COMPARING STUDENT REFLECTIVENESS IN ONLINE DISCUSSION FORUMS ACROSS MODES OF INSTRUCTION AND LEVELS OF COURSES

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ABSTRACT

Fostering reflective deliberation in the online classroom ensures that students reach a high level of achievement in virtual courses. Student peer exchanges were evaluated on a collaborative web site structured around interactive weekly discussions offered across an online, face-to-face, and upper- and lower-division political science courses. Findings indicate that despite differences in mode and level of instruction, the 87 students were academically reflective in their peer discussions across geographic boundaries. This study concludes that a collaboration with a peer interactive design has an important place in online classes, which is a concern for educators and university administrators when developing and delivering pedagogical content.

Keywords: Online Learning, Deliberation, Reflectivity of Discussions, Different course levels,

Different instruction types, Online Communities.

INTRODUCTION

Deliberating, reflecting on ideas and viewpoints, pondering over ideas and engaging in discussions, all occur naturally in face-to-face classes and are important elements in online discussion forums as well, along with linking learning, a sense of efficacy, and civic engagement. There are two primary reasons for studying reflective deliberations in online courses. The first is that online courses are growing dramatically as the figures in 2005 indicate: 3.2 million university students in the United States took at least one online course, up from 2.3 million the previous year

(Allen & Seaman et al., 2006). As this growth continues to rise and these courses are here to stay, we need to design and offer online courses that engage students with each other and with the academic materials with deliberative reflectivity.

The second reason research on student reflectivity is significant is that a primary component of effective online (or face-to-face) teaching is student deliberation of ideas and viewpoints with reflective thought. It is, therefore, imperative that we learn how students engage online in order to offer pedagogically viable online learning environments. The central aim of this study is to do just that. To study the peer deliberative engagement of 87 students enrolled in online, face-to-face, upper and lower-division political science courses when they post and respond to each other and to a question posted by the instructor on a weekly basis on a carefully designed collaborative web site created for the specific purpose of academic interactivity. Reflectiveness was measured as a compound dependent variable that gauged the deliberative exchange of ideas among students using academic works within these discussions.

The design and delivery of an online

collaborative web site is central to offering a pedagogically robust interactive online course so that students engage with each other and with the academic materials. It is important that students engage with others outside their geographic boundaries so they can critically evaluate how issues impact others in similar and dissimilar ways. In using an asynchronous site, students have the additional benefit of time and space to consider their thinking before responding, as prior researchers have noted (Boud, Cohen, & Sampson, 2001; Paul, & Elder, 2012).

The idea used in this study for the online collaboration came from a faculty member who believed that interactive peer discussions with guided academic criteria about common comparable subjects, such as American politics or elections, would promote greater deliberative discussions on an online portal open to all members. This interactive endeavor has been in use for the past eight semesters. Interested faculty were recruited from the national American political science education list serve and subsequent national political science conferences. Each instructor was responsible for and performed work in a timely manner, including obtaining human subject forms and meeting FERPA requirements. The collaborators agreed upon the course type, level, objectives, and syllabus requirements and prepared alternative project arrangements for those students who did not consent. The online collaborative site was created through a ning.com service and personally paid for by professors. Each semester a new web site was created for those choosing to participate that incorporated as many as six campuses or as few as two institutions. The web site created for this study represents an extension of the past several years of interaction among students. The online site would provide a virtual educational space for students enrolled in comparable subjects across geographic boundaries to practice critical thinking about political issues when interacting with each other. The site was created using a paid service through ning.com with the URL americanpoliticsspring2012.ning.com. The collaborative site was designed with student peer interactivity in mind, much like Facebook, where participants respond to the initial poster and to each other. On the site, instructors posed weekly questions on a rotating basis for all students to respond. The students 87 enrolled in the three courses posted and responded to the same question and each question created a separate discussion forum. An example of this interactivity is shown in Figure 1 with student names erased to preserve the integrity of the participants.

The outcome of this research is important for educators interested in offering and designing effective online courses that are educationally vigorous and university administrators and policymakers interested in offering viable technological innovations that address the changing nature of their students who seek online classes, or as an alternative to building more physical classrooms on campuses. Institutions are faced with the need to develop pedagogical content virtually and research in the field of online discussions in higher education continues to grow, but we still know very little about how students perform in online collaborative discussion threads (Topping, 1996), where they discuss and deliberate with each other without knowing the identities of those with whom they deliberate. Online spaces provide an equal platform for students, and as Herring (1993) argues "they provide for the possibility that individuals can participate on the same terms as others, that is, more or less anonymously, with the emphasis being on the content, rather than on the form of the message or the identity of the sender" (p. 1). With the focus on the written message, online students would participate on the same terms as others while remaining anonymous and their geographic differences or mode of instruction unknown.

With the collaborative site designed for interactivity with online spaces lending to asynchrony, students would have the time and space to think and engage with each other with deliberate thought. Having the benefit of time to think about the questions asked of them, students read peer responses critically, scrutinize the information, and evaluate and reason differing perspectives before responding to peers (Paul & Elder, 2012). Creating interactive designs across any subject matter lead to reflective thinking about the question and the subject matter. For instance, in studying history, students learn to focus on historical processes and questions. When studying math, they clarify and analyze mathematical goals and problems. When studying literature, they reflect upon literary methods and questions. Abilities like these play

a central role in a rich and substantive concept of critical thinking. They are essential to approaching actual issues, problems, and situations critically. Understanding the rights and duties of citizenship, for example, requires that one has the ability to compare perspectives and interpretations, to read and listen critically, and to analyze and evaluate policies. These are crucial tasks for thinking deeply about the rights and duties of citizenship. When faced with a question, having time and space to understand another person's point of view provides students with practice in developing critical thinking.

Student online discussion exchanges are seen as a cooperative process (Boud et al., 2001) in which both participants are actively engaging in various forms of relationships based on the written post. There will be differences based on the level of course. Some students will guide others with their greater knowledge and others will respond to that additional information, Therefore, the first research question asked was, despite the different modes of instruction (online or face-to face), would student deliberative reflectivity scores in the collaboration vary? The second research question was whether, despite the level of the course (upper- or lower-division), reflectivity scores in the collaboration would vary?

This research is compelling as studies have yet to compare peer deliberative interactions among students across different delivery modes and levels of courses with the same instructor providing reliability of results. Allowing comparisons across level of course and mode of instruction were possible, because prior to the start of the semester, the professors discussed the similarities of their courses' objectives and distributed a standardized list of instructions for the collaboration. Moreover, the distribution of race, gender, and course level were appropriately equal among the participating institutions, which makes this study comparable. This study is especially distinctive as it compares different modes and levels of instruction online with a researcher who taught the same course using different modes of instruction, which provides for a reliable analysis.

LITERATURE REVIEW

The research on effective student deliberative online instruction offers three conclusions: 1) online deliberative approaches may be as effective as traditional instruction, 2) much like face to-face courses online courses need collaborative and discussion-oriented strategies, and 3) more research is needed (Boud et al., 2001; Dixson, 2010; Topping, 1996).

Online deliberative forums offered through asynchronous discussions perform similar duties as face-to-face discussions. They both have back-and-forth dialogue among peers in physical classrooms or online. Whether these discussions are occurring in the classroom or out in the online hallway, deliberations are a pedagogical tool that enhances the student's knowledge gain and increases the level of engagement among them. Researchers have observed that in online environments, much like face-to-face classes, learning occurs through an egalitarian process in which participants generate, challenge, reflect upon, and defend ideas, thereby constructing meaning through these exchanges (Paul & Elder, 2012; Rountree, 1995). In other words, online technologies facilitate creative collaboration among active participants who coproduce content through peer discussions (Lee & McLoughlin, 2007), and learn through student discussions (Dehler & Parras-Hernandez, 1998). Online teaching methods using deliberations are comparable to face-to-face courses at promoting positive civic knowledge, attitudes, and behaviors (Botsch & Botsch, 2012; Delli & Keeter, 1996; Galston, 2007: Pollock & Wilson, 2002). Peer discussions online are supported by several studies confirming that retention rates are on par between online and face-to-face courses; that is, despite the differences in mode of instruction, there were no significant differences in their course outcomes (Bolsen, Evans, & Fleming, 2016; Farinella, Hobbs, & Weeks, 2000; Hastie, Hung, Chen, & Kinshuk, 2010; Kim & Bonk, 2006; Pape, 2010;

Simonson, Smaldino, Albright, & Zvacek, 2012; Wladis, Conway, & Hachey, 2015).

Online deliberative peer discussions providing viable means of academic engagement have been heatedly debated with previous research on several variations of online teaching such as that on blended courses (courses where one class period is taught face-to-face and the other is held asynchronously online) (Asarta & Schmidt, 2016), online discussions complementing in-class use (Roscoe, 2012; Wolfe, 2012), and discussions in

fully online classes (Pollock, Hamann, & Wilson, 2011). Research has also gained momentum in the field of online deliberations itself (Delborne, Anderson, Kleinman, Colin, & Powell, 2011; Min, 2007; Stromer-Galley, 2007; Talpin & Wojcik, 2010; Tucey, 2010; Wojcieszak, Baek, & Carpini, 2009). While past research points to the growing evidence that online discussions are a highly effective means of engaging in political science courses (Clawson, Deen, & Oxley, 2002; Hamann, Pollock, & Wilson, 2009; Wilson, Pollock, & Hamann, 2007), there is agreement in the field that online deliberations are genuinely multidisciplinary.

A recurrent theme in the literature is that collaborative/interactive activities are a necessary component of effective online pedagogical instruction. As Graham et al. (2001) argued, a "well designed discussion facilitates meaningful cooperation" (p. 2.). Deliberative strategies in discussion forums offer rapport and collaboration among students, thought provoking questions, and dynamic interaction (Gayton & McEwen, 2007). When students are engaged in deliberation they seek new information, explain or justify their positions, hold others accountable for their views, and engage in an active learning process (Bender, 2003; Bloom, 1956).

Online discussions in collaborations offer several democratizing effects that occur because the medium subdues or eliminates an individual's status cues (Caspi, Chajut, & Saporta, 2008; Herring, 1993; Kiesler, Seigel, & McGuire, 1984). Students have no knowledge of a participant's race, ethnicity, religion, course level, or mode of instruction. While students may not remain entirely anonymous to their peers, because their explicit communications do not mask differences such as photos or grammar usage, it provides for privacy of the poster and the focus shifts to the content rather than the identity of the sender (Herring, 1993). In doing so, online interactions provide four primary benefits.

First, anonymity challenges diverse viewpoints and the students gain an awareness of alternative perspectives, a more reflective understanding of collective problems, and a deeper appreciation of minority rights (Guttman, 2000; Van Vechten & Chadha, 2013). Exposure to and experience with diversity can help students develop skills to handle and resolve disagreements arising from conflicting points of view (Gurin, Nagda, & Lopez, 2004; Zuniga, Veenstra, Vraga, & Shah, 2010).

Second, with identities concealed, peers are often confident in their expressions and become more open, frank, expansive, curious, and even confessional in their willingness to share and discuss sensitive issues. Based on the content of the message and not on the sender's characteristics, these discussions are a constructive way to collaborate and engage students in higher order thinking (Faraj, Jarvenpaa, & Majchrzak, 2011; Meyer, 2003) and are known to boost academic progression (Anderson, 2003; Merryfield, 2001; Van Vechten & Chadha, 2013). Third, online discussions continue providing educational opportunities for students who might be travelling, deployed, or working full time, thus reducing interruptions to their educational experiences. Today's student is engaged academically even when they are not being "watched" online. Fourth, with the use of asynchronous as opposed to synchronous approaches, students can post responses anytime, helping them engage with issues and material more meaningfully because they have the chance to think critically through arguments, evaluate evidence, draw conclusions, reflect and reconsider, and reestablish their positions (Hamann et al., 2009; Yoo, 2013). In fact, when students are given the time, space, and ownership of discussions, it sharpens their perspective (Anderson, 2003; Paul & Elder, 2012) giving them the opportunity to interact, provide peer feedback, and reflect on the status of their personal learning goals and outcomes (Er, Özden, Yaşar, & Arifoglu, 2009; Harris, Mishra, & Koehler, 2009; Simonson et al., 2012). Asynchronistic means are known to aid in higher-order reasoning (Avery & Hahn, 2004), where peers engage each other in discussions of ideas and positions that encourage critical reflection and dialogue with space and time for them to consider all sides of an issue before offering their own educated input. Asynchronous online peer discussions are not a new observation but a well-established pedagogical practice in higher education.

While in daily life students have conversations with each other inside and outside the classroom in synchronous terms, online peer discussions are asynchronous providing a learning experience that is qualitatively different from the usual teacher-student interactions and which offers mutual

benefits (Saunders, 1992). Whereas in face-to-face classes, the roles of the teacher and learners are fixed, in online learning peer-discussion relationships are either undefined or shift during the course of the learning experience, especially as the student's response is based on the content of the message and sent to peers as opposed to the instructor. The advantage in learning from peers is that these participants are in a similar position without being in a position of authority. They share the same experiences, and with their identities concealed the emphasis online is on the learning process.

Online discussion oriented relationships result in various relationship styles, as many as fourteen (Griffiths, Houston, & Lazenbatt, 1995). For instance, it can involve an upper-level student who is slightly ahead of other students, or who has successfully demonstrated proficiency with the material, responding with greater critical thought in discussion exchanges with others of different levels (Griffiths et al., 1995). Other relationships can develop when a research assistant plays a role in the discussion, and another form includes students in the same level learning from each other (Boud et al., 2001; Brookfield & Preskill, 1999; Griffiths et al., 1995; Topping, 1996). No matter the form, with identities masked online, students have the opportunity to support and learn from each other by explaining their ideas and receiving feedback. Those with greater experience would deliberate with greater reflectiveness and critical thought while tying in academic text ideas that further explain the deliberations in greater length. What we do know is that the online exchange in discussions is an equal process of exchange (Saunders, 1992) where both participants are actively engaging in various forms of relationships based on the written message and their online anonymity. The student-peer learning process makes use of peers as resources without knowing who and where these peers are geographically, while focusing on the written message yet contributing to their learning (Johnson & Johnson & Aragon, 2003; Saunders, 1992).

Research in the field of incorporating online discussion-oriented projects grows, but according to Topping's exhaustive review of the literature, surprisingly little research has been done on asynchronous collaborative peer exchanges online (Topping, 1996). Content analysis, while time consuming, is a commonly used strategy by researchers to code qualitative discussion boards (Hamann et al., 2009; Van Vechten & Chadha, 2013; Wilson et al., 2007). In finding a coding scheme that would be both comprehensive and would enable reliability in analyzing the material, researchers develop their own measures for coding depending upon the study. Some researchers used methods similar to Bloom's taxonomy in identifying levels of cognitive activity (Henri, 1992). Other researchers employed a coding scheme by counting how many student statements were written "in depth"—that is, they added new critical ideas or evidence to the discussion—when responding to other students' postings directly or indirectly (Hamann et al., 2009; Pollock & Wilson, 2002; Pollock et al., 2011; Wilson et al., 2007). Yet another researcher developed a model to analyze content that highlights dimensions of the learning process, such as participation, interaction, social, cognitive, and metacognitive (Wickersham & Dooley, 2006). In this study, the coding of the content analysis was tied to the intent of the interactive design of the collaborative endeavor, which is to facilitate critical and reflective engagement among peers across geographic boundaries through a purposefully designed site. The content analysis used a prior published index that related to student reflectivity among peers online to measure the dependent variable in this study (Chadha, 2016a & 2016b; Van Vechten & Chadha, 2013).

Research focused on differing delivery modes and levels of course are a concern for decision makers, such as professors designing educationally vigorous courses as well as policy makers and university administrators addressing the changing nature of their students and to other educators seeking to teach comparable courses such as English, math, social science, medicine, or engineering. Lessons learned from this study can be used across any comparable subjects in or out of academia. For example, in medicine, the discussion of surgeries of conjoined twins in Iraq can be discussed and deliberated by various medical practitioners ranging from doctors, nurses, and support staff and could be used in Indonesia. In engineering issues from irrigation canals to the design and implementation of technological advancements in cars might benefit. Another example would be the use of an e-collaboration among those involved in making digital chips in the United States and customers

and providers using these chips in Germany or Japan, who could discuss the various stages and components of the process, which leads to greater efficiency of product manufacturing in another country. Or the methods and practices shared by fire fighters in California can be used in Louisiana. The uniqueness of academically sound online offerings added by this study adds to the richly debated literature, notwithstanding its limits.

LIMITATIONS WITH ONLINE OFFERINGS

I analyzed the language of e-mails for tone, evaluated Undoubtedly, with growth in the field there are the limitations of online offerings. Foremost, learner isolation and engagement is more likely to be an issue online than in face-toface courses (Conrad & Donaldson, 2004). These concerns are noted by students who agree that they tend to be more engaged in a subject when they are around peers. Another limitation of online designs is the interaction between the student and instructor(s). Researchers note that the (social) presence of the instructor is an integral component of a successful online course. The instructor must be conscious of online activities that translate virtual interaction into an impression of a "real" person (Dixson, 2010; Kehrwald, 2008; Otter et al., 2013). These issues cannot be dismissed, and while student peers can provide presence, it is crucial for instructors to be a part of that presence. More research is needed to understand these concerns and to create academically challenging online courses.

Researchers Defending the Limits in Online Courses.

In addressing issues of learner isolation and engagement online, researchers suggest that creating discussion forums and engaging students with peers is a key component toward fostering learning and building a sense of community that minimizes isolation (Conrad & Donaldson, 2004). In response to issues of learner isolation, instructors suggest offering both synchronous and asynchronous sessions. The benefits of synchronous sessions are a sense of presence; however, this leads to inequality, as not all students are able to attend these sessions due to work or personal scheduling conflicts. Besides, the very reason a student would enroll in an online class is to make it a part of their schedule that is independent of others (Dixson, 2010; Kehrwald, 2008). This is especially true when a student who is deployed is enrolled in a class and cannot be a part of the synchronous session. A combination of synchronous and asynchronous approaches is suggested (Hamann et al., 2009; Kim, Park, Yoon, & Jo, 2016, Lou, Abrami, & d'Apollonia, 2001).

Another limit is that in achieving online educationally challenging courses, researchers admit that universities' instructional technology departments need to provide instructors with training in creating academically challenging online courses and provide sufficient support to both instructors and students to ensure a world class education. Such concerns are of practical significance to policy makers and designers needing to address the accessibility and creation of online virtual spaces for educational purposes. Despite the limits of online formats, there is substantial evidence to suggest that online learning is at least as effective as the traditional format. In order to provide support for such evidence, a call for more significant published research has been issued as the arena of online education and teaching expand nationally and globally (Hamann, et al., 2009; Jankowski & Van, 2004; Karlsson, 2010; Kies & Wojcik, 2010; Lou, et al., 2001; Ranerup, 2000; Russell, 1999; Stanley, Weare, & Musso, 2004; Wright, 2007).

METHODS

With the purpose behind the collaboration to be an interactive means of discussion among students across three courses and the courses themselves agreed upon, the collaborative site was designed with student peer interactivity in mind. This research studied the reflective peer interactions of the 87 students during the Fall 2012 semester. This included the researcher who taught the same course using different modes of instruction and level of course.

A mixed methods approach was used in this study. First, content analysis across the three participating universities from the Fall 2012 term was performed. Among the 87 enrolled students a resultant 540 postings (posts and responses) were written and each posting coded. Second, the content analysis was statistically tested using MANOVAS. The MANOVAS were used as they can statistically determine whether there are any

differences between the independent groups of the face-to-face versus online class and between the upper and lower-level classes. As two instructors coded the content analysis, Cohen's κ inter coder reliability checks were performed with resultant moderate agreement ($\kappa = .607$, 95% CI (.436 to .78), $p < .0001$) between the faceto-face and online class and between the upper and lower-level classes. Pre- and posttest surveys about the nature of student online interactions from the semester formed the student perspective. This analysis was possible as prior to the start of the semester the instructors agreed to commonalities in their courses and in the online collaboration for the entire semester.

Comparability Across Courses

Prior to the start of the Fall 2012 semester, the professors agreed to offer a collaboration across the three courses. Two of the courses were on the same topic but offered in differing delivery methods, while the third course, at a lower level, was offered as a course focused on elections and maintained similar course objectives as the other two. For the collaboration, the professors agreed to a common set of assignments and each professor added these to his or her own syllabus (see Appendix B) along with common instructions, a course grade, and the same minimum number of words and postresponse requirements. Students were required to respond to weekly discussion questions posted by the instructors and also to respond to other students' posts to build and maintain a discussion-oriented online community. The instructors were mindful of several pedagogical goals: increase student interaction and participation, reinforce lessons, hold students accountable for views, develop better understanding of points of view, improve communication and analytical skills, articulate points, to achieve openness to all, to build civility, tolerance, critical thinking, deepen a sense of identity, and expand a sense of "community." They did not provide examples of posts or responses to be written. The 87 students who participated in the program (there were no drops from any of these classes) were enrolled in three American Politics courses across three states. The professors discussed the similarities of their courses' subject material and agreed to this project requirement in their syllabus. Students were required to post and respond to the same minimum number of questions posted on a rotating basis by the instructors. This multilayered effect of original posts and responses to other posts were considered discussions.

The instructors discussed and distributed a standardized list of instructions in their syllabi. Each professor assigned a different percentage, ranging from 10% to 15% of the course grade to this collaborative activity. Instructors did emphasize and require that students participate and participate consistently. They reminded students of these ground rules when necessary. Students on each campus were asked the same questions and were required to participate in the weekly discussions organized around a question posted by one of the instructors using a minimum length of 75 words, which is approximately four fully-typed lines, in their posts and responses. Other than the minimum word guidance and the requirement to respond and reply to the same minimum number of discussion questions, no other guidance was provided to the students with regard to how to interact or construct a post or response. Typically, the students had one week to analyze and respond to the question ("the post"). In order to build dialogue, the students were also required to respond to others' posts ("the response"). This exchange between instructor and student and student and student furthered personal interaction, student investment in the site, and a sense of an online community.

Professors monitored conversations for signs that students were abiding by general rules of respect, decency, and civility, but they generally refrained from participating in the discussion forums. Throughout the semester, the instructors talked to each other about any issues or concerns having to do with the online collaborative activities. The semester-long project "virtually" linked classes across three states and different time zones for a total of 87 students. A description summary of campus participants is provided in Table 1.

As shown in Table 1, two of the courses were upper division while one was a lower division course. Of the two upper-division courses, one was taught online while the other was taught face-to-face. The online collaborative discussions were required in each of the courses with an agreed upon minimum number of words and a required number of posts and responses. The course objectives were mirrored across the courses and lent to the comparability of the collaboration. Females outnumbered males on the site, 68% to 32%. The group was racially and

ethnically diverse as well, with whites comprising 25% of students, African Americans 44%, Latino Americans 21%, and 10% indicated "other" as their category (taken from end-of-semester self-reports).

Table 1: Descriptive Summary of Campus Participants

Campus	A"	"B"	"C"
Location	Texas	California	New York
Course Level	Upper	Upper	Lower
Course name	Participation and Elections	Campaigns and Elections	American Politics
Class Delivery	Online	Face-to-Face	Face-to-Face
Grade	15%	14%	10%
# students in course	23	15	49

The Dependent Composite Variable, the Reflectivity Index

As the intent of the collaboration was to have students interact with each other about common political issues and the collaborative site was designed with student peer interactivity in mind, the dependent variable would measure for evidence of reflectivity in student interactions regardless of whether the form of instruction was online or face-to-face. A reflectiveness index was created using published research that measured the reflectiveness and deliberation that took place in these online interactive discussions (Chadha, 2016a & 2016b; Van Vechten & Chadha, 2013). The index would measure how reflective and/or deliberate the students were, whether they were thoughtful in their posts and responses; if they were thinking critically, developing informed perspectives about civic issues, and learning from each other; whether they tied in ideas from classroom discussions or texts, referenced external web links or books, asked questions that required extensive discussion, and interacted in a civilized manner; and whether the lengths of their posts or responses went beyond grade requirements showing they were taking the time to be thoughtful and deliberative in their discussion. If the students were not thoughtful but were unreasoned in their responses, e.g., they made broad generalizations in a negative or derogatory manner to others, they were not considered reflective. Measuring critical reflection in discussions required a thorough reading of each student's posts to an instructor and responses to other students' post. Each post (n = 368) and response (n = 172), a total of 540 postings, was read and coded for the reflectiveness index.

Operationalizing the Variables

To be reflective/deliberative means that students had reflected, deliberated, or reconsidered their own views when they responded to questions or when they commented on other students' posts. They puzzled through problems or issues, questioned others, challenged others, or held them accountable for their views in a positive way. They thought about the question and responded with reflective and deliberate comments. A score of 1 or 0 was assigned. + Civic Roles. Were the students thoughtful citizens? Did they think about the questions posed and respond in ways that reflected a theoretical or practical application of American politics? Did they discuss civic issues such as First Amendment or voting issues rather just mention them? Did they engage each other, not just agree or disagree with each other? Did they challenge or push one another to think in a civil way? A score of 1 or 0 was assigned. + Classroom ideas or texts. In their responses did the students refer to ideas to which they had been exposed in class or mention their professors or discussions in class? A score of 1 or 0 was assigned. + References or outside links. Did the students post or cite links to external sites when responding to questions, or did they refer to court cases in such a manner that one might look them up? Did they cite current events or media-related stories that might be looked up or located by another student? Did they provide actual links to other related sources? A score of 1 or 0 was assigned. + Poses honest question. Did the students actually ask one or more questions that enlarged the scopes of the discussions, rather than rhetorical ones that assumed answers? A score of 1 or 0 was assigned. + Length. A scale of 1–3 was used: 1 = a short response of usually 75 words or fewer, or up to 4 full lines of text; 2 = a medium response, between 5–9 lines of text; and 3 = a long response, longer than 10 lines.

One point each was assigned to the first five of the six variables. The sixth variable, length, had a range of points. The lowest possible score was one, while the maximum a student scored was eight. The total number of postings per student (example: student X posted six times a day, five

days in a row) was not used as a measure toward increased learning as it was not the total number of posts and responses that were reflective, but rather the reflective score is a measurement of thoughtful understanding and contribution to a post or response.

The Hypotheses

The design and delivery of the asynchronous collaboration site promoted interactivity, so students would have the time and space to think about and evaluate information with academic intent when responding to peers. As important in engaging with others across boundaries, these interactive questions asked of students would explicitly require them to reflect critically about their thinking as prior researchers have noted (Boud et al., 2001; Paul, & Elder, 2012). The hypothesis would measure this reflective peer engagement of students in the online collaboration. Hypothesis (H1) followed that despite differences in the mode of instruction, whether the course itself was taught online or face-to-face, reflectivity scores would not vary. This would hold true as students would be responding to each other based on critically reading and evaluating the written message without knowing the identity, nature, or mode of instruction of the poster no matter where they are located geographically or the mode of instruction (Herring, 1993). It would also follow that those with greater experience would deliberate with greater reflectiveness and critical thought while tying in academic text ideas further explaining these deliberations in greater length. The reflectivity index would measure these very interactions. Hypothesis (H2) followed that the upperlevel face-to-face course was more reflective than the lower-level face-to-face course. This hypothesis would hold true as online peer exchanges occur under the mask of anonymity and are based on the written post or response with students reacting to that written communication. Those with greater experience based on their level of study would respond in a greater reflective manner than those with less experience (Griffiths et al., 1995). This would hold true as students in upperlevel face-to-face course, who are slightly ahead of other students, would be more reflective as they have greater experience, proficiency, and understanding of the material than those in the lower-level face-to-face course (Boud et al., 2001; Griffiths et al., 1995; Topping, 1996). However, both upper- and lower-level students would score with reflectivity. A carefully designed and managed academic web space can promote engaged and reflective online discussions across the country despite varied modes of instruction or levels of course.

There were a total of 12 questions posed to the students on the site. The first and last instructor-initiated discussion questions (DQs) were not used as part of the analysis as the first DQ asked them for introductions and the last DQ was asked after one university had finished the semester and several students had stopped participating. Examples of DQs included, "What is Presidential Greatness?" "Is it time to say goodbye to the Electoral College?" "What is Government responsibility?" Instructor questions were either theoretical or speculative in nature or were questions centered on current events (example questions are included in appendix A). In total, 540 posts and responses to the instructor-initiated discussion questions were coded and analyzed. While not a requirement, students initiated their own questions (Discussion Student Questions or DSQs) on the site, of which there were 18. Students responded to or revisited 72% of these DSQs. Examples of student-initiated questions include, "Should there be Compulsory Voting?" "Is there an impact of same-sex marriage debate on elections?" "How does the 47 percent argument affect elections?" Instructors moderated both the DQs and DSQs to make sure that no one was being disrespectful on the site.

FINDINGS AND DISCUSSION

Based on the two hypotheses, a MANOVA was used to compare the two upper-level courses' reflectivity scores as university-level variability across classes exists. The first MANOVA tested for reflectivity score variability as a function of mode of instruction. A second MANOVA tested for reflectivity scores as a function of level of course. Table 2 displays the mean and standard deviation (SD) scores of reflectiveness for the upper-level online, upper-level face-to-face, and lower-level face-to-face courses.

As can be seen in Table 2, upper-level face-to-face class scores yielded higher mean reflectivity scores ranging from 2.25–4.5. In the lower-level face-to-face class the mean ranged from .405–2.4. Students in upper-level online classes scored on

Table 2: Mean and Standard Deviation (Sd) Scores of Reflectiveness by Upper-Level Online, Upper-Level Face-to-Face, and Lower-Level Face-to-Face Course

Classes Mean (SD)		Q2 score	Q3 score	Q4 Score	Q5 Score	Q6 Score	Q7 Score	Q8 Score	Q9 Score	Q10 Score	Q11 Score
Upper-Level Online	Mean	.4643	2.500	2.9681	3.262	3.333	3.357	3.119	4.071	2.286	2.452
	N	21	21	1	1	21	1	1	1	1	1
	D	2.04066	2.4950	2.12424	2.2171	2.4100	2.8816	2.3712	1.9124	2.1364	2.2853
Upper-Level Face to-Face	Mean	4.4286	4.500	4.1193	3.143	3.821	4.036	4.607	4.393	2.250	2.714
	N	14	14	14	14	14	14	14	14	14	14
	SD.	.70809	1.5191	1.42099	2.2738	2.0058	2.4216	1.7451	1.4568	2.4318	2.1636
Lower-Level Faceto-Face	Mean	6486	1.068	2.4730	1.595	2.324	2.000	.541	1.216	.405	.459
	N	37	37	37	37	37	37	37	37	37	37
	SD.	.73551	2.3926	2.41507	2.0373	2.3429	2.3805	.4643	1.9739	]1.4036	1.3662
Total	Mean	.6215	2.153	2.9375	2.382	2.910	2.792	2.083	2.667	1.313	1.479
	N	72	72	72	72	72	72	72	72	72	72
	SD	.29972	2.6104	2.23300	2.2588	2.3562	2.6481	2.4581	2.3795	2.0614	2.0970

Note. N = Sample size

par with students in the upperlevel face-to-face course across half the questions with an average mean score of 3.0. The statistical tests confirm the content analysis just as these mean findings are consistent with the hypothesis.

In examining student posts with reflectivity, an upper tier of reflectiveness entry would be five lines, or more in length, (which exceeded the minimum requirement of 75 words, or four typed lines) and was deliberative, thoughtful, referred to a civic issue, and/or contained references to ideas discussed in the classroom, textbook, outside media, or contained actual links to other articles or materials, or posed an honest question that furthered the discussion. In the following posting a student addresses the Constitutional issues, considers both sides, and references the First Amendment and an idea from class:

Stephanie (pseudonym) … I think it is necessary, like you pointed out, to make it clear that the reason for protest is 'legitimate' in the perspective of the Westboro Baptists. They were properly protected by their First Amendment right, and they were not in any of the 'buffer' zones mentioned in the first link/article. However, I do agree that it was the wrong time, and wrong place to be making a protest. Like we discuss in our political science class, preferences, times, and institutions all result in the final outcome. If the Westboro Baptists are the only ones who 'prefer' to make this somewhat contradictory argument that their God is punishing America by killing soldiers who are homosexuals, it will not factor into the outcome much if the strong majority thinks that it is the wrong time and place for it to be protested. ... Though they are entitled to their freedom of speech, and of religious beliefs, it almost seems paradoxical that they are pushing their beliefs on one issue (sexuality) by going against what most citizens would think is typical Christian behavior. ... A funeral is a place where any citizen—especially a member of the Marines—should be respected by all.

As this post shows, students' misconceptions about current controversies were often apparent. Some of these misstatements went unremarked upon (such as the reference to killing a homosexual soldier; in this case the soldier in question was heterosexual), but often a peer would call attention to these statements and correct them. Professors tried to provide basic facts about cases or events referenced in the discussion questions by addressing them in class and by including links to relevant articles in the question prompts.

Student posts not considered to be reflective would be short, knee-jerk, "hit-and-run," normative, and often devoid of fact-based evidence, and/or they were argued merely from a moral standpoint. When responding to their peers' posts, often the students

just agreed with a previous statement and repeated points already made. On the following question about the impassioned controversy surrounding the construction of an Islamic mosque near Ground Zero, a typical unreflective response was:

> *Tom (pseudonym) I agree . . . there seems to be some type of hidden agenda. Why even attempt to build there? I'm sure they can find another location somewhere in the country.*

A student response that had an honest question would be similar to the following:

> *Ken (pseudonym) the problem with the stand your ground and any other laws like it is that I feel like that they offer black and white rules for murky situations. What does it mean to retreat to a safe place? And what line does one have to wait for someone to cross before they are allowed to defend themselves adequately? In public, I do think it is generally right to require that someone make an attempt to escape the situation before using lethal force. But frankly I feel like I'm in no position to judge someone who uses lethal force to protect themselves or a loved one if they determined in the moment that they couldn't waste time trying to get to safety. . .*

Following the mean and standard deviation results, two MANOVAS were performed next. The first MANOVA revealed statistically significant multivariate reflectivity score variability as a function of level of course, $F(10, 60) = 14.486$ ($p < .001$); Wilk's A = .293. The second MANOVA also revealed statistical significance in reflectivity scores based on the mode of instruction. $F(10, 60) = 4.534$ ($p < .001$); Wilk's A = .570. Statistically significant multivariate F tests were achieved for both the level of course and mode of instruction ($p < .000$) as provided in Table 3. With significance across a variety of tests such as Wilks' Lambda, Pillai's Trace, Hoteling's Trace, and Roy's Largest Root, significant evidence provides proof that interactive discussions among students, across far-flung states, about common and often challenging issues with a diverse student body deepened their understanding of issues and their interconnectedness not only as members of a larger online class but also as part of a larger civic community.

Table 3: Significant Multivariate Tests Across Level of Course and Mode of Instruction (at p < .001 level)[a]

Effect		Value	F	Hypothesis df	Error df	Sig
Level of course: Upper/Lower-Level	Pillai's Trace	.707	14.486b	10.000	60.000	.000*
	Wilks' Lambda	.293	14.486b	10.000	60.000	.000*
	Hoteling's Trace	2.414	14.486b	10.000	60.000	.000*
	Roy's Largest Root	2.414	14.486b	10.000	60.000	.000*
Mode of Instruction: Online/Face-to-Face	Pillai's Trace	.430	4.534b	10.000	60.000	.000*
	Wilks' Lambda	.570	4.534b	10.000	60.000	.000*
	Hoteling's Trace	.756	4.534b	10.000	60.000	.000*
	Roy's Largest Root	.756	4.534b	10.000	60.000	.000*

Note. Significant at the *p < .000
a. R Squared = .388 (Adjusted R Squared = .371)
b. R Squared = .255 (Adjusted R Squared = .233)

With the significance of both the MANOVAS, the univariate main effects were examined next. Significant univariate main effects were obtained for the mode of instruction providing support for hypothesis one. Significant main effects were also obtained for those in the upper-level online and upper-level face-to-face courses for questions 2, 3, 8, 9, 10 and 11, $p < .000$ and for questions 4, 5, 6, 7, $p < .010$ as reported in Table 4. Statistical significance for level of course was achieved as was predicted in hypothesis two; students in upper-level courses do perform with greater reflectivity than do students in lower-level courses. Students in upper-level courses have higher educational abilities than do those in the lower-level courses. However, despite the level of significance in those courses, online collaborations are a meaningful inclusion in online courses.

Table 4: Univariate Tests Across Mode of Instruction: Upper-Level Online and Upper-Level Face-to-Face Questions

Dependent Course Variable	Type III Sum of Squares	df	Mean Square
Upper-Level Online Q2 score	145.852	2	72.926
And Upper-Level Q3 score	123.238	2	61.619
Face-to-Face Q4 Score	27.556	2	13.778
Questions Q5 Score	47.304	2	23.652
Q6 Score	28.085	2	14.042
Q7 Score	51.57	2	25.786
Q8 Score	199.769	2	99.885
Q9 Score	160.998	2	80.499
Q10 Score	62.639	2	31.320
Q11 Score	79.720	2	39.860

Note. Significant at the *p < .001 and **p < .010

With the significance for the mode of instruction, post hoc comparisons follow, and significance for questions 2, 3, 8, 9, 10, and 11 ($p < .000$), are reported in Table 5. Closer examination of the questions (sample questions are in appendix A) with statistical significance in the post hoc reflectivity scores show that student posts and responses to questions based on current events were tied to a civic role or referenced classroom ideas or texts and were significant in terms of reflectivity ($p < .001$). The questions based on theoretical issues were significantly reflective as well ($p < .005$). Post hoc significance for question 4 was not as significant as the other questions ($p < .048$). This may have to do with the question itself, which had to do with the secret taping of Mitt Romney, Republican candidate for President of the United States, who said that those who do not earn enough to pay federal income tax were unlikely to vote for him. The instructor asked, "how we understand the national discussions about the 99%, the 1%, the 47%? Should income and income dependency play any role in the election? Should government's relationship between voters with money and voters without money be different?" While student responses to the question were deliberative, they were hard pressed to tie academic materials that were a part of the reflectivity index in their responses, and therefore the posts and responses were low in terms of the created reflectivity index used in this study.

Table 5: Tukey's Post Hoc Significance of Test Differences In Mean Scores for the Two Comparisons: Mode of Instruction & Level of Course

Mode of Instruction (M)		Level of Course (L)		
Question (Q) # and Type	UL online	ULF2F	LLF2F	Sig
	Mean (SE)	Mean (SE)	Mean (SE)	
Q2 current event Q	-2.9643*	3.7799*	.000**	
Q3 current event Q	-2.000*	3.432*	.000**	
Q4 theoretical Q	-1.1512	1.6463*	.048***	
Q5 theoretical Q	.119	1.548	-1.667*	.015***
Q6 theoretical Q	-.488	1.497	.103***	
Q7 theoretical Q	-.679	2.036*	.034***	
Q8 current event Q	-1.488	4.067*	-2.579*	.000**
Q9 current event Q	-.321	3.177*	.000**	
Q10 current event Q	.036	1.845*	-1.880*	.001**
Q11 current event Q	-.262	2.255*	1.993*	.000**

UL online = Upper-Level Online course; ULF2F = Upper-Level Face-to-face course LLF2F = Lower-Level Face-to-face course.
Based on observed means: The error term is Mean Square (Error) = 3.370. Note Significant at the *p < .05 level, **p < .001 and ***p < .005
a. R Squared = .388 (Adjusted R Squared = .371)
b. R Squared = .255 (Adjusted R Squared = .233)
c. R Squared = .078 (Adjusted R Squared = .051)
d. R Squared = .131 (Adjusted R Squared = .105)
e. R Squared = .071 (Adjusted R Squared = .044)
f. R Squared = .104 (Adjusted R Squared = .078)
g. R Squared = .466 (Adjusted R Squared = .450)
h. R Squared = .400 (Adjusted R Squared = .383)

With the significance in MANOVA and post hoc tests, students scored and achieved reflectivity across mode of instruction. Whether students were enrolled in a face-to-face or online class, they performed on par with each other online as hypothesized. MANOVAS support the second hypothesis as well, that students in upper-division courses do perform with greater significance than those in lower-division courses.

Implications for these significant results are especially fruitful for educators, policy makers, and online designers who seek to design successful academic courses. A carefully designed and managed web space with interactive components can promote engaged and reflective online discussions across the mode of instruction, whether that instruction is in an online or faceto-face course. And that in an upper- or lower-division course, reflectivity scores are achieved and they are greatly beneficial to those in upper-division courses. These are important findings as online discussions link students across diverse characteristics such as race, gender, religion, ethnic profile, course level, or mode of instruction. This highly varied membership challenges various viewpoints, one where students develop an awareness of alternative points of view, a more reflective understanding of collective problems, and an appreciation of majority and minority rights (Guttman, 2000).

The student perspective from the end-of-semester evaluations across the levels and modes of instruction in Table 6 noted the benefits of their interactions providing further support of these findings. In these evaluations, closed-ended questions confirm that students were engaged in the online discussions. Of online students who reported, 78% used the site more than ten times past their course grade requirements, versus 47% of face-to-face students. For both groups, 44% reported visiting and revisiting the site for a reason other than responding to a post. Online and face-to-face students reported that they found the articles and/or links posted with the questions to be useful 88% of the time and 53% of the time respectively.

Table 6: Responses to Various End-of-Semester Surveys by Online and Face-to-Face Students: How Often did You Use the Site?

	Online	Face-to-face	Total
More than 10 times	78%	18%	49%
6–10 times	17%	35%	26%
3–5 times	6%	47%	26%
Once or Twice	0%	0%	0%
Zero	0%	0%	0%
Did you ever visit the site to check on your own discussion forum(s) or for a reason other than to make a post?			
Yes, once or twice	17%	25%	21%
Yes, a few times	44%	44%	44%
Yes, often	28%	6%	18%
No, I only visited to	11%	25%	18% post my responses
No, I did not	0%	0%	0% participate
How would you rate the use of articles or links posted to the site in your understanding of American Politics?			
Mostly helpful or	89%	53%	71% very helpful
Neither helpful or	0%	35%	17% unhelpful
Not helpful or mostly	11%	12%	11% unhelpful

Designing an online collaborative space with interaction as its defining component is critical for building student peer relationships and forming an interactive online community that reflects and deliberates across geographic boundaries. Developing informed perspectives on political issues was also possible because students "related" to each other. When students were asked to react to this statement, "I feel I related to others who participated in the web site," 82% of the upper-division students "agreed" to the statement. When asked if the web site helped them make more meaningful connections with students, 55% of upper-division students and 58% of lower-division students responded affirmatively. This result indicates that students made interpersonal connections that helped to create a sense of a larger political community. This purposefully-designed interactive online community allowed them to explore issues with what appeared to be a general sense of responsibility to and for each other.

Table 7 records their experiences using the collaborative site in their own words.

Table 7: Responses* to Questions About Their Experience Using the American Politics Collaborative (Web) Site by the Highest Agreement Choice.

Answer Options	Upper-Level Course	Lower-Level Course
I feel I could relate to others who participated in the web site.	72	82
This site helped me make meaningful connections with other students	55	58
The instructor-initiated discussion forums are valuable features of the site	78	94
Other students' discussion question forums are valuable features of the site	67	70
This site made me feel as if I am part of a larger political community.	78	88

*Responses based on percentage use

When asked about the instructor questions, 78% versus 94% felt that they were a valuable feature of the site, and 67% and s70% felt likewise about student questions. When asked about the collaboration, 78% and 88% felt that it made them feel part of a larger political community. Eightynine percent of online students and 100% of face-to-face students said that they would recommend to others that future classes participate in this kind of web site. Anecdotally, as positive feedback from students in prior semesters are shared among cohorts, students in similar classes ask for the same collaborative activity to be included in their courses.

CONCLUSIONS AND FURTHER STUDIES

This study concludes that an online collaboration with a peer interactive design has an important place in virtual classes, which is important to educators and university administrators regarding the development and delivery of pedagogical content. Alongside the design and delivery of an online course, the engagement of students with similar and dissimilar viewpoints across geographic boundaries provides a space for students to challenge themselves and to reflect critically about their thinking, as prior researchers have noted (Boud et al., 2001; Paul, & Elder, 2012).

The findings presented in this research yield three major results. First, in tune with much of the pedagogical literature, this study demonstrates that reflective peer discussions can take place in any classroom, including the online one, regardless of the modality of instruction. Whether the students are enrolled in an online, face-to-face, upper- or lower-division course, they are academically energized in peer discussions with each other. As the need to create meaningful online interactions grows in departments and universities across the country, concerns for the effectiveness of online courses and learner isolation can be curtailed, as collaborations such as these are effective tools in combating isolation and providing presence and academically challenging interactions.

Second, the interactive design in the online collaboration can be replicated across a variety of classes nationally and internationally in or outside academia. In academia, collaborations are an extension of avid and robust academic deliberations across a variety of comparable subjects, such as the Humanities, English, math, engineering, architecture, psychology, and the Social Sciences, to name a few. Through the use of an e-collaboration, those involved in teaching model U.N. courses can practice with each other in a collaborative venture before meetings, helping them with much-needed experience, argumentation techniques, and confidence. Collaborative use has enhanced the learning of students who are autistic or those with social challenges, as it can personalize their learning without bombarding them with constant social interaction (Collins, 2014). The interactive peer discussion design used in this study has been used in other successful collaborative endeavors and has been documented in Mathematics (Chu, Chen, & Tsai, 2017), oceanography (Trujillo & Thurman, 2017), education (Gordon & Connor, 2001), management (Wilson, 2001), and law (Cooper, 2001). Collaborative endeavors are flexible options that can be offered as an "external" activity in a face-to-face class and can be used as a preparatory tool for a class where students are involved in the discussion of a reading before class. Outside academia, for example, it can be used by scientists experimenting in Ecuador with how altitude changes affect brain functions and that data can be shared with anyone involved in space exploration or a Mars expedition. More online academic and nonacademic collaborations of this sort should be pursued and designed based on the subject and intent of the collaborative activity.

Third, the development and delivery of a

carefully designed academic online collaboration is critical toward the effectiveness of a specific subject's intended pedagogical needs. Based on the intent of a collaboration, instructors need to spend time well before the semester starts discussing what courses they could collaborate on, what they hope to achieve in the collaborative endeavor, to pay for and design the site. Instructors need to be mindful when building their collaboration that different peer relationship styles would result from the interaction among participants of differing range of experiences online (Fines, 2008; Griffiths et al., 1995).

While this research showcases an effective interactive site, other collaborations based on specific course subject contents and expectations can be designed with other purposes that include other collaborative ideas, such as holding several virtual town hall meetings synchronously with students across time zones because personal and academic class times vary. Another engagement idea would be to have students paired with peers of another institution and interview them. With these differing forms of engagement, critical thinking and dialog among participants will grow along with their confidence when talking to each other about ideas, controversial or otherwise.

Several recommendations for future studies include: a) compare classes across a range of comparable subjects and levels of courses, b) address questions such as the consistency of students' reflective participation over the course of the semester or if their participation ebbed and flowed due to other class priorities, c) make comparisons between a class that provides students with sample scripts of posts and responses with classes that do not provide student scripting, and d) make instructor presence as a priority because greater instructor feedback makes these online collaborations much more meaningful to the students. Future studies can compare an online course with or without online presence. Research is additionally crucial for policy makers and online site developers when making decisions about offering and maintaining techno-savvy support systems, providing support for the time investment in developing these courses, and providing technological support for both educators and students.

Developing online interactive sites are critical for the long-term success of our students in a globally competitive environment. To challenge students, we need to design classes where they can improve their skills as critical thinkers. When students are driven for answers to questions, they need information, and that information needs interpreting, so the resultant emphasis is that students begin to see connections and utilize critical thinking across any subject. The emphasis on creating online interactive sites provides a space for the discussions in the existing diversity of information and in reflective thinking. The goal for our students, regardless of their favored mode of instruction or course level, is to prepare them to practice and to advance as critical thinkers.

The practical and theoretical implications of this collaboration are immense. In a practical sense, students can participate in a cross-continental and international web site project that demonstrates the utility of social networking technology as a teaching tool that both enables and extends educators' "pedagogical reach." Theoretically, the potential of an online collaboration is limitless in that students can grow and learn academically from each other as they would in a faceto-face class and they can be civically energized in their discussions with each other. The process of learning to teach so as to foster critical thinking is the very process by means of which one establishes intellectual standards for assessing thinking, and, by extension, for assessing instruction itself. The implications of these-peer engaged energized conversations, ones that can be linked across domestic and international time zones through the use of a collaboration, are boundless.

Future research is necessary, especially comparing subjects and collaborations globally, as they will provide insight into a very current and growing trend that is invigorating the online education field. Research is essential for both educators and administrators when making decisions about offering and maintaining academically vigorous courses in the virtual hallway. Universities need to provide resources, such as training, money, and time, to support and develop these collaborations and to do more research on collaborative endeavors. In this complex digital age, this research and future researchers' outcomes have important implications towards understanding the effectiveness of online collaborations in fostering critical thinking and dialogue among students. The future of peer learning online is indeed very bright and its potential is limitless.

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APPENDIX

APPENDIX A

Sample of Theoretical and Current Event Discussion Questions Asked

Theoretical question posted by professor: "Of campaign ideas and government responsibilities. Over the course of this election cycle, we have heard much about Social Security and Medicare. One of the fundamental questions that is not directly asked is: what exactly is government's responsibility? What is the community's responsibility? What happens if someone can't meet his or her own personal responsibilities, should government, the community, somebody step in? What do you think? What evidence can you find to support your opinion? A good argument is bolstered by evidence. Make a case and challenge each other!"

Current event question posted by professor: "Is it time to say goodbye to the Electoral College? A recent New York Times editorial has joined a national chorus that maybe the Electoral College, a relic of arguments between states about slavery, has served its purpose and is not useful for the 21st century and beyond. Many states are not contested and thus ignored. Many voters have minority opinions in their states and are thus ignored. Electoral College margins do not match the popular sentiment. Does it depress turnout? Is it time to bid adieu to the Electoral College? What do you think? Here's the editorial: http://www.nytimes.com/2012/11/16/opinion/the-tarnish-ofthe-electo..."

APPENDIX B

NING Guidelines for Use and Instruction (Sample Instructions given to all students, Fall 2012).

In an attempt to broaden our discussion of American politics, you are required to join the Fall 2012 Collaborative Website: http://americanpoliticsprojectfall2012.ning.com/main/authorization/signIn?invitationExpired=1. The site's networking platform will allow you to interact with other college students who are also tracking American political developments through their classes. Our activities and discussions will encompass a wide range of topics, current events and issues, and the political process. You will bring a lot to the table. Make it yours by contributing often! The web site's success depends on your ongoing participation. You must:

1. Join americanpoliticsfall2012.ning.com. After verification of your consent forms, you will be sent an email invitation to join the site. Follow the steps in the email to join. If you experience any problems, please email right away!
2. Once you have joined the site respond to the question at the end of the prompt.
3. Complete the beginning-of-the-semester survey. Another will be given at the end of the semester. Your participation is critical.
4. Almost every week you are required to participate in the online dialogue (a minimum of 8 posts and 8 responses throughout the semester) by posting 2 kinds of entries (minimum of 75 words per entry): (a) an original response to a Question of the Week (a minimum of 8 posts throughout the semester), AND: (b) at least one response to another student's post (a minimum of 8 responses throughout the semester). Posts are due before Sunday at midnight.
   - Each original weekly post/response must contain a minimum of 75 words, or about four full lines on a regular webpage. Responses must be understandable. Avoid abstract descriptions like "awesome" and so forth; support your statements with reasoning. One-sentence postings are insufficient (remember, 75 words minimum).
   - Politics often engenders passionate beliefs and opinions; all posts must use language that is respectful of all points of view, even those with which you may not agree. No personal attacks or foul or obscene language. We are debating ideas within a larger academic setting, and you need to be mindful of that in all your uses of the site. Violators will be banned from the site and will lose points for ungraded activities. That said, please make the most of this opportunity to collaborate in this cross-country experiment! Learn a lot from each other, and have fun with it.