving meaning to our subject, but for our students, these connections and meaning may not be obvious to them.

A final major facet of cooperative learning is roles in groups. Groups are to be divided by the number of jobs, not by the number of people (Wong & Wong, 2004). Furthermore, each role should have some part of the project that is the students' contribution (Kelly, 2004). Some group roles include leader, facilitator, time-keeper, recorder, spokesperson, or materials manager (Silberman, 1996). The leader oversees the entire group's activities. The facilitator runs the group discussion or work. The timekeeper keeps the time, the spokesperson orates the group findings to the rest of the class, the recorder keeps notes, and the materials manager oversees materials being used, such as construction paper, markers, dry-erase boards, or worksheets.

CHAPTER III

Methodology

Throughout their careers as educators, teachers face a multitude of challenges and hindrances. Action research is an effective method for teachers to use others' research and findings to better understand the problem as well as to form a plan of action to resolve the issue. According to Mills (2003), action research is any systematic inquiry conducted by teacher researchers...in the teaching/learning environment to gather information about how their particular schools operate, how they teach, and how well their students learn (p. 5). Action research is research done by teachers for themselves (Mills, 2003, p. 5).

Action research engages teachers in a four-step process: indentifying an area of focus, collecting data, analyzing and interpreting data, and developing an action plan (Mills, 2003, p. 5). After an educator selects an area of focus and interest, the educator will collect data of their school, the students, the challenge or problem, and prior research on the topic. After collecting the data, the educator will analyze the data and interpret what it all means. Finally, based on the educator's findings, the educator will form an action plan to implement in the researched setting.

Context of the Study

I have conducted my action research in Pitman High School (PHS). PHS is a comprehensive community public high school that serves students in ninth through twelfth grades from Pitman, in Gloucester County, New Jersey, United States, as part of the Pitman School District. There are 501 students and 40 teachers in PHS, and the student population is 96% Caucasian, 2% Asian, 1% Hispanic, and 1% African-American. Over 90% of the 2007 graduating senior class attended a two or four year college, and over 88% of all of the students participate in extra-curricular activities.

Pitman is a suburb of Philadelphia, PA. Pitman is less than three square miles and has 9,365 residents. The town has three elementary schools, one middle school, one high school, and thirteen churches. Pitman neighbors Glassboro, the home of Rowan University, a major university in southern New Jersey with over 10,000 students and seven academic colleges.

I conducted my research in Mr. Smith's (a pseudonym) ninth grade Standard English class. I began my student teaching internship on January 25th, 2009 and I had taken over Mr. Smith's ninth grade English classes on February 17th, 2009. There are ten students in my classroom, all of whom have low levels of academic interest. Two students have been left back from the previous school year and are repeating the ninth grade again. One student competes on various school sports teams, and two students play rock music in bands outside of school. Two students have IEPs and require the assistance of an in-class support teacher; this support teacher attends and contributes to class every day. All of my students appear to come from similar financial backgrounds. The students in this class have a lot of trouble staying on task. They are constantly engaging

in side conversations and I must constantly tell them to pay attention; otherwise, the students would not learn the necessary concepts or complete their work in a timely manner.

The classroom is bright with a window facing the faculty parking lot. Mr. Smith has pictures, posters, and quotes on his walls in order to reflect his personality and approach to life. Mr. Smith coaches track, and due to limited space in the small school, he has track storage in the corner of the room, away from the desks. The desks are set up as a horseshoe with a row of desks facing forward in the center. I chose not to rearrange the desks for two reasons: I only have two of Mr. Smith's classes, and the seating arrangements work for this class.

From the ten students in the class, I selected my participants based on their performance in the classroom. I had decided to include students in my research because students are the informants in teacher research, helping us to learn both the recipes for behavior in their cultures and the learning strategies that they employ (Hubbard & Power, 1993). I made my decision based on their grades, their attitudes toward school and class, their presence in the classroom, and their willingness to try new things in the classroom. From this point, I selected three students: Sara, Sean, and Andrea.

Sara is new to the school; she moved to Pitman from Virginia during the first half of the school year. She had no problem socializing in the new school, and she fits into the school very well. She does not participate in any after school activities, but she achieves the best grades in the class. She always puts all of her effort into her schoolwork, and she takes pride in it. She sits at a desk in the row inside the horseshoe. She separates herself from the talkative and distracting students. She is the first to raise

her hand with an answer or a question about something she does not understand. Students occasionally tease her for her high achievement in class, but this does not affect her. She consistently earns As in class. I had selected her for her strong attitude towards her schoolwork.

Sean is a talkative and social student in the class. He sits in the back of the class with his friends. Sean plays football in the fall, wrestles in the winter, and runs track in the spring. He has two brothers in the high school: a senior wrestler (who had made it to the wrestling state finals in Atlantic City, NJ), and a sophomore. Sean jokes a great deal and often makes humorous comments, but he does not make fun of or antagonize his classmates. He is bit too talkative and distracts his peers, but he takes his grades very seriously. He typically earns Bs in class. I had selected him because he is talkative with a good attitude towards school.

Andrea is a very quiet student who sits in the back of the room, but in an isolated corner. She is not very talkative, and she does not raise her hand with answers often. She does not like very loud noises and becomes nervous when the in-class discussions get too loud. She is interested in anime and other popular Japanese cartoons. Andrea has an IEP that requires the assistance of an in-class support teacher. She has a C average in class. I had selected Andrea because she is not very comfortable with talking in class. *Data Sources*

I have had experience teaching William Shakespeare's "Hamlet" to a senior class during my student teaching. I picked up the class at the middle of their studying this play, and the students were not very interested in the play by this point; it was very challenging for me. For this reason, I had chosen to do my action research along with the

freshmen class' study of Shakespeare's "Romeo and Juliet". I had selected three strategies in cooperative learning: reciprocal learning, jigsaw, and skills practice; I incorporated each of the three strategies into my unit on "Romeo and Juliet."

While incorporating these cooperative learning strategies, I had three sources of data: student interviews, formal observations, and student work. First, I wanted student interviews because I wanted to give students direct input on their own attitudes and ideas. Rather than assuming something about a participant's performance or attitude, I would prefer the student to shed light on the situation. Second, I wanted to conduct formal observations, because cooperative learning is a very active form of engagement with the material, and sometimes student success is not reflected in their work or in an interview. Finally, I wanted to use student work as data because that would allow me to gauge the participants' success with completing an assignment. Sometimes, while a student may not appear to engage with his or her peers, just listening to his or her peers may engage the student with the material, and the work that this student produces may reflect the engagement.

Trustworthiness

If credibility, transferability, dependability, and confirmability can be addressed, then, according to Guba (1982, as cited in Mills 2007), the action research can be considered to be valid. By using various sources of data such as surveys, notes, and student work artifacts, I will be practicing triangulation, which supports and ensures credibility. Furthermore, forming three types of data for a number of cooperative learning activities ensures dependability. Transferability is conducting research that is specific to a particular context. In my classroom, I observed that while the students talk when they are

not supposed to, my cooperating teacher rarely puts the students into groups or allows them to work together. Based on my observations, I feel that the students' lives, personalities, interests, and school-related strengths are conducive to effective cooperative learning.

My action research had potential for biases. One bias is that my students may have been influenced by previous experience with cooperative learning during my student teaching. The cooperative learning that I have implemented has not been as structured as well as the research suggests, and the students' opinions and impressions were difficult to adjust in such a short amount of time.

CHAPTER IV

Findings, Analysis, and Interpretation

Findings

Before I had incorporated the three cooperative learning strategies, I administered a preassessment survey in order to gauge the participants' attitude toward cooperative learning and group work based on prior experience with it in their classes. The survey asked students to state their preference of large group, small group, partners, or solo work when completing various types of assignments. I also provided a space to elaborate any answer should a participant feel it necessary. Sara did not commit to any type of group. When the assignments were bigger and more general, such as projects or presentations, she prefers to work with a small group; however, for more important assignments, such as homework or test preparation, she prefers to work alone. Sean, on the other hand, prefers to work with either large or small groups for all assignments. Conversely, Andrea prefers to work alone on all assignments. She added that she does not like talking very much during class and she likes to rely on herself for assignments.

I had conducted both formal and informal observations during the three strategies of cooperative learning that I had selected. When I had used reciprocal learning, Sara excelled. She had taken charge in her pair by developing questions, which she naturally does in most lessons on her own. She seemed very optimistic and upbeat, despite her peers' wavering engagement in the assignment. She eventually became distracted and began talking, but this was a result of peer pressure and her peers' lack of engagement.

When I conducted a jigsaw strategy, Sara was again very engaged with the material. She was immediately interested in what we were doing when I assigned students to different parts of the room for the first half of the jigsaw. She later added that she liked being able to get up and move during class (Survey, May 7, 2008); she fell into a routine of being in the same seat every day, and being able to move to a new location in the class, even temporarily, was enough to invigorate her to succeed in class. Finally, when participating in a cooperative skills practice activity, Sara did not become as engaged as she did with the previous two strategies. She did not become engaged because her group mates had difficulty paying attention and staying on task. As a result, Sara could not take much away from this activity. Halfway through, she had given up and did her own portion of the work by herself to ensure a satisfactory grade for her part.

Sean had an increasingly difficult experience than Sara when participating in the cooperative learning activities. Sean spoke a lot during all three of the activities, but he was off-topic more of the time than on-topic. I observed that he had used these activities in order to socialize and talk. When I told his group to get back on task, he would be the first to say "Alright guys, let's do this." However, this motivation would quickly waver and the discussion would quickly digress back to irrelevant conversation. I did observe that Sean tends to sit with the same groups when I allow the students to freely select their partners. However, when I assigned Sean to a different partner (and separated him from his usual group), he was a lot quieter and on-task. He did not physically engage with his partner like I had expected, but he did stay on task.

Andrea, like Sean, selected the same person or people whenever we did a cooperative learning activity. Additionally, Andrea had constantly selected the only other student with an IEP, who, like Andrea, requires the assistance of an in-class support teacher. Andrea led most of the conversations and discussions in her pair. I had found out later that she was comfortable and talkative with Michael because they are good friends outside of class. It follows that when she worked with a different student, she would not contribute. She would remain quiet, offer one-word responses, and stay to herself while completing the assigned work. I was interested to find that when working with Michael, Andrea was just as loud and talkative as the rest of the class.

I included student work as a data source because I felt that the work that students submit is the form of assessment with which students are most familiar based on their past and current experience in the school. I also wanted to see if an engagement among peers during cooperative learning is related to good and insightful class work. Sara's work was, as usual, top-notch. The work she had submitted surpassed her peers' work. Her work is above average, and reflects thought and effort. Sean's work, however, did not reflect as much effort or thought as Sara's work. During a jigsaw exercise, Sean spoke about all sorts of things that were not the on-task assignment. Therefore, he had done no work. When I said that time was up and I am collecting the papers, Sean began to scribble the answers onto the paper as quickly as he could. This example best embodies Sean's work; he did the bare minimum in order to receive credit for his work. Finally, Andrea's work was very good. Her answers are insightful and reflect deep thought regarding the topics. This work was some of the best work I have seen from her during my time student teaching this class.

Rubrics and Graphs

Participant Name: Sara

Time: Beginning of study

Participant Name: Sara			Time: Beginning of study		
CATEGORY	4	3	2	1	
Stays on task	Consistently stays focused on the task and what needs to be done. Very self- directed.	Focuses on the task and what needs to be done most of the time. Other group members can count on this person.	Focuses on the task and what needs to be done some of the time. Other group members must sometimes nag, prod, and remind to keep this person on-task.	Rarely focuses on the task and what needs to be done. Lets others do the work.	
Attitude	Never is publicly critical of the project or the work of others. Always has a positive attitude about the task(s).	Rarely is publicly critical of the project or the work of others. Often has a positive attitude about the task(s).	Occasionally is publicly critical of the project or the work of other members of the group. Usually has a positive attitude about the task(s).	Often is publicly critical of the project or the work of other members of the group. Often has a negative attitude about the task(s).	
Quality of Work Submitted	Provides work of the highest quality.	Provides high quality work.	Provides work that occasionally needs to be checked/redone by other group members to ensure quality.	Provides work that usually needs to be checked/redone by others to ensure quality.	
Cooperation with Others	Almost always listens to, shares with, and supports the efforts of others. Tries to keep people working well together.	Usually listens to, shares, with, and supports the efforts of others. Does not cause "waves" in the group.	Often listens to, shares with, and supports the efforts of others, but sometimes is not a good team member.	Rarely listens to, shares with, and supports the efforts of others. Often is not a good team player.	
Contributions	Routinely provides useful ideas when participating in the group and in classroom discussion. A definite leader who contributes a lot of effort.	Usually provides useful ideas when participating in the group and in classroom discussion. A strong group member who tries hard!	Sometimes provides useful ideas when participating in the group and in classroom discussion. A satisfactory group member who does what is required.	Rarely provides useful ideas when participating in the group and in classroom discussion. May refuse to participate.	

Sum = <u>19</u>

Participant Name: Sara

Time: End of study

CATEGORY	4	3	1 ime: End of	1
Stays on task	Consistently stays focused on the task and what needs to be done. Very self- directed.	Focuses on the task and what needs to be done most of the time. Other group members can count on this person.	Focuses on the task and what needs to be done some of the time. Other group members must sometimes nag, prod, and remind to keep this person on-task.	Rarely focuses on the task and what needs to be done. Lets others do the work.
Attitude	Never is publicly critical of the project or the work of others. Always has a positive attitude about the task(s).	Rarely is publicly critical of the project or the work of others. Often has a positive attitude about the task(s).	Occasionally is publicly critical of the project or the work of other members of the group. Usually has a positive attitude about the task(s).	Often is publicly critical of the project or the work of other members of the group. Often has a negative attitude about the task(s).
Quality of Work Submitted	Provides work of the highest quality.	Provides high quality work.	Provides work that occasionally needs to be checked/redone by other group members to ensure quality.	Provides work that usually needs to be checked/redone by others to ensure quality.
Cooperation with Others	Almost always listens to, shares with, and supports the efforts of others. Tries to keep people working well together.	Usually listens to, shares, with, and supports the efforts of others. Does not cause "waves" in the group.	Often listens to, shares with, and supports the efforts of others, but sometimes is not a good team member.	Rarely listens to, shares with, and supports the efforts of others. Often is not a good team player.
Contributions	Routinely provides useful ideas when participating in the group and in classroom discussion. A definite leader who contributes a lot of effort.	Usually provides useful ideas when participating in the group and in classroom discussion. A strong group member who tries hard!	Sometimes provides useful ideas when participating in the group and in classroom discussion. A satisfactory group member who does what is required.	Rarely provides useful ideas when participating in the group and in classroom discussion. May refuse to participate.

Sum = <u>10</u>

Participant Name: Sean

Time: Beginning of study

Participant Name: S			Time: Begini	And the second
CATEGORY	4	3	2	1
Stays on task	Consistently stays focused on the task and what needs to be done. Very self- directed.	Focuses on the task and what needs to be done most of the time. Other group members can count on this person.	Focuses on the task and what needs to be done some of the time. Other group members must sometimes nag, prod, and remind to keep this person on-task.	Rarely focuses on the task and what needs to be done. Lets others do the work.
Attitude	Never is publicly critical of the project or the work of others. Always has a positive attitude about the task(s).	Rarely is publicly critical of the project or the work of others. Often has a positive attitude about the task(s).	Occasionally is publicly critical of the project or the work of other members of the group. Usually has a positive attitude about the task(s).	Often is publicly critical of the project or the work of other members of the group. Often has a negative attitude about the task(s).
Quality of Work Submitted	Provides work of the highest quality.	Provides high quality work.	Provides work that occasionally needs to be checked/redone by other group members to ensure quality.	Provides work that usually needs to be checked/redone by others to ensure quality.
Cooperation with Others	Almost always listens to, shares with, and supports the efforts of others. Tries to keep people working well together.	Usually listens to, shares, with, and supports the efforts of others. Does not cause "waves" in the group.	Often listens to, shares with, and supports the efforts of others, but sometimes is not a good team member.	Rarely listens to, shares with, and supports the efforts of others. Often is not a good team player.
Contributions	Routinely provides useful ideas when participating in the group and in classroom discussion. A definite leader who contributes a lot of effort.	Usually provides useful ideas when participating in the group and in classroom discussion. A strong group member who tries hard!	Sometimes provides useful ideas when participating in the group and in classroom discussion. A satisfactory group member who does what is required.	Rarely provides useful ideas when participating in the group and in classroom discussion. May refuse to participate.

Sum = <u>12</u>

Participant Name: Sean

Time: End of study

Participant Name: S			Time: End of	การการการการการการการการการการการการการก
CATEGORY	4	3	2	1
Stays on task	Consistently stays focused on the task and what needs to be done. Very self- directed.	Focuses on the task and what needs to be done most of the time. Other group members can count on this person.	Focuses on the task and what needs to be done some of the time. Other group members must sometimes nag, prod, and remind to keep this person on-task.	Rarely focuses on the task and what needs to be done. Lets others do the work.
Attitude	Never is publicly critical of the project or the work of others. Always has a positive attitude about the task(s).	Rarely is publicly critical of the project or the work of others. Often has a positive attitude about the task(s).	Occasionally is publicly critical of the project or the work of other members of the group. Usually has a positive attitude about the task(s).	Often is publicly critical of the project or the work of other members of the group. Often has a negative attitude about the task(s).
Quality of Work Submitted	Provides work of the highest quality.	Provides high quality work.	Provides work that occasionally needs to be checked/redone by other group members to ensure quality.	Provides work that usually needs to be checked/redone by others to ensure quality.
Cooperation with Others	Almost always listens to, shares with, and supports the efforts of others. Tries to keep people working well together.	Usually listens to, shares, with, and supports the efforts of others. Does not cause "waves" in the group.	Often listens to, shares with, and supports the efforts of others, but sometimes is not a good team member.	Rarely listens to, shares with, and supports the efforts of others. Often is not a good team player.
Contributions	Routinely provides useful ideas when participating in the group and in classroom discussion. A definite leader who contributes a lot of effort.	Usually provides useful ideas when participating in the group and in classroom discussion. A strong group member who tries hard!	Sometimes provides useful ideas when participating in the group and in classroom discussion. A satisfactory group member who does what is required.	Rarely provides useful ideas when participating in the group and in classroom discussion. May refuse to participate.

Sum = <u>13</u>

Participant Name: Andrea

Time: Beginning of study

Participant Name:	4	3	1 ime: Begini	1
CATEGORY Stays on task	Consistently stays focused on the task and what needs to be done. Very self- directed.	Focuses on the task and what needs to be done most of the time. Other group members can count on this person.	Focuses on the task and what needs to be done some of the time. Other group members must sometimes nag, prod, and remind to keep this person on-task.	Rarely focuses on the task and what needs to be done. Lets others do the work.
Attitude	Never is publicly critical of the project or the work of others. Always has a positive attitude about the task(s).	Rarely is publicly critical of the project or the work of others. Often has a positive attitude about the task(s).	Occasionally is publicly critical of the project or the work of other members of the group. Usually has a positive attitude about the task(s).	Often is publicly critical of the project or the work of other members of the group. Often has a negative attitude about the task(s).
Quality of Work Submitted	Provides work of the highest quality.	Provides high quality work.	Provides work that occasionally needs to be checked/redone by other group members to ensure quality.	Provides work that usually needs to be checked/redone by others to ensure quality.
Cooperation with Others	Almost always listens to, shares with, and supports the efforts of others. Tries to keep people working well together.	Usually listens to, shares, with, and supports the efforts of others. Does not cause "waves" in the group.	Often listens to, shares with, and supports the efforts of others, but sometimes is not a good team member.	Rarely listens to, shares with, and supports the efforts of others. Often is not a good team player.
Contributions	Routinely provides useful ideas when participating in the group and in classroom discussion. A definite leader who contributes a lot of effort.	Usually provides useful ideas when participating in the group and in classroom discussion. A strong group member who tries hard!	Sometimes provides useful ideas when participating in the group and in classroom discussion. A satisfactory group member who does what is required.	Rarely provides useful ideas when participating in the group and in classroom discussion. May refuse to participate.

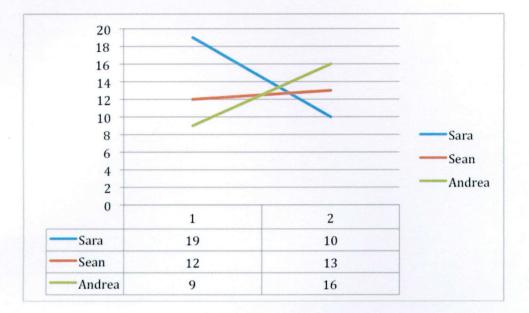
Sum = <u>9</u>

Participant Name: Andrea

Time: End of study

Participant Name: Andrea Time: End of study				study
CATEGORY	4	3	2	1
Stays on task	Consistently stays focused on the task and what needs to be done. Very self- directed.	Focuses on the task and what needs to be done most of the time. Other group members can count on this person.	Focuses on the task and what needs to be done some of the time. Other group members must sometimes nag, prod, and remind to keep this person on-task.	Rarely focuses on the task and what needs to be done. Lets others do the work.
Attitude	Never is publicly critical of the project or the work of others. Always has a positive attitude about the task(s).	Rarely is publicly critical of the project or the work of others. Often has a positive attitude about the task(s).	Occasionally is publicly critical of the project or the work of other members of the group. Usually has a positive attitude about the task(s).	Often is publicly critical of the project or the work of other members of the group. Often has a negative attitude about the task(s).
Quality of Work Submitted	Provides work of the highest quality.	Provides high quality work.	Provides work that occasionally needs to be checked/redone by other group members to ensure quality.	Provides work that usually needs to be checked/redone by others to ensure quality.
Cooperation with Others	Almost always listens to, shares with, and supports the efforts of others. Tries to keep people working well together.	Usually listens to, shares, with, and supports the efforts of others. Does not cause "waves" in the group.	Often listens to, shares with, and supports the efforts of others, but sometimes is not a good team member.	Rarely listens to, shares with, and supports the efforts of others. Often is not a good team player.
Contributions	Routinely provides useful ideas when participating in the group and in classroom discussion. A definite leader who contributes a lot of effort.	Usually provides useful ideas when participating in the group and in classroom discussion. A strong group member who tries hard!	Sometimes provides useful ideas when participating in the group and in classroom discussion. A satisfactory group member who does what is required.	Rarely provides useful ideas when participating in the group and in classroom discussion. May refuse to participate.

 $Sum = \underline{16}$



Sara

At the beginning of my observation of Sara, she was a strong student. While allowed to work on her own, she focused on her work and submitted all that I had assigned. However, based on my formal observations, when I had asked that she cooperate with a classmate, her performance and attitude suffered. As a result, her cooperative learning score had lowered from a nineteen to a ten.

Sean

At the beginning of my observation of Sean, he had a lot of potential that he was not using. I observed that he was very talkative and outgoing, but did not channel this disposition to his class work; rather, it hindered his performance. While the activities had provided a different and more positive forum for Sean to cooperative with his peers, I observed that he had not yet adapted to cooperative learning by the conclusion of my study. As a result, his cooperative learning score slightly improved by the end of the study from a twelve to a thirteen.

Andrea

At the beginning of my observation of Andrea, she had kept to herself. She did not cooperative with others, and she only minded her own business. I observed that her class performance was mediocre based on attitude and class work she had submitted. However, after having the opportunity to participate in cooperative learning activities with a friend from outside of class, her performance had improved for the better. Her attitude improved, her cooperation with classmates improved, and, as a result, her class work improved. She was still selective with whom she cooperated, so her cooperation score slightly suffered towards the end. However, her performance in the classroom improved, which improved her cooperative learning score from a nine to a sixteen.

Analysis

I originally believed that because students like Sean talk and disrupt class often, I could use these traits to my advantage instead of working against them. I thought that cooperative learning strategies would guide their talking and produce positive results. My belief was that if they were already talking, let me give them something to talk about. As it follows, I had expected fruitful discussions, work, and attitudes in class. However, I found the contrary.

Sara is a high-achieving student. She will go the distance and put forth the effort. When an assignment requires solo work, Sara will usually submit top-notch work. When I began to incorporate cooperative learning strategies, Sara's attitude had wavered. She knew that she could rely upon herself, but when she had to rely upon a fellow classmate, it all came crashing down. When she found that she could not rely on another student, this high-achieving student would withdraw from the cooperation and just worry about her own grade. While her work had never wavered, her attitude and approach in terms of cooperation with peers were actually poor.

Sean is very talkative and outgoing. Based on his approach to the classroom and his work, I feel Sean's attitude towards school is different from Sara's. While Sara is focused on earning the best grade she can get, Sean is different. He is involved with sports and he has a lot of friends, so he does not give the proper attention to his grades. I feel that he saw cooperative learning activities as a chance to socialize and gossip; this is evident from his constant talking with his peers about anything but topic I had assigned to him. However, while his work had wavered, Sean's attitude and approach in terms of

cooperation were superb. Although he had trouble staying on task, he cooperated wonderfully with his peers, and he occasionally uncovered very interesting and valid points because of his willingness to talk and work with others.

Andrea is a very quiet person in the classroom. She is loud in the hallways when among her friends, but once the bell rings, she flicks a switch and becomes almost mute during class. I found that she was only quiet because she chose to be. She separated herself from her only friend in the class, she kept to herself, and she did what was asked of her in class. However, once allowed to cooperatively learn with a friend, it is as if she flicked the switch again. She was very talkative with Michael. She came up with very interesting and valid points, and her work excelled from what I would normally expect from her. Furthermore, upon closer inspection, I found that during cooperative learning activities, Andrea (and Michael) did not need any help from the in-class support teacher. They supported each other, and Andrea's work, attitude, and approach to the classroom had advanced the most out of all three participants.

Interpretation

By synthesizing the data, I have made a few interpretations. I believe that in order to use cooperative learning strategies successfully, educators must understand and incorporate comfort, repetition, expectations, and leniency. Students must feel comfortable with each other as well as the concept of working with fellow classmates while completing assignments. Educators must repeat unfamiliar classroom procedures such as cooperative learning, and students will adapt and grow comfortable with the

strategy. Educators must hold students accountable for the educator's expectations. Finally, educators must be lenient enough to allow deviations from the plan if students produce results different from the educator's expectations.

Students must be comfortable with one another in order to cooperate with one another. When I had first begun to use cooperative learning strategies, all of the students in the class had trouble producing the results I had expected of them. First, they were not comfortable working with each other. Sara is a great example that a high achieving student may not always be successful during cooperative learning activities. These activities do not rely so much upon a students' achievement level as it relies upon student ability and willingness to work with one another. Andrea, on the other hand, is very comfortable with Michael, and although she comes off as quiet, shy, and unengaged on her own, she turned it around from the beginning of my student teaching; she was not the same person at the end of my internship as she was at the beginning of it.

Students must participate in cooperative learning activities often in order to feel out and become used to working with each other. At the beginning of my student teaching, the students were used to individual on-task assignments. They had rarely worked with each other. It follows that when I first incorporated a cooperative learning strategy, we hit plenty of bumps in the road. Sean is a great example of not being used to this type of activity. Sean is so talkative and outgoing that when I incorporated a cooperative learning activity, he did not fully understand what to do nor on what I was grading him. As a result, he took that time to socialize and talk with his friends. With repetition, the students began to better understand the nature of cooperative learning, and they began to produce more desirable results.

Students need to understand a teacher's expectations. Students need to understand what a teacher wants from them, and why they are doing a certain activity. If students are not on the same page with each other when entering a cooperative learning activity, results will be disastrous. In Sara's case, while she understood exactly what I expected, her partner did not understand. As a result, a rift formed between them during that activity, and Sara broke off on her own in order to complete the activity, thereby defeating the purpose of the cooperative learning strategy.

When conducting a cooperative learning activity, the teacher needs to be lenient. All teachers should be strict when it comes to time limits, topics, and assignments. However, cooperative learning activities are unpredictable. When two willing minds are put together, no one can predict what will happen. Sometimes, students will produce something the teacher did not expect would happen. When this happens, a teacher must be lenient enough to support this tangent, as long as it will produce learning on the students' behalf.

A specific example of this is when I used a form of reciprocal learning. I asked the students to consider what they feel about the phrase "It was love at first sight" in conjunction with "Romeo and Juliet." When I walked by Sara's group, I heard them talking about movies they had recently seen. I asked them to get back on task, but they explained to me how they were discussing examples of love at first sight in current media, such as films, movies, and television. I decided to let them run with it, and they came up with some very valid points of the media's influence of modern society's view

of love at first sight. These points led to a very fruitful class discussion that I had not planned, yet when I brought it back to "Romeo and Juliet," the students gained a much better and deeper understanding of where Shakespeare was coming from when writing the play.

CHAPTER V

Conclusions

Summary

During my first few weeks of student teaching, I had informally observed my 9th grade students' lack of engagement with their English class based on their mediocre test scores and poor class work. As a result, I researched active engagement strategies and found cooperative learning, a strategy in which groups of students of differing abilities work together in various learning activities. I selected three cooperative learning strategies: reciprocal learning, jigsaw, and skills practice. Before implementing the three strategies, I administered a survey about working with classmates to the three participants; this survey was my first source of data. While executing the three strategies on various days and at various points during my unit on Shakespeare's <u>Romeo & Juliet</u>, I conducted formal observations and collected class work as two more sources of data. *Conclusions and New Understandings*

After analyzing the data, I developed a new understanding that my assumptions of the participants' success with cooperative learning were incorrect. I assumed that the straight-A student who always puts all of her effort into her work would be very successful with cooperative learning. I had also assumed that the mediocre, quiet, and distant student would not be successful with cooperative learning. I finally assumed that a very talkative and social student would benefit greatly from cooperative learning. After implementing the three cooperative learning strategies I had selected, the data

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produced results entirely opposite of my expectations. The straight-A student took so much pride in her work that she could not rely on another student when participating in any activity, so she did not cooperate with her partner(s) in the activities and lessons. The quiet and shy student tended to pair with a friend with whom she is very comfortable, and she became very talkative, outgoing, and cooperative. She was very successful with cooperative learning and, as a result of working with her friend, earned the best grades I had seen since I had begun student teaching. Finally, the talkative and social student was not prepared to handle the limited freedom of working with a partner or group of students in order to accomplish an activity. He could not settle down and concentrate while with his peers, and his work suffered from his behavior.

Furthermore, after analyzing the data, I had developed a new understanding of routines and a student's comfort-level. When the strategies I used did not produce the results I expected, I did not understand why it had not been successful. I did not account for the fact that the students were not comfortable with participating in cooperative learning activities. After incorporating cooperative learning strategies after this study, the students had grown more comfortable with cooperative learning – I observed that the students had begun to work more cohesively together, their class work was more in-depth than their work when I had first arrived, and the students seemed to be more enthusiastic and excited about class.

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Recommendations

Overall, cooperative learning is useful tool to use in the classroom. I recommend that educators should consider using cooperative learning within their classroom. When using cooperative learning, teachers need to listen closely to the students' conversation and know when it is time to move on to the next activity; students may use this time to discuss outside-the-classroom matters. For this reason, educators should use it sparingly and with caution; it may not be the most effective strategy for some students, but in an educational world that is transitioning to rely upon differentiated instruction, cooperative learning can be a very powerful tool. It fosters positive interaction among students and allows students the possibility to make the class their own. It encourages students to voice and defend their own opinions, which is a powerful and highly sought-after trait in both college and the work force.

New Directions and Questions

After completing this study, I have refocused my interest and area of study. According to Tomlinson (1999), in a differentiated classroom, teachers must be ready to engage students in instruction through different learning modalities; cooperative learning is just one of many strategies to differentiate one's instruction in the classroom. I am very interested in other possibilities to encourage active student engagement in my English class. While at first unsure and confused, the students eventually warmed up to working with each other, and I am very interested in other methods of differentiated instruction to engage my students. Therefore, a new question I will research is "What differentiation methods are most successful in actively engaging a 9th grade English class?"

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References

Bridges, A (2007, October 11). National test scores prove need for school librarians. Retrieved May 24, 2009, from American Library Association Web site: <u>http://www.ala.org/Template.cfm?Section=news&template=/ContentManagement</u> /ContentDisplay.cfm&ContentID=167017

Fisher, D., & Frey, N. (2008). Better learning through structured teaching. Alexandria, VA: ASCD.

- Frank, C., Grossi, J., & Stanfield, D. (2006). *Applications of reading strategies* within the classroom. Boston: Pearson Education, Inc..
- Goldberg, M. (2001). Lessons from exceptional school leaders. Alexandria, VA: ASCD.
- Grey, B (2008, April 3). High school drop-out rate in major us cities at nearly 50 percent. Retrieved May 24, 2009, from World Socialist Web Site Web site: <u>http://www.wsws.org/articles/2008/apr2008/scho-a03.shtml</u>
- Hubbard, R., & Power, B. (1993). The art of classroom inquiry: A handbook for teacherresearchers. Portsmouth, NJ: Heinemann.
- Jackson, R. (2009). Never work harder than your students & other principles of great teaching. Alexandria, VA: ASCD.
- Kane, S. (2007). *Literacy & learning in the content areas*. Scottsdale, AZ: Holcomb Hathaway, Publishers, Inch.
- Kelly, M. (2004). *The everything new teacher book*. Avon, MA: F+W Publications Company.

- Mills, G (2003). *Action research: A guide for the teacher researcher*. Upper Saddle River, NJ: Merrill Prentice Hall.
- Putnam, J., & Burke, J. (2006). Organizing and managing classroom learning communities. New York, NY: The McGraw-Hill Companies.
- Sagor, R. (2003). Motivating students and teachers in an era of standards. Alexandria, VA: ASCD.
- Silberman, M. (1996). Active learning: 101 strategies to teach any subject. Needham Heights, MA: Allyn & Bacon.
- Tomlinson, C. (1999). The differentiate classroom: Responding to the needs of all learners. Alexandria, VA: ASCD.
- Wiggins, G., & McTighe, J. (2005). Understanding by design. Alexandria, VA: ASCD.
- Wong, H., & Wong, R. (2004). *The first days of school: How to be an effective teacher*. Mountain View, CA: Harry K. Wong Publications

APPENDICES

Appendix A

Consent Letter

I agree to participate in a study entitled "How do I encourage active student engagement during the entire class period in my 9th grade English class?" which is being conducted by Mr. Austin Martinez of the M.S.T. (Master of Science in Teaching) Education Program at Rowan University.

The purpose of this study is to implement and evaluate three popular strategies of classroom instruction that engages students. The data collected in this study will be combined with data from previous studies and will be submitted for publication in a research journal.

I understand that I will be required to participate in all classroom activities, and I will be assigned to work either individually or as a part of a group. My participation in the study should not exceed the allotted class time.

I understand that my responses will be anonymous and that all the data gathered will be confidential. I agree that should any information obtained from this study be used in any way for publication or education, I am in no way identified and my name is not used.

I understand that there are no physical or psychological risks involved in this study.

I understand that my participation does not imply employment with the state of New Jersey, Rowan University, the principal investigator, or any other project facilitator.

If I have any questions or problems concerning my participation in this study, I may contact:

Mr. Austin Martinez at (732) 824-3078 or, Dr. Beth Wassell at (856) 256-4500 ext.3802

(Signature of participant (or guardian if under 18))

(Date)

(Signature of Investigator)

(Date)

Appendix B

Initial Cooperative Learning Survey

Name:

Directions: Please circle the best answer.

- 1. When completing class work, I prefer to
 - a. work in large groups (5+ students).
 - b. work in small groups (3-4 students).
 - c. work in pairs (you and a partner).
 - d. work alone.
- 2. When completing homework, I prefer to
 - a. work in large groups (5+ students).
 - b. work in small groups (3-4 students).
 - c. work in pairs (you and a partner).
 - d. work alone.
- 3. When working on and delivering a presentation, I prefer to
 - a. work in large groups (5+ students).
 - b. work in small groups (3-4 students).
 - c. work in pairs (you and a partner).
 - d. work alone.
- 4. When completing a class project, I prefer to
 - a. work in large groups (5+ students).
 - b. work in small groups (3-4 students).
 - c. work in pairs (you and a partner).
 - d. work alone.

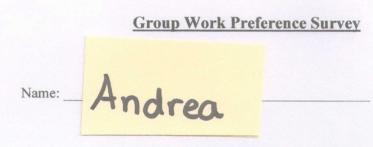
Appendix C

Observation Checklist Rubric

CATEGORY	4	3	2	1
Stays on task	Consistently stays focused on the task and what needs to be done. Very self- directed.	Focuses on the task and what needs to be done most of the time. Other group members can count on this person.	Focuses on the task and what needs to be done some of the time. Other group members must sometimes nag, prod, and remind to keep this person on-task.	Rarely focuses on the task and what needs to be done. Lets others do the work.
Attitude	Never is publicly critical of the project or the work of others. Always has a positive attitude about the task(s).	Rarely is publicly critical of the project or the work of others. Often has a positive attitude about the task(s).	Occasionally is publicly critical of the project or the work of other members of the group. Usually has a positive attitude about the task(s).	Often is publicly critical of the project or the work of other members of the group. Often has a negative attitude about the task(s).
Quality of Work Submitted	Provides work of the highest quality.	Provides high quality work.	Provides work that occasionally needs to be checked/redone by other group members to ensure quality.	Provides work that usually needs to be checked/redone by others to ensure quality.
Cooperation with Others	Almost always listens to, shares with, and supports the efforts of others. Tries to keep people working well together.	Usually listens to, shares, with, and supports the efforts of others. Does not cause "waves" in the group.	Often listens to, shares with, and supports the efforts of others, but sometimes is not a good team member.	Rarely listens to, shares with, and supports the efforts of others. Often is not a good team player.
Contributions	Routinely provides useful ideas when participating in the group and in classroom discussion. A definite leader who contributes a lot of effort.	Usually provides useful ideas when participating in the group and in classroom discussion. A strong group member who tries hard!	Sometimes provides useful ideas when participating in the group and in classroom discussion. A satisfactory group member who does what is required.	Rarely provides useful ideas when participating in the group and in classroom discussion. May refuse to participate.

Appendix D

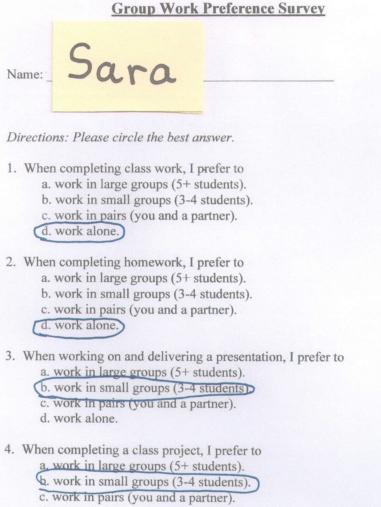
Completed Surveys



Directions: Please circle the best answer.

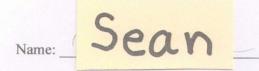
- When completing class work, I prefer to

 a. work in large groups (5+ students).
 b. work in small groups (3-4 students).
 - c. work in pairs (you and a partner).
 - work in pairs (you and a partner).
 - d. work alone.
- 2. When completing homework, I prefer to
 - a. work in large groups (5+ students).
 - b. work in small groups (3-4 students).
 - c. work in pairs (you and a partner).
 - d. work alone.
- 3. When working on and delivering a presentation, I prefer to
 - a. work in large groups (5+ students).
 - b. work in small groups (3-4 students).
 - c, work in pairs (you and a partner).
 - d. work alone.
- 4. When completing a class project, I prefer to
 - a. work in large groups (5+ students).
 - b. work in small groups (3-4 students).
 - c. work in pairs (you and a partner).
 - d. work alone.



d. work alone.

Group Work Preference Survey



Directions: Please circle the best answer.

- 1. When completing class work, I prefer to
 - a. work in large groups (5+ students).
 - b. work in small groups (3-4 students).
 - c. work in pairs (you and a partner).
 - d. work alone.
- 2. When completing homework, I prefer to
 - a. work in large groups (5+ students).
 - b. work in small groups (3-4 students).
 - c) work in pairs (you and a partner).
 - d. work alone.
- 3. When working on and delivering a presentation, I prefer to
 - a. work in large groups (5+ students).
 - b. work in small groups (3-4 students).
 - c. work in pairs (you and a partner).
 - d. work alone.
- 4. When completing a class project, I prefer to
 - a. work in large groups (5+ students).
 - b. work in small groups (3-4 students).
 - c. work in pairs (you and a partner).
 - d. work alone.

Appendix E

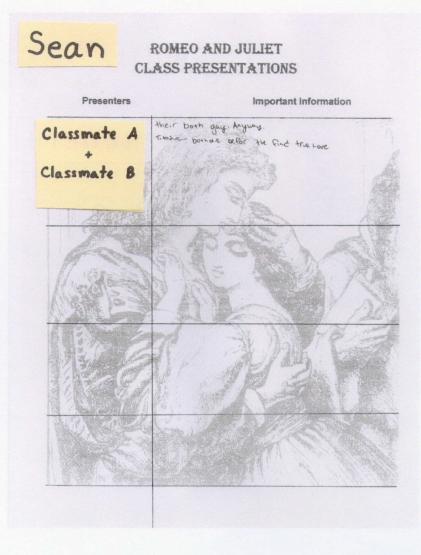
Student Work

Sara
he is over the one airi/nas a new desire now he likes a young giri juliet If he didn't get this giri he wallow due
now he loves again and is loved by someone the both are attractived to gachother. he compains to juliet that they can't be together and she visits him?
since they are vivals he may not get to see her. the vest is just onlying how they love lachother and raint visit eachother cause of the rival families.

*This is an example of when Sara had given up on working with a partner. She had completed the entire assignment by herself.

ne Sean do Sich phres pelive fl 00 SE n person Ne G

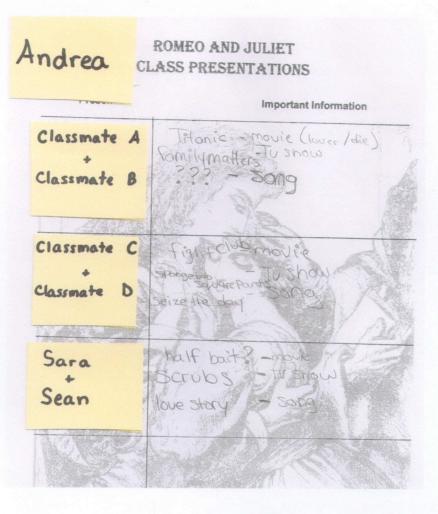
* This is an example of how Sean did not complete the assignment. There was a second part to this assignment where partners were to cooperatively form an opinion based on their original dispositions. Sean spoke with his partner, but did not speak about the assignment. This assignment is incomplete.



*This is an example of Sean's attempt at completing a jigsawed assignment. He completed the solo work on his own, but he did not complete the collaboration part.

Classmate A classmate B Andrea + classmate C There are many different levels in this book. There is a train, there is a boy returning to his parents, there are also commuters waiting impatiently, and there are some strange parents. This was a creative book. Every thing in this story ties into the title "Black and white"

*This is an example of Andrea's first experience with cooperative learning. She did not participate with the other group members, and her contribution is non-existent in this piece of work.



*This is an example of the second half of a jigsawed assignment. Where Sean had difficulties completing the assignment in a timely fashion, Andrea was very successful. She had opened up to the idea of cooperative learning and she has become one of the strongest students in the class when I use a cooperative learning strategy.