Learning to Think Like an Anthropologist? Toward Understanding Student Acquisition of Anthropological Perspectives in Online vs. Face-to-Face Anthropology of Education Courses

Diane M. Hoffman,[1] David Saavedra,[2] Tsehuajab Washul,[1] and Christof Fehrman.[3]
[1]School of Education and Human Development, University of Virginia
[2]School of Education, Virginia Commonwealth University,
[3]Department of Psychology, University of Virginia.

Abstract

In recent years, online approaches to teaching anthropology have become popular in higher education. In this exploratory account, we consider how student understanding of anthropological ideas differed in online vs. face-to-face modalities of an anthropology of education course. Through content analysis of student essays and discussion posts over 8 semesters of the course as it was delivered in both formats, we considered patterns in students' conceptual responses to anthropological ideas. Our analysis revealed differences in student conceptual engagement, with greater acquisition and understanding of anthropological perspectives in the face-to-face course than in the online course. Drawing from recent work in the anthropology of learning that emphasizes interactional and social dimensions of learning, we suggest that a possible explanation for these differences lies in features of the interaction environment in each course. Our study points to ways in which the fine-grained study of online course environments through analysis of student writing may offer significant insights into improving teaching of anthropology in such contexts more generally.

Keywords
Online learning, anthropology of education, interaction environments, content analysis.

Introduction

The increasing popularity of online learning in the social sciences and in the field of anthropology in particular raises new and interesting questions regarding the nature and effectiveness of online instruction compared to traditional face-to-face course delivery in teaching students the foundations of the discipline. All disciplines cultivate a particular lens—sets of values and habits of mind that shape the conduct of research and the development of theory. One key aim of graduate level introductory courses in Anthropology of Education is to familiarize education students with the ways anthropologists see the world, and to show the value of this lens in deepening appreciation of the complexities of education as a social and cultural process. This involves promoting students' abilities to know about and be able to use anthropological principles of cultural relativism, holism, and comparativism to enhance their understanding of educational processes such as teaching and learning as well as their understandings of key questions in education such as the production of various forms of social inequality.

In this article, we present the results of an exploratory study that considers how students engaged with anthropological ideas in an online vs. face-to-face version of an anthropology of education course. Our central question concerned how students were engaged conceptually with ideas presented in each modality as reflected in their writing assignments for each course. While we did not assume that students' writing in either course reflected the entirety of their learning, we were interested in whether their writing revealed differences in their conceptual engagement with key ideas related to anthropology, and if so, how these differences could be explained by features of the course interaction environments.

Our study was limited, however, in that we did not have classroom observation data for the face-to-face course during the four years covered in our analysis (2018-2020), so we could not make any definitive comparative claims about how the face-to-face interaction environment may have shaped student learning. At the same time,

we found that student conceptual engagement did differ in the two courses. We thus present hypotheses that can serve as stepping stones to further work that could shed light on the nature of the interactional context, especially in online courses, and how it may affect student learning. We also suggest that careful content analysis of student writing can be a useful tool in this process for uncovering some of the more complex and often unrealized ways students engage with anthropological ideas. Closer attention to how students interact with different course environments and how these interactional contexts may shape student learning can inform teaching methodology as well as contribute to the anthropology of learning itself as a disciplinary endeavour.

Background

At the time this study was conducted, the first author, Diane Hoffman, an anthropologist by training, had been teaching Anthropology of Education in a graduate level social foundations of education program for over 20 years. In 2015 she developed an online version of the same course. Having taught both versions with nearly identical topics, readings and assignments for many years, she wondered if students were in fact learning equally effectively in both versions of the course, and, more specifically, what the differences might be in student learning through each modality. With support from the University of Virginia Center for Teaching Excellence Scholarship of Teaching and Learning (SoTL) program, she designed a study to consider the following questions: how does student learning about anthropological perspectives differ in the online and face-to-face versions of an anthropology of education course? Does one course format appear to be more effective in terms of student acquisition of anthropological perspectives? What are the patterns of student responses to course material in each case—that is, how do students "make sense" of anthropological ideas, and do some sense-making patterns facilitate learning more than others? What can be said about the features of the interaction environment in the online course in particular and how might these be shaping student learning? What are the larger implications of this work for the anthropological study of learning itself?

This inquiry is situated theoretically within two bodies of literature: studies of online teaching and learning and developments in the broader field of the anthropology of learning. The body of literature comparing online and face-to-face instruction is largely quantitative, comparing course grades and/or test results in two versions of the same course. The results are quite mixed. Some analyses find student outcomes to be better in online contexts (Iseminger et al., 2020; Means et al., 2010), while some find better outcomes in face-to-face contexts (Bir, 2019; Xu & Jaggars, 2014), and some determine both contexts to be roughly equivalent (Horspool & Lange, 2012; Kelani et al., 2021; Mollenkopf et al., 2017; Paul & Jefferson, 2019). These mixed findings suggest that there may be underlying constructs related to the mode of instructional delivery that are often overlooked and unexamined by researchers.

Studies that look a bit more closely at the quantitative data tend to reveal a complicated picture. In a comparison of online and face-to-face versions of an undergraduate public policy course, Sussman and Dutter (2010) found no overall difference in student performance. However, they did find differences in terms of grade distribution. Online versions of the course resulted in more students with high and low grades and fewer students in the middle. The authors speculate that factors such as the level of development of computer and writing skills as well as orientations towards task completion, time management, and self-discipline contributed to these differences in distribution. Callister and Love (2016) found no difference in final exam scores between online and face-to-face versions of a business negotiation course, yet simulated negotiation tasks were better performed in the face-to-face format. They conclude that the type of learning being pursued by instructors can be affected by course format; informational content may be taken up equally in both formats, while skills may be better honed face-to-face. In a third example, Dendir (2019) stresses that studies comparing online and face-to-face learning modalities must account for student characteristics tied to the course format they select. While an initial analysis of exam scores in a microeconomics course indicated that online students outperformed face-to-face students, after controlling for intangible factors influencing students' selection of the online format (distance from campus, hours worked per week, prior online course experience, etc.) online students' superior performance disappeared. Additionally, face-to-face students performed better on routine homework assignments, which the instructor considered to require thinking and problem-solving skills of a higher order than exams. The author concluded that "the lower performance of online students on homework could also indicate that, despite scoring well on exams, they may in fact be learning less" (Dendir, 2019, p. 182).

Any number of factors related to differences in course format may be contributing to differences in learning. Communication among classmates is perceived to be of much higher quality in person (Horspool & Lange, 2012; Thompson et al., 2013), for instance. And while in-person discussions are felt to be much more energetic and

dynamic than online discussion threads, students also find them more challenging (Meyer, 2003; Redmond, 2011). There may also be disciplinary differences in how learning occurs in an online versus a face-to-face format. In a large-scale examination of the community college system in Washington state over five years, Xu and Jaggars (2014) found that certain discipline areas, such as the social sciences, consistently demonstrated a larger gap in student performance online versus face-to-face compared with other discipline areas, such as the natural sciences. The varied findings and conclusions in the current literature base comparing online and face-to-face learning formats raise many questions about the nature of learning in these varied contexts.

Additionally, the equity question is an important one in the research on online learning. There are a growing set of questions as to whether online learning can help to 'equalize' the learning experience for individuals of minoritized status. Increasing accessibility to higher education is a key motivation in the proliferation of postsecondary online courses, which offer flexibility in scheduling and in geographic location for students who may not be able to follow a traditional on-campus student path (Milman, 2015; Redmond et al., 2018). Yet accessibility does not guarantee success. A sizable body of research has found differences in educational outcomes in online courses by gender, race/ethnicity, age, and prior levels of educational attainment, some of which determined that online formats can exacerbate differences that already exist in traditional face-to-face courses (Xu & Jaggars, 2014).

Turning to the second body of research that informs this inquiry, in recent years there has been a reinvigoration of anthropological interest in questions of learning across a broad range of human activities (Erickson & Espinoza, 2021; Nasir et al., 2020; Ingold, 2017). A key idea behind this work is that learning occurs through changing participation in communities of practice (Lave 1996; Lave & Wenger, 1991), as learners move from positions of novice to expert over time as they interact with others and acquire forms of practice within a given community. In this work, in contrast to the ways learning has been traditionally studied in psychology as an individualized cognitive process, there is a strong emphasis on themes of culture, identity, social context, social interaction, and embodiment and their roles in learning. One of the more important trends in this scholarship treats learning as the development of a kind of "response-ability" (Ingold, 2017), in which learning is understood as the development of capacities to attend, respond, and interact with the environment. In this sense, what one might call the "interaction environment" becomes a critical domain in which to explore learning, rather than simply through end-point quantitative measures of what students have supposedly "learned".[1] This perspective requires us to consider how student ideas develop in relationship to the experiences of participation in a learning community—developing skills to interact, attend to, and experience ideas as they evolve and connect learners to particular kinds of environments.

These ideas lead us to consider what may be the significant and meaningful dimensions of the interaction environment, understood broadly, across different learning modalities. For us, this includes the ways students make sense of and interact with learning materials, the ways they make sense of and use ideas, and the ways they discursively interact with others. As teachers and learners of anthropology ourselves, we want to deepen the discourse that sees anthropology as a way to disrupt assumptions about the nature of participation and the ways people "learn" through participation, with an ultimate goal of contributing to advancing the study of learning more generally.

Methods

We compared the online vs. face-to-face [FtF] versions of the same graduate level anthropology of education course offered over a period of 4 years, from 2017 to 2020 (8 semesters total, 4 semesters FtF and 4 semesters online). In both courses, the topics covered, the materials (readings and videos), and the writing assignments were identical. In all courses students completed short-answer midterm and final exams, as well as two reflection essays assigned at two points in the semester. The courses differed only in two respects: the FtF discussions and activities moderated by the instructor were replaced by written discussion boards in the online course, and FtF

---

[1] Obviously, this study is focused on what some may consider "formal learning environments," which may differ in some respects from informal, non-school-based contexts. However, for most anthropologists who study learning, stark divisions between "formal" (i.e. institutional or school-based) and "informal" learning occurring through everyday social practice are no longer considered significant, as the focus of inquiry has substantially shifted toward understanding how learning is socially mediated regardless of the particular setting (Lave, 1996; Lave & Wenger 1991).

lectures (typically about 15 minutes, during which key concepts were discussed and presented by the instructor) were replaced by recorded lectures and/or written course overviews for each online module.[2]

There were three distinct research phases in this study. Since all students in all courses completed reflection essays, in the first phase of the project we conducted a content analysis of 236 student reflection essays (84 from the face-to-face course and 152 from the online course) from both versions of the course over 8 semesters. We chose to begin our analysis with reflection essays because these were the least structured assignments in the course, offering students the most opportunity to write freely about course content or readings/topics that interested them. Au1 and two graduate students in anthropology of education (Au2, Au3) divided up the courses, each analyzing approximately equal numbers of online and FtF course versions. We used a standardized format to record our observations, noting course type, semester, assignment type, selected quotes/evidence from students' writing, and analytical category or theme that the evidence reflected. Each researcher read through all student reflection essays for each of their assigned courses and uploaded their materials to a file-sharing site. We met online multiple times through the analytical phase of the project to compare observations and discuss emergent themes in the data in order to generate the analytical themes discussed below.

In the second phase of the project, we focused on the online discussion forums. Regrettably, as noted above, we did not have comparable observation data from student discussions conducted in person, so no definitive comparisons were possible. However, we chose to explore the forums as a way to further our understanding of what might be occurring conceptually as students contribute to discussion posts. This analysis also allowed us to determine whether the conceptual trends we observed in the reflection essays also occurred during student interactive discussions, and/or whether there were additional aspects of student engagement with course materials we could not see just by focusing on student essays. We selected three modules (at different points in the course—beginning, midpoint, and endpoint) for each of the online courses, and each researcher conducted a content analysis of the discussion boards in one module for the given semester.

In the final phase, we brought in the fourth author, Fehrman, to provide some quantitative context for our study. A statistical analysis focusing on course grades and demographics enabled us to compare the grade distributions in each version of the course. While we could not claim that grades reflected student learning in any definitive or complete way, we considered that they would offer an additional insight into what the qualitative data revealed about differences in learning in each course.

Our focus in the qualitative analysis was to explore how students responded to the major constructs the course intended to teach: i.e. the culture concept, cultural relativism, holistic thinking, comparative analysis, and consideration of multiple perspectives—ideas that are all considered foundational to the discipline (Brown et al., 2020). For students new to the field of anthropology, these principles often entail a completely new way of thinking about humanity and challenge them to see and understand the world in novel ways (McGranahan, 2014).[3] We explored student writing to identify trends in the kinds of cognitive processes that students engaged in while encountering course content (e.g., referencing readings, lectures, discussions in and across courses, describing personal experiences and connections to the course content, applying anthropological ideas to other contexts, questioning, and responding to others' contributions). We made special note of how and whether students explicitly used or referenced anthropological perspectives in their discussions of educational issues or statements that revealed what students considered to be the value of an anthropological lens. We paid specific

---

[2] We acknowledge two significant events that took place during the study time period. First, the University of Virginia changed online learning platforms from Collab to Canvas. Differences in the design of each platform could have influenced the quality and depth of student learning. Second, the COVID pandemic began in Spring 2020. Much research has documented COVID-era learning declines for students, especially for those from minority backgrounds. However, we did not specifically consider COVID-related impacts in this work. Despite the platform switch and slight differences in delivery (a one-hour zoom meeting was added to the Fall 2020 online course), our findings in terms of online versus face-to-face learning were generally consistent.

[3] We recognize that the conclusions we draw in this study on the "learning of anthropology" are limited, as they focus on what is often a single course for students who are not anthropology majors. As with any discipline, deep acquisition of foundational perspectives comes from long-term study and, for anthropologists, immersion in field settings. Our goals in teaching this course are thus to expose students to foundational perspectives and to generate a sense of the potential of anthropological insights and methods to broaden and deepen understandings of critically important issues in education.

attention to comments students made about their own learning, such as course material "challenged my thinking" or "taught me to see things in a new way."[4]

Trends in Student Conceptual Development

In the course of reading hundreds of pages of student reflection essays in both online and FtF classes, we began to see trends in the ways in which students responded to anthropological ideas. Specifically, we noticed that some forms of conceptual response to course material appeared to encourage learning, while other forms served to discourage it. Further, frequency counts revealed how much the online vs. face-to-face course modalities actually differed in terms of these conceptual processes, with the FtF courses having far more of the kinds of responses that appear to support acquisition of anthropological perspectives.[5]

Responses That Encouraged Learning

1. Making Connections Across Different Knowledge Sources

Students made explicit reference to different materials such as readings, discussions, lectures, films, and sometimes learning from other courses as ways to think about anthropological ideas. Making such connections happened far more frequently in the FtF course than in the online course. For example, a class discussion prompted more questioning and reflection that became the basis for a written reading response, or a student searched out other material related to course content to expand her lens:

> I want to dive a little deeper on the term defensive structuring. I find the idea fascinating. The definition we were given in class got me thinking a little more about the idea.

> I read the article *Poor Kids and the 'Word Gap'* as an extension to our class discussion on the deficit perspective.

> This stood out to me because it resonated with what I heard in another course...

> (Frequency of making connections: Online: 5, FtF: 47)

2. Refraction: Application of a Course Concept to New Contexts or Settings, or to Personal Experience

Students took an idea learned in the course and applied it to a new or different setting or to a past personal experience. Often this involves explicit statements that the student learned to "see things differently" or developed a new way of seeing, questioning, or critiquing a familiar issue:[6]

> Here I reflect on my own experiences and ways that this stigmatizing border work was used against Appalachian English...

> This categorization and labelling of minorities is nothing but an achievement of US culture...Which inspired me to think that, perhaps the question we should be asking is not what can these kids do successfully? But why can't we value what these kids do successfully?

> Upon my continued reflection on those [texts] and an explanation of the students' perspectives from that ethnography in class, my way of thinking about it turned interesting....

> (Frequency of refraction: Online: 35, FtF: 79)

---

[4] In nearly all cases (with a few exceptions—three students pursuing graduate studies in anthropology and perhaps three or four more who had taken previous undergraduate level courses in anthropology) students enrolled in this course had no prior exposure to anthropology.

[5] In interpreting these frequency counts, we must remember that enrolment was not equal across both modalities. Online sections generally had higher enrolment than FtF sections, with the result that our data corpus consists of more essays from online students. Of the 236 essays we analysed for this report, 36% come from the FtF context and 64% come from the online context. Frequency counts that stray from these proportions to a great degree may signal that differences in course format are indeed impacting student learning.

[6] This practice was seen as indicative of effective student learning only when the application was appropriate; improper application or extension revealed student failure to grasp fundamental aspects of the construct.

3. Value of Anthropological Concepts

Student work displayed explicit or implicit recognition of the meaning and value of anthropological concepts of holism, relativism, or comparison. The FtF course appeared to produce many more explicit positive valuations than did the online course. For example:

> The work of anthropologists can help us view differences from a different lens. One in which we are active observers and we develop the ability to take the perspective of another person/culture and recognize it as their truth. A perspective in which we do not judge the behaviours of others on the basis of our own values.

> As everyone in the system gets bogged down in this negativity, I think there is light and hope in what educational anthropology can bring to the table. After all, anthropology can help people understand the cultural perspectives and histories of each group involved, which can provide common understandings that allow for mutually beneficial changes to be implemented in the education system.

> I believe it is imperative that we share with others the need to see things from the perspective of students from other cultures....

> (Frequency of concept value displayed: Online: 2, FtF: 8)

4. Moving Beyond the Individual Level of Analysis (Holism)

The student shows evidence of moving to systemic/structural interpretations of educational and social issues, rather than seeing things only in terms of individual choice, behaviour, ability, etc. Examples:

> I was thinking about this Saudi reform when reading the Wolcott story, where the students' "buy in" came at too great a cost, and how answers to this issue should come from a higher structural level. I think reform on the sociopolitical level is where a solution can be found.

> After all the theories and discussions on school failure...I believe that we have concluded that there needs to be a complete renovation of ideas, practices, and   perceived results in education and the larger society.

> In 21st century America teachers continue to...see the child as deficient when in reality...the child is not given a voice and various institutions have to change in order for these minority children to do well.

> (Frequency of holism examples: Online: 14, FtF: 24)

Responses That Discouraged Learning

In contrast to the above-described responses that appeared to reflect acquisition of anthropological perspectives, students also engaged in other approaches to processing course ideas that reflected lack of understanding or impeded fuller conceptual development. We found that these practices occurred typically much more often in online environment than in the FtF course.

1. Assimilation

This refers to a process where anthropological constructs are assimilated or equated to pre-existing ideas, frames of reference, popular discourses or professional knowledge domains outside of anthropology. In this process, the distinctiveness and nuances of the anthropological concepts are often lost, and they are used simply to reinforce what the student already knows. For example, a student assimilates the idea of cultural discontinuity to the popular notion of culture shock, or hidden curriculum is generalized to all social interactions or reduced to teacher personal bias, or Erickson's (1993) notion of "cultural border" becomes just another version of cultural clash. Examples:

> [When traveling overseas] I went through the cultural discontinuity that Spindler talks about, in seeing different behaviors from the natives and trying to understand them.

> I was privy to many stories of classroom interactions that could be viewed as the enforcement of cultural borders. For instance my eldest child often described the classroom conflicts between a first generation Japanese American

friend and his second grade teacher. The teacher consistently rebuked this student, singled him out for punishment, and held him back from enrichment activities.

Geertz' argument about "entering into an alien turn of mind" reminds me of Stephen Covey's *7 Habits of Highly Effective People.*

(Frequency of assimilation examples: Online: 37, FtF: 4)

2. Individualistic Bias

Oftentimes, assimilation occurs when students reduce the collective cultural dimension of anthropological ideas to an individual level of analysis. This can be seen in some of the examples cited above, where a student treats the idea of cultural discontinuity (a collective phenomenon) as equivalent to "culture shock" (an individual experience). Students' analysis/thinking remains at an individualistic level rather than expanding to include considerations of system, structure, or larger social and cultural context. Examples:

Emerging adults enter the halls of college as amalgamations of their own personal hidden curriculums….

My biggest takeaway from [ethnography] is that assimilation occurs on an individual level.

That being said, the personal reasons for education and the intrinsic value of those reasons are immeasurable. They cannot be captured by one teacher or one student; the true purpose of education is simply whatever the learner makes it out to be.

(Frequency of individualistic bias: Online: 16, FtF: 3)

3. Persistence of Overtly Evaluative Lens/Rejection of Relativism

In some cases, students rejected relativism and persisted in seeing some cultures as better than others. Personal views and values were put forth in lieu of true analysis. While this did not occur with great frequency in either course, we note these both because they were very evident individual cases of students not grasping (or not wanting to grasp) anthropological perspectives, and because of the ways in which aspects of interaction (student-student and/or instructor-student) may have been particularly important in shaping this outcome (see further discussion to follow). Examples:

Blaming victims is immoral; blaming cultures is sometimes necessary.

I consider it irresponsible to consider their (minority) communication method ("yelling") as equally valid to mine.

When I first saw some "quick fixes" to help assimilation into the American educational system easier, now I really wonder what strategies could be used at all when people don't want to learn. Are there any practical ways to make education appealing to certain cultures, or is it a hopeless cause?

(Frequency of rejecting relativism: Online: 11, FtF: 3)

4. Heavy Reliance on Summary and Quotation

In these instances, students' writing reveals minimal analytical engagement with concepts. Students do not try to construct an argument of their own or apply ideas to different contexts. Their writing is overly dependent on summarizing and quoting course readings. Examples:

[Nearly 30% of this student's essay is direct quotation (386 out of 1292 words)]: A more apt theory of learning dictates that "learning is not an individual possession. The term learning simply glosses that some persons have achieved a particular relationship with each other" (McDermott, 1993, p. 277). The profound implications of this statement highlight that "We must give up our preoccupation with individual performance and examine instead the structure of resources and disappointments made available to people in various institutions" (McDermott, 1993, p. 295).

[Half of every paragraph in this student's essay is direct quotation from readings]: "Anthropologists tend to be generalists, seeking interrelationships among the physical, social, personal, cultural, and historical bases on human

existence" (Zaharlick, 1992, p.117). They observe individual interactions, as well as the various relations with "identity formations through class, gender, and race" (Yon, 2003, p.421).

(Frequency of heavy reliance on quotes and summaries: Online:19, FtF: 9)

Overall, one of the most marked findings from our analysis of student reflection essays is the extent to which we found that student grasp of anthropological perspectives appeared to be more effective in the FtF version of the course. The biggest difference is that the online version shows very high levels of assimilation, whereas assimilation happens far less frequently in the FtF version. Online courses also showed more evidence of persistence of individualist frames of reference compared to FtF classes. Finally, connections across different modalities were much more frequent in FtF courses than online, particularly in terms of direct references to class discussion. Student essays in the FtF course routinely referenced prior discussions from course meetings, while essays in the online course rarely referenced points from discussion boards or comments from other students.

Insights from Analysis of Online Discussion Boards

In the second part of our study, we turned to analysis of the discussion boards in the online course for more insight into the above-noted themes as well as the nature of the online interaction environment and how this might be shaping student learning outcomes. One of the major differences between the FtF and online learning environments was the extent to which writing was the primary modality of engagement in the online course. On average, each student in the FtF course produced 6,500 words per semester whereas the online students produced about 12,000 words per semester, with online discussion board posts accounting for the difference.[7] However, it is important to note that the informal quality of writing in discussion boards was quite different from that produced in essays and exams. Thus, it becomes important to ask how the cognitive processes in discussions line up with processes reflected in the formal writing assignments. Does discussion board writing serve as a resource for student thinking that might be comparable to the kinds of discussions that might be happening in FtF courses? What may be effects of an interaction environment structured largely through reading and writing?

The first thing to note is that we saw evidence of similar cognitive processes occurring in discussion posts that were identified in student reflection essays. In discussion boards, we found evidence for positive learning responses, including statements of explicit valuation of anthropological lenses, refraction/application to new cases, and most importantly, statements reflecting the role of *other students* in helping to change one's perspective or open one's eyes to anthropological ideas. For example:

> I liked how you explained control vs. trust. I had not thought about that.
>
> Your analysis of this theme helped me to notice some more points that I hadn't thought of originally.
>
> Our differences in interpretation illuminate a few interesting things about ethnography.
>
> I hadn't seen that, but yes, thank you for opening my eyes!

At the same time, we noted that these affirmations of the impact of other students' ideas do not carry over into reflection essays. While students do show evidence of learning from each other in discussion posts, we did not see any explicit reference to discussion boards in student reflection essays. This is in particular contrast to the ways students in FtF classes consistently referenced ideas from class discussions in their reflection essays. This suggests to us that ideas from discussion boards were somewhat less influential than FtF class discussions in shaping student learning.

Our inquiry further revealed a number of other unique aspects of the online environment related to issues of what we call "performative affect." Students markedly and consistently used positive comments to begin nearly every discussion post response: e.g. "I agree with you." "I totally agree." "I like how you said..." "I agree--great job making these connections." "Great post!" "I liked how you talked about ..." "I love how you were able to break this down...." "I think you did awesome!" There are a variety of ways to interpret this, including carryover from social media habits of "liking," or the constant evaluative habits learned as teachers (always state what is

---

[7] Based on comparison of Fall 2019 FtF and Spring 2020 Online courses.

good or what you like about someone's effort).[8] (Disagreements were rare and were treated very delicately, as in "I interpreted that somewhat differently.") However, we perceived this performative affect as less than conducive to genuine engagement with concepts; in fact, it often became the main point of a post to simply agree with what someone else had said instead of going deeper or developing one's own thinking on the matter at hand.

Further, the push toward agreement tended to produce an "echo chamber" for misleading interpretations that get carried through a discussion and preclude alternative ways of interpreting course ideas. For example, in a case where students were asked to read and offer a cultural interpretation of a scenario in which a teacher is having difficulty with a large group of minority students, three course participants wrote:

> I liked your comments about expectations. If they could find common ground around expectations the class would work better.

> I also found that the gap could be bridged if they addressed expectations.

> Behaviour management. I agree, I didn't state it that way but I said the teacher and students wanted more control.

Instead of discussing what is going on at a cultural level—the point of the exercise—students instead reinforce each others' talk about classroom management approaches and completely miss a deeper more culturally informed way of looking at the situation.

A second major theme that emerged in our analysis of discussion posts concerned temporality effects. These shaped both the nature of the interactive discussions as well as the level of participation or engagement. We found that, typically, with weekly modules, the number of students viewing others' discussion posts decreases over time. For example, as might be expected, in one class with 18 students, early posters tend to have their posts read and responded to the most; whereas those of students who post late are not even read by other students, let alone responded to. On average in this class, a post was read by 11 students, which means that at least a third of the students in the course are not interacting with their fellow students. Furthermore, in each weekly module, the students who post first are nearly always the same, and their posts are read by a small group of their peers who also always post early. We hypothesized that this creates a temporally bifurcated learning experience. For some early responder students in the course, opportunities for valued and interesting exchanges with other students are present, whereas for others, participation in the course appears to be reduced to simply a set of tasks that need to be done. Even in a case of an explicitly structured group discussion, there was only a single exchange of ideas, which took the form of agreement with a point raised by another student: "I thought this but you communicated it very well." In effect, rather than respond to each other, students responded to the prompts individually.

A Quantitative Lens

At the end of our study, we used a descriptive statistical approach to analyse course demographics and grades. This data provides some context for themes identified in our qualitative analysis, though due to the uneven and relatively small sample sizes in each demographic category, we cannot report any definitive findings. Notably, in support of our qualitative analysis, several patterns emerged that indicated there were differences in outcomes between FtF (n = 42) and online course versions (n = 69). The most striking was that there were proportionally many more "A" range grades in FtF courses (72%, n = 30) compared to online courses (52%, n = 36) and a higher number of "B" range grades in online courses (38%, n = 26) compared to FtF courses (21%, n = 9). Additionally, FtF courses had a grade mode of "A" (38%, n = 16) while online courses had a grade mode of "A-" (19%, n = 13), with the median grades also reflecting this difference (median FtF: "A", online: "A-"). These data were consistent when considering both gender and race.[9] This seems to support what our qualitative analysis suggested earlier: that a FtF course format lends itself to more effective learning of anthropological constructs overall. See Table 1 for grade modes and medians.

---

[8] Many of the online courses had large numbers of public school teachers who were enrolled in a social foundations Masters degree program.
[9] Given the small numbers of students in most racial categorizations, our analysis of grade and race is based on the categories "White" and "non-White."

Table 1: Grades by Category.

Category	Mode (%)	Median
FtF (n = 42)	A (38%)	A
Online (n = 69)	A- (19%)	A-
FtF/Female (n = 24)	A (33%)	A
Online/Female (n = 37)	A- (24%)	A-
FtF/Male (n = 18)	A (44%)	A/A-
Online/Male (n = 32)	B (22%)	B+
FtF/Non-White (n = 19)	A (32%)	A-
Online/Non-White (n = 30)	B+ (20%)	B+
FtF/White (n = 23)	A (45%)	A
Online/White (n = 39)	A (23%)	A-

An important aspect of this trend in our data is that it reflects larger trends in the research literature concerning racial disparities in online learning: non-White students appeared to do better FtF than they did online, whereas grades were more similar across course modalities for White students. Interestingly, the grade modes were similar between the White and non-White students in the FtF modality but not for the online version. One important source of qualification may relate to how students themselves may differ in each setting. For example, were there more teachers in our online courses? This could shape outcomes in specific ways, including whether they were taking the course as a requirement for a certification and/or whether they were taking it for personal interest. Unfortunately, the limited demographic data we had access to did not allow us to further qualify aspects of student demographics that may be important to understanding the trends we identify here. We thus present them as points to explore further in future studies.

Conclusion: Toward a Deeper Appreciation for Learning as Interaction

While we cannot make any definitive claims, based on our qualitative analysis that revealed disparities in student acquisition of anthropological concepts in the two course formats, with more effective learning in the FtF course, we hypothesize that aspects of the interaction environment may be a critical consideration in explaining these differences. In the online course, while we saw evidence for some interactive trends in online discussion threads, these typically occurred among a small sub-group of students in the course—often the same people each time—while others in the course did not participate in these threads and thus were relatively isolated from the larger learning community. The online environment may be more marked by the way it relies extensively on solitary reading and writing and only minimally by engagement with others through asynchronous discussion threads. While there is evidence that students do experience changes in perspective that reflect acquisition of anthropological ideas, in an online course with significant asynchronous work, the ability of students to communicate in real time, push back against each other, and negotiate meaning with any sense of urgency is severely hampered. A student might create a post and not get a response for days (if at all), at which point the idea might no longer be salient. As a result, the entire participation frame shifts. Students in the online course approach it as a series of tasks to get done.

While the lack of observational data for the FtF course means we cannot make any absolute claims about the FtF interaction environment, we hypothesize that FtF courses may be richer in interaction opportunities because they offer multiple channels/avenues for engagement and participation that in turn can support more of a "learning community" where opportunities for the co-construction of knowledge can emerge.[10] In the FtF format there may be potentially greater cross-pollination of ideas, and more back-and-forth that gets students to think and learn *with* each other. Frequent references to class discussion in student writing suggests that learning also may be more iterative and cyclical in the face-to-face format, with students revisiting and thinking more deeply about anthropological ideas and concepts. In this sense the interaction environment may be characterized by those features that have been identified as significant in anthropological studies of learning: strong social

---

[10] It is true that sometimes similar things happen in FtF courses as well, as some students always participate in discussions and others do not. One could argue, however, that even if they do not actively partake in discussions, they are still listening and observing and are thus still a part of a learning community.

community membership, observation as a key modality of interaction, modelling/scaffolding of performance, and multimodal sensory involvement.

We must also consider how the instructor is able to engage in each course format. In a FtF course, the instructor is able to engage directly in the conversation in order to redirect conversations that stray off topic, clarify concepts with deeper explanations or examples, answer questions, and correct misunderstandings as they come up. All of these moves can be made easily in a FtF discussion and reach all students simultaneously. Not so online, where a misconception or misinterpretation might propagate within student discussion threads before the instructor is able to respond. And even if a clarifying response is made, there is no guarantee that students will return to the online forum to read and take in such corrections and clarifications. Further, our analysis reveals an important as yet under-theorized role for expressions of positive affect and its role in structuring and shaping discourse in the online course environment. The obligatory affirmation of others' ideas was quite marked in this context and unlikely to occur in an in-person setting to the same extent. In the online environment, this could produce both artificial convergence in student thinking as well as preclude development of further reflection or deeper interpretations.

Certainly, in face-to-face settings, the embodied habitus of "being in a classroom" may be quite different from the nature of embodied experience and participation in a virtual environment. This suggests that, from the perspective of an anthropology of learning, there may be an important role for bodily experience and the ways in which attention is shaped through each modality. The participation structure of online activities and tasks presents learners with a different set of tools and goals, perhaps, than the in-person classroom, as well as different modalities of bodily engagement. Is attending to text or images on a screen different from attending to discourse in a room full of people? How does each setting cultivate the "response-ability" that Ingold (2017) identifies with learning?

Because our work is limited to a single longitudinal case with limited data, our themes and hypotheses may not extend to the teaching and learning of anthropology more generally. However, the questions we have raised here have many implications for teaching within the discipline, given the increasing popularity of online teaching and learning and the interest of many scholars of teaching and learning in how the landscape of online learning is impacting the experiences of both teachers and learners. We have shown that it is important to consider how students "make sense" of anthropological perspectives, especially as reflected in the discourse that they produce. Further, we have suggested that characteristics of the interaction environment may be important considerations in understanding these responses. We offer these ideas as a way forward to think about future research in the field. More attention is certainly needed to the question of the how interaction environments shape learning and, more generally, to trends in the anthropological study of learning that are relevant to the learning of anthropology. As anthropologists of learning, our concern with the ways meaning and environment are interrelated, and how people learn to expand and deepen their understandings of others and themselves, remain central to this task.

Acknowledgments

Disclosure statement
No potential conflict of interest was reported by the authors.

References

Bir, D. D. (2019). Comparison of academic performance of students in online vs traditional engineering course. European Journal of Open, Distance, and e-Learning, 22(1), 1-13. https://doi.org/10.2478/eurodl-2019-0001

Brown, N., McIlwraith, T., & González, L. T. de. (2020). *Perspectives: An Open Introduction to Cultural Anthropology, 2nd Edition.* The American Anthropological Association.

Callister, R. R., & Love, M. S. (2016). A Comparison of Learning Outcomes in Skills-Based Courses: Online Versus Face-To-Face Formats. *Decision Sciences Journal of Innovative Education,14*(2), 243–256. https://doi.org/10.1111/dsji.12093

Dendir, S. (2019). Performance differences between face-to-face and online students in economics. *Journal of Education for Business, 94*(3), 175-184. https://doi.org/10.1080/08832323.2018.1503586

Erickson, F. (1993). Transformation and school success: The politics and culture of educational achievement. In E. Jacob & C. Jordan (Eds.), *Minority education: Anthropological perspectives* (pp. 27-51). Ablex.

Erickson, F. & Espinoza (2021). The anthropology of learning: A continuing story. *Anthropology & Education Quarterly,* 52 (2), 123–134.

Horspool, A. & Lange, C. (2012). Applying the scholarship of teaching and learning: Student perceptions, behaviours and success online and face-to-face. *Assessment & Evaluation in Higher Education, 37*(1), 73-88. https://doi.org/10.1080/02602938.2010.496532

Ingold, T. (2017). *Anthropology and/as Education.* Routledge. https://doi.org/10.4324/9781315227191

Iseminger, S. I., Diatta-Holgate, H. A., & Morris, P. V. (2020). Describing students' intercultural competence after completing a cultural diversity course online or face-to-face. *Teaching and Learning Inquiry, 8*(2), 114–127. https://doi.org/10.20343/TEACHLEARNINQU.8.2.8

Kelani, Z., Doral, M., Roger Post, Y. (2021). Academic performance of face-to-face and online students in an introductory economics course and determinants of final course grades. *Online Journal of Distance Learning Administration, 24*(2). Retrieved October 22, 2021, from https://www.westga.edu/~distance/ojdla/summer242/kelani_doral_post242.html

Lave, J. (1996). Teaching, as learning, in practice. *Mind, Culture, and Activity, 3*(3), 149-164. https://doi.org/10.1207/s15327884mca0303_2

Lave, J. & Wenger, E. (1991). *Situated learning: Legitimate peripheral participation.* Cambridge University Press.

Nasir, N. S., Lee, C. D., Pea, R., & McKinney de Royston, M. (Eds.). (2020). *Handbook of the cultural foundations of learning.* Routledge. https://doi.org/10.4324/9780203774977

McGranahan, C. (2014). What is Ethnography? Teaching ethnographic sensibilities without fieldwork. *Teaching Anthropology*, 4, 23-36. https://doi.org/10.22582/ta.v4i1.421

Means, B., Toyama, Y., Murphy, R., Bakia, M., & Jones, K. (2010). *Evaluation of evidence-based practices in online learning: A meta-analysis and review of online learning studies.* U. S. Department of Education. https://www2.ed.gov/rschstat/eval/tech/evidence-based-practices/finalreport.pdf

Meyer, K. A. (2003). Face-to-face versus threaded discussions: The role of time and higher order thinking. *Journal of Asynchronous Learning Networks, 7*(3), 55-65.

Milman, N. B. (2015). Distance education. In J. D. Wright (Ed.), *International encyclopedia of the social and behavioral sciences* (2nded., pp. 567-570). Elsevier. https://doi.org/10.1016/B978-0-08-097086-8.92001-4

Mollenkopf, D., Vu, P., Crow, S., & Black, C. (2017). Does online learning deliver? A comparison of student teacher outcomes from candidates in face-to-face and online program pathways. *Online Journal of Distance Learning Administration, 20*(1). Retrieved October 22, 2021, from https://www.westga.edu/~distance/ojdla/spring201/mollenkopf_vu_crow_black201.html

Paul, J. & Jefferson, F. (2019). A comparative analysis of student performance in an online vs. face-to-face environmental science course from 2009 to 2016. *Frontiers in Computer Science, 1*, 1-9. https://doi.org/10.3389/fcomp.2019.00007

Redmond, P. (2011). From face-to-face teaching to online teaching: Pedagogical transitions. In G. Williams, P. Statham, N. Brown, & B. Cleland (Eds.), *Changing Demands, Changing Directions. Proceedings ascilite Hobart 2011* (pp.1050-1060). University of Tasmania. https://www.ascilite.org/conferences/hobart11/downloads/ProceedingsV3.pdf

Redmond, P., Abawi, L., Brown, A., & Henderson, R. (2018). An online engagement framework for higher education. *Online Learning Journal, 22*(1), 183-204.

Sussman, S. & Dutter, L. (2010). Comparing student learning outcomes in face-to-face and online course delivery. *Online Journal of Distance Learning Administration, 13*(4). Retrieved October 22, 2021, from https://www.westga.edu/~distance/ojdla/winter134/sussman_dutter134.html

Thompson, N. L., Miller, N. C., & Franz, D. P. (2013). Comparing online and face-to-face learning experiences for nontraditional students: A case study of three online teacher education candidates. *The Quarterly Review of Distance Education, 14*(4), 233-251.

Xu, D. & Jaggars, S. S. (2014). Performance gaps between online and face-to-face courses: Differences across types of students and academic subject areas. *The Journal of Higher Education, 85*(5), 633-659.