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A Comparative Analysis of Two Methods for Guiding Discussions Surrounding Controversial and Unresolved Topics

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Abstract

Debates, a popular classroom method, elicit students’ participation and critical thinking. Debates’ focus of winning, at times, generates arguments. Constructive controversy, a researched-based methodological alternative, similarly facilitates students’ engagement and critical thinking while also inventively diminishing arguments through cooperative negotiation (Johnson & Johnson, 2009). The author examines both methods’ impact on students’ engagement, students’ thinking, and the dialogues’ productivity. Three findings and three educationally significant insights emerged.
As any educator can attest, conflicts and controversy emerge within every school’s classrooms and social settings. David Johnson and Roger Johnson (2007, 2009) made the case that teachers can harness intellectual conflict for various educational benefits. Researchers have thoroughly examined debates, which are widely popular (California’s High School Speech Association’s Curriculum Committee, 2004; Meany & Shuster, 2005). As the quote in the title demonstrates, however, debates can elicit antagonism and “generate more heat than light” (Hess, 2009). Johnson and Johnson (2007, 2009) characterized constructive controversy, a research-based social psychology theory, as the instructional procedures designed to produce and channel intellectual conflict to positively impact students’ learning, students’ engagement, and productive dialogue. This research paper is a comparative analysis of debates and constructive controversy, two approaches that compare and contrast in interesting ways.

The pedagogical basis for both debates and constructive controversy are student-led inquiry, critical analyses of evidence, and dialogic negotiation. Researchers have documented the positive learning outcomes associated with student-led inquiry (Smith & Wilhelm, 2006; Wineburg, 2001), critical analysis (Anderson & Krathwohl, 2001; Zemelman, Daniels, & Hyde, 1998), and dialogic negotiation (Laverty & Gregory, 2007; Tobin, 2000). Since American students live and will eventually participate in a democratic society, researchers argue that the thinking skills associated with debates and constructive controversy are especially important within social studies curriculums (Dewey, 1933; Hess, 2009; Zinn & Macedo, 2005). These two approaches are also philosophically quite different.

Debates are highly competitive, much like athletic contests (California’s High School Speech Association’s Curriculum Committee, 2004; Meany & Shuster, 2005). Using a pre-selected topic and knowledge perceived as fixed, the winning side constructs a narrative through logic and evidence that both amplifies their own position and reduces the opponents’ logic and evidence, thereby diminishing that perspective (Laverty & Gregory, 2007; Meany & Shuster, 2005). Through a structured organization for the debate, participants develop strong work ethics, public speaking skills, and pride in winning (California’s High School Speech Association’s Curriculum Committee, 2004; Meany & Shuster, 2005). Researchers criticize debate strategies because antagonism frequently emerges as students relinquish open-mindedness in a quest for winning (Hess, 2009; Johnson & Johnson, 2007; Slaikev & Hasson, 1998; Voss & Means, 1991). Johnson and Johnson (2007) suggest this is a result of students’ rigid advocacy for their original position, which they feel is misunderstood or unfairly criticized.

Constructive controversy, which focuses students’ attention on the intellectual conflict surrounding a complex, relevant, and yet unresolved issue, is more of a discussion than a debate (Johnson & Johnson, 2009). During a constructive controversy unit, students select a relevant topic, actively construct a perspective through research, employ evidence and persuasive logic to express a position during a discussion, and challenge only specious evidence and faulty logic of the contrasting position (Johnson & Johnson, 2007). Through a flexible organization, students cooperatively reconceptualize the discussion, or seek common ground between two seemingly disparate perspectives and attempt to construct a third pathway (Ibid.). An exploratory activity such as this elicits students’ “epistemic curiosity” based on meticulous and open-minded
examination (Johnson & Johnson, 2009, p. 41). The constructive controversy method does not subscribe to the premise that there is no “truth” but does hold that perspectives are both socially constructed and adaptable if new (and meaningful) evidence emerges. It does not imply that any third pathway is better than the original two or that finding some agreement is better than standing on one’s principles. Nor does it suggest knowledge is less important than thinking or negotiation. During a constructive controversy discussion, students’ use of knowledge forms the basis for their thinking and negotiations (Johnson & Johnson, 2009).

Key differences between the two methods include, but are not limited to, predetermined topics compared to students’ selection of topic, fixed knowledge compared to students’ construction of knowledge, structured debate patterns compared to a flexible discussions, and competitive (or antagonistic) debate strategies that crown winners compared to constructive discussions resulting in identification of common ground and exploration of new paths. With each difference, the former represents debates and the latter embodies constructive controversy. Contemporary research appears to support the latter. Educational researchers argue the pedagogical effectiveness of enabling students to select a consequential topic, construct knowledge, and then discuss multiple perspectives (Bransford, Brown, & Cocking, 2000; Bruner, 1990). Researchers interested in preadolescents’ cognition and engagement argue exploratory, individualized, and relevant curricula using emergent, fluid methodology fits within the middle school philosophy (National Middle School Association, 2003; Wiles, Bondi, & Wiles, 2006).

This paper compares and contrasts constructive controversy strategies with typical debate-style methods within a current events unit in a 7th grade middle school social studies curriculum. This paper measures their respective impact on students’ engagement, students’ thinking, and the discussion’s productivity.

Three findings and three educationally significant insights emerged. The three findings, based on data yielded from this study, suggest that constructive controversy more fully engaged students, more effectively challenged students’ thinking, and more productively stimulated healthy discussion than debates. Three insights, based on the researcher’s observations and inferences, are that constructive controversy fits particularly well within social studies curricula, coheres suitably within a middle school philosophy, and while Johnson and Johnson (2009) suggested a need for “sufficient proceduralization” (read: teacher training), this is not necessary.

To demonstrate such findings, this paper is broken down into four sections. The Literature Review examines the divergent opinions regarding teachers’ roles in rousing intellectual conflict in the classroom. In this section, the researcher applies the research literature to justify his decision to employ what others might perceive to be a divisive topic and contentious pedagogy.

The Methodology section describes how data were gathered, coded, and interpreted. The researcher details specific methods employed for debates and then constructive controversy discussions. This section also specifies the debate and discussion topics.

The Findings section describes what happened during the debates and then within the constructive controversy discussions. This section reports interpreted data regarding students’
engagement, students’ thinking, and the discussions productivity. To do so, the researcher compares and contrasts the two methods’ impact on the three aforementioned findings.

Finally, the Discussion section examines the reasons for the success of constructive controversy, as demonstrated in the Findings section. It also explores the three previously mentioned insights, specifically those relevant to constructive controversy’s connection to social studies curricula, middle school philosophy, and the relevance of teacher training. The researcher will argue these insights are quite meaningful for both secondary social studies educators and middle school teachers of any curricula seeking research-based methods to elicit students’ engagement, challenge students’ thinking, and guide productive discussions about contentious material.

Research Literature

Many educators perceive intellectual conflict to be divisive and educationally unnecessary for various reasons. There is a strong potential for students’ stress, anxiety, and social hostility (Chiu & Khoo, 2003; Johnson & Johnson, 2009; Slaikev & Hasson, 1998). Lively discussions can result in a loss of classroom control (Parker, 2006a). High-stakes accountability demands curricular coverage over content depth (Johnson & Johnson, 2009). Students might compromise open-mindedness for “winning” when debating (Hess, 2009; Laverty & Gregory, 2007; Voss & Means, 1991). Teachers are “insufficiently proceduralized,” or not competently trained to manage intellectual conflicts (Johnson & Johnson, 2009). For these reasons, few educators purposefully stimulate intellectual conflict within the classroom (DeCecco & Richards, 1974; Hess, 2009; Johnson & Johnson, 2009).

In contrast and for various reasons, many researchers and educators purposefully elicit intellectual conflict. Johnson, Johnson, and Johnson (1976) made the case that intellectual conflict can positively affect students’ learning and engagement. Pearce (2002) argued structured dialogic interactions over disputed but relevant content could enhance students’ criticality. Hess (2009) contended that to deprive students of this opportunity denies them skills necessary for living within a democratic society. Through discussions about controversial issues, many education researchers made the case for expanded students’ empathy, recognition of diverse views, and intense engagement (Cullinan, Dove, Estice, & Lanka, 2008; Laverty & Gregory, 2007; Parker, 2006b). Dewey (1938) would characterize students’ purposeful use of knowledge as an intelligent activity. Including these positive educational outcomes, researchers of both debates (California’s High School Speech Association’s Curriculum Committee, 2004; Meany & Shuster, 2005) and constructive controversy (Johnson & Johnson, 2005, 2007, & 2009) have similar pedagogical goals. They aim to motivate students, focus attention, facilitate high levels of criticality and cognition, improve conceptualization, enhance recognition of differing perspectives, and stimulate divergent thinking. However, as mentioned in the paper’s introduction, key differences between two methods necessitate a comparative analysis.

While acknowledging the potential for divisiveness, the researcher implemented debates and constructive controversy discussions within a current events unit in a middle school classroom.
Methods

This section will contextualize the methodological implementation of debates and constructive controversy within a current events unit in a social studies curriculum. For clarity, this section contains three parts. The first part details the methods employed for data collection, coding, and interpretation. The second part describes the methods employed for the debates and the specific topics that students researched and debated. The third part details the strategies employed for constructive controversy discussions and the specific topics that students researched and discussed.

Data Collection, Coding, and Interpretation

There were two data collection steps to measure each method’s impact on students’ engagement, students’ thinking, and the productivity of the dialogue. First, all students engaged in one of two debates, each an emergent issue within American current events. Second, the same students, one month later, took part in one of two constructive controversy discussions. During each phase, students’ dialogues were videotaped, transcribed, coded, and analyzed. Twenty-three students were present during both debates and constructive controversy discussions. (Students who were not participants in a debate or a discussion watched respectfully.)

To determine students’ engagement, the researcher measured participation levels by tallying each student’s dialogic contribution(s). The researcher ignored the content and substance of the contributions, which were highly variable and contained within analysis of students’ thinking. The researcher then compiled a graph for both the debate and constructive controversy discussion to report the percent of students who participated at least once (see figure 1). He then compiled a graph to report the frequency of students’ participation (see figure 2). The researcher judged frequency of participation to be a better indication of engagement.

To examine students’ thinking, the researcher coded students’ answers based on three categories. The researcher scrutinized students’ answers to determine if they remained rational (or seemed purposefully argumentative), used logic (or specious claims), and employed evidence (or did not). To justify these categories as indicative of students thinking, one cannot likely think clearly if one does not remain rational, one cannot likely think with clarity if one does not employ sound logic, and one cannot likely think with complexity if one does not employ evidence. The researcher then compiled a graph for both debates and constructive controversy discussions to report these three categories of students’ thinking (see figure 3).

To ascertain the productivity of the debate and the constructive controversy discussion, the researcher compiled the data from the aforementioned variables. From this summative analysis, the researcher determined which method most positively stimulated a healthy discussion.

Debate-Style Methodology and Topics

Various researchers (California’s High School Speech Association’s Curriculum Committee, 2004; Meany & Shuster, 2005) and the Middle School Public Debate Program
(http://www.middleschooldebate.com/index.htm) encourage the teacher to select age appropriate, challenging, uncomplicated, contentious topics (without students’ input) that, when possible, connects meaningfully with the curriculum. They suggest an organizational arrangement whereby one group is termed the proposition group and the other is the opposition group. The format follows a pattern, divided into five-minute segments, whereby one group follows the other multiple times. In the first section, the speakers make an argument and provide evidence. In each subsequent section, the speakers follow suit while also directly or indirectly refuting the opposing group’s argument and evidence.

During the two debates, one group researched the history of and current event materials on same-sex marriage and the other researched the history of and current event materials on the death penalty. Each group deliberated the constitutionality and legitimacy of a federal law on each topic. (For purposes of brevity, a list of case law, current event articles, and internet resources is not included.)

**Constructive Controversy Methodology and Topics**

Johnson and Johnson (2007, 2009) created a methodology that enables students’ discussions of a complex but unresolved conflict. To facilitate a productive discussion, constructive controversy employs unique strategies that advance students’ criticality and reasoning skills while seeking to diminish antagonism. This methodology has six parts.

The teacher first asks a complex central theme question (i.e. “Is civil disobedience in a democracy constructive or destructive?”). To learn relevant background information, students examine various primary historical documents related to the central theme question.

Next, the teacher assigns students a position. The students individually research, organize information, and then work as a group to construct a presentation.

In the third step, students use evidence and logic to express their assigned position to the opposition group. At this time, students in the opposition group carefully listen, seek to understand the rival perspective, and, when necessary, ask clarifying questions. The opposition group then presents their perspective as the opponents listen, seek to understand the perspective, and ask clarifying questions. This step enables each group to advance their position while gaining a comprehensive understanding of the opposing position.

In the fourth step, students candidly discuss the issue. They advance their perspective, use evidence and logic to comment on the opposing position, and rebut critiques. This step enables students to better comprehend the divisions between the two divergent perspectives.

In the fifth step, students reverse perspectives and present their opponents’ position (Johnson & Johnson, 2009). This step facilitates students’ understandings of the evidence and logic of both positions by purposefully forcing them to think beyond their original perspective.

In the final step, students reconceptualize the issue by deliberately working beyond their original perspective. In this step, students first identify common ground between the two
perspectives and then seek to create a mutually agreed-upon new position. Reconceptualization is not a compromise but a cooperatively constructed third alternative; it is a form of political triangulation and is tantamount to intellectual invention (Arts & Verschuren, 1999). Researchers argue it to be the capstone of criticality (Anderson & Krathwohl, 2001; Johnson & Johnson, 2009). Students may not fully complete this final step. Students demonstrate completion of this final step through a detailed, evidence-based presentation of this reconceptualized third position.

Johnson and Johnson (2009, p. 41-42) asserted these methods forced students away from concurrence seeking, where groups cooperate to avoid conflict; debate, where groups compete to “win” an argument through refutation and rebuttal of evidence and reasoning; and individualistic efforts, where students independently study multiple perspectives but do not allow their initial conclusion to be challenged.

There were two groups of constructive controversy discussions, one researched the history of and current event materials on abortion and the other researched the history of and current event materials on the medicinal marijuana. Each group deliberated the constitutionality and legitimacy of a federal law on each topic. (For purposes of brevity, a list of case law, current event articles, and internet resources is not included.)

Findings

This section reports and interprets what happened during the debates and the constructive controversy discussions. (While there were two debates and two discussions, the researcher combined the numbers to comparatively analyze the two methods.) This section is broken down into three subsections: students’ engagement, students’ thinking, and the productivity of the methods. The researcher will compare and contrast each method’s impact on the three areas. The reader will clearly see that, upon close inspection, constructive controversy appeared to more effectively elicit students’ engagement, students’ thinking, and a productive discussion.

Students’ Engagement

To determine students’ level of engagement during the debates and discussions, the researcher used the transcript from the dialogue to tally students’ dialogic contribution(s). He then combined the results. As mentioned above, the researcher ignored each comment’s content and substance, which were highly variable and examined within analyses of students’ thinking.

Students’ Participation (figure 1) represents the proportion of students who commented at least once. This percentage was quite high in both debates and in both constructive controversy discussions.
The results in Students' Participation (figure 1) demonstrate that both methods elicited high levels of students' participation. However, when one closely scrutinizes the data, a more complicated picture emerges. To participate is to contribute, but this does not reveal the level of engagement.

To describe a student as engaged, that student cannot simply say one thing, that student must participate frequently. Students' Engagement (figure 2) represents the number of times the students contributed. The graph reports students who contributed infrequently (0-2 times), somewhat frequently (3-5 times), and quite frequently (6 times or more). (Student totals add up to 23.)
The data within Students’ Engagement (figure 2) report frequency of students’ participation. This is a measure of the quality of students’ participation, or engagement, because it reveals the variable of regularity, which Students’ Participation (figure 1) could not. The data demonstrate that more students’ spoke far more frequently during the constructive controversy discussion than during the debate. In fact, three times as many students spoke “quite frequently” during the constructive controversy discussions than during the debates. Further, more than three times as many students spoke “infrequently” during the debates than the constructive controversy discussions. The data reveal that constructive controversy more fully engaged students.

**Students’ Thinking**

To more accurately assess how students’ participated, the researcher examined their thinking. The researcher judged students’ thinking in three parts: disposition, reason, and evidentiary support. In short, the researcher determined if they remained rational (or seemed purposefully argumentative), used logic (or specious claims), and employed evidence (or did not). The researcher then created Students’ Thinking (figure 3), which combined data from both debates and both constructive controversy discussions, to report students’ rationality, use of logic, and employment of evidence.
Whereas Students’ Engagement (figure 2) measured the quality of students’ participation (and figure 1 simply reported participation), Students’ Thinking (figure 3) measured the quality of students’ thinking. A cursory examination of the data reveal that during the constructive controversy discussions more than 80% of the students’ comments were rational, employed logic, and utilized evidence. This graph reveals that constructive controversy methodology elicited a higher quality of students’ thinking in every measurable way. Further, it was only in the “use of evidence” measure that constructive controversy methodology did not more than double the results from debate methodology.

While the data in Students’ Thinking (figure 3) demonstrably indicate the success of constructive controversy to elicit all three variables, when one examines the data in the inverse it is more revealing. The data uncover that, during debates, 76% of students struggled to maintain a rational disposition, 66% of students could not sufficiently rely on logic, and 48% did not rely on evidence. The data support Hess’s (2009) argument that debates can elicit antagonism and “generate more heat than light.”

Dialogues’ Productivity

To ascertain the productivity of the debate and the constructive controversy discussion, the researcher examined data from all three graphs. From this summative analysis, the researcher determined that in no area did the debate method better the constructive controversy method. Students’ Participation (figure 1) was the only variable in which results for the debates were close to those of constructive controversy. However, closer inspection of the data (Students’ Engagement, figure 2) revealed students’ engagement (read: quality of participation) was still far better during constructive controversy discussions. Further, within Students’ Thinking (figure 3), results from constructive controversy far surpassed results from debates.
during all three measures. For these reasons, it appears that constructive controversy methodology elicited more productive dialogues than the debate-style strategy.

The findings, while certainly impressive, are not strong enough to claim conclusively that constructive controversy is a better strategy than debate. The only conclusions one can draw is that in this context, at this time, and with these students, constructive controversy appeared to be the better method for eliciting students’ engagement, challenging students’ thinking, and facilitating productive dialogues. The question then is why was it better?

**Discussion**

Reflecting upon what happened during this research, and in an attempt to explain why constructive controversy resulted in stronger student-participation, more cogent expressions of students’ thinking, and a more productive discussion, the researcher offers one conclusion that has multiple (and related) parts, each based on Johnson and Johnson’s (2007, 2009) research findings and Hess’s (2009) claims.

The constructive controversy method cognitively challenged students to rely on rational disposition, logic, and use of evidence in ways that debates did not. Students in both debates focused on winning an argument, as most rigidly advocated for their original position. Some students tried to better the opponent through verbosity or antagonism (as evidenced in figure 3), which caused others to stop contributing (as evidenced in figure 2). Hess (2009) warned against both outcomes.

During constructive controversy, however, specious claims and argumentative statements were rare (as evidenced in figure 3). Since these two dialogic activities were with the same students and separated only by one month, it is reasonable to argue the absence of specious claims and argumentative statements during constructive controversy were results from aspects provided within constructive controversy methodology that debate methodology did not.

Johnson and Johnson’s (2009) constructive controversy methodology required that students’ restate the others’ perspective (constructive controversy’s fifth step) and work towards reconceptualization (the sixth and final step). In the fifth step, when students’ reversed positions and presented their opponents’ perspective, they demonstrated – as much to their opponents as to the researcher or themselves – a clearer understanding of both positions. Consequently, the emotion of the discussion appeared to lessen as students focused more on the topic, employed rational dispositions, used logic, and utilized evidence (as evidenced in figure 3). As a result, students ably reconceptualized the issue through deliberation and negotiation, each of which were extensions of rationality, logic, and evidence usage. For these reasons, constructive controversy methodology enabled students to want to participate (figure 2) and rely on more constructive forms of thinking (figure 3), which resulted in healthier and more productive discussions than those generated during the debates.

One cannot overlook, however, that debates preceded constructive controversy. Students certainly, with experience and time, would improve their ability to employ evidence. This skill is not likely dependent upon their emotional and cognitive development. Rationality and logical
thought are far more likely to be dependent upon emotional and cognitive maturation, which one month of spacing clearly did not provide (Wiles, Bondi, & Wiles, 2006). In other words, adolescents, known for their impulsivity, irrationality, and at times belligerence (Ibid.), would not likely on their own within a month release a propensity to be argumentative or avoid specious claims, given their tendencies to do both excessively during debates. Stated differently, the adolescents would not likely independently and in a month’s time develop a rational disposition and employ more readily the use of logic, which the data in figure 3 indicated. For these reasons, one can reasonably assert the method for discussion likely impacted students’ behaviors to a greater degree than a second contentious discussion.

While the research project focused on students’ engagement, students’ thinking, and the dialogue’s productivity, the researcher noted other significant discoveries. Three insights emerged from the research project, specifically related to constructive controversy’s connection to social studies curricula, its coherence with the middle school philosophy, and the relevance of teacher training. These insights, while speculative, are meaningful.

Constructive controversy fits particularly well within a social studies curriculum. Citizens in a democratic society must learn to critically evaluate complex and unresolved situations using multiple data sources (e.g. Dewey, 1933; Hess, 2009; Johnson & Johnson, 2005; Zinn & Macedo, 2005). Sparking an intellectual conflict may be potentially divisive (Chiu & Khoo, 2003), there is a potentiality for students’ stress, anxiety, and/or social hostility (Johnson & Johnson, 2009; Slaikev & Hasson, 1998), and lively discussions can cause teachers to lose control of the classroom (Parker, 2006a). However, students in a democratic society must also learn how to constructively engage those with divergent beliefs in a healthy discussion to dialogically negotiate new positions (Hess, 2009; Johnson & Johnson, 2005). For these reasons, constructive controversy fits specifically well within the social studies.

This research project’s findings suggest that constructive controversy distinctively coheres with the middle school philosophy. Researchers interested in middle schools suggest curricula that are exploratory, emergent, content-rich, individualized, and deemed meaningful by pre-adolescents and adolescents (Lindquist, 1997; National Middle School Association, 2003). Further, middle school researchers encourage middle school teachers to employ engaging methodologies that provide variety, flexibility, and choice (Lindquist, 2002; Wiles et al., 2006). Constructive controversy fits well within middle school curricula since it enables students to actively participate, flexibly work, and purposefully select from an array of complex, contentious, and unresolved topics. These characteristics arguably enhance any students’ engagement, but work especially well with adolescents and cohere with a middle school philosophy (National Middle School Association, 2003; Wiles et al., 2006).

While these findings report many positive attributes for constructive controversy, Johnson and Johnson (2009) suggest a need for sufficient proceduralization. This is not necessarily the case. While it training for competency at managing intellectual conflicts would benefit teachers, this is not always feasible. Teacher in-services are a possibility, but they may be impractical due to cost and the availability of trained professionals. It seems most realistic, therefore, for teachers to learn through experience. To gain that experience, however, teachers must take risks with the initial “test” groups. Without teachers skilled at controlling potentially
divisive classroom contexts, a host of negative results may materialize. At worst, student conflicts may emerge (or explode). Or, while less harmful initially but arguably equally unconstructive, students may become entrenched in their original perspective and compromise open-mindedness for winning an argument (Hess, 2009; Laverty & Gregory, 2007; Voss & Means, 1991). These are tangibly negative outcomes. The positives mentioned in the three findings and the first two insights, however, outweigh these potentially negative outcomes. Further, these negatives are a possibility, but not a certainty. For these reasons, this research demonstrates that an experienced teacher would likely have the skills necessary to fluidly adjust and respond to manifestations of the aforementioned negative outcomes.

In sum, the data reported in this research validate the general conceptual framework of Johnson and Johnson’s (2009) constructive controversy. Further, when contrasted with findings garnered from debates, the data suggest strong attributes for constructive controversy. The reported insights speculate about where this methodology fits best. Due to its meaningful focus on democratic reasoning and criticality, secondary social studies teachers are encouraged to employ constructive controversy. Due to its methodological flexibility, ability to engage, focus on student-choice, and concentration on content adolescents deem meaningful, middle school teachers of all curricula are encouraged to utilize constructive controversy. Finally, there is not necessarily a need for compulsory proceduralization because the benefits far outweigh the (possible but not probable) detrimental results.
References


