The Benefits of Teacher-Led Classroom Discussion
in a Secondary Social Studies Classroom

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Abstract

Twenty-two eleventh and twelfth grade students participated in the study. These students attended a rural, public high school of 800+ students, located in a Midwest state. Nine of the students were males and thirteen of the students were females. All of the participants were in the same class period. The purpose of this project was to determine the benefits of implementing teacher-led classroom discussion in a secondary social studies class.

Data was collected by the researcher through the use of a single method. The researcher utilized a series of single prompt/question assessments; created by the researcher, in order to collect data for the study the students were given two assessments per day. The first assessment was given after the students had only read the text. The second assessment was given after the students participated in a teacher-led classroom discussion derived from the reading. A total of three different assessments were used during the three days of data collection: Assessment #1, Assessment #2, and Assessment #3. The assessments were collected by the researcher and scored by the researcher through the use of the Holistic Critical Thinking Scoring Rubric. Data was recorded for each of the assessments and graphed for each day. The results in the study indicated an increase in student achievement, as determined by the students’ scores, after the implementation of the teacher-led classroom discussion.
Acknowledgments

I wish to acknowledge those people who lent their effort, guidance, and support toward the successful completion of this project. First, I would like to sincerely thank my advisor, Dr. JoAnn Burkhardt for her patience and expert guidance throughout the development of this project. I would also like to express gratitude to my wife and my mother who have encouraged and pushed me. Their support served as an inspiration toward the completion of this important educational goal.
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Chapter I: Introduction

Introduction

As a graduate student, the researcher was accustomed to the use of teacher-led classroom discussion as a method of promoting higher level critical thinking skills in graduate classes. The researcher found the discussions to be a method which allowed for student interaction and learning within a structured, teacher-led format that challenged him to explore new ideas and problems. However, the researcher wanted to determine what benefits students in a secondary social studies class would obtain as a result of a teacher implementing teacher-led classroom discussion. It was important for the researcher to note that teachers often confused recitation with teacher-led classroom discussion. Thus it was paramount for the researcher to review the professional literature and implement the discussion in a manner concurrent with the defined methods in order to determine what the true benefits of this method were.

Statement of the Problem

The purpose of this project was to determine the benefits of implementing teacher-led classroom discussion in a secondary social studies class. The research questions were: (1) According to the professional literature reviewed, how was teacher-led classroom discussion defined; (2) What were the benefits of teacher-led classroom discussion on secondary social studies students; (3) How were teacher-led classroom discussions implemented in secondary social studies classes; (4) What were the benefits of implementing teacher-led classroom discussion in a secondary social studies class?
Justification

A review of literature regarding the topic of teacher-led discussion revealed the importance of this strategy as a classroom tool, according to Wilen (2004). The researcher found that many studies relating to this topic concluded that teacher-led discussion improved student understanding and higher-order thinking skills. According to Larson (2000), students in classrooms that implemented teacher-led discussion were active participants in constructing their knowledge rather than passive recipients of the information transmitted by the teacher. This project explored the benefits of teacher-led discussion and the importance of implementing this method as a classroom tool in a secondary social studies class. The researcher theorized and the literature concurred that teacher-led classroom discussion can improve student comprehension and critical thinking in a social studies classroom, which in turn should lead to improved application of knowledge and test scores. Thus, the researcher recognized the importance of implementing teacher-led classroom discussion because of the increase in standardized testing that has resulted from No Child Left Behind.

Definition of Terms

Teacher-led classroom discussion: a method of instruction which involves the teacher asking higher order questions, the students developing an opinion or idea about the topic, and interaction between the students and teacher which explores the possible views.
Secondary social studies: a high school class that focuses on subjects such as history, government, geography, psychology, etc.

Limitations and Appropriate Use of Results

There were several limitations to consider with respect to this project. The first of these was the bias of the researcher. The researcher believed strongly in the importance of implementing teacher-led discussion and that it would produce positive results. The other primary limitation that influenced this study was the length of time spent in the classroom. The researcher had limited time with the students because the study was completed during a student internship. Because these limitations were present during the study and may have influenced the results, they may not be applicable to some classes.
Chapter II: Review of Literature

The purpose of this project was to determine the benefits of implementing teacher-led classroom discussion in a secondary social studies class. The research questions were: (1) According to the professional literature reviewed, how was teacher-led classroom discussion defined; (2) What were the benefits of teacher-led classroom discussion on secondary social studies students; (3) According to the professional literature reviewed, how was critical thinking defined; (4) How were teacher-led classroom discussions implemented in secondary social studies classes; (5) Did the implementation of teacher-led classroom discussion improve students’ critical thinking skills?

1) According to the professional literature reviewed, how was teacher-led classroom discussion defined?

According to Larson (2000) and Wilen (2004) teacher-led classroom discussion was an evasive term to define. However, both Larson and Wilen agreed that teacher-led classroom discussion has often been confused with recitation by teachers and students alike. Thus it was necessary to define recitation in order to determine what teacher-led classroom discussion was not. Wilen defined recitation as a method in which the teacher asked questions and the students answered them. Wilen continued to discuss that the goal of the traditional recitation method was to determine if students knew specific facts in order to prepare them for objective tests. Wilen also noted the importance of the difference in pace between discussion and recitation. He discussed recitation as a fast paced method of interaction because the questions are primarily knowledge level questions that the students should know the answers to. However, discussion was
described by Wilen as a slower paced interaction because of the importance of students contemplating the question or prompts in order to formulate an idea and a response.

Wilen (2004) stated that discussion was an instructional conversation composed of teacher and student interaction including higher order questions asked by the teacher, statements, and responses where students were to apply their knowledge and think critically in order to enhance their understanding about an issue, problem, or other content. Cardzen (as cited in Larson 2000) made the point that discussion was not an interaction consisting of students answering teachers’ test questions and being evaluated, but rather when students explore ideas, share their ideas and communicate more often, and are free to choose when to speak. According to Wilen, teacher-led classroom discussion was not a teacher asking questions and students answering them, but rather it was a means for students to explore ideas, develop critical thinking skills, interact about societal issues and problems, and engage in group decision making and problem solving. Engle and Ochoa (as cited in Larson 2000) agreed that teacher-led classroom discussion should require students to develop an opinion or idea, be able to support their beliefs with evidence, and where both the students’ and teacher’s ideas are open and subject to criticism.

According to the professional literature reviewed, teacher-led classroom discussion was a difficult term to define. Wilen (2004) and Larson (2000) agreed that in order to truly define teacher-led classroom discussion it was necessary to determine the differences between teacher-led classroom discussion and recitation. Wilen, Cardzen (as cited in Larson 2000), and Engle and Ochoa (as cited in Larson 2000) concurred that teacher-led classroom discussion was an interaction which involved students engaged in
developing new ideas based on questions presented by the teacher with the goal of compelling the students to use critical thinking skills.

2) According to the professional literature reviewed, what were the benefits of teacher-led classroom discussion on secondary social studies students?

According to the professional literature, there were several benefits that secondary social studies students acquired as a result of teacher-led classroom discussion. Throughout the literature, specifically Gall (as cited by Larson 2000), Larson (2000), Chilcoat and Ligon (2001), Wilen (2004), and Gambrell (2004), the most noted benefit was the ability of teacher-led classroom discussion to engage students, and to promote and develop higher order critical thinking in students. Chilcoat and Ligon discussed student engagement as students taking an active role in their education or the teaching/learning process. Engaged learning was also discussed by Chilcoat and Ligon in terms of group problem solving and students working to reach their own conclusions. Higher order critical thinking was defined by Larson (2000) as the ability of students to understand, evaluate, and manipulate information.

Another benefit discussed by Larson and Parker (as cited in Chilcoat and Ligon 2001), Parker and Hess (as cited in Wilen 2004), and Larson (2000) was the importance of teacher-led classroom discussion in promoting democracy. Larson and Parker (as cited in Chilcoat and Ligon 2001) argued that teacher-led classroom discussion was perhaps the cornerstone of democratic education due to its ability to engage students in democratic living. Dewey (as cited in Larson 2000) elaborated on the topic of discussion and democracy in the classroom when he stated that it could be used to integrate ethnically, socio-economically, and sexually diverse classrooms by centering on a
common issue. Larson (2000) noted the importance of diversity in classroom discussion to democracy when he stated that during discussion students often gained an awareness of perspectives and opinions that are different from their own beliefs and ideas.

The final benefits discussed in the literature were improved sense of community and self-esteem. Chilcoat and Ligon (2001) noted that social studies students in the Mississippi Freedom schools who were taught using teacher-led discussion were more active in their communities. According to Chilcoat and Ligon, the Mississippi Freedom schools used a teacher-led discussion based curriculum in order to integrate current social studies issues into the classroom and thereby raised the interests of the students in improving their communities. Chilcoat and Ligon also mentioned that the use of teacher-led classroom discussion in the Mississippi Freedom schools resulted in an increase in student self-esteem.

Throughout the review of literature the implementation of teacher-led classroom discussion was noted for having several benefits for secondary social studies students. The most common benefit, which was discussed by Gall (as cited in Larson 2000), Larson (2000), Chilcoat and Ligon (2001), Wilen (2004), and Gambrell (2004) was the promotion and development of higher order critical thinking in students and the increase in engaged learning. The implementation of teacher-led classroom discussion was also celebrated because it promoted a democratic classroom and democratic values, according to Larson and Parker (as cited in Chilcoat and Ligon 2001), Parker and Hess (as cited in Wilen 2004), and Larson (2000). Finally, community and self-esteem were discussed by Chilcoat and Ligon as two benefits, of teacher-led classroom discussion, that were documented as occurring together in the case of the Mississippi Freedom schools.
3) How was teacher-led classroom discussion implemented in secondary social studies classes?

Throughout the review of professional literature the most prevalent model noted for implementing teacher-led discussion in a secondary social studies class was the IRE model. According to Gambrell (2004) and Wilen (2004) this method was known as the teacher initiation, student response, and teacher evaluation model (IRE). Gambrell argued that this model often allowed for little student control over the discussion and fewer opportunities to respond to questions posed by the teacher. Gambrell also discussed the rapid pace that occurs with the IRE model. This was mentioned by Gambrell as particularly problematic because it left little time for student responses and discussion between peers. However, Mercer (as cited in Gambrell 2004) stated that the IRE model could be a valuable classroom tool if teachers were willing to offer feedback rather than evaluative comments. While Gambrell noted some of the negative aspects of the model, Wilen discussed the IRE model in a different manner.

While Wilen (2004) noted that the IRE model is often recognized as a model of teacher-led classroom discussion, he challenged that concept in his study. He claimed that the IRE model was, more accurately, a form of recitation as opposed to a method of teacher-led classroom discussion. Wilen stated that in order to properly implement teacher-led classroom discussion, the questions needed to be of a higher order which would promote more critical thinking. Wilen also noted that true teacher-led classroom discussion should be conducted at a slower pace, and in a manner by which the teacher encouraged students to connect previous knowledge with the new information. Another point that Wilen made about implementing teacher-led classroom discussion was the
importance of the teacher redirecting questions to other students. He noted that through the redirecting of questions new and different views and ideas would be contributed. Dillon (as cited in Wilen 2004) discussed the importance of wait time in implementing teacher-led classroom discussion. This was mentioned as an important point because it created a more comfortable atmosphere which was more conducive to student participation. Wait time was also noted for its importance in allowing the students to converse and develop their thoughts and ideas. Wilen applied these characteristics of teacher-led classroom discussion to several classes in his study. The results determined that while many teachers used the term discussion for their classroom activities, few teachers implemented what he defined as true classroom discussion.

Throughout the review of literature both Gambrell (2004) and Wilen (2004) discussed the IRE model with respect to teacher-led classroom discussion. However, while Gambrell acknowledged the IRE model as a form of teacher-led classroom discussion, Wilen disagreed. Wilen chose to define teacher-led classroom discussion in a different manner. Wilen challenged the IRE model and claimed that in order for true discussion to take place, among other characteristics, higher order questions needed to be implemented. Wilen also noted the lack of true discussion that took place in the classrooms that he studied.

Conclusion

There were several questions that the researcher needed to answer in order to proceed forward with this project. Through the review of literature, the researcher was able to define, note the benefits of, and examine the implementation of teacher-led classroom discussion in a secondary social studies class. As a result of the review of
literature, the researcher gained a better understanding of what efforts other people had undertaken in studying and implementing teacher-led classroom discussion. Although, much of the literature agreed on the definition of teacher-led classroom discussion, there were disagreements about the methods of implementing it. The disagreement that existed between differing ideas for implementing teacher-led classroom discussion challenged the researcher to think critically about what teacher-led classroom discussion was, and how it could best be implemented.
Chapter III: Methods and Procedures

Introduction

The purpose of this project was to determine the benefits of implementing teacher-led classroom discussion in a secondary social studies class. The research questions were: (1) According to the professional literature reviewed, how was teacher-led classroom discussion defined; (2) What were the benefits of teacher-led classroom discussion on secondary social studies students; (3) According to the professional literature reviewed, how was critical thinking defined; (4) How were teacher-led classroom discussions implemented in secondary social studies classes; (5) Did the implementation of teacher-led classroom discussion improve students’ critical thinking skills?

Participants

Twenty-two eleventh and twelfth grade students participated in the study. They were enrolled in a rural school of 800+ students, located in a Midwest state. Nine of the students were males and thirteen of the students were females.

Treatment/Intervention

The researcher began the implementation of the treatment by introducing the concept of teacher-led classroom discussion to the students in the classroom. Included in the lesson was a definition of teacher-led discussion, an overview of the benefits, and the method of implementation in the classroom.

The researcher explained to the students that teacher-led classroom discussion is a form of interaction which includes the students responding to questions that the teacher had created with the purpose of challenging the students to think critically at a higher
level about a text or a topic. The researcher then explained that this method would be implemented in the classroom through the use of a number of readings from the text which the students would read. Following the reading from the text the students would actively participate in a discussion led by the teacher with the use of higher order questions that the researcher had created. The researcher explained that the importance of his research was to gain an understanding of the benefits that this method could have on students’ ability to think critically on a topic.

The researcher chose to allot an entire class period for discussing the information with the students. The researcher provided the students with a worksheet that was devised as a reference for the students and detailed the many aspects of teacher-led classroom discussion. The worksheet included the format that each research session would follow, as well as an example of how teacher-led classroom discussion should take place. At the end of the first of four class periods the researcher reviewed the information again, and answered any questions that the students had pertaining to the format of the study and the expectations that the researcher had for them. Once the researcher felt confident that the students had an understanding of the research project, and what was going to happen, the researcher was ready to begin the intervention.

Over the next three days the researcher implemented the intervention through a series of readings and assessments that the students completed. Each day the students received a specific reading from their texts. The readings were chosen by the researcher for their content, which consisted of psychological experiments that had been conducted throughout history and that had later been found to be ethically controversial. The
readings were also chosen for their ability to challenge the students to think critically about the subject matter.

The researcher began each day by providing the students with the reading as soon as the class began. The researcher then instructed the students that they were to complete the reading within the given time frame of ten minutes and to be prepared to respond to a question/prompt pertaining to the reading. The students were instructed not to begin until all of the readings had been handed out for the purposes of standardizing the process. They were then given ten minutes to complete the reading.

After the ten minutes allotted for the reading had expired, the students were then given the assessment that the researcher had created covering the material in the reading. The students were given another 10 minutes to complete the assessment. Once all of the students had completed the assessment, the researcher collected each of the assessments by walking around to the students’ desks and picking them up. After all of the assessments had been collected, the researcher began the teacher-led classroom discussion portion of the intervention. This was accomplished through the use of questions that the researcher had previously designed to encourage the students’ to think critically about the material that they had just read. The questions asked over the next three days are as listed below.

Day 1

1. What are ethics?
2. Why might we question the ethics of this experiment?
3. What effects might this experiment have had on the subject?
4. How might this experiment have been better carried out?
5. What changes could have been made to make this experiment more ethical?

6. Would you want this experiment to have been conducted on you?

Day 2

1. What was Freud’s theory as to why Little Hans was so scared?

2. Do you agree with the idea of the Oedipus/Elektra complex?

3. Do you believe that the horses really represented his dad?

4. What other possible explanation could there be?

5. Was Freud’s theory correct, or was it just a coincidence that naturally resolved itself?

Day 3

1. What is humanism?

2. What is behaviorism?

3. Do you believe that anyone, regardless of ability, can be trained to become anything?

4. Do you believe that people choose who they want to be?

5. Why might some people prefer the humanist approach over the behaviorist approach, or vice versa?

The questions were designed by the researcher to scaffold the students’ thinking from basic knowledge questions, as defined by Bloom’s Taxonomy (Bloom et al 1956), to higher order critical thinking questions as defined by Bloom’s Taxonomy. Students would raise their hand to participate, and the researcher allowed each student the opportunity to speak if they so chose. The researcher allotted twenty minutes for this
portion to allow the students adequate time to think critically about the material, and to answer and debate their opinions about each question.

At the end of the teacher-led discussion, the researcher provided the students with the same assessment that they had been provided with upon their completion of the reading assignment for that day. The researcher again allotted ten minutes for the students to complete the assessment. Once the time was up, the researcher collected each of the assessments individually by picking them up off of the students’ desks.

**Instruments**

The instruments used to collect the data were a series of assessments that the students were required to complete after they had finished the reading for the day and again after the teacher-led classroom discussion. The assessments consisted of a single question/prompt that the researcher constructed. The prompt/questions required the students to think critically about this subject, and to draft a short answer response discussing their opinions about the subject of the question. The assessments were designed by the researcher through the use of Bloom’s Taxonomy, specifically the analysis level. This was done to ascertain that the questions were capable of requiring the students’ to think critically about the reading that they had completed. The analysis level was chosen by the researcher because it required the students to deconstruct the information that they had received in an attempt to better understand the material.

Each prompt that was used in the study is listed below.

**Questions**

1. Analyze the case study of the Little Albert experiment, and construct a brief response pertaining to the ethics of Watson Rayner in conducting the experiment.
2. Analyze the case study of Little Hans, and construct a brief response either in agreement with or dissenting from Freud’s analysis of the situation.

3. Analyze the reading pertaining to Behaviorism/Humanism, and construct a response in which you take the side of either the humanist theory or the behaviorist theory and explain why you chose the theory that you did.

**Procedures**

Data was collected by the researcher through the use of a single method. The researcher utilized a series of single prompt/question assessments; created by the researcher, in order to collect data for the study the students were given two assessments per day. The first assessment was given after having only read the text. The second assessment was given after the students participated in a teacher-led classroom discussion derived from the reading. The assessments consisted of a single question/prompt which the students were to think about and prepare a short answer response that they would record on the paper with the prompt/question. The students were instructed that they would be given ten minutes to complete each of the assessments. The students would then be given the assessment, and after ten minutes had expired, the researcher would collect each of the assessments by picking them up off of each student’s desk. At the end of the information gathering portion of the study, the researcher examined and scored the students’ responses.

**Timeline**

The researcher discussed the details of the study with the regular classroom teacher during the first week of the researcher’s internship which began in early January 2007. The researcher then had each of the students and their parents sign a letter of
informed consent pertaining to the study. The letter described the study and its purpose, as well as the role that the students would play in the study. Upon receiving consent from the regular classroom teacher and the students, the researcher prepared the readings and the assessments that would be used to complete the study. The study was carried out during a four day period in mid-March 2007. The data was analyzed after the study had been completed.

Data Analysis

The answers for all questions were read, and all the responses were then scored. The responses to the questions were scored by the researcher through the use of the Holistic Critical Thinking Scoring Rubric designed by Peter A. Facione and Noreen C. Facione (1994). The rubric consisted of a four point scale in which a four was the highest level of critical thinking and a one was the lowest. Each of the four points on the scale was differentiated by the presence or lack of certain criteria in the response (see Appendix A for a copy of the rubric). The rubric scale and criteria were as follows:

4 Consistently does all or most of the following:
   - Accurately interprets evidence, statements, graphics, questions, etc.
   - Identifies the salient arguments (reasons and claims) pro and con.
   - Thoughtfully analyzes and evaluates major alternative points of view.
   - Draws warranted, judicious, non-fallacious conclusions.
   - Justifies key results and procedures, explains assumptions and reasons.
   - Fair-mindedly follows where evidence and reasons lead.

3 Does most or many of the following:
   - Accurately interprets evidence, statements, graphics, questions, etc.
1. Identifies relevant arguments (reasons and claims) pro and con.
2. Offers analyses and evaluations of obvious alternative points of view.
3. Draws warranted, non-fallacious conclusions.
4. Justifies some results or procedures, explains reasons.
5. Fair-mindedly follows where evidence and reasons lead.

2 Does most or many of the following:
- Misinterprets evidence, statements, graphics, questions, etc.
- Fails to identify strong, relevant, counter-arguments.
- Ignores or superficially evaluates obvious alternative points of view.
- Draws unwarranted or fallacious conclusions.
- Justifies few results or procedures, seldom explains reasons.
- Regardless of the evidence or reasons, maintains or defends views based on self-interest or preconceptions.

1 Consistently does all or almost all of the following:
- Offers biased interpretations of evidence, statements, graphics, questions, information, or the points of view of others.
- Fails to identify or hastily dismisses strong, relevant counter-arguments.
- Ignores or superficially evaluates obvious alternative points of view.
- Argues using fallacious or irrelevant reasons, and unwarranted claims.
- Does not justify results or procedures, nor explain reasons.
- Regardless of the evidence or reasons, maintains or defends views based on self-interest or preconceptions.
- Exhibits close-mindedness or hostility to reason.
The researcher did not need to attain permission from the authors because they had already granted a general permission to use the rubric for educational purposes. The researcher scored the students’ responses to each of the assessments based on the rubric.

The data was then examined by the researcher. The researcher compared the students’ responses from each day in order to determine if the students demonstrated a higher level of critical thinking on the second assessment, after the teacher led discussion, than they had on the first assessment. The researcher completed the response by scoring each of the assessments based on the Holistic Critical Thinking Scoring Rubric. The responses were given a score of one through four, where a score of four represented the highest level of critical thinking and a score of one was the lowest level of critical thinking. The researcher then graphed the average score of the class on each assessment. The research categorized student performance into three categories. They were: the students demonstrated higher levels of critical thinking after only reading the selection, the students demonstrated higher levels of critical thinking after reading the selection and participating in the teacher-led classroom discussion, or the students’ levels of critical thinking remained unchanged from the first assessment to the second.

Conclusion

During this study, twenty-two eleventh and twelfth grade students from a Midwest state participated in research to determine if teacher-led discussion resulted in higher order critical thinking. The researcher attained consent from the regular classroom educator as well as the students and their parents prior to beginning the study. The study was conducted over a four day period in mid-March. The researcher began the implementation of the intervention by introducing the concept of teacher-led classroom
Discussion to the students in the classroom. Included in this lesson was a definition of teacher-led discussion, an overview of the benefits, and the method of implementation in the classroom. The next three days were spent collecting data for the study. This was accomplished through one method. The method consisted of a sequence of assessments that the students completed throughout the study. The assessments were created by the researcher with the intent of challenging the participants to think critically about a series of readings. Each of the readings was aligned with the classroom curriculum and chosen for their controversial subject matter. There were two assessments per day. The first assessment was completed after the students had only read the article, and the second was completed after the students had read the article and participated in a teacher-led classroom discussion. At the end of the study, the researcher scored each of the assessments based on the Holistic Critical Thinking Scoring Rubric developed by Facione and Facione (1994). The results from each assessment were then compared against the other assessment from that day to determine if the teacher-led classroom discussion improved the students' level of critical thinking.
Chapter IV: Results

Introduction

The purpose of this project was to determine the benefits of implementing teacher-led classroom discussion in a secondary social studies class. The research questions were: (1) According to the professional literature reviewed, how was teacher-led classroom discussion defined; (2) What were the benefits of teacher-led classroom discussion on secondary social studies students; (3) According to the professional literature reviewed, how was critical thinking defined; (4) How were teacher-led classroom discussions implemented in secondary social studies classes; (5) Did the implementation of teacher-led classroom discussion improve students’ critical thinking skills?

The study attempted to answer the following research question: “Did the implementation of teacher-led classroom discussion improve students’ critical thinking skills?” Data was collected from a series of three researcher formulated assessments. The assessments were designed to evaluate the level of critical thinking the students displayed when answering the prompts on the assessments. The assessments were single question prompts developed around three classroom readings the students were to complete. Students were given instruction about the purpose of teacher-led classroom discussion prior to the implementation of the teacher-led classroom discussions.

The assessments were administered on three consecutive days with Assessment #1 having been administered on the first day, Assessment #2 having been administered on day 2, and Assessment #3 having been administered on the third day. Each of the assessments were administered twice, once after the students had only read the text that
the assessments were based on, and once after the students had read the text and participated in the teacher-led classroom discussion. Data was collected from each of the assessments through the use of the Holistic Critical Thinking Scoring Rubric developed by Facione and Facione (1994), and then analyzed to determine if the teacher-led classroom discussion method had benefits (see Appendix A for a copy of the rubric).

Data Results

Day One: First Assessment

The first assessment the students participated in during the study was given after the students had completed a reading from the text. The assessment contained a single question/prompt, designed by the researcher, pertaining to the reading from the text. The question/prompt was designed to challenge the students to think critically about the text (see Appendix B for the complete copy of the assessment). The question/prompt stated, “Analyze the case study of the Little Albert experiment, and construct a brief response pertaining to the ethics of Watson and Rayner in conducting this experiment.” The students’ responses were then collected and scored by the researcher on a scale of one to four points, with four representing the highest score, according to the Holistic Critical Thinking Scoring Rubric. The results were: six students (27.2%) received a score of one on their response; twelve students (54.5%) received a score of two on their response; four students (18.1%) received a score of three on their response; zero students (0%) received a score of four on their response.

Day One: Second Assessment

The second assessment the students participated in during the study was administered after the students had completed the reading from the text, and participated
in a teacher-led classroom discussion. The assessment consisted of the same
prompt/questions from Assessment #1, and the students’ responses were collected and
scored. The results were: five students (22.7%) received a score of one for their
response; twelve students (54.5%) received a score of two for their response; five
students (22.7%) received a score of three for their response; zero students (0%) received
a score of four for their response.

The students’ scores from the first assessment and second assessment of day one
were recorded in a spreadsheet according to the four scoring levels of the rubric, and the
data was entered into graph form for comparison. Figure 1 illustrates this comparison.

*Students’ Critical Thinking Skills Displayed on Day One: First Assessment and Day One: Second Assessment*

The students’ results were summarized in the figure below. It should be taken
into account that the responses were kept anonymous. Thus there is no evidence that any
of the students remained in the same score category from the first assessment to the
second assessment.
Day 1

The data illustrated in Figure 1 indicated that a greater number of students achieved a higher rubric level score on the second assessment, after the teacher-led classroom discussion, than did on the first assessment. The data in Figure 1 also displayed a decrease in the percentage of students (4.5%) that scored at rubric level one between the first assessment and the second assessment, as well as an increase in the percentage of students (4.6%) that scored at rubric level three. The data depicted in the graph showed no change in the percentage of students that scored in level two and level four.

**Day Two: First Assessment**

The second day of data collection was completed through the use of the same method that the researcher employed during the first day. The students were administered Assessment #2 for the first time after having only read the selection from the text that the researcher had designed the assessment around (see Appendix C for the
complete copy of the assessment). The prompt/questions stated, “Analyze the case study of Little Hans, and construct a brief response either in agreement with or dissenting from Freud’s analysis of the situation.” The students’ responses were scored by the researcher through the use of the Holistic Critical Thinking Scoring Rubric. The results were: fourteen students (63.6%) received a score of one for their response; seven students (31.8%) received a score of two for their response; one student (4.5%) received a score of three for their response; zero students (0%) received a score of four for their response.

Day Two: Second Assessment

Assessment #2 was administered for the second time after the students had both read the text that was used for the first assessment of day two, and had participated in a teacher-led classroom discussion covering the material from the text. Students were provided the same assessment that they had been given for the first assessment of day two. The researcher collected the students’ responses and scored the results. The information was: eleven students (50.0%) received a score of one for their response; three students (13.6%) received a score of two for their response; seven students (31.8%) received a score of three for their response; one student (4.5%) received a score of four for their response.

Students’ Critical Thinking Skills Displayed on Day Two: First Assessment and Day Two: Second Assessment

The students’ results were compiled in a spreadsheet and placed in a graph for comparison, Figure 2. Because the assessments were anonymous, it should be noted that there is no evidence that any of the students remained in the same score category from the first assessment to the second assessment.
The data represented in Figure 2 displayed the largest number of students (50.0%) remained in the first level of the rubric. However, the number of students in both level one and level two decreased between the first assessment of day two and the second assessment of day two 13.6% and 18.2%, respectively. The data also illustrated that while the number of students in level one and level two decreased after the teacher-led classroom discussion, the number of students in rubric level three and four increased 27.3% and 4.5%, respectively.

*Day Three: First Assessment*

The third day of data collection was accomplished in the same manner as the first and second day of data collection. The students were assigned a reading from the text, and once they had completed the reading they were given an assessment (Assessment #3) with a question/prompt that the researcher had designed to correspond with the text (see Appendix D for the complete copy of the assessment). The question/prompt stated,
“Analyze the reading pertaining to Behaviorism and Humanism, and construct a response in which you take the side of either the humanist theory or the behaviorist theory and explain why you chose the theory you did.” The students’ responses were scored through the use of the Holistic Critical Thinking Scoring Rubric. The information was: thirteen students (61.9%) received a score of one for their response; seven students (33.3%) received a score of two for their response; one student (4.7%) received a score of three for their response; zero students (0%) received a score of four for their response.

**Day Three: Second Assessment**

The second assessment of the day was completed through the use of the same prompt/question (Assessment #3) that was employed on the first assessment of day three. The students were given the assessment after having completed the reading from the text, and participating in a teacher-led classroom discussion. The students’ responses were collected and scored by the researcher. The results were: five students (23.8%) received a score of one for their response; twelve students (57.1%) received a score of two for their response; two students (9.5%) received a score of three for their response; zero students (0%) received a score of four for their response.

**Students’ Critical Thinking Skills Displayed on Day Three: First Assessment and Day Three: Second Assessment**

The students’ results were compiled in a spreadsheet and placed in a graph for comparison, Figure 3. Because the assessments were anonymous, it should be noted that there is no evidence that any of the students remained in the same score category from the first assessment to the second assessment. It should also be noted that only twenty-one students participated in the study on this day.
Figure 3 Comparison of percentage of students scoring 1-4 on the Holistic Critical Thinking Rubric Day Three: First Assessment and Second Assessment

The data in Figure 3 illustrates a large decrease (38.1%) in the number of students that scored in the level one category, and an increase of students, 23.8% and 4.8%, who scored in both the level two and level three categories, respectively.

Conclusion

Twenty-two eleventh and twelfth grade students participated in this study. The researcher conducted this study over a three day period, during which the students were assessed six times (twice per day). Each day, the researcher would assign a text for the students to read, and follow it up with an assessment designed around the text. The students would then be engaged in a teacher-led classroom discussion of the material, which was followed by the same assessment that they had completed after only reading the text. The responses to the assessments were collected by the researcher and scored through the use of the Holistic Critical Thinking Scoring Rubric. The scores from each day were then compared and graphed. The data from each day showed an increase in the
number of student responses that scored at the higher level of the rubric from the first test administration to the second. On day one of the data collection, students who scored at level one of the rubric decreased by 4.5% while students who scored at level three of the rubric increased by 4.5%. The number of students who scored at level two and four of the rubric remained unchanged for levels two and four. According to the rubric this meant that students were more likely to:

- Accurately interprets evidence, statements, graphics, questions, etc.
- Identifies relevant arguments (reasons and claims) pro and con.
- Offers analyses and evaluations of obvious alternative points of view.
- Draws warranted, non-fallacious conclusions.
- Justifies some results or procedures, explains reasons.
- Fair-mindedly follows where evidence and reasons lead.
Chapter V: Discussion

Introduction

The purpose of this project was to determine the benefits of implementing teacher-led classroom discussion in a secondary social studies class. The research questions were: (1) According to the professional literature reviewed, how was teacher-led classroom discussion defined; (2) What were the benefits of teacher-led classroom discussion on secondary social studies students; (3) According to the professional literature reviewed, how was critical thinking defined; (4) How were teacher-led classroom discussions implemented in secondary social studies classes; (5) Did the implementation of teacher-led classroom discussion improve students’ critical thinking skills?

The researcher wanted to determine the benefits of implementing teacher-led classroom discussion in a secondary social studies class. It was important for the researcher to note that teachers often confused recitation with teacher-led classroom discussion. Thus it was paramount for the researcher to review the professional literature and implement the discussion in a manner concurrent with the defined methods in order to determine what the true benefits of this method were.

Meaning of Findings

The results of this study indicated that student responses, as scored by the researcher according to the Holistic Critical Thinking Scoring Rubric designed by Facione and Facione (1994), improved as a result of the implementation of the teacher-led classroom discussions. The quantity of improvement varied from assessment to
assessment, but generally included student scores increasing from a lower level of the rubric to a higher level of the rubric. The four levels of the rubric were:

4 Consistently does all or most of the following:
   - Accurately interprets evidence, statements, graphics, questions, etc.
   - Identifies the salient arguments (reasons and claims) pro and con.
   - Thoughtfully analyzes and evaluates major alternative points of view.
   - Draws warranted, judicious, non-fallacious conclusions.
   - Justifies key results and procedures, explains assumptions and reasons.
   - Fair-mindedly follows where evidence and reasons lead.

3 Does most or many of the following:
   - Accurately interprets evidence, statements, graphics, questions, etc.
   - Identifies relevant arguments (reasons and claims) pro and con.
   - Offers analyses and evaluations of obvious alternative points of view.
   - Draws warranted, non-fallacious conclusions.
   - Justifies some results or procedures, explains reasons.
   - Fair-mindedly follows where evidence and reasons lead.

3 Does most or many of the following:
   - Misinterprets evidence, statements, graphics, questions, etc.
   - Fails to identify strong, relevant, counter-arguments.
   - Ignores or superficially evaluates obvious alternative points of view.
   - Draws unwarranted or fallacious conclusions.
   - Justifies few results or procedures, seldom explains reasons.
Regardless of the evidence or reasons, maintains or defends views based on self-interest or preconceptions.

Consistently does all or almost all of the following:

- Offers biased interpretations of evidence, statements, graphics, questions, information, or the points of view of others.
- Fails to identify or hastily dismisses strong, relevant counter-arguments.
- Ignores or superficially evaluates obvious alternative points of view.
- Argues using fallacious or irrelevant reasons, and unwarranted claims.
- Does not justify results or procedures, nor explain reasons.
- Regardless of the evidence or reasons, maintains or defends views based on self-interest or preconceptions.
- Exhibits close-mindedness or hostility to reason.

Thus the increase in level of student scores from the lower levels of the rubric to the higher levels of the rubric would indicate an increase in the criteria aligned with each level of the rubric.

Assessment #1

The results of Assessment #1, which took place on day one of data collection, indicated that a greater number of students achieved a higher rubric level score for the second administering of the assessment, after the teacher-led classroom discussion was implemented, than did on the first administering of the assessment, which took place prior to the intervention of the teacher-led classroom discussion. On the first administering of Assessment #1 the percentage of students that scored at rubric level one was 27.2%, while the number of students that scored at level one on the second
administering of Assessment #1 was 22.7%. The decrease in the percentage of students (4.5%) that scored at rubric level one indicated an increase in student scores between the first administering of Assessment #1 and the second administering of Assessment #1. An increase in the level of student scores was also evidenced by an increase in the percentage of students (4.6%) that scored at rubric level three. The number of students that scored at rubric level two and four remained unchanged from the first administration of the assessment to the second. The increase in the quantity of students that scored at a higher rubric level would indicate that these students were displaying more characteristics indicative of critical thinking, according to the rubric.

Assessment #2

The results of Assessment #2, which took place on the second day of data collection, exhibited the largest number of students that scored in the first level of the rubric on the first administration of the assessment, as well as on the second administration of the assessment. However, the number of students that scored, each, in level one and level two, on day two, decreased between the first administration and the second administration of the assessment 13.6% and 18.2%, respectively. The results of the study also showed that while the number of students that scored in levels one and two of the rubric decreased after the teacher-led classroom discussion, the number of students that scored in rubric levels three and four increased by 27.3% and 4.5%, respectively. The increase in the number of students that scored at rubric level three and four would indicate an increase in the number of students that performed at levels consistent with critical thinking.
Assessment #3

The results of Assessment #3, which took place on the third day of data collection, displayed an increased number of students achieved higher scores after the implementation of the teacher-led classroom discussion. The number of students that scored in the first level of the rubric decreased 38.1%, from 69.1% to 23.8%, between the first administering and the second administering of the assessment. At the same time, the number of students that scored in levels two and three of the rubric increased by 23.8% and 4.8%, respectively. The number of students that scored in level four remained unchanged at 0% between the first and second administration of the assessment. Because no students scored at level four of the rubric the researcher questioned the effectiveness of the implementation of teacher-led classroom discussion. The researcher had expected that by the time the students had participated in Assessment #3 they would have continued to improve their scores, not only from the first administering of the assessment to the second administering of the assessment, but from Assessment #1 to Assessment #3. The lack of students that scored at level four seemed to indicate that this expectation was not met. However, the increase in the number of students that scored at level two and level three, of the rubric, indicated that there had been an increase in the critical thinking that the students exhibited, according to the criteria of the rubric.

Summary

Twenty-two eleventh and twelfth grade students participated in the study. These students attended a rural, public high school of 800+ students, located in a Midwest state. Nine of the students were males and thirteen of the students were females. All of the participants were in the same class period.
The purpose of this project was to determine the benefits of implementing teacher-led classroom discussion in a secondary social studies class. Data was collected by the researcher through the use of a single method. The researcher utilized a series of single prompt/question assessments; created by the researcher, in order to collect data for the study the students were given two assessments per day. The first assessment was given after the students had only read the text. The second assessment was given after the students participated in a teacher-led classroom discussion derived from the reading. A total of three different assessments were used during the three days of data collection: Assessment #1, Assessment #2, and Assessment #3. The assessments were collected by the researcher and scored by the researcher through the use of the Holistic Critical Thinking Scoring Rubric. Data was recorded for each of the assessments and graphed for each day. The results in the study indicated an increase in student achievement, as determined by the students’ scores, after the implementation of the teacher-led classroom discussion.

Recommendations

The researcher compiled a list of recommendations for the replication of this study, as well as for future studies pertaining to the implementation of teacher-led classroom discussion.

Recommendations for future studies of the benefits of teacher-led classroom discussions included: extended time for implementation and data collection, a larger and more diverse participant pool, and multiple independent assessment scorers.

The first recommendation for the replication of this study pertained to the quantity of time that the researcher implemented the teacher-led classroom discussions. The
researcher had limited time to implement the teacher-led classroom discussions because it was conducted during an internship that lasted ten weeks. The researcher felt that this was not adequate time to fully determine the benefits of teacher-led classroom discussions. By increasing the quantity of time spent implementing teacher-led classroom discussions, students may experience more benefits related to increased critical thinking skills. The researcher would also recommend an increased quantity of time be allotted for data collection. Extended time for data collection would have allowed for the collection of more data sets. This, in turn, would have allowed for a better analysis of the benefits of teacher-led classroom discussions.

Another recommendation made by the researcher relates to the participant pool for the study. The researcher recommended that for future studies related to the benefits of teacher-led classroom discussions, a larger participant pool be included. This project included twenty-two eleventh and twelfth grade students. They were enrolled in a rural school of 800+ students, located in a Midwest state. Nine of the students were males and thirteen of the students were females. The researcher would recommend using a larger sample of students, from a more diverse population for future research, in order to better determine the benefits of teacher-led classroom discussions across a wider population.

The final recommendation that the researcher would suggest for future research and replication of the study would be the use of multiple, independent scorers. In order to better determine that student responses are scored accurately through the use of the Holistic Critical Thinking Rubric, the researcher recommended that future research and replication of this study should include at least two or more independent scorers who are trained in scoring with the rubric.
The researcher also included recommendations regarding alternate approaches to improving critical thinking in social studies students. The researcher would recommend that for future studies pertaining to improving critical thinking in social studies students, it would be beneficial to examine student-based methods of intervention. The researcher felt that because the teacher-led classroom discussions were focused on questions created by the researcher, the students were not involved in an important conceptual aspect of the project. The researcher determined that an inquiry-based intervention in which the students were the focal point of the intervention could be more beneficial for improving students' critical thinking abilities.

Conclusion

Teacher-led classroom discussions were intended to improve the students' ability to think about a particular subject. Students were expected to actively analyze a reading, in order to synthesize a response to a series of questions that the researcher/teacher had created to challenge the students' thinking. The data from this study suggested that student achievement, in a secondary social studies class, increased through the use of teacher-led classroom discussion.
References


Appendix A

Holistic Critical Thinking Scoring Rubric

Facione and Facione

4

Consistently does all or almost all of the following:
Accurately interprets evidence, statements, graphics, questions, etc.
Identifies the salient arguments (reasons and claims) pro and con.
Thoughtfully analyzes and evaluates major alternative points of view.
Draws warranted, judicious, non-fallacious conclusions.
Justifies key results and procedures, explains assumptions and reasons.
Fair-mindedly follows where evidence and reasons lead.

3

Does most or many of the following:
Accurately interprets evidence, statements, graphics, questions, etc.
Identifies relevant arguments (reasons and claims) pro and con.
Offers analyses and evaluations of obvious alternative points of view.
Draws warranted, non-fallacious conclusions.
Justifies some results or procedures, explains reasons.
Fair-mindedly follows where evidence and reasons lead.

2

Does most or many of the following:
Misinterprets evidence, statements, graphics, questions, etc.
Fails to identify strong, relevant counter-arguments.
Ignores or superficially evaluates obvious alternative points of view.
Draws unwarranted or fallacious conclusions.
Justifies few results or procedures, seldom explains reasons.
Regardless of the evidence or reasons, maintains or defends views based on self-interest or preconceptions.
Consistently does all or almost all of the following:

Offers biased interpretations of evidence, statements, graphics, questions, information, or the points of view of others.
Fails to identify or hastily dismisses strong, relevant counterarguments.
Ignores or superficially evaluates obvious alternative points of view.
Argues using fallacious or irrelevant reasons, and unwarranted claims.
Does not justify results or procedures, nor explain reasons.
Regardless of the evidence or reasons, maintains or defends views based on self-interest or preconceptions.
Exhibits close-mindedness or hostility to reason.
Appendix B
Assessment #1

1. Analyze the case study of the Little Albert experiment, and construct a brief response pertaining to the ethics of Watson and Rayner in conducting this experiment.
Appendix C

Assessment #2

1. Analyze the case study of Little Hans, and construct a brief response either in agreement or dissenting from Freud’s analysis of the situation.
Appendix D

Assessment #3

1. Analyze the reading pertaining to Behaviorism and Humanism, and construct a response in which you take the side of either the humanist theory or the behaviorist theory and explain why you chose the theory that you did.