Ethical Dimensions of Virtual Collaboration: Peer Networks, Digital Technologies, and Multimodal Composing in an Online Writing Course

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Bill Hart-Davidson (2014) argued that peer networks can boost the learning potential of individuals, and he advocated "the use of peer networks, digital technologies, and multimodal composing as interventions in learning" (p. 218). Similarly, in their study about virtual collaboration in professional contexts, Linda M. Peters and Charles C. Manz (2007) noted that a virtual team's collaborative ability is only as strong as the relationships, trust, and shared understanding of the individuals who make up the team. This essay examines how the intersections and ethical dimensions of peer-to-peer learning and collaborative relationship building play out in the four-week online version of a business communication course. A major project for this course is a collaborative report and presentation based on a business-related intercultural communication scenario. Not only is the project timeframe shorter, but also the oral presentation shifts from a face-to-face classroom event to an online video presentation. Pragmatic and ethical issues become apparent in this fastpaced virtual collaboration, including accessibility, intercultural communication, time zones, trust, and workflow management. Scaffolding strategies that promote peer-to-peer networking and learning, while incorporating multiple checkpoints, can help ensure team success.

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This essay examines how the intersections and ethical dimensions of peerto-peer learning and collaborative relationship building play out in the online version of a business communication course. A major project for this course is a collaborative report and presentation based on a business-related intercultural communication scenario.

I begin with a literature review that provides a rationale for teaching virtual collaboration. Next I briefly describe the challenges of the online course and major collaborative project. Following that, I discuss the pragmatic and ethical issues that became apparent in this fast-paced virtual collaboration, including accessibility, intercultural communication, time zones, trust, and workflow management. I then describe scaffolding strategies that promote peer-to-peer networking and learning, while incorporating multiple checkpoints, to help ensure team success. Finally, I offer some insights about teaching virtual collaboration based on student feedback and my own observations.

Preparing Students for a Distributed Workplace

Students already know that teams work best when team members trust each other and have a shared understanding. They may expect that, in the work-place, trusting relationships will develop naturally and be ongoing; however, Marie C. Paretti, Lisa D. McNair, and Lissa Holloway-Attaway (2007) argued that the rise of distributed work means that teams are not usually stable or long-term, but rather "flexible communities of practice, formed in response to specific needs and dissolved once the goals have been achieved" (p. 328). For short-term class projects, intentional social interactions are critical to cultivating good working relationships. Even if an ongoing friendship is not the goal, students must learn how to adapt to short-term collaborations by getting to know their teammates.

Students often have naïve beliefs about the workplace that need to be challenged. Paretti et al. (2007) observed that students assume the roles and purposes of a workplace team will always be clear, which they suggested presents a learning opportunity for developing "the communication skills needed to identify or establish such roles in the absence of structure" (p. 347). Yet the opportunity to work on a less-structured project is often met with resistance from students who want a clear, linear path to success. In a study of two online courses using Google Docs, Brad Mehlenbacher, Ashley Rose Kelly, Christopher Kampe, and Meagan Kittle Autrey (2018) found that students tended to defer to instructor authority; for example, rather than carefully consider a suggestion for revision they would "merely accept the suggestion because the instructor had made it" (p. 209). In addition, Mehlenbacher et al. (2018) noted that too much instructor presence in the team's document, however well intentioned, was a constraining presence: "If instructors are to work strategically with students in collaborative environments, and if their aim is to teach students how to work in these spaces, they must paradoxically resist the temptation to tell them what to do" (p. 214). Of course, this requires a willingness to allow students to become frustrated and to work through those frustrations, even as they cling to the notion that instructor feedback on drafts should be algorithms for an A.

Students learn by doing together. Hart-Davidson (2014) noted, "Within peer networks, there is a dynamic that arises from the rich set of resources each individual learner has to draw upon that boosts the learning potential and the performance level—of each individual" (p. 213). Part of that doing together involves choosing and using technology effectively, which means evaluating technology based on the needs of the project, rather than a desire to try out a fancy new application. Sajda Qureshi and Ilze Zigurs (2001) noted case studies of corporate environments that suggest successful virtual collaboration is not so much about the sophistication of the technologies used, but rather on how those tools are used.

Finally, students become aware of cultural values and habits when they work with students from other cultures. Even student groups that appear homogenous on the surface may not be, which can become a source of conflict and a learning opportunity. Xusen Cheng, Shixuan Fu, Jianshan Sun, Yajing Han, Jia Shen, and Alex Zarifis (2016) found that, during virtual collaboration, "language, values (e.g. attitude, perception) and habitual behaviors" (p. 274) affected trust between multicultural groups and homogeneous groups. Students need to become aware of these potential differences, so that they are consciously thinking about what may be driving behaviors—including their own—rather than simply reacting.

Managing Challenges of the Short-Term Online Writing Course

Whether delivered face-to-face or online, Professional Communication for Business fulfills the advanced writing requirement for business majors. Four modules make up the course: Creating Digital Presence, Delivering Bad News, Facilitating Intercultural Communication, and Collaborating Virtually. All modules require digital and multimodal composition, and, except for the first module, all modules include a collaborative component: The Delivering Bad News and Collaborating Virtually modules require teams of two to three, and the Intercultural Communication module requires teams of three to five.

Like the face-to-face sections, the online section is hosted on Canvas, although with a different master course template to align the activities with the fully online format and the schedule with the university's four-week winter intersession, which runs immediately prior to the spring semester. The course also runs in four-week sections during the two summer sessions. Since fall semester 2017, I have taught 12 face-to-face sections of the course, and I taught the online version for the first time during the 2018-19 winter intersession and first summer session.

The focus of this article is the summer session and my strategies for managing the challenges of a short-term online writing course. The business students typically range from sophomore to senior and include domestic and international students. All are full-time students of traditional college age. Students taking the four-week online course are usually trying to graduate early or catch up to graduate on time. All are capable students and most are highly motivated. In this particular session, two students were taking the course from China; four were taking the course from states other than Ohio; and 11 were taking the course from either the Cincinnati or Cleveland metropolitan area. Some of the students were acquainted with other students in the class.

Weekly synchronous meetings through WebEx were required for the first three weeks of class. The operating assumption was that students would be available for a wide range of hours; however, scheduling meetings proved to be a time-consuming, frustrating task—and not just because of the multiple time zones. Although students were advised to do nothing else but focus on the class, some were working at jobs or internships, trying to complete coursework while traveling, or taking more than one course. With only 17 students, I still had to schedule three meetings per week, two of those in the evening, and I was unable to get a consistent commitment to establish regular meeting times each week.

The Intercultural Communication module for the online format was compressed from six weeks to 11 days (weekends included) to accommodate the four-week schedule. Teams and topics were assigned before the first day of the project, and the deliverables were a written report and a video presentation. Although the format of the written report did not change for the online course, the oral presentation shifted from a face-to-face classroom event to an online video presentation. Each student created a video of themselves presenting their section, and all video files were edited into one presentation by a member of the team.

The project required that teams research a topic on cultural identity, with the understanding that identities can intersect. Topics included age, disability, gender, sexual orientation, race, ethnicity, region, and nation. Students also looked at corporate culture; for example, companies with very different corporate cultures may be considering a merger; departments within an institution may have conflicting cultures; or a company may find itself at odds with local community stakeholders. The next step was to create a scenario, i.e., a business context in which conflicting cultural identities and values are creating misunderstandings. Once the scenario was approved, the team further focused its research on addressing that scenario. Working as either internal or external consultants, their task was to make a recommendation to present to executives.

All students in the online format had some experience with virtual collaboration by the time the Intercultural Communication module was launched. They were already familiar with digital platforms, such as Google Docs, and the preceding project also required partner teams to collaborate virtually.

Forming and Facilitating Virtual Peer Networks

What became immediately apparent to me was the need to be sensitive to how virtual teams were formed, and the brevity of the course heightened that concern. When teaching online technical writing courses during the regular semester (the business communication course is not offered online during the regular semester), I have found it helpful to organize teams based on current grades and engagement in the course. That strategy allows me to give some teams more autonomy and others more attention; however, during the regular semester, all or most online students are on campus, providing opportunities to hybridize the virtual collaboration with some face-to-face team meetings and face-to-face team conferences with me. For four-week and six-week online courses, I have had to consider the challenges of geographic distance, multiple time zones, and issues of technology access (especially for students taking the course from China). In addition, I have had to consider that, no matter how much "presence" I maintain in the course, my ability to observe and supervise team dynamics is constrained. I have to be ready for the possible and the unpredictable. For example, I try to balance teams by gender, race, and nationality as much as possible, but "balance" is not always possible, and also some student identities may not be obvious or disclosed. Sometimes personalities mesh better or worse than expected. Sometimes students experience events outside of the course that interfere with their ability to engage with the project and their team. Forming teams is already difficult in face-to-face courses that offer time for the instructor to get to know students better and for students to get to know each other better; forming virtual teams in short-term online courses requires faster decision-making with less information.

Before assigning teams, I asked students to email me with teammate requests, requiring them to work out agreements with potential teammates before doing so. Likewise, I considered requests from students who did not want to work with particular peers, which were usually due to interpersonal issues from the previous collaborative project. Some students requested to Evans

continue working with peers with whom they had already established good working relationships. I did not make any announcements to the class about specific requests; I simply assigned students to four teams once the due dates for requests had passed. As much as possible, I assigned teams based on geography and time zones, to avoid adding another layer of difficulty to an already difficult task. Although two international students taking the course from the U.S. did work with domestic students, three international students worked on a team together, which allowed them to share language and familiar social media applications, even though they were not all located in the same region or time zone. Some students located in the same metropolitan areas took advantage of the opportunity to meet in person, allowing them to hybridize their virtual collaboration. I tried to make the teams as balanced as possible, but my primary goal was to alleviate as many complications as possible, given the context of the compressed assignment.

The teams requested their top two picks for a topic, based on a provided list. Once topics were assigned they were on their own, but with support and timeframes for checking in with me. I encouraged teams to delegate tasks based on expertise and interests. With such a short time frame for completion, I allowed for prior knowledge, comfort level, and risk tolerance to dictate their decisions. I did provide opportunities to test new platforms and encouraged them to find work-arounds when they encountered challenges. At the same time, I was transparent about the benefits and drawbacks of technologies, allowing them to make some decisions about how they used those technologies, especially in their interactions with me. For example, I avoided surveillance mode by allowing students to decide when and whether I would get editing access to their Google Docs. They could wait until drafts were due to allow me access and then remove access after I provided feedback. Another option was to use Google Docs for drafting and to turn in PDFs or Word documents of their drafts.

Scaffolding a Short-Term Virtual Collaboration

Some of the scaffolding for the assignment happened in the course leading up to the intercultural communication project. For example, written and video introductions at the beginning of the semester helped students get to know each other, and allowed me to see whether they could successfully create and post videos. Full-class peer response to digital professional branding materials gave students more opportunities to get to know one another.

At the start of the assignment, students read about intercultural communication and contributed to a discussion about aspects of their own identities they were willing to share. This activity provided insights to me as well as to their classmates: For example, international students were keenly conscious of their identity as "international" in the U.S., but also noted how that identity disappeared once they were back in their home country. Just as noteworthy were revelations of some domestic students whose immigrant, first-generation, or lower socio-economic identities complicated stereotypes of our students as the privileged white middle- and upper-class. Many students found the university itself as a site that influenced their developing identities, as they were being exposed to people and ideas very different from those back home.

Another reading about collaboration was followed by a discussion prompt asking students to describe their best and worst team experiences in college and why they believe those experiences played out the way they did. These discussions helped students to reflect on past experiences as preparation for their next team project, and they were also another resource for students to get to know each other as potential or assigned teammates.

Each team was assigned a different intercultural communication topic. Requiring substantial peer response and discussion was a strategy to ensure all students were exposed to a wider view of intercultural communication. Once teams were assigned, I encouraged social interaction prior to starting the project (in person or through video conference). I emphasized the need for empathy and etiquette, for example, not directly editing the work of teammates, but adding a comment to suggest, ask questions, or signal need for discussion in real time. At the same time, I encouraged them to look at the project as a joint effort that everyone should have a voice in, rather than individual parts to sew together at the end. I also emphasized the importance of being willing to give and accept feedback, preferably by talking through and negotiating changes, in real time, if possible. Students were required to create a team agreement and plan of action (formal or informal), which included choices of technology for communicating and composing, in addition to schedules for maintaining regular contact and writing together. These were exactly the kinds of agreements and plans an instructor cannot monitor, so the project included multiple checkpoints for peer and instructor feedback. The schedule ran as follows:

> Day 1: Reading and discussion on intercultural communication and personal identity

Day 2: Team project work

Day 3: Reading and discussion on collaboration; team scenario proposal; annotated bibliography

Day 4: Small rough drafts incorporating sources (sections written by individual students)

Day 5: Written report outline Day 6: Rough draft of full report Day 7: Rough draft of slides for video presentation Day 8: Final video presentation Day 9: Team project work Day 10: Team project work Day 11: Final written report; reflective memo; self and peer evaluation

My feedback on drafts had to be explicit with fast turnaround, so that students could keep the project moving. A team member would contact me by email to clarify feedback or to ask for additional feedback; these interactions also had to proceed quickly.

Following the assignment, students evaluated themselves and their peers using the "Peer Evaluation Form for Group Work" (See Appendix). One anecdotal observation I have about using this form multiple times, in both face-toface and online courses, is that the least-engaged team member tends to give all members high scores; however, they are usually contradicted by more consistent scores provided by their peers. The most unified teams also tend to rate members highly; teams with divisions tend to rate members based on those divisions; and some students provide scores that indicate they are oblivious to their own reputation on the team or to the work that particular peers have contributed. In other words, the numerical evaluations are generally more helpful as an indication of team dynamics, rather than as a grading suggestion.

More interesting, in terms of what students may have learned, are the responses to three questions below the rating scale, especially "What did you learn about working in a group from this project that you will carry into your next group experience?" The following is a summary of how students responded to that question:

- A clear understanding of tasks and division of labor prevents confusion and misunderstanding.
- Human interaction creates connection: A mix of in-person and virtual communication is ideal.
- Communication is everything: Stay in touch, stay on schedule, be willing to discuss, share ideas, and accept feedback.
- Attitude is key: Get everyone on the same page and cooperate with each other.

• Be comfortable with communication technologies.

Most team conflicts tended to be about misunderstandings over who was doing what and differing definitions of what constituted a timely response to group chat messages. One team had conflict over leadership, leading one student to reflect honestly about the desire to be always in charge versus the need sometimes to take direction.

In addition to the team evaluation, students were assigned a final reflection to self-evaluate in more detail their own understanding of and performance in collaborative team report writing and presenting. The online course format complicated those tasks with virtual collaboration, digital presentations, and compressed timeframes for delivery. Although the reflective prompts did not address intercultural communication specifically, some clues about student insights did emerge:

Virtual collaboration can shift some individuals' identities, depending on their confidence presenting themselves through digital technologies; i.e., some students felt more passive and less confident than they typically would be in face-to-face groups, while others were surprised to be in an unfamiliar leadership role.

- Distance can increase the risk of misunderstanding, even among colleagues who speak the same language, come from the same culture, and use the same familiar software platforms.
- Attempts to define and understand other cultures can lead to more stereotyping.
- Successful working relationships depend on understanding and respecting different perspectives and building trust among team members.
- Developing skills in virtual collaboration is necessary and valuable, even if face-to-face interactions would be preferable.

On Day 1 of the semester's final collaborative project—a produced video focused on best practices for collaborating virtually—students were assigned to read "Making Virtual Teams Work: Ten Basic Principles" (Michael D. Watkins, 2013). I asked them to discuss the principle that resonated most with them, based on their team experience in the intercultural communication unit. Nine out of 17 students chose "Clarify tasks and processes, not just roles and goals." Out of curiosity, I went back to my winter session results for the same question, and discovered that 10 out of 20 in that section chose the same basic principle. Students, it would seem, do not want to discuss nebulous concepts; they want to break down the project into identifiable tasks and deliverables that can be assigned to trusted teammates. Evans

Conclusion: Instructor Insights

An interesting observation, one I have noted repeatedly over the past two years teaching the business communication course, both face-to-face and online, is that negotiating relationships on the larger team project is stressful for students. For the final collaborative project, students tend to retreat back to familiar—often "homogeneous"—partners or perhaps the one team member they connected with in the larger project. On the one hand, this highlights the need for students to reflect on their own trustworthiness and their own ability to connect with others, especially those from other cultures; on the other hand, it emphasizes the importance of learning how to develop trust and strong relationships on collaborative teams.

The following are some suggestions instructors can use to help nurture that process of building trust:

- Provide opportunities for students to get to know one another early in the semester and to give each other feedback on their work.
- Consider the demographics and context of a particular course section when assigning teams and topics.
- Make clear the purpose of the assignment and outline the tasks to accomplish the assignment.
- Balance team grades with individual grades on various components of the project.
- Provide students some room to play and fail in their digital communicating and composing processes without serious penalty.
- Establish instructor presence by being responsive, and supportive, while also finding unobtrusive ways to monitor progress and resolve conflicts.

A certain amount of conflict and confusion is part of the process of any collaboration—and not a sign of failure, even if it feels that way sometimes for students or for the instructor. Of course, reflection is an ethical dimension of virtual collaboration, and students—and instructors—often do not realize how much they have learned until they look back at how far they have come.

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Appendix: Peer Evaluation Form for Group Work

Your name _

Write the name of each of your group members in a separate column. For each person, indicate the extent to which you agree with the statement on the left, using a scale of 1-4 (1=strongly disagree; 2=disagree; 3=agree; 4=strongly agree). Total the numbers in each column.

Evaluation Criteria	Group member:	Group member:	Group member:
Attends group meetings regularly and arrives on time.			
Contributes meaningfully to group discussions.			
Completes group assign- ments on time.			
Prepares work in a quality manner.			
Demonstrates a cooperative and supportive attitude.			
Contributes significantly to the success of the project.			
TOTALS			

Evans

Feedback on team dynamics:

- 1. How effectively did your group work?
- 2. Were the behaviors of any of your team members particularly valuable or detrimental to the team? Explain.
- 3. What did you learn about working in a group from this project that you will carry into your next group experience?

Adapted from a peer evaluation form developed at Johns Hopkins University (October, 2006). The author of the adapted form is unknown, but it is still searchable by its title.