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ARTICLE

Thinking Outside the Comfort Zone: Implementing Debates in an Online Anthropology Course

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Abstract

The debate technique has the potential to encourage students to critically think and engage in anthropology courses in higher education. But debates can be challenging, especially when taking place in an online environment. This article presents the implementation of a debate in a high-enrollment, online archaeology course. Mainly, we seek to answer these questions: (1) How did students perceive their critical thinking, engagement, and interaction while participating in the online debate? (2) What was the instructor's experience related to the quality of student responses as well as the grading time and effort? At the conclusion, we offer recommendations for educators interested in incorporating debates into their own practice.

Keywords*: debates; online debates; online discussions; critical thinking; online interaction; online learning; teaching methods; higher education*

Introduction

The prevalence of students taking online higher education courses in the United States has risen steadily, even before the shifts associated with the COVID-19 pandemic. In 2016, 31.6% of all enrollments were students taking at least one distance education course in the U.S., which was a 5.6% increase from the previous year (Seaman, Allen, and Seaman 2018). At the large university where the authors work, online and online-enhanced courses accounted for about 27% of all credits offered before the Spring 2020 semester; by Spring 2022, it had increased to 34%. (Note that in the unusual Fall 2020 semester, the percentage rose sharply to 61%.)

This rise of online learning certainly extends into the discipline of anthropology. The University of Central Florida currently offers a fully online degree that is rated the top online anthropology degree by *U.S. News and World Reports*. One course that is now only offered online is *The Archaeology of Complex Societies.* The undergraduate course focuses on different theoretical perspectives about why social complexity first developed in numerous places at various times around the world. Because of the nature of

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archaeological evidence, definitive answers are usually impossible, but certain ideas are more supported than others by evidence. For this reason, it is important for students to be able to critically assess that evidence as well as create their own arguments for certain perspectives while supporting them with sound evidence. Certainly, this ability is important in other anthropology courses, and for life in general.

Students who enroll in *The Archaeology of Complex Societies* are mostly Anthropology majors and have previously completed *Archaeology and the Rise of Human Culture*, a course which explores the evolution of human society from foraging and hunting groups to the earliest cities and states. Students range from first-years to seniors, with some students taking only online courses at the university and others taking a blend of online and on-campus courses. Many of the students are what could be called "non-traditional," meaning they are working, supporting families, and do not live on campus.

Unique challenges come with teaching a course fully online. In our university in the southeast United States, online class sizes range anywhere from 25-1,000, depending on modality, discipline, and course objectives. *The Archaeology of Complex Societies* typically enrolls 70-100 students. A high-enrollment online course poses some challenges regarding critical thinking, collaborative work, and personalized feedback from the teacher. Knowing that student-student interaction is important for engagement and knowledge building (Kolloff 2001), it is important to find ways for students to meaningfully engage with each other online while not overburdening the teacher.

Facing an increasing number of anthropology courses being offered online, what are some online assignments that can prompt students to form arguments backed with evidence (which is crucial for anthropologists), while at the same time mitigating the grading time and effort for the teacher of large classes? We decided to implement an online debate in *The Archaeology of Complex Societies* to explore the potential of this activity to support both students and teachers. This assignment and study were originally implemented before the pandemic, but the effects of the pandemic on students and the assignment were also considered.

Debates

There are multiple purposes for a debate, but it is mainly used to articulate positions of a problem or argument and persuade others to agree with the proposed position. The debate technique may be a good fit for courses that ask students to consider multiple perspectives (Mitchel 2019). Since the goal of this course was for students to develop the ability to critically assess evidence and create their own arguments, we concluded that debates were an appropriate technique to implement. The element of persuading others could potentially foster engagement and interaction.

Typically, debates occur in face-to-face settings in real time and have been found to stimulate critical thinking (Kennedy 2007) and engagement (Abernathy and Forestal 2019) in higher education settings. With the advent of online learning, educators began exploring

the feasibility and effectiveness of conducting debates entirely online. Online debates have been found to promote higher levels of cognitive presence in online learning environments (Charrois and Appleton 2013; Darabi, Arrastia, Nelson, Cornille, and Liang 2011; Kanuka, Rourke, and Laflamme 2007; Nussbaum, Winsor, Aqui, and Poliquin 2007). Engaging in an online debate has been found to improve critical thinking (Iman 2017), aid the development of sophisticated arguments, and encourage opinion change in learners (Boyd, Baliko, and Polyakova-Norwood 2015; Nussbaum et al. 2007). This technique has been studied in history (Korniienko 2020), English as a Second Language (Iman 2017; Kudinova and Arzhadeeva 2020), nursing (Boyd et al. 2015), pharmacology (Charrois and Appleton 2013), stress and resilience in children and families (Darabi et al. 2011), and education (Jeong and Liu 2017; Kanuka et al. 2007; Nussbaum et al. 2007), but it has rarely been documented in anthropology.

Although there is demonstrated potential for online debates, they are not inherently successful. Supporting students to form arguments and critically assess evidence in a collaborative setting is challenging in any learning environment, let alone an online course in which 70 students are enrolled. It would be logistically difficult to oversee 35 separate one-on-one debates, so often a group-style debate becomes necessary. A group format, while engaging students in collaboration, can be difficult for students who are juggling multiple commitments. Previous research has identified some elements that often are present with an effective debate. Preparing the students ahead of time and having a clear debate prompt and guidelines is critical to success (Boyd et al. 2015). For instance, providing a worked example and modeling the debate ahead of time can result in increased participation and higher-order thinking skills (Tollison and Xie 2012). The role of the teacher has been identified as important for debate success. Nussbaum et al. (2007) recommended that the teacher establish norms where respectful disagreement is valued and add some scaffolds such as questions to better guide students in evaluating opposing sides and forming new arguments. They, along with Charrois and Appleton (2013), also suggest the teacher facilitate the debate when needed, to keep the conversation on topic or to scaffold or model.

The focus of this article is on a particular assignment in *The Archaeology of Complex Societies*. Leveraging the online discussion tool in the learning management system, an online debate was implemented with the intention of supporting critical thinking as well as engagement and peer interaction, while also keeping the volume of grading manageable for the instructor. We pose the following questions: (1) How did students perceive their critical thinking, engagement, and interaction while participating in the online debate? (2) What was the instructor's experience about the quality of student responses, as well as the grading time and effort? Considering the answers to these two questions, we will generate recommendations for anthropology educators interested in adopting a similar approach in their contexts.

Participants and Context

The idea for an online debate was born when the two authors were paired up in a professional development training about online teaching. The teacher (Kovacevich) had experienced previous success using debates in a face-to-face environment, and the instructional designer (deNoyelles) had engaged in past research about online debates. They worked together to develop a debate assignment using the discussion tool within the university's online learning management system (Instructure Canvas).

The first online debate was considered a pilot and took place in Fall 2016 before any formal data was collected. Students were randomly placed into groups of 10-12 that were further subdivided into groups of 5-6 who would then work as opposing teams to post alternative positions on theories of the rise of complex society among the pre-Columbian Maya. Some teams were assigned to a perspective that argues for trade as the primary cause for the rise of complex society, while opposing teams argue for ideology as the primary cause. The objective is to help the students see that multiple factors and causes were probably at play in the rise of social complexity. There were three discussion parts associated with the debate, each expected to be 300-600 words in length: (1) an opening statement, (2) a rebuttal, and (3) a closing statement. This pilot debate appeared to foster critical thinking amongst the majority of students and allowed for efficient grading. Although Kovacevich was satisfied with the responses, some students did indicate that they were not satisfied with the group element, expressing that it caused undue stress to have to coordinate with multiple individuals online to participate in the debate.

After the first online debate concluded, approval was granted by the university's Institutional Review Board to begin collecting data moving forward. Formal data was collected from online debates that took place in the Fall 2017, Fall 2018, and Spring 2020 sections of *The Archaeology of Complex Societies*. All sections were completely online and taught by Kovacevich. The debate was a mandatory assignment, regardless of whether students opted into the research study. Information including class enrollment and study opt-in rate is below (Table 1). In order to accommodate students with busy work-life demands, students were asked whether they would rather participate in the debate within a group or one-on-one. Approximately 23 groups were created each semester to accommodate the debate. Around 8 of these groups consisted of multiple students, with half of the students arguing for one position, and the other half arguing for the other position, resulting in 4-5 students debating 4-5 students. The remaining groups (around 15) consisted of two students debating each other (a separate but related manuscript concerning the influence of group formation is currently in progress). Students were not asked for their initial beliefs in the matter; students were randomly assigned to one of the two positions. The assignment of debate position stance is based on a trade article (Rathje 1971) or ideology article (Drennan 1976 and/or DeMarrais, Castillo, and Earle 1996).

Table 1. Semester, Enrollment, and Study Opt-in Rate

Semester	Total Class Enrollment	Study Opt-In Rate
Fall 2017	73	34 (47%)
Fall 2018	92	49 (53%)
Spring 2020	98	48 (49%)
Totals	263	131 (50%)

Debate Prompt and Preparation

The online debate took place later in the course, after the mid-term period. Before the debate, students participated in two online discussions with a more traditional question-and-answer style. The debate prompt was the same as in the pilot: *Which perspective best explains the rise of social complexity among the Maya?* There were two positions to be argued: the trade perspective and the ideology perspective. The parts of the debate were the same as in the pilot: each group posted an opening statement, rebuttal, and closing statement. Table 2 shows the instructions that were shared with the students as well as when each part was due.

Table 2. Debate Parts, Descriptions, and Deadlines

Debate Part	Description	Due
Opening Statement	You should outline the theory as laid out by the original author and then provide at least three key pieces of evidence from the course content that could support the possibility of this theory in explaining the rise of social complexity for the Maya. This statement should be between 300-600 words and may use visual aids. Remember to properly cite all sources and provide a bibliography.	Unit 11
Rebuttal	You will present evidence contrary to your opponent's position. At least THREE new key pieces of evidence must be referenced. This statement should again be between 300-600 words and may use visual aids. Remember to properly cite all sources and provide a bibliography.	Unit 12
Closing Statement	You will review your position, but you may also critique and modify your own theory to better fit the data that you have discovered, or you may continue to argue that your theory is a good fit for the	Unit 13

	data. At least THREE new key pieces of evidence must be referenced. This statement should again be between 300-600 words and may use visual aids. Remember to properly cite all sources and provide a bibliography.	

A page called "Preparing for the Debate" was added to Unit 11 of the online course (Table 3). The page addressed logistical details (how to find out what position each group was assigned, where the debate would take place, who they were debating with and against) and included information about how to develop group roles and a game plan and how to prepare and post the opening statement. For the 2020 class, some design improvements to the page were made based on student feedback and teacher perceptions, such as inserting screenshots of the online course and further clarifying the instructions.

Students debating in larger groups were given two online discussion forums in order to prepare for the debate: one for students arguing for the ideology position and one for students arguing for the trade position. The teacher posted student names and assigned positions in a course announcement as well as in a discussion within each group's online space. Students were encouraged to post in their assigned position forum and begin introducing themselves. The teacher and/or teaching assistant checked these discussions periodically to make sure that students were posting in the correct group and everyone was participating. If a student was not participating, an email reminder was sent.

Table 3. "Preparing for the Debate" Page Headings and Topics

Headings	Topics
Introduction (for All Students)	Some of you will be working in groups for this assignment, and others will work as individuals. Those working in Groups start with 1a, those who will work individually start with 1b. If you aren't sure how you were assigned, you will be able to tell by going to your group space (see instructions below).
1a. Instructions for Groups	Find Your Group Discover Your Theory Choose Roles and Make a Game Plan Prepare an Opening Statement Citations and Bibliography How to Post Your Statement
1b. Instructions for Individuals	Identify Your Debate Partner Discover Your Theory Prepare an Opening Statement

	Citations and Bibliography How to Post Your Statement

Debate Examples

This section features abridged examples of students engaging in debate. We present excerpts of student work and summarize other portions to protect the students' intellectual property, although these excerpts are shared with student permission as outlined in the study's protocol approved by the Institutional Review Board.

The primary success of these debates is that students are able to find specific evidence to support their arguments in the readings and also to form their own conclusions. This often includes the realization that multiple factors/perspectives might be represented; simple solutions and singular factors are often not the best explanations. This can be seen in the following example from a group of students assigned to debate the ideology perspective. Their rebuttal critiques the trade perspective, but then goes on to find that both perspectives were probably influential in the rise of complexity if the perspectives are modified:

> For instance, the idea that a resource deficiency of salt, metates, or obsidian in the Mayan [sic][1] lowlands has been criticized since "suitable alternative raw materials can be found in the lowlands" (Scarre and Fagan 2016, 35).

The group then goes on to discuss how jade was traded from the highlands to sites in the Lowlands like Cuello, Belize, but that trade had ideological underpinnings and was not only for life sustaining resources. The group concludes:

> Ultimately, the rise of complexity is not due to a singular cause. Instead, a joint approach that accounts for the interaction between ideology and trade would be the most beneficial for adequately understanding the subject.

The trade perspective group comes to similar conclusions in their concluding statement but still argues for the primacy of trade, with influence from ideological factors:

> The rise of social complexity among the Maya was caused by many different components. While each component was important, I, along with William Rathje, believe that trade was the leading aspect of growth and success. Counter arguments such as ideology being the leading cause of growth have very valid reasoning, even though throughout my research I still believe that trade was the root cause.

The students then go on to use evidence from Rathje (1971) to argue that the largest and earliest sites were in areas of resource deficiency (both of utilitarian and ritual goods):

[1] Generally, the term "Mayan" refers to the language, and "Maya" is used to refer to the people in both the singular and plural form and as an adjective. Introductory students may be unfamiliar with these distinctions, although they are given this instruction during the course.

> Rathje discusses that Peten, a lowland core area, was very difficult to reach and was most vacant of supplies (Rathje 1971, 280). It was in the same core area as two of the most successful and thriving locations in the lowlands, Mirador and Tikal (Rathje 1971, 280). Peten was largely vacant and was also an area that had no salt, obsidian, and indigenous stone recourses. It was not somewhere with tradable objects and goods. However, it grew to be one of the largest complex societies. Why is this? Because of their extreme need of outside resources, they were forced to create bonds and trade networks with many places and keep them wide and successful or else their community would not be able to survive.

This assignment engages the students with the higher levels of Bloom's Taxonomy. They begin by applying these approaches to data they read for the class, but they are also often able to analyze and correlate data with the perspectives, evaluate their utility, and create and/or modify the perspectives to better fit the data.

Evaluation

The debate was worth 60 points total, which was 12% of the final grade. In the first two iterations, a single rubric was developed to describe how students would be graded, with the following criteria: (1) clarity of argument, (2) use of evidence, (3) understanding of topic, (4) presentation skills, and (5) bibliography and citation. In the last iteration, Spring 2020, three rubrics were developed for the three parts of the discussion in order to be more accurate in grading and guide the students more effectively. For instance, the rubric for the rebuttal included "effectiveness of counter-arguments" and the closing statement rubric included "concluding ideas." For students who were debating within groups, the group would get a score for the post in general based on the rubric, but then points would be deducted from each individual if they did not contribute enough. Full credit was given to an individual student if there was evidence that they contributed meaningfully to the parts of the discussion debate. Examples included but were not limited to the following: contributing more than one post; contributing over multiple days; contributing meaningful content in words and possibly images (images not required for full credit). The instructor asked the teaching assistant to count the words and days of participation; the instructor then provided feedback and graded each post.

Data Sources and Analysis

This study took a mixed-methods approach, in that both quantitative and qualitative data were collected for analysis. After the debate concluded, students were asked to complete a survey (Appendix A). The survey contained 20 closed-ended items and one open-ended item that aimed to measure their perceptions of critical thinking and engagement as well as peer interaction. This survey has been used in a previous study by deNoyelles (see deNoyelles & Reyes-Foster 2015). Survey items were generated from the

various definitions and coding schemes employed in previous articles (see Behar-Horenstein and Niu 2011; Yang, Newby, and Bill 2005).

For the closed-ended items, descriptive statistical analyses were conducted; these were mainly focusing on the item means based on a 5-point Likert scale ("agree" to "disagree"). Responses to the open-ended item, which simply asked students to provide feedback about the debate, were analyzed for emerging themes related to critical thinking and engagement. These responses were used to complement and expand understanding of the quantitative results.

Results

Quantitative items from the survey are presented first, and themes will be further explored through the students' responses to the open-ended question.

In general, students rated the online debate favorably (Table 4). Of particular note is the strong agreement with the items about critical thinking, which was a primary pedagogical objective for this activity.

Table 4. Sample of Survey Items, Categories, and Means

Item	Category	Mean (1=Disagree, 5=Agree)
"The instructions were clear. I understood what I needed to do."	Logistics	4.35
"This assignment required me to use my critical thinking abilities."	Critical thinking	4.85
"This assignment encouraged me to think outside of the box."	Critical thinking	4.38
"This discussion encouraged me to think about the class content in a new way."	Critical thinking	4.26
"I enjoyed this assignment."	Engagement	3.94
"I think this assignment is valuable."	Engagement	4.62
"This discussion activity held my attention longer than other discussion activities."	Engagement	3.86
"This discussion activity promoted interactions with my classmates." (Spring 2020 data only)	Interaction	4.58

"It took me an excessive amount of time to complete this assignment."	Logistics	2.61

Critical Thinking

In their open-ended responses, students often remarked that they experienced a deeper level of learning when compared to other kinds of assignments. A student explained, "It actually helped me learn about the Mayans [sic] a lot more than any other assignment because of how much thinking I had to do." One cannot simply look up the answer to a debate; it forces one to gather compelling evidence, evaluate other arguments, and be persuasive. Another student remarked, "This was an interesting assignment because it forced the participants to think about why something happened, rather than just repeating back information." Critically assessing evidence is a must for archaeologists. Since students were randomly assigned to a position, they sometimes had to argue for the perspective they did not personally agree with. A student reflected, "I learned a lot about both theories and my thinking was challenged because the theory I had to defend was not the theory I necessarily agreed with. So I had to think outside my comfort zone to prove my theory beyond the other. . . ." An essential component of critical thinking is thinking outside the box (or in this case, the "comfort zone") and appreciating multiple perspectives. In a previous study, Nussbaum et al. (2007) found that arguing both sides of an issue leads to higher cognitive presence.

Although we were not specifically studying the impact of the debate structure, it appears that both the nature of the prompt and its pacing improved synthesis and retention of the material. Spacing the debate over three units helped students retain the information more and maintained their attention. A student said, "It helped me a lot to digest the whole process of the Maya rise and fall more easily than trying to capture the necessary information from three wide-ranging modules. I had to search out what was important, and that helped me to figure out what to pay attention to." Identifying what information is relevant is an essential component of critical thinking. Another student said, "Without this assignment I do not think I would have retained so much about Maya civilizations. There was an extensive amount of data pertaining to the Maya in the modules. Therefore, the assignment helped me reflect on the notes, as opposed to reading through it once to complete the module quiz."

Students debating within groups sometimes commented on the nature of the group work in relation to learning. Despite humorously reporting that they felt like they were "herding cats most of the time," one student explained, "I did learn the material more deeply than during a normal module assignment." Another perceived peer interaction in a more positive light: "Sometimes with online classes it can be hard to get really deep into the information and presentations of an assignment but this one helped overcome that barrier by allowing us to, not only interact with classmates, but feel responsible for the overall well-being of the group grade which was a really good motivating factor." Several

students commented that the resulting arguments were stronger because of working within a group: "Their input also helped me come up with points that I previously would never have come up with on my own. I really did learn a lot." Another explained, "This assignment was an overall great experience. I had an outstanding team that helped make our statements strong and accurate." Another student related this type of assignment to the field of anthropology: "The assignment was useful and opened my eyes to different evaluations and interpretations that archaeologists and anthropologists may use in their work. The process itself, and working with other individuals, was/is necessary for this career field." We were pleasantly surprised to see that the majority of comments about group work were positive.

Engagement and Peer Interaction

Evidence of engagement, peer interaction, and critical thinking often co-existed within the same student comment. This is not surprising, given the relationship between these variables (see Reyes-Foster and deNoyelles 2015). For example, consider this comment: "When going through the course material you have to consider possible points your opponent could bring up and your own material. This way of thinking forces the student to absorb the content in a fun way. I feel it challenges the student in a creative non traditional academic way." Words like "fun," "loved," and "enjoyed" indicate a level of engagement within the activity, and this engagement can influence the amount of effort put in. A student explained, "While this assignment took more time to complete than other ones assigned throughout the semester, I was much more interested, and willing to spend time for this assignment." It seems that students can be engaged if the task is worthwhile, even if it takes more time, "brings more work," or requires a deeper level of thinking. Finally, perceived relevance to future careers can also be an element of engagement. One student shared, "This assignment really helped me understand the importance of debating in this field. If we can't debate about theories pertaining to civilizations, we have no chance of finding the truth. There has to be a full understanding of different viewpoints and colleagues need to take the time to listen to each other."

Support

Students provided some feedback about how the debate could be improved. Perception of unclear debate expectations, timing, and group size emerged as themes in the open-ended survey comment.

One emerging theme from the 2017 and 2018 survey comments was the perception of unclear debate expectations. Several students commented that they were not totally sure what the opening statement, rebuttal, and closing statement should include. A student voiced, "Opening Argument by itself doesn't necessarily imply 'Make all of your major points now to start things off,' so mine was very cursory and not quite as detailed as it should have been." A suggestion was offered by another student: "While I understood

that an argument was necessary, I'm not sure how clear "argument form" was understood by others. . . . It may be useful to explain to students the idea of using learned information to present an argument (how to create an argument), not just reiterate what was learned." Someone else recommended, "I think providing an example of a good debate and poor debate would be helpful for the beginning; that way it is easier to know how to format the argument and responses." In Spring 2020, richer details were added about the contents of the debate parts, and only two (out of 48) students expressed confusion.

The timing of the debate was also mentioned. Due to an impending hurricane and the Thanksgiving holiday, the Fall 2018 debate was pushed to the final weeks of the course. One student confessed, "I did like the assignment, but I felt that I couldn't fully enjoy it, or participate as much as I would have liked to. With this assignment being so close to the end of the semester, and the amount of final projects in my other four courses, as well as working full time, really stressed me out." While we thought the Spring semester would be better with no hurricanes or major holidays, the Spring 2020 semester was significantly disrupted due to the COVID-19 crisis. The debate took place only a few weeks after the campus was closed. In the survey, we asked if the disruption significantly affected their debate experience, and the results were mixed; 19 students agreed or somewhat agreed, while 16 students disagreed or somewhat disagreed. One student shared, "I thought the debate was interesting and a valuable assignment to have. I enjoyed communicating with my teammates, but with the mess of the coronavirus, it made it difficult for my group to participate and work together in a timely manner. Overall great assignment but tough year to fully appreciate it."

There were some suggestions that were specifically related to debating within groups. Students in the 2017 and 2018 semesters desired more guidance about assigning roles to specific members of the group. This was mentioned in the "Preparing for the Debate" page within the online course, but the page did not go into full detail. There were few complaints, but they did exist, and involved the distribution of work: "Individuals should be assigned roles if participating in a group setting. I found the workload to be uneven and unfair. Some contributing barely anything to the posts/discussion some weeks." Yet these comments are countered by a student who enthusiastically shared, "I had no idea how meaningful and even critical working in a group on this could be! So glad I opted on Group! Our group was a live, breathing, egalitarian process. No one in charge...no previously designated roles and so forth. And somehow it just worked! Loved this assignment. I feel lucky and blessed to have had this opportunity!"

Group size also emerged as a concern a few times. One person shared, "I did enjoy it; however, I think that the groups were slightly too big. . . . I wanted to contribute to my group so I volunteered early on to write the closing statement so that I would be a valuable person to the group. And there were other people who offered to help but there just wasn't enough parts for everyone to share equally." Another chimed in, "I liked being able to participate in a discussion with my peers in which we could chat back and forth. However

having so many people in the group made it difficult to collaborate on the assignment, given our very different schedules." In Spring 2020, smaller groups of no more than 4 people were implemented. Still, there were some complaints about group members not doing their share as well as concerns with coordinating a cohesive response.

Teacher Reflection

The debate responses have largely demonstrated the assignment's primary learning objective: understand that multiple factors and causes were probably at play in the rise of social complexity. In the discussion prompt for the closing statement, the teacher gives students the option of demonstrating how both "trade" and "ideology," and even other factors, may have contributed to the rise of social complexity, and many students do that. However, the quality of posts has been about the same over the three assignment iterations. We think the improvements made, namely tightening up the instructions, have helped to clarify and make things easier for the students, but they have not necessarily resulted in answers higher in quality.

While the grading time for this assignment is greater than all other assignments during the semester (average times are approximately half of a day for each post, i.e., opening, rebuttal, and closing statements, for the entire class), it is still less than assigning a research paper to each student and assures that some critical thinking, student engagement, and peer interaction are occurring in the large-enrollment, online environment. The nature of the debate structures student contributions in short bursts, digestible for the teacher and students. From the teacher perspective, it was easy to scan for the three key pieces of evidence versus looking through an entire paper.

Managing groups remains a challenge but lessons have been learned. One of the major challenges we are facing now is that students prefer to use an outside discussion tool to complete their game-plan when they work in groups, as the option in the learning management system does not always alert them to posts from team members depending on their settings. When they have opted to do this, the teacher asks to be included on the chats so word counts and days of participation can be counted for each student. This is a relatively minor inconvenience, but the process could be streamlined. Also, the perception of peers not "pulling their weight" is to be expected to some degree and may not be completely eradicable. The students who do not contribute as much get lower grades, but the other students are not privy to other students' grades, plus they still may feel frustrated because they are not being helped in their work. The teacher is currently considering putting a disclaimer statement in the course that if the student chooses the group rather than one-on-one option, there is the possibility that not everyone will participate; this disclaimer will help students be prepared for this occurrence but also know that non-participants will not receive full and/or any credit.

Discussion

Despite the challenges of implementing a debate in a high-enrollment online course, we found it to be a useful technique and worth the time and effort. The survey results suggest that students perceived critical thinking while participating in the debate. The inherent nature of the debate technique supports students to think like archaeologists, who often accept that definitive answers are usually impossible, but certain ideas are more supported than others through a careful look at evidence. Students appeared engaged throughout the debate. The implication is that even if an assignment takes more time and effort, students can still find it engaging and worthwhile if it stimulates critical thinking. It seems that students can be engaged if the task is worthwhile, even if it takes more time, "brings more work," or requires a deeper level of thinking. The nature of the debate is competition more than just a discussion, which is engaging.

This student experience aligns well with the goals of teaching anthropology, which include re-examining one's own values in light of perspectives from other cultures (Robbins and De Vita 1985). This appreciation for other cultures and perspectives can contribute to global competency, which is essential for many fields of future employment, not just anthropology. It is important to consider students' previous knowledge in the success of the debate. Most were Anthropology majors so they did incorporate knowledge from previous courses. However, this approach has the potential to be successful with a mix of majors and non-majors, in that the focus is on understanding arguments and looking for evidence to support them – a more generalizable skill.

While promising, online debates need to be carefully set up. Table 5 presents our recommendations for critical elements of a successful online debate. First, the prompt for the debate must be authentic, not having an obviously right or wrong answer. It must be complex enough for students to have to consider different kinds of evidence in order to form a well-reasoned argument. Second, the concept of debate should be described. What are the main parts? What does a successful debate look like? Third, protocols are important to clearly establish several points: who talks, who are they talking to, and when? Where do they go to prepare for the debate? Fourth, deliberate pacing and timing is important. It does seem that students appreciate the spacing out over weeks. Having the debate toward the end of the semester is important because they need foundational knowledge. Fifth, group guidance also matters. Groups can strengthen responsibility as well as the quality of the argument; but working in groups also increases the social complexity. Managing groups may present challenges for the teacher, but then again, grading many individual assignments does as well. Having the debate in an online format actually increases the teacher's ability to assess individual participation in groups. Most of the time members of groups are communicating in a written format that can be assessed using a rubric for individual participation. Each group member can be assigned a different grade based on how much they contributed to the conversation. Giving the students the choice to work in groups or as individuals seems to alleviate some of the classic problems with group

assignments. Finally, clear evaluation helps students grasp what the outcome of the debate should look like.

Table 5. Elements of a Successful Online Debate.

Element	Recommendation	Example
Create authentic prompt	Prompt should come from real-life and have some relevance	"Which perspective best explains the rise of social complexity among the Maya?"
Explain the nature of the debate	Let students see examples of debates before engaging in their own	"Review this exemplary example of an opening statement, rebuttal, and closing statement before posting your own."
Establish protocols	Students need to know what they are debating, who they are debating with, and where and when the debate will take place.	"The easiest way to get to your group space is…" "I will post your names in an Announcement AND in your group discussion area in your group space so that there will be no confusion as to what your position is."
Pacing and timing	Space out the parts	"In Module 11, your group will post an opening statement, in Module 12 a rebuttal, and in Module 13 a closing argument."
Group guidance	Provide group with additional guidance	"Now is a good time to choose one group member who will be responsible for posting your finished Opening Statement (and/or responsible for posting all statements) by the deadline."
Clear evaluation	Basic rubric to keep them on track	Criteria: Presentation Skills, Clarity of Argument, Use of Evidence, Understanding of Topic, Citation and Bibliography

Conclusion

With the increase in online courses, it is necessary to identify strategies that help online students exhibit thinking that is similar to anthropologists and other social scientists. Debate is one strategy that was identified in previous literature as having potential to

address this. While exploratory in nature, this study is one of the few that explores online debates within an anthropology course in a higher education setting.

What we found is that the online debate goes beyond other exams and assignments that often leave students to merely regurgitate facts from a textbook. Interactive activities are a must in this profession. This particular form of engagement is especially important for anthropology and the social sciences and/or humanities where there are multiple, diverging arguments by scholars for the appearance of social phenomena that must be understood and assessed by the student. As far as workload goes, grading of lengthy term papers can be impossible for classes of 100 or more; debates offer shorter assignments to tackle.

There were some limitations to this study. Each iteration of the assignment was used in the same course by the same instructor at the same university using the same online discussion tool. Implementing debates in multiple contexts and using different online discussion tools would help provide additional insight. We also recommend gathering more than student perceptions. In a future study, we intend to explore the depth of knowledge exhibited in the debates themselves. We would also like to look at how group formation affects perceptions and quality of the debate.

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Appendix A: Survey Items

1. The assignment instructions were clear. I understood what I was supposed to do.
2. I enjoyed doing this assignment.
3. I was more motivated to complete this assignment when compared with other discussions.
4. I found this assignment: (1) Intriguing, (2) Exciting, (3) Both intriguing and exciting, (4) Neither intriguing nor exciting.
5. I think this assignment is valuable.
6. This discussion activity held my attention longer than other discussion activities.
7. This assignment should be used in future classes.
8. This assignment required me to use my critical thinking abilities.
9. This assignment challenged the way I think.
10. This discussion activity encouraged me to think about the class content in a new way.
11. This assignment encouraged me to think "outside of the box."
12. This assignment encouraged me to write about how I think rather than what I think.
13. This assignment promoted interactions with my classmates.
14. I had a good sense of what my role in the group would be.
15. Reading my peers' responses encouraged me to reflect on the way I thought about the discussion.
16. It took me an excessive amount of time to complete this assignment.
17. How much time did you spend on this assignment in total? (1) Less than 1 hour, (2) More than 1 hour but less than 3 hours, (3) 3-5 hours, (4) More than 5 hours
18. I understood how I was going to be evaluated.
19. The three parts of the debate were spaced out appropriately over the modules, and gave me enough time to prepare.
20. The instructions provided me enough detail about what should be in an Opening Statement, Rebuttal, and Closing Argument.
21. The disruption in the Spring 2020 semester significantly affected the quality of my contribution to the debate. [*Spring 2020 only*]
22. Please use this space to give me any additional feedback about this assignment. [*open-ended*]