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FROM PEER REVIEW TO PEER CONFERENCE: INCREASING COLLABORATION IN ASYNCHRONOUS AND SYNCHRONOUS COMPUTER-MEDIATED MODES IN A TECHNICAL AND PROFESSIONAL COMMUNICATION CLASS

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ABSTRACT

The purpose of this study was to investigate the influence of different modes of peer review on students' interactions through a mixed-methods case study. The researcher recruited six students and conducted three peer review sessions in the asynchronous anonymous, asynchronous identifiable, and synchronous mode. The data sources were student pre- and post-peer review drafts, peer review comments, and the researcher's observations of student interactions. The data analysis included transcribing, coding, enumeration, classification, ethnographic analysis, and comparison.

The data analysis showed that tension in peer review interactions that might have caused dissatisfaction in students could be reduced if students performed more collaboratively. The renaming of peer review as peer conferencing presupposes peers using mindful wording in the form of questions or opinions rather than commands, effective use of marginal space in Google Docs, and productive exchange of ideas in Zoom. Recommendations for conducting collaborative peer conferences in writing classes are provided.

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Introduction

As I started delving deeper into the scholarship on peer review, I realized what a complex endeavor it is. The "founder" of peer review in writing classes, Peter Elbow (1973), meant this activity for "a committed group of people" (p. 78) of no more than twelve. In this case, it is possible to create an atmosphere of intimacy and support that will allow students to indulge in mutually enriching learning experiences. However, with our realities where first-year writing classes are mandatory, which automatically causes rejection in a certain portion of students, and with the class sizes being around 20 students at best, peer review that will satisfy everyone seems a hardly attainable goal. Still, as flexibility is one of the essential skills of a teacher, it is our challenge to create the most effective conditions for conducting peer review. Even if we can never organize a peer review paradise within the teacherless writing class proclaimed by Peter Elbow, at least we can try our best to approach it and relieve student disappointment at least partially. And this is the goal of the case study below.

Moreover, another student's vision was, "I do believe some papers aren't meant for peer review, such as opinionated papers or a personal experience paper." From these comments, I saw the dissatisfaction with the peer review organization and the anxiety that prevented the student from gaining benefits from class peer review. Though some students wrote positively about the way I conducted peer review in my classes, frustrating accounts like these made me think about improving my current peer review practices.

Peer review became the focus of my current research as soon as I started teaching writing at the University of New Mexico because group activities have never been a strong side of my home country's educational system. The very nature of this activity and

its multiple forms and options engaged me to such an extent that I started experimenting and conducting peer reviews differently each time. Besides, during my first semester of teaching writing, I immediately ran a pilot survey on student attitudes to peer review, and, with many students, the results were discouraging. For example, a student wrote, "I feel peer review is not helpful. It is a waste of time. I feel uncomfortable. I feel as if class mates will judge me for what I write. I feel upset. The classmates do not provide enough help. I feel uncomfortable because classmates do not respect what I write."

This Study

My dissertation consists of six chapters. Chapter 1, the literature review, focuses on the main findings on the topic of peer review in first-year composition classes both in the face-to-face and virtual environment and approaches to more collaborative peer review. The literature review revolves around common themes within the peer review research, emphasizing computer-mediated versus traditional peer review. Besides, a separate section will be devoted to theoretical frameworks that will guide my research. Finally, I will explain what scholarship affected my pedagogical solutions on the peer review design that I applied to this study.

Chapter 2 describes the research design and methodology where I describe the research context (at the university and class level), participants of the study, data sources (initial drafts, peer-reviewed drafts, final drafts, video-recordings), procedures (peer review sessions), and data analysis (comparison of drafts, calculation of categories and concepts, coding of idea units), and how these elements illustrate a more collaborative approach to peer review. Also, within each peer review stance, I describe the taxonomy of types of comments that I derived based on the peer review discourse produced by the

study participants. I analyze the distribution of stances across peer review modes in this study and provide examples of each type of comment I came across through analyzing student peer review communication.

Chapters 3, and 4 focus on non-face-to-face computer-mediated peer reviews (through Google Docs), and Chapter 5 is devoted to face-to-face computer-mediated peer review (through Zoom). In all those chapters, firstly, I provide an overview of peer review sessions by thoroughly analyzing the composition of student groups, the circumstances under which peer review sessions took place, and peer review group interaction (the manner and general flow of commenting). Secondly, I analyze the occurrence of peer review stances and use them as a paradigm to analyze student peer review collaboration. Thirdly, I share my insights on other factors that need attention in terms of further improvement of the design of the collaborative peer review activity.

Chapter 6 ties my findings to those of other scholars and provides recommendations for the optimal organization of collaborative peer review in writing classes based on such aspects as peer review design and peer review training.

Chapter 1: Peer Review in Composition Scholarship

Peer review as a collaborative class activity entered writing classes long ago when Peter Elbow (1973) formulated his understanding of the teacher-less classroom, and Donald Murray (1978) developed his ideas about empowering students in the classroom. Without naming the term "peer review," Elbow gave a good reason for conducting this activity in class: in his vision, a teacher is not a typical audience, and they only give feedback on writing improvement but do not tell what they actually experienced while reading the paper. In turn, peers can be the real audience if they "concentrate on telling you how they experienced it and not try to tell you how to fix it" (p. 81), so the writer could decide later how to improve the paper. Since that time, peer review has been widely applied in various forms within diverse educational settings and disciplines and pursued a variety of goals: providing feedback, improving draft quality, identifying effective writing, developing peer trust, and so on (Stewart, 2019).

Different theories—from psychological to socio-political—have been used to formulate multiple research questions and conduct research to explore and provide recommendations on a better application of peer review. Recently, the topicality of peer review became even more prominent when educators started looking for new forms of teaching under the conditions of COVID-19 lockdown and found that the increase of writing assignments could be an effective way out in courses that suddenly became remote but where writing had not been that common before. However, more writing assignments mean more feedback, and that is where peer review becomes as handy as never before (Reynolds, Cai, Choi, Faller, Hu, Kozhumam, & Vohra, 2020).

The topic of this study is the *collaborative* peer review, which may sound redundant at a glance because it may seem that peer review presupposing two participants at minimum is collaborative by default. However, very often peer feedback is provided in the course of one-way communication when the dialogue between participants is not expected or is not possible due to the peer review design (for instance, with currently popular Eli Review). On the contrary, a truly collaborative peer review[1] activity presupposes an *exchange* of ideas between a reviewer and an author, for example, initial feedback – the author's questions – the reviewers explanations and clarifications – the author's response – the reviewers appeal to own experiences – the author's reaction, etc. Given that peer review as a class activity is often accompanied by stress and dissatisfaction in students, my hypothesis is that true collaboration as described above may be a solution to those issues. If students are trained to perceive peer review as a *dialogue* rather than a mere provision of feedback and understand how to hold this dialogue, there will be much more rapport in peer review groups that will lead to better understanding of the goals and benefits of the peer review activity in students.

I have divided my review of the scholarship on peer review into two major sections: peer review in the face-to-face mode and peer review in the computer-mediated mode. Each section will encompass peer review research for an L1 context (where students' first language is English from early childhood), an L2 context (where students' first language is other than English and English was learned much later), and a mixed

[1] Though the term "collaborative peer review" is not new, different interpretations of it can be found in scholarship and definitions are rarely given. For example, Getchell and Gonso (2019) suggest that engaging students in preliminary reflective activities on peer review will allow students to understand the role and goals of the activity better; thus, this improved understanding will make class peer review collaborative.

context (where the setting includes both L1 and L2 students in the same class.) The literature under discussion will include not only the scholarship on composition but also from other disciplines. The section on face-to-face peer review will cover such aspects as the origin of this kind of classwork in U.S. writing classes; student attitudes to peer review; student stances, or language functions used while providing or receiving feedback; student peer review training; and issues of power in mixed peer review groups.

The section on computer-mediated peer review will encompass the following aspects: the origin of computer-mediated peer review and the first cases of its mention in composition scholarship, power issues in peer review groups, student attitudes to different review modes, and the factor of anonymity, a comparison of computer-mediated peer review with face-to-face peer review (e.g., such as the effect of each on the quality of final drafts), the advantages of computer-mediated peer review over face-to-face, discourse (differences in feedback content with each mode).

Finally, I will analyze theoretical frameworks that have helped me study peer review from multiple perspectives and provide examples of studies that incorporate these theories. Besides, I will explore the basic recommendations scholars give on the proper organization and realization of peer review and identify the research gaps in the sphere of peer review. At the end, I will explain the influence of scholarship on the peer review design in my class.

Literature Review

Face-to-face Peer Review

Peer review initially gained popularity since this activity can help reduce an instructor's workload (Elbow, 1973) and because it resembles academic discourse

(Bruffee, 1984) where collaboration is highly values, thus making the peer review activity highly important for the design of a writing class. During the pre-computer era, face-to-face peer review was the only setting available, and, therefore, oral in-class peer review seemed more than natural and appropriate for different learning contexts (DiPardo & Freedman, 1988; Gere, 1987; Gere & Stevens, 1987; Hawkins, 1976; Hu & Lam, 2010; Murau, 1993; Spigelman, 2000; Tigchelaar, 2016). Thom Hawkins (1976), one of the first proponents of face-to-face peer review, described his experience with using peer criticism, or the "Writer's Workshop" (p. 641), a model organically interwoven into general group work for the L1 class. He emphasized the importance of oral response: "Spoken feedback is the spine of the workshop, the real work of the hour" (p. 641), implying the advantage of oral feedback over written. Within that stance, scholars have extensively scrutinized oral peer review, and the research on oral peer review has focused on student attitudes toward different aspects of peer review, student behavior (stances and language functions), training of students to help them become more effective collaborators, and power issues in mixed peer review groups.

Regarding student attitudes toward peer review, Murau (1993) found that even graduate students may experience anxiety—even if the writing workshop they participate in is voluntary —with L2 students feeling more anxiety than L1 students and suggested conducting a survey among students before deciding to implement peer review into the course design. Murau's results were confirmed by Braine's (1996) study, where questionnaire results showed that the environment in mainstream classes (classes that primarily house L1 U.S. residents) is uncomfortable for most L2 students. To help alleviate L2 students' anxiety, Braine proposed placing them in separate L2-only first-

year composition classes, and Chamcharatsri (2017) suggested that L2 students can be offered to provide feedback to one another in their first language, which, according to students' accounts, raised their confidence in both peer review and their writing proficiency. Another problematic point in students' attitudes toward peer review is their skepticism towards peers' language proficiency to provide feedback. L2 students perceive peer review skeptically due to their distrust in their peers' advice, which originates from their lack of confidence in their language skills (Mangelsdorf, 1992; Morgan, Fuisting, & White, 2014). This distrust becomes deeper if students, in fact, receive low-quality feedback from peers and decide that this activity does not suit them, especially if they evaluate their own input in peers' papers as significant (Fan & Xu, 2020).

Other factors affecting student attitudes toward peer review were singled out by Burnett (1994) in her research based on miscellaneous L1 high school and university settings: rhetorical awareness, self-image, motivation, responsibility, and receptiveness to planning and collaboration. The study on L1 student attitudes by Brammer and Rees (2007) touched upon the correlation between the perceived value of peer review across disciplines by students and writing faculty, its actual use and frequency, student self-confidence, and preliminary instruction. One of the authors' conclusions was that the more assignments are peer-reviewed in a class, the higher the perceived value of this activity is. Besides, Brammer and Rees found that even though some students considered peer review not very helpful, all agreed that it should be required (not necessarily in the in-class mode). In sum, the research shows that, in the case of L2 students, the main stumbling block of their negative attitudes toward peer review is their lack of confidence in their own language skills and the resulting anxiety they then feel. In turn, with L1

students, there are other factors, such as their lack of confidence in their peers' proficiency to provide feedback and their attitude toward the class.

To understand the rationale behind student attitudes and the perceived value of peer review, the peer review studies needed to see “how students actually respond to each other” (Mangelsdorf & Schlumberger, 1992, p. 235) as they review their classmates’ papers. For this reason, the topic of student language behavior, or peer review stances, students demonstrate during peer review emerged. The topic of peer review stances is considered crucial in terms of more effective modeling of peer review instruction and activities (Burnett, 1994; Mangelsdorf & Schlumberger, 1992; Lockhart & Ng, 1995; Zhu & Mitchell, 2012).

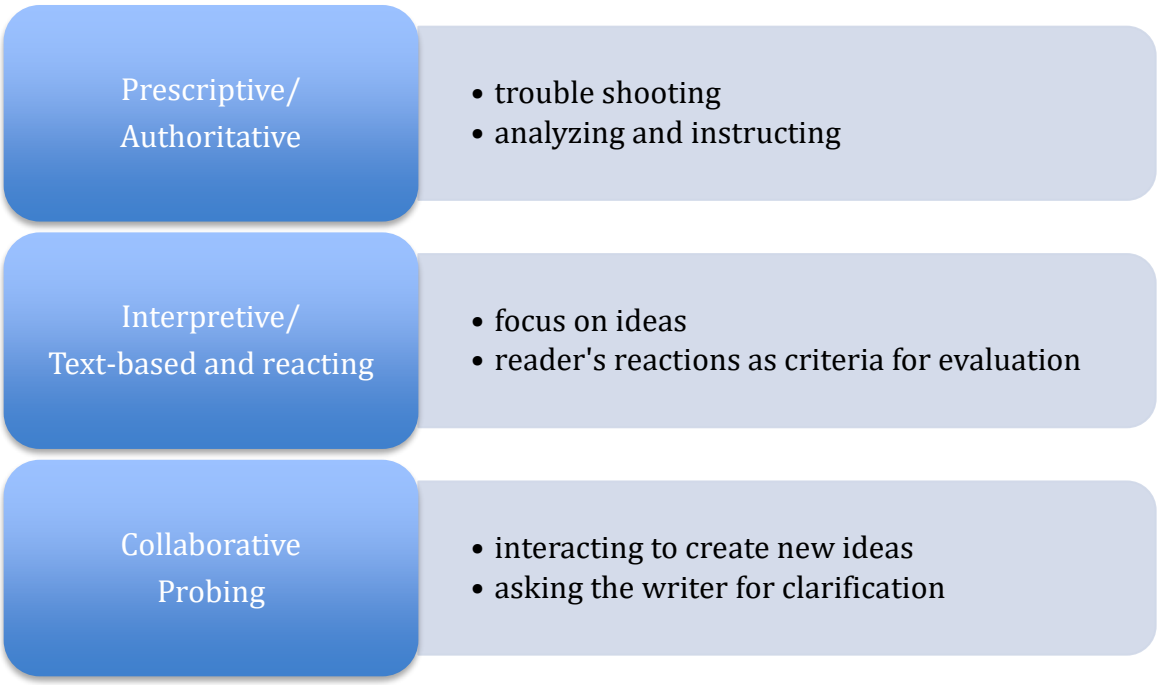
The assumption behind the topic of stances was that, if to study existing verbal peer review practices, more effective student interactions leading to "a fuller understanding of the writing process" (Lockhart & Ng, 1995, p. 606) could be modeled by the instructor. In particular, Burnett (1994) found that student readers, regardless of their first language, used the following stances, or "verbal moves"[2] (p. 68): prompting, contributing, challenging, and directing. Mangelsdorf and Schlumberger (1992) discerned three "stances" (or approaches) to providing feedback by L2 students: "prescriptive, " as chosen by the majority of students (for example, "stick to the prompt"); "interpretive" (where students impose their own ideas onto the text); and "collaborative" (students try to see the text through the author's eyes). Lockhart and Ng (1995), in their L2 research, identified four categories of reader stances—authoritative, interpretive, probing, and collaborative. Zhu and Mitchell (2012) went further and studied both the reader and

[2] In other studies, verbal moves are called language functions (Zhu, 2001) or response types (Stanley, 1992).

writer in detail through a case study of L2 students in a mixed class and found two sets of stances: 1. Reader-centered, active, eliciting (as a writer) and text-based and reacting (as a reader); 2. Responding and cooperative (as a writer) and analyzing, oriented toward applying concepts learned about writing, and instructing (as a reader) (Figure 1). Overall, the researchers mentioned above have come to the unanimous conclusion that a collaborative stance should be encouraged and taught by instructors because it is beneficial for the revisions of both writers and readers.

Figure 1

Peer Review Stances in Peer Review Scholarship



The topic of language behavior during peer review segues to the topic of teaching students how to do peer review, where the main point is that students can and should be successfully trained to adopt the necessary stance, that is, to become good collaborators. The question, then, is what does good collaboration include? Wallace (1994) found that collaborative skills consist not only of using proper language forms but also active

listening, asking for elaboration, adapting generic prompts, and occasionally directly challenging one's collaborator. Teston, Previte, and Hashlamon (2019) added to this idea by suggesting an effective paradigm, according to which evaluation rubric direct questions can be transformed into conversation starters, for example, the rubric "Does the multimodal work maintain consistency (e.g., slogans, sounds, branding, fonts, color scheme)? " turns into a challenging and elaborating question "I notice how different this part of your design is from that part of your design. Can you tell me more about why that is? " (p. 203) I assume that this strategy can be successfully applied to peer review questions and used for training, so students learn to collaborate with a more positive outcome. However, research in mixed and L2 contexts shows that any training in peer review is always beneficial for the writing process and quality of the final draft, even if it consists of just one aspect of peer review preparation, such as the provision of rubrics in the mixed classroom (Crossman & Kite, 2012); a short activity during one or two class periods in L2 classes (Min, 2005, 2006, 2008; Rollinson, 2005; Ruecker, 2014; Swain, Brooks, & Tocalli-Beller, 2002); or the training that includes multiple stages during a whole month in either a mixed or L2 class (Berg, 1999; Stanley, 1992; Zhu, 1995).

Another important topic in the area of collaboration in peer review lies in the sphere of power relations, especially with mixed student groups of both L1 and L2 students (Carson & Nelson, 1994; Cheng, 2013; Kubota, 2001; Leki, 2001; Ruecker, 2014; Sommers & Lawrence, 1992; Zhu, 2001). Research shows that mixed groups are often characterized by conflicts, both in teacher-centered activities and even more in group activities. In the context of U.S. universities, L2 students are often international students from non-English speaking countries (or countries such as India, where English

is also an official language alongside other languages) and recent U.S. residents. (The latter may be U.S. high school graduates, but their English language proficiency may still differ from that of L1 students.) However, it is non-L1 international students who experience the most pressure from their domestic L1 peers. In the accounts of Braine (1996), Leki (2001), and Ruecker (2014), L2 international students experience significant apprehension about group work with domestic students. For instance, as Braine (1996) learned from the L2 informants in his study,

> …generally the NES [native English-speaking] students did not help them or even speak to them in class and that the teacher did little to encourage communication. During peer review of papers in groups, these students felt that the NS [native speaking] students were impatient with them, and one student said that he overheard a NS student complain to the teacher about her inability to correct the numerous grammatical errors in his paper. (p. 98)

As Leki (2001) reports, an L2 student in her study also "heard negative comments from her Chinese friends about group work. They had told her that Americans did not like to work in groups with "foreigners, " and if the students were simply asked to form groups on their own, the "foreigners" tended not to be invited to join" (p. 49). Ruecker's (2014) results from more than a decade later show that little has changed in the attitude of L1 students toward their L2 classmates: for example, an international student from Japan was told by his compatriots that, based on their previous experience, "he would be an inferior member of a peer review group because he was not an "American" (p. 96). In other words, L1 students suppose themselves to be "more powerful" in comparison to L2 students and sincerely believe that L2 students are not equal to them. Such unfriendly

attitudes create quite a hostile environment for L2 users and lower the effectiveness of collaborative class activities for mixed groups.

What is interesting is that L2 students may even agree with this positioning, believing in L1 students' excellence. As an international student in Cheng's (2013) study expressed, "I thought they know everything" (p. 19). Not surprisingly, this stance is always well conveyed nonverbally and affects the behavior of L1 students towards international L2 students and contributes to the formation of a certain stereotype about the latter. In cases when international L2 students try to break this stereotype and demonstrate a sense of equality with U.S. students, such a position causes a conflict of powers, as happened with Ghanaian students in Ruecker's (2014) study. They resisted critical feedback from their American peers, claiming to be L1 English users and confident about their academic English. Perhaps the Ghanaian students were unaware that World Englishes are often regarded inferior in relation to Standardized American English.

The quantitative study by Zhu (2001) attempted to measure different aspects that constitute the power dynamics of peer review in mixed groups in a composition class. The participants of her study were placed into three peer review groups, each consisting of two to three L1 and one L2 students. Zhu traced turn-taking behaviors within the groups to determine language functions and to find similarities and differences between the comments. Her analysis of audiotapes and student drafts shows that L2 students used fewer types of functions, used the "advising" function more rarely, were interrupted more often, less often regained their turn, and provided more content-based feedback (while L1 students preferred to concentrate primarily on grammar and other text-level issues).

Based on the last finding, Zhu concluded that the L2 students' contribution to the peer review process was valuable and that instructors should support them to increase their level of participation.

Power issues have several possible explanations besides lower language proficiency among L2 students. One of them concerns the difference in understanding the notion of collaboration, or collectivism by different cultures, which determines how group work is organized and realized. If Western group work typically focuses on the individual's well-being in the end and does not exclude competition, group work among students from Asia usually favors group well-being and maintaining harmony within it (Carson & Nelson, 1994). As the primary function of peer review consists of providing a type of critique to peers, or constructive criticism, this means that often students from Asia are unwilling to critique, being scared to destroy the harmony within the collective (Cheng, 2013; Leki, 2001; Zhu, 2001). Another reason why students from Asia might have difficulties collaborating with their U.S. classmates lies in educational theories and practices. There is a perception in applied linguistics that defends the U.S. system of education by praising its critical thinking and problem-solving aspects and decrying Asian education, which is presented as "rigid, authoritarian, [and] brutal" (Kubota, 2001, p. 21). Thus, the two cultures and two educational systems are dichotomized, and Asian culture is presented as the Other, with this vision being the legacy of colonial discourse (Kubota, 2001). Not surprisingly, U.S. teachers familiar with these tendencies of U.S. pedagogical scholarship silently render these ideas in class, thus creating a negative image of students from Asia in the eyes of domestic students.

Computer-mediated Peer Review

The Internet, which started spreading worldwide during the past two decades, made online technologies available and relevant for their incorporation into traditional composition classes. Computer-mediated peer review technologies immediately gained the attention of writing programs that started using them in multiple kinds and through various platforms. This section will cover the following aspects of computer-mediated peer review: its convenience and appropriateness to the goals of writing programs in comparison with the traditional face-to-face mode and the analysis of various peer review modes (primarily, face-to-face, computer-mediated asynchronous, and computer-mediated synchronous) based on different parameters such as distribution of power, student attitudes, anonymity, content of feedback, and the final draft quality.

At the onset of its appearance among peer review techniques, computer-mediated peer review realized through asynchronous platforms such as LMS discussion boards and instant messengers (and video conferencing was very uncommon at that time) was not considered a unique phenomenon but simply a mode of traditional peer review. The first scholarly ideas about computer-mediated peer review were that this mode is convenient, as it does not require a formal classroom setting; otherwise, it was not seen as any different from face-to-face peer review (Breuch, 2004). At that time, scholars only discussed basic tips for applying computer technology to peer review, like opening two files on the screen—one with the initial text and the other with the checklist (Duin & Gorak, 1991) or highlighting problematic aspects (Palmquist & Zimmerman, 1999). Later, as educators delved deeper into the topic, they mostly agreed that this peer review mode had certain advantages over its face-to-face ancestor in terms of fostering more

profound collaboration: computer-mediated peer review allows writers to request more feedback (through emailing the document to any significant number of reviewers or inviting them to the synchronous chat) and to receive it in multiple forms, including Microsoft Word Track Changes, in-text comments, comments in the margins, comments by email or chat, audio feedback, and finally via video-conferencing (see Goldin et al., 2012). Also, computer-mediated peer review allows for mitigating the negative factors that usually accompany face-to-face contact: power issues, miscommunication, and time pressure (Hinds & Kiesler, 2002).

Moreover, multiple computer programs have been specifically developed for more effective organization of the computer-mediated peer review process: PREP Editor (Neuwirth et al., 1994), CSILE (Scardamalia & Bereiter, 1994), Praktomat (Zeller, 2000), Peer Grader / Expertiza (Gehringer, 2000), SWoRD (Cho & Schunn, 2007), and Aropa (Hamer, Kell, & Spence, 2007). Some advantages of these programs are that they have an option of the smart choice of peers based on the latters' individual characteristics, such as former grades, evaluation of the project under review, student self-assessment (Crespo García, Pardo, & Delgado Kloos, 2006). Besides, this software can automatically evaluate the quality of peer comments and formulate recommendations for revision (Cho, 2008; Ramachandran & Gehringer, 2010; Xiong, Litman, & Schunn, 2010).

The first attempt to systematically analyze computer-mediated peer review was made by Lee-Ann Kastman Breuch (2004) in her book *Virtual Peer Review: Teaching and Learning About Writing in Online Environments,* which turned out to be one of the defining texts on this topic. First, Breuch suggested that the whole writing process—writing a document, electronic exchange of written documents, and

commenting/discussion of them—can take place via computers and the Internet, and, hence, computer-mediated peer review could entirely substitute traditional peer review in the classroom at all its stages. Secondly, she thoroughly analyzed the difference between face-to-face and online peer review based on three parameters: time (real or delayed), space (location of peer review participants does not matter), and interaction (mainly text-based). She concluded that computer-mediated peer review is not just a variety of traditional peer review but a completely different activity that shapes response in its own way. Finally, she emphasized that computer-mediated peer review is even closer to the goals of writing instruction than traditional oral peer review, as it involves writing to much more an extent, thus giving students more opportunities to write and, therefore, to improve their writing.

Multiple studies also answered many exploratory questions on the topic of computer-mediated peer review, in particular, comparing three modes of peer review—face-to-face, computer-mediated asynchronous, and computer-mediated synchronous (Chang, 2012; Liu & Sadler, 2003). Several subtopics of research were singled out: student attitudes to different peer review modes (Guardado & Shi, 2007; Ho & Savignon, 2007), power issues in computer-mediated peer review groups (Jones et al., 2006; Sullivan & Pratt, 1996), discourse, or the feedback content (DiGiovanni & Nagaswami, 2001; Liou & Peng, 2009), the effect of computer-mediated peer review on the quality of final drafts (Hewett, 2000; Wang & Usaha, 2009), and the effect on drafts of the anonymous peer review and student attitudes to it (Demmans Epp, Akcayir, & Phirangee, 2019; Guardado & Shi, 2007; Lu & Bol, 2007).

The issues of power so relevant for the traditional form of peer review are also critical to trace within the computer-mediated mode. Sullivan and Pratt (1996) found that the computer-mediated mode in the study (an electronic synchronous discussion board) turned out more collaborative and had 100% participation in group discussions compared to 50% with face-to-face group discussions. That might mean that, in the computer-mediated mode, students feel less constrained by power issues caused by a teacher's natural dominance, students' own language proficiency, and other factors (for example, having a less attractive physical appearance). Without those pressures, students can interpose in the conversation more effortlessly. DiGiovanni and Nagaswami (2001) also found through their questionnaire that students feel more confident doing computer-mediated peer review. During face-to-face peer review, students might think that "I am not an English teacher," and their advice has little value. With computer-mediated conversations, the teacher might reassure them that all their electronic discussions are monitored; therefore, corrective measures will be immediately undertaken if the teacher sees an issue with a student's comment. Jones et al. (2006), who conducted their research on writing center communication between tutors and clients, obtained the same results: clients "talked" more during computer-mediated sessions.

On the contrary, the results of Guardado and Shi (2007) show a "power pattern" that differs from the one above. Japanese students noted that they felt unconfident in an online setting due to limited English language proficiency and missed the regular classroom mode that could allow them to clarify their ideas. That happened because the EFL class in that study was more focused on oral speech training than written communication; therefore, students felt "more powerful" while talking rather than

writing. This implication proves that effective collaboration is achieved through the interaction of various factors (course goals and design in this case) rather than just picking the right peer review mode.

In relation to attitudes to computer-mediated peer review, students generally prefer face-to-face mode because personal communication is highly meaningful to them (Liu & Sadler, 2003) and because they perceive peer review as primarily an oral social activity (Ho & Savignon, 2007). Also, synchronous online mode is even more appealing because, while new, it reminds students of real talk and is, therefore, more exciting (Honeycutt, 1998; Liu & Sadler, 2003; Tuzi, 2004). This stance goes against the results on draft quality, with asynchronous electronic feedback producing better revisions. However, Liu and Sadler (2003) found that at the end of the semester, the students changed their opinion and demonstrated more perceived value of asynchronous mode. In other studies, students said that their experience with computer-mediated peer review was positive despite their initial preferences for face-to-face mode (Ho & Savignon, 2007; Sullivan & Pratt, 1996). Many indicated that reviewing peers' papers online was helpful because it allowed them to review without the usual face-to-face rush in the classroom. As Mabrito (1991) concluded, ample time is incredibly convenient for students with a high level of apprehension.

Reviewer anonymity is the aspect that can only be considered only in the context of computer-mediated peer review. Research shows that anonymous mode is more helpful than identifiable one because it allows students to be more objective in their feedback without worrying about their peers' reactions (Baker, 2016; Demmans Epp, Akcayir, & Phirangee, 2019; Guardado & Shi, 2007; Lu & Bol, 2007). However, the

collaborative stage—providing clarification—was problematic because students found it awkward to ask questions to anonymous reviewers (Guardado & Shi, 2007).

Unlike Breuch (2004) who argued that computer-mediated peer review can be effectively used alone, without the face-to-face component, most scholars concur that combining computer-mediated and face-to-face peer review modes as a two-step procedure is a more effective peer review process, including an out-of-class computer-mediated step for thorough review without the rush and an in-class face-to-face step, which provides the opportunity for collaborative discussions with questioning and clarifying (Chang, 2012; Ho & Savignon, 2007; Jones et al., 2006; Liu & Sadler, 2003; Tuzi, 2004). Chang (2012) even argued that, for one writing assignment, three peer review sessions in three different modes (face-to-face and computer-mediated asynchronous for the first draft and computer-mediated synchronous for the second draft) would be even more effective than two peer review sessions in two modes.

Discourse, or feedback content, in computer-mediated (asynchronous and synchronous) and face-to-face modes differs regarding revision orientation and content level. Revision-oriented comments suggest concrete improvements, while non-revision-oriented comments are positive notes or wrong suggestions. According to multiple studies, computer-mediated asynchronous mode generally produces more revision-oriented and focused comments than the face-to-face mode (Breuch, 2004; Chang, 2012; Hewett, 2000; Honeycutt, 1998; Liou & Peng, 2009; Liu & Sadler, 2003; Wang & Usaha, 2009; Sullivan & Pratt, 1996; Tuzi, 2004). Besides, the computer-mediated asynchronous mode is characterized by the prevalence of macro-level commenting, which means expressing global ideas about the draft (such as commenting on genre and rhetorical

aspects). On the contrary, micro-level comments, i.e., comments at the word- and sentence level, are produced more in face-to-face mode. Another issue that mainly concerned the synchronous mode was the abundance of maintenance or chatting comments ("oh oh," "what happened, man?", etc.) that fulfill the function of communication supporters due to the unavailability of nonverbal channels (Jones et al., 2006; Liou & Peng, 2009; Liu & Sadler, 2003). However, after peer review training, the amount of chatting reduced significantly because students became more confident (Liou & Peng, 2009).

In relation to writing quality, which means the quality difference between first and final drafts, scholars note that quality improves with the computer-mediated asynchronous peer review mode more than with face-to-face and computer-mediated synchronous modes (Hewett, 2000; Liu & Sadler, 2003; Mabrito, 1991; Wang & Usaha, 2009; Sullivan & Pratt, 1996; Tuzi, 2004). For example, it was found that asynchronous electronic feedback led to more revisions than face-to-face talk: only 57.6 % of peer comments via face-to-face peer review were used, compared to 72.6 % of comments made via computer-mediated asynchronous peer review (Wang & Usaha, 2009). One of the possible reasons for such results is that typed feedback imposes more respect and is perceived by students as direct suggestions for improvement, while comments obtained through oral talk sound like mere recommendations (Hewett, 2000). On the other hand, Nuemann and Kopcha (2019) found that typed asynchronous feedback on Google Docs did not lead to significant revisions by their middle school participants; however, as researchers marked, this outcome might have been caused by student overall lack of revision skills. A positive moment is that Google Doc comments in that study led to

threaded discussions, which characterizes the peer review with Google Docs as a truly collaborative activity.

As for video-conferencing that will be one of the modes in this study, there is a severe lack of studies on this topic in the peer review domain. The closest field to composition studies that has used video conferencing for more than a decade was writing center pedagogy, whose scholarship mentioned using video calls for synchronous online consultations (Yergeau, Wozniak, & Vandenberg, 2008; Threadgill, 2010; Worm, 2020; Nadler, 2020). Obviously, the topic became more popular with the onset of the COVID-19 pandemic, still most research is conducted in the English as a Foreign Language context rather than in rhetoric and composition. Nevertheless, I can assume that their findings can be cautiously applied to the field of composition and technical and professional communication. Serhan (2020) marked primarily negative attitudes of students to Zoom in comparison to usual in-person mode, although students also pointed out the advantages of Zoom learning, such as flexibility, use of multimedia, group chat that allowed for asking questions easier. However, one of the caveats of Zoom and other video conferencing tools is the so-called "Zoom fatigue,"[3] which means that the same interaction time causes more exhaustion in the environment of using audio-visual technology compared to traditional interaction. Many factors increase the mental load with Zoom communication; in particular, not sharing a physical space, constant staring at multiple faces at a close distance, and reduced mobility (Bailenson, 2021). So, instructors

[3] A new concept of "Zoom fatigue" evoked appearance of a significant amount of studies not only in the field of education (e.g., Toney, Light, & Urbaczewski, 2021) but also in the field of psychology, business, and communication (e.g., Bailenson, 2021; Nesher Shoshan & Wehrt, 2022, etc.)

who intend to incorporate Zoom activities in their classes should be aware of Zoom's side effects, which will affect the activity's outcomes.

As for student behavior, Kohnke and Moorhouse, EFL professors at two Hong Kong universities, noticed that students behaved more passively "due to the lack of paralinguistic cues" during Zoom class sessions (p. 299, 2020). Like Nadler (2020), they also marked "screen fatigue" and, based on their observations, recommended making Zoom sessions shorter. On the contrary, teaching through Zoom can be engaging because it helps facilitate collaborative small group interactions, which is highly relevant to peer review. The authors conclude that students adapt quickly to learning "beyond traditional classroom" and Zoom mode has a lot of potential in second language acquisition (Kohnke & Moorhouse, p. 300).

Another research concerns changes K-12 and higher education instructors had to make to their nonverbal communication to effectively teach in Zoom mode (McArthur, 2021). Though that study did not involve students as participants, it can be assumed that students experienced similar problem. In particular, instructors reported the dilemma of making eye contact on Zoom where to make eye contact, one needs *not* to make eye contact but look in the camera. That was challenging to some instructors who were used to reading their students faces to adjust their teaching. Another inconvenience was dealing with the fact that one always has to see their own face while on Zoom, which may not be pleasant (which was probably one of the reasons while many students preferred not to turn on video while on Zoom.) These implications prove that Zoom as a peer review mode presents not only advantages for successful collaboration but also challenges that may contribute to anxiety.

Theoretical Frameworks

In this section, I will analyze theoretical frameworks that help one study peer review from multiple perspectives: the theory of collaborative learning by social-constructivist theory by Kenneth Bruffee (1984), the theory of cognitive development by Jean Piaget (1970), Activity Theory and the theory of the Zone of Proximal Development by Lev Vygotsky (1978) and Yrjö Engeström (1987, 1999, 2008), the theory of power by Michel Foucault (1990), and the theory of remediation by Jay Bolter and Richard Grusin (1999).

One of the most influential texts on peer review theory in writing belongs to Kenneth Bruffee (1984), who highlighted social interaction in peer review in terms of oral communication and in line with social constructivism—"We can think because we can talk" (p. 640)—and, in this context, expressed an idea similar to Elbow's (1973) about peers as a real audience as opposed to teachers:

> In most cases people write in business, government, and the professions mainly to inform and convince other people within the writer's own community, people whose status and assumptions approximate the writer's own. That is, the sort of writing most people do most in their everyday working lives is… "normal discourse." Normal discourse…applies to conversation within a community of knowledgeable peers. A community of knowledgeable peers is a group of people who accept, and whose work is guided by, the same paradigms and the same code of values and assumptions (p. 642).

In other words, peer review appears to be "normal discourse" in its best sense. As all students receive the same instruction and therefore are equally knowledgeable about what this or that assignment prompt expects students to do, all of them are capable of productive collaboration. They are eligible to provide feedback and should value peer feedback even more than that of their teacher, whose grading of students' texts does not represent normal discourse because of power dynamic issues. While this theory was very progressive regarding face-to-face peer review, it also inspired those scholars who were categorically against distance education because of the absence of real-life communication (Marsch & Ketterer, 2005); obviously, such a stance could emerge only because video conferencing was underdeveloped at that point.

Outside of writing studies, theories from other fields affected how peer review in writing classes can be conducted and studied. In particular, the theory of power that emerged in the sphere of philosophy can shed light on conflicts among participants that can emerge during the peer review process. Michel Foucault (1990) formulated his famous idea about "the omnipresence of power" (p. 93) that is immanent to all human manifestations and especially in human interactions. Power issues are indispensable for learning collaboration because group members constantly compete for academic and social positions (Moje & Shepardson, 1998) and go through continuous collisions of interests and motivations. The concept of power is very relevant to peer review studies where it may explain many issues in relatively homogenous groups and groups whose members are linguistically and culturally diverse. In particular, the theory of power can explain why female students are more often interrupted in peer review discussions than male students (Sommers & Lawrence, 1992). Besides, it can explain cautious student

attitudes to peer review *per se* because, "where there is power, there is resistance" (Foucault, 1990, p. 95). In other words, students are unwilling to authorize someone whose status is originally equal to theirs, such as a peer, to provide them with this feedback; however, receiving feedback from the teacher meets less resistance if at all because teacher's power is by default. Nevertheless, even if students would like to receive peer feedback, they might feel offended if this feedback turns out negative; negative feedback works as transgression.

Here the topic of training acquires new meaning through the prism of power relations. Not only is training effective because it gives necessary knowledge and skills, but it also gives students the power that before was only the teacher's prerogative. Even the mere realization that they took the training makes students more confident and more apt for peer review (Stanley, 1992). The topic of peer review stances also acquires a new angle if considered through the prism of the theory of power. Students lean to the prescriptive stance at the initial stage of their development as peer reviewers because everybody likes to exercise their power over others. Still, when students become knowledgeable about the peer review goals and procedure, their role in it, and how to behave to make it maximally beneficial, they realize that exercising power does not lead to the best results in this situation. Hence, they turn to the collaborative stance.

The theory of remediation that was developed by Jay D. Bolter and Richard Grusin (1999) came from the field of new media literacies, and its concept of immediacy versus hypermediacy is highly relevant to computer-mediated peer review in writing classrooms. By immediacy, those scholars mean immediate access to resources and contacts that make certain kinds of work (especially those that involve collaboration)

more manageable. In turn, hypermediacy is about the superfluity of resources and tools that makes a choice time-consuming; also, hypermediacy means supersaturation with information that makes it difficult to process. Nowadays, with the help of technology, we, on the one hand, can enjoy the immediacy of not being physically present towards each other, for example, through synchronous chat or video conferencing. However, the pay for immediacy is hypermediacy created by the availability of opportunities to create and recreate our texts. If, in the past, people were typing their texts on paper and could allow for only one of two rounds of revisions, nowadays, with computer typing, the revision process can last forever and does not save us time in the end.

Breuch (2004) also addressed the concept of immediacy and positioned the opportunity to request and receive any amount of feedback as an advantage. On the other hand, the writer will have to process that tremendous amount of feedback, which inevitably will lead to supersaturation. Another possible issue related to hypermediacy in computer-mediated peer review is the untold number of various devices, programs, and formats that often cause their incompatibility and, as a result, the impossibility of connecting. Technological issues may ruin a computer-mediated peer review session, causing much frustration to students and instructors (and researchers, too). Such complications should be taken into account in designing a peer review activity.

The field of psychology also significantly contributed to the field of writing studies in general and collaborative activities in particular. So, collaboration in learning communities was justified and supported by Jean Piaget (1970) through his theory of cognitive development. He asserted that external authorities, such as parents or teachers limit the learning process of students through their dominance by making the latter less

prone to defending their point of view. On the contrary, in peer interaction, the learning process is not limited by an external authority, more likely leads to the generation of knowledge that can be critiqued, developed, and reconstructed later.

Another theoretical framework that came to writing studies from the field of psychology is Activity Theory (AT) that expanded and deepened the understanding of collaboration. AT emphasized the necessity to design learning activities that are relevant to life and therefore build higher motivation in students (Engestrom, 1987, 1999, 2008; Vygotsky, 1978). Because AT will be a key theoretical framework of this study, I will expand on it more. Initially based on the ideas of Marxist philosophy (Rubinštein & Blakeley, 1987; Chaiklin, 2019), not only AT developed as a paradigm for the field of psychology but was also extensively applied in the educational context (Daniels, Edwards, Engeström, Gallagher, & Ludvigsen, 2013; Hancock & Miller, 2018; Holman, Pavlica, & Thorpe, 1997; Roth & Tobin, 2002; Russell & Schneiderheinze, 2005; Scanlon & Issroff, 2005; Yamazumi, 2021). Alexei Leont'ev, one of the principal founders of AT, broke down human behavior into three levels: activity, action, and operation, where a motive drives an activity, a goal drives an action, and conditions drive an operation (1978). These levels form a hierarchy where the entire activity system consists of an activity with its motive (which he also considered the activity's "object"); the activity is split into separate actions with their goals; and an individual performs those actions under certain conditions. The object, or motive of activity, being one of the basic concepts of Leont'ev's paradigm, answers the question of why an individual performs an activity. From Leont'ev's perspective, no activity is performed without a motive, and even

when an activity creates an impression as if there is no motive, this means that the motive is hidden (1978).

The concept of motive has been most often used in peer review studies, which helped conclude that learners' motives shape their practices in coping with learning tasks. The research showed that even though students receive the same instruction and act under the same learning conditions, they still perform the activities according to their personal motives and goals (Coughlan & Duff, 1994; Donato, 2000; Roebuck, 2000; Storch, 2004; Zhu & Mitchell, 2012; Yu & Lee, 2015). For example, Zhu and Mitchell (2012) linked students' peer responses to their motives by studying recordings of peer review sessions and transcripts of interviews with them. Two native Spanish-speaking students enrolled in a low-advanced EAP writing class demonstrated two different approaches to providing feedback that was caused by different motives. For one student, the primary motive for giving feedback was to improve the writing product, i.e., the text itself, by making it easier to understand, so she asked many questions aimed at her comprehension of the text. On the contrary, for the other student, the main motive was to improve the writing process, for which her feedback was mostly analyzing, oriented toward applying concepts learned about writing, and instructing. Zhu and Mitchell concluded that the students "were each engaged in a different activity defined by a distinct motive" (p. 379).

Another study on peer review that used the concept of motive from AT theory was devoted to analyzing two EFL students' motives for participating in the peer review process and the influence of their motives on stances, interaction, and revision (Yu & Lee, 2015). The data sources were similar to those used by Zhu and Mitchell (2012) but with stimulated recalls (students watching and commenting upon the video recordings).

Yu and Lee found that, for the first student, the motive was to participate in the peer review activity as a learner with "autonomy and agency" (p. 578). The analysis of his peer review comments showed that the student preferred the reader role (the concept of division of labor is in action), and his drafts demonstrated his high engagement with revision (one of the outcomes of the peer review activity). From the interview, the researchers found that he had a positive peer review experience from secondary school and a positive experience with small group work (on the level of the "subject").

In contrast, the second student explained that his motive was to fulfill the mandatory task. The factors that influenced such a stance were his disappointment with his secondary school teachers who failed to engage him, his lack of experience with peer review, and his negative experience with small group work. The student preferred the writer role and demonstrated low engagement with revision. Similar to the results of Zhu and Mitchell's study (2012), this study demonstrates how students reshaped the peer review tasks assigned to them by instructors based on their motives.

In addition to the importance of the concept of motive, Leont'ev emphasized the role of social context for the activity's structure, "Under whatever kind of conditions and forms human activity takes place, whatever kind of structure it assumes, it must not be considered as isolated from social relations, from the life of society" (cited in Kaptelinin, 2005, p. 9), which means that any activity is social by nature even if performed alone. The peer review process is a very illustrative example for AT as this activity is social even if students do peer review on their own (e.g., as a home assignment), and it is regulated not only by the peer review assignment prompt (teacher's influence) but also by the social environment in class or group (classmates' influence).

An essential addition to the paradigm described above was made by the Scandinavian school of AT, particularly by Yrjö Engeström (1987, 1999, 2008). Initially, Leont'ev and the Russian school of AT understood human behavior primarily through the prism of motive and social relations and focused on individual manifestations. Later, Engeström started viewing the activity system as a collective phenomenon encompassing subject, object, community, instrument, rules, division of labor, and outcome (Kaptelinin, 2005) and emphasized the interconnectedness of these components that, in the end, led to performing an activity. This level of detail is valuable because Leont'ev's theory was meant for psychological studies first and foremost, while Engeström's model was devised to apply AT principles in other disciplines. In the context of writing studies, this interpretation was supported and clarified by Kain and Wardle, who defined the activity system as "a group of people who share a common object and motive over time, as well as the wide range of tools they use together to act on that object and realize that motive" (Kain & Wardle, 2014, p. 275).

Engeström's approach also underscores the importance of understanding that the learning process is shaped by the learner's resistance to instructional intervention. However, he views resistance not as an issue or an obstacle to successful teaching and learning but as a constant source of innovation:

> In activity theory, contradictions play a central role as sources of change and development. Contradictions are not the same as problems or conflicts. Contradictions are historically accumulating structural tensions within and between activity systems. The activity system is constantly working through tensions and contradictions within and between its elements. Contradictions

> manifest themselves in disturbances and innovative solutions. In this sense, an activity system is a virtual disturbance and innovation-producing machine. (Engeström, 2008, p. 205).

In other words, according to Engeström, a teacher can and should consider students' resistance by giving them agency and allowing them to take charge of the process, thus reshaping the instructional process. The idea of resistance echoes the power theory by Foucault (1990), who states that any human interaction is filled with power issues, i.e., a collision of motivations and interests.

Another theory, developed by Vygotsky (1978), the Zone of Proximal Development (ZPD), emphasized learning from peers and was defined as follows: "distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem-solving under adult guidance or in collaboration with more capable peers" (p. 86). Not only more capable peers are a source of progress for their less capable colleagues, but also the latter are a source of progress for the former. When more successful students explain things to others, they start understanding the material better. So, learning collaboration is a process that is equally beneficial to group members with different proficiency, even if this is not obvious at a glance. Another implication of ZPD for the peer review process is that learning to fulfill the task comes from taking responsibility for the task, so ZPD of a peer also includes taking on responsibility for a peer's revision, thus pushing peers to providing high quality feedback (Litowitz, 1993; Nelson & Gruendel, 1986).

In relation to writing instruction, Activity Theory has been thoroughly analyzed by Russell (1995), who was the first to bring it into composition theory. He determined a set of defining characteristics for any activity system: 1) historical development, 2) mediation by tools, 3) dialectical structure, 4) the presence of relations of participants and tools, and 5) change through ZPDs (p. 54). These concepts are very appropriate and promising for research in composition in general and in peer review studies. So, any peer review activity system has a historical development component in itself, which means that all students in class bring their cultural past and past experience with peer review. Regardless of how detailed peer review instructions are, students' experiential baggage will definitely affect their participation in and attitude toward the peer review process, (see a study by Yu and Lee (2015) on the correlation between Chinese college student attitudes to peer review and their previous peer review experiences.)

The mediation-by-tools characteristic can be observed through the use of technologies such as the discussion board within LMS (or forums on social media platforms), audio and video recording, and Google Docs, which help the researcher keep track of different moves in computer-mediated and face-to-face peer review discussions. In addition to those apparent tools, sometimes other artifacts are referred to as tools, including languages, rules (peer review instructions in this case), communities (in the context of writing in-the-disciplines), and division of labor (e.g., writers and readers) (Lei, 2008). The next characteristic of any activity system—the dialectical structure—can help both instructors and students realize that peer review is both beneficial and traumatic due to inevitable power issues. Finally, the aspect of relations with tools means different attitudes to peer review modes by instructors and students. Those attitudes are

conditioned by both psychological comfort and pedagogical expediency in instructors and psychological comfort and the level of easiness of task fulfillment in students. Finally, the change through ZPDs means that students continuously master new skills through interaction with new tools and collaboration with classmates, which leads to academic progress and emotional maturity.

Recommendations in Scholarship on Conducting Peer Review

All scholars researching the peer review process provide recommendations as a natural takeaway from their research. Many agree that any peer review should be thoroughly organized to make it a truly collaborative activity. As Bruffee (1984) argues, "Organizing collaborative learning effectively requires doing more than throwing students together with their peers with little or no guidance or preparation" (p. 652). Apart from the necessity of student training discussed above, organization of peer review involves other aspects such as grouping students, community building in class, paper presentation, using peer review in other stages of the writing process besides revision (e.g., at the stage of brainstorming), and teacher participation in peer review. Especially, thorough organization of the peer review process is helpful to young students who might not extract their lessons from "real life" collaboration and only develop frustration and negativity concerning the peer review process.[4]

[4] However, happy stories happen when students overcome their frustration and use the negative experience to their benefit, demonstrating maturity. For example, a graduate student from Korea in Cheng's (2013) study was deeply hurt because her L1 peers discarded her contribution to the project and chose to entirely rewrite the part she had been initially in charge of. However, she later thoroughly studied both drafts – hers and the final – and concluded that her draft was indeed flawed in many aspects. She understood what had diminished the value of her work in the eyes of her L1 peers and worked hard to improve her writing. In the next semester, her participation in

Grouping of Students. Specifically, the grouping of students should be a point of careful consideration. Principally, scholars concur that the formation of peer review groups (or dyads) should be strategic and not random. Ferris and Hedgecock (2014) suggest that a group includes one strong writer, one weak writer, and one average writer or students who can otherwise benefit from another's strengths. For this purpose, preliminary collection and analysis of information, such as data from questionnaires and student works and observation during ice-breakers, would be helpful. This data is vital in relation to mixed groups whose interaction is complicated by power issues and different expectations about the peer review process (Nelson & Murphy, 1992, 1993). There is an opinion that linguistic and cultural homogeneity (unlike diversity) is a key to successful peer review collaboration (Nelson & Carson, 2006; Hu & Lam, 2010). However, other scholars have the opposite opinion—that successful peer review and revision come from collaboration between L1 and L2 students because they both have their strong sides: L1 students often provide better feedback at the sentence level, and L2 students' feedback is often more robust concerning content (Brammer & Rees, 2007; Lockhart & Ng, 1995; Mangelsdorf & Schlumberger, 1992; Nelson & Murphy, 1992.) Also, scholars propose not to shuffle groups for every peer review session but keep them intact for the whole semester (Breuch, 2004; Ferris & Hedgcock, 2014). Still, it is always possible to reorganize them at midterm or if the instructor notices a less satisfactory performance of a group in their current composition.

Community Building. Another peer review recommendation concerns the necessity of community building in class: "Students need to create a sense of shared

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collaboration was much more successful, and she even got credit for her contribution from the strongest L1 group member.

community in order to develop dialogues of trust and to build confidence in their classroom peers" (Brammer & Rees, 2007, p. 81). Moreover, a good community goes alongside good rapport, which, in turn, always beneficially affects the peer review process and the final writing product. However, good rapport is not achieved immediately after the first icebreaker (Elbow, 1973), so instructors must think through a whole set of community-building activities. Community building is essential not only for face-to-face peer review but also for computer-mediated interactions (Tannacito, 1998).

Draft Presentation. Regarding face-to-face peer review only, the question is how to present the draft to the group: either asking student reviewers to read drafts silently—during or before class—or asking student writers to read aloud to their peer groups. Peter Elbow (1973) recommended the second option because writers might notice some details they missed while writing; besides, oral presentation develops a better sense of audience: "It also means learning how they do react" (p. 83) when the writer can see the immediate reaction of the peers. Another possibility to see peers' reactions is "interpretive reading, " where a reviewer reads the work aloud (Sitko, 1993, p. 176). Reviewers focus on content and organization and pause whenever they come across the main point (in their opinion), which they summarize, and then predict what will be discussed next. Meanwhile, the writer takes notes and marks where the reviewer's analysis and predictions differ from their intentions. Though, since then, this practice has been unheard of in peer review scholarship, it did find its application in writing center practices (Block, 2016). However, to ensure that the reader focuses on higher-level issues of the text, they need a relevant task.

Peer Review at the Stage of Invention. As Hansen and Liu (2005) pointed out, "Effective peer response activities are not just a stage in the writing process; they are an integral component of promoting language development" (p. 38). Following this statement, these authors give these recommendations: conduct peer review not only at the stage of revision but at the stage of invention so students can discuss their ideas for the assignment as soon as possible and link peer response to other classroom activities (e.g., to demonstrate given feedback in the final portfolio). Another group of strategies from these authors touches upon raising student involvement in the peer review process. For this purpose, Hansen and Liu recommend trying new modes of peer review and different worksheets for different assignments and to give students more agency, for example, by allowing them to establish their own rules for peer review (to read drafts before or during class; to decide on the number of students in a group and group rules), by inviting them to create peer review worksheets, by appointing group managers from students to monitor the progress of groups, by discussing as a class the last peer review session to improve the peer review design and to start to realize the activity's importance deeper.

Teacher Participation. Last but not least is the aspect of teacher participation in peer review. The issue instructors experience—especially those who are used to the teacher-centered model of class—is the difficulty of transferring their agency to students and not interfering in the process (Rollinson, 2005). In turn, in the computer-mediated mode, instructors need to step aside even more; therefore, they can feel more stressed (Tannacito, 1998). This decrease in a usual teacher's agency means that specific training is needed to prepare new instructors for conducting peer review in their classes to make the process less tense and more beneficial for all participants.

However, there is a different point of view on teacher participation in student peer review: an "instructor-led peer conference" (Ching, 2014, p. 21). For this activity[5], students who signed up for one time slot are assigned to review one another's drafts in advance according to the prompt and assignment grading rubric. In turn, the instructor prepares their feedback so that it can be split between the feedback for grading purposes (the smallest part) and the peer review conference (the largest part). During the 45-minute conference with three students, the instructor moderates the discussion, nudging students to comment on higher-level textual characteristics.

Though the instructor's presence by default deprives this activity of its student-centeredness commonly perceived in peer review scholarship, and this "obscure version of peer response … does not fit neatly into conventional understandings of peer response" (Ching, 2014, p. 21), it still can be viewed as a hybrid of peer review training where students learn to provide peer feedback and actual peer review. This format allows the instructor to address the issues typical for many students' works so students know that they are not alone in their struggles. Additionally, the learning process is mutual here because, as Ching (2014) acknowledged, "there have been several occasions in [his] own teaching practice in which hearing the feedback peers give one another has altered my perception of a particular student's draft" (p. 25). Finally, according to Bergstrom (2022), a combination of peer reviews and conferences significantly saves the instructor time because they perform only one activity instead of two and provide most of their feedback

[5] Before I read the theoretical rationale for this activity in Ching's article (2014), I first heard about this peer review mode from Dr. Maria Bergstrom of Michigan Technological University in the course of an email conversation we had (personal communication, March 11-14, 2022). According to Bergstrom, students found those conferences extremely helpful.

orally by leaving the smallest part of it for their written comment that will explain the grade. On a side note, this peer review activity may be successfully conducted over Zoom in online classes (at least once due to the limitations of the number of synchronous activities), which will be an apt break from asynchronous learning (Bergstrom, 2022).

Overall, these recommendations state that the organization of a truly collaborative peer review activity requires very thoughtful consideration from the instructor. In this case, peer review will lead not only to effective revisions but to student overall growth as writers and collaborators. Also, the outcomes will be a positive classroom environment and positive perception of the class by students alongside the teacher performance improvement.

Still, any recommendations formulated by scholars should be used by carefully taking into account each concrete educational context, class environment, and student population.

Effect of Scholarship on Designing the Collaborative Peer Review in My Class

On my end, my approach to conducting collaborative peer review in my classes and, particularly, for this research was shaped by several scholarly findings that I found relevant to the learning context in my class.

One of the findings was the perceived value of peer review among students (Brammer & Rees, 2007), which was higher if more assignments were peer-reviewed during the semester. For this reason, students in my class reviewed each major project twice: in the middle and before the final submission (yet, the final portfolio project received only one peer review due to a lack of time). Secondly, with the spread of computer-mediated learning, researchers have been engaged in comparing different peer

review modes on various aspects and have concluded that a combination of face-to-face and technology-enhanced peer review is the most effective for students learning goals (Chang, 2012). For this reason, during the first half of the semester, my peer review design was a combination of virtual peer review through the LMS and traditional face-to-face peer review.

When COVID-19 brought changes to our class and stopped in-person learning, I redesigned my peer review process but still tried to keep the concept of combined modes in place (Google Docs for the asynchronous virtual modes and Zoom for the synchronous new normal face-to-face mode). Finally, scholars have found that peer review is a helpful activity for teaching students to be good collaborators (which is even more topical in teaching students technical and professional communication), so we discussed in class the importance of collaboration, which consists not only in using more positive language forms but also in active listening, asking the writer for elaboration, and asking the reader for specific feedback (Wallace, 1994). However, the flow of peer discussions that I observed in my class demonstrated that this appeal did not reach all of my students. I will argue for a more efficient structuring of the peer review activity that will make the collaboration more plausible, if not inevitable.

As for theoretical frameworks that can be used for peer review research, many of them, to a certain extent, are reflected in my approach to conducting peer review, including the one I addresses in the methodology in this study. For example, writing instructors are aware that students may be skeptical of peer review due to their perception of themselves as incapable of providing helpful feedback, a feeling of the blind leading the blind (Schunn & Yong, 2019). Understanding this, I addressed it in the peer review

training and talked about it in terms of Kenneth Bruffe's (1984) concepts of a community of knowledgeable peers and normal discourse. I explained to my students that they are equally knowledgeable and capable of providing good feedback because all of them received similar writing instruction within this class. Feedback can and should be different from the writer's expectations because this difference allows them to see their writing from a reader's point of view. I provided my students with an example of academic peer review when an author may receive different feedback from several knowledgeable reviewers.

The Zone of Proximal Development, a concept of Activity Theory (Vygotsky, 1978; Engestrom, 1987, 1999, 2008), connects well with the above conversation about students' distrust of one another's abilities to provide helpful feedback, especially when more successful and effective writers receive peer review partners whom they consider worse writers than themselves. By default, students expect learning from their peers in terms of draft improvement. When this does not happen, in case of a weaker peer review partner, students may become frustrated. However, the ZPD theory allows instructors to present the situation in such a way that stronger students may still learn from their weaker peers. If there is no way to see the feedback of a weaker peer as beneficial, they can learn to explain the needed improvements more effectively. In this regard, I explained that though it is evident that significantly less proficient writers benefit from the interaction with more proficient writers, the latter also benefit from the interaction with the former because they learn to formulate and get across their ideas with a better outcome. Another aspect that scholars include in the ZPD concept that we discussed in class is the responsibility for one another's success, which is one of the motives for participating in

peer review (Litowitz, 1993; Nelson & Gruendel, 1986). Last but not least, ZPD in peer review is much broader than simply the improvement of writing skills; it is also the constant learning to effectively interact with classmates, each of whom brings to the table a unique personality, expertise, and experiences, which is even more critical with ever-changing technology.

Another aspect we discussed in class is that tension and even conflicts are inevitable in peer review discussions because of the constant presence of a hierarchy in human interaction (Foucault, 1990). Hierarchy in a peer review group is caused not only by obvious factors, such as sex and language proficiency but also by less specific factors such as characters of students (Moje & Shepardson, 1998), which sometimes can even override sex and gender. When a student's perception of themself is different from how others perceive them, it may cause clashes, which show in the character and amount of feedback and its perceived value. However, as a hierarchy is typical for any human group, including the workplace, we need to learn to operate effectively under the pressure of hierarchy, so peer review is an integral part of learning to collaborate professionally.

Conclusion

Peer review of any kind can be rightly attributed to collaborative writing not only because it provides the writer with another pair or two of eyes but also because it allows receiving feedback from a "real" audience who does not keep in mind the writer's overall performance in class and does not have to give their peer a grade. Another collaborative feature of peer review is that it teaches students respect to their peers and their knowledge and realize that this knowledge can come not only from apprenticeship (i.e., from the teacher) but also from one's peers. Besides, peer review is the activity that is most close

to the one that students will face in their future workplaces, and, thus, it helps them to become more mature and aware of what will be in store for them after graduation.

Peer review may be accompanied by power issues that arise from reviewers' capability to provide helpful feedback, their desire to provide it, and their willingness to accept and use it. In the case of L2 students, these issues are often exacerbated even more because their language proficiency differs from L1 students, which may cause power issues in mixed L1/L2 groups. Partially, these problems may be solved through proper training that will raise student confidence and skills in providing feedback. Computer-mediated peer review will also help because the absence of physical proximity can make the environment less tense, leading to higher-quality feedback and, eventually, to higher-quality final drafts after student writers incorporate peer feedback. Furthermore, when conducting computer-mediated peer review anonymously, the problem of power conflicts and anxiety decreases to some extent. However, physical contact still means much to young people because socialization is one of the primary activities and tasks for that age group. A possible decision here would be to alternate computer-mediated peer review sessions with face-to-face sessions or use a two-phase peer review model, with the computer-mediated phase being the first. That will allow students to receive more focused written feedback and oral clarifications and build social ties.

This literature review allowed me to see specific gaps in the peer review literature, which I will address in this study. The analysis of scholarship demonstrated that there is a lack of peer review research

- in the context of teaching Technical and Professional Communication
- in the context of Minority-Serving Institutions

- on using such technologies as online document editors (such as Google Docs) and video conferencing tool (such as Zoom)
- and a lack of case studies on peer review

Especially these peer review aspects became topical in the new reality caused by the COVID-19 pandemic when writing instructors could not conduct peer review in the traditional face-to-face mode or computer-mediated modes augmented by the face-to-face stage. As a researcher, I used this opportunity to find new ways to preserve at least some communication that students in my highly interactive face-to-face class had become used to before the COVID-19 lockdown was ordered. I hope my students appreciated my effort to maintain the effectiveness of our peer review process even though that semester was accompanied by much stress and suspense.

Chapter 2: Methodology

This study is a single case with embedded units (Yin, 2003), in which the primary case of interest is the peer review process in a technical and professional communication class. The embedded units are the instructor's overall class design and the peer review design, in particular, student participants' drafts they used for the three peer review sessions together with the comments they made. The case study model allowed me to analyze those details that will shed light on the process of the peer review activity, which has been traditionally neglected in peer review research (Baker, 2016). Looking into the process helped me uncover the best collaborative moves in student interactions that I later recommended encouraging in peer review training. On the other hand, due to the case study model, I could analyze the circumstances of conflicts or moments that looked tense to me and also formulated recommendations on how to avoid them. The theoretical framework, educational setting, participants, instructional approach, data collection, and analysis are described below.

Theoretical Framework

For the current study, I used the Activity Theory model by Engeström, which allowed me to link the specifics of students' (subjects') peer review commenting (object and outcome) to the peer review modes (instruments) designed by the instructor. As Engeström (1987) explains it: "Activity Theory is a multi-voiced formation involving re-orchestration of those voices, of the different viewpoints and approaches of the various participants" (p. xxiv), which justifies the use of the case study method for this research where students' voices articulated through their drafts, peer review comments, and

discussions, alongside the circumstances of which I became aware, allowed me to study the peer review activity in this class with the utmost thoroughness.

Engeström's approach also underscores the importance of understanding that the learning process is shaped by the learner's agency that will always find its place regardless how high the level of detail of rules and instructions is: " [T]he very assumption of complete instructional control over learning is a fallacy. In practice, such control is not possible to reach. Learners will always proceed differently from what the instructor … had planned and tried to implement or impose" (Engeström, 1987, p. xix). However, Engeström views resistance not as an issue or an obstacle to successful teaching and learning but as a constant source of innovation. For this reason, in this study, I viewed contradictions emerged among students as a source of inspiration for improvement of peer review instruction.

Echoing the idea of Foucault (1990) about the omnipresence of power, Engeström (2008) points out, "work teams are relatively complex and inherently contradictory formations where both power and learning are largely outcomes of locally constructed ways and means for dealing with the contradictions" (p. 184). I believe that this study helped reveal the points of contradiction in the peer review process, whose analysis allowed me to provide valuable insights for improving the peer review pedagogy.

Hypothesis and Research Questions

The main *hypothesis* of this study is that peer review that uses strong collaborative moves contributes to a more positive emotional environment in a peer review group, leading to higher satisfaction by the peer review activity in students. By collaborative moves, firstly, I mean posting drafts on time and, secondly, thoughtful non-

repetitive unobtrusive timely feedback with a visible effort and clear intention to make it understandable and reasonable to the writer. Thirdly, in Google Docs, a collaborative reviewer should be mindful of the other reviewer's need to provide feedback, thus being aware of the visible limits of marginal space. On Zoom, collaboration means a dialogue (in the context of this study, a polylogue as the peer review design used groups of three) with equal participation of all group members, leading to a productive generation of knowledge, and creating a favorable emotional environment.

The *research questions* for this study that helped me to uncover and analyze collaborative and not so collaborative elements in student peer review interactions are as follows:

1. How is student peer review collaboration different across various modes?
2. What aspects and details does an instructor need to attend in designing a collaborative peer review class activity?
3. What elements of student peer review performance contribute or do not contribute to productive collaboration among students?

Research Context and Participants

This study was conducted at the University of New Mexico (UNM), a Minority-Serving institution of higher learning in the United States of America, offering undergraduate and graduate-level degrees, located in the center of Albuquerque, a metropolitan area of near a 1,000,000 people. The total student population (for Spring 2020, when the data collection took place) was 26,226 (21,196 on the Main campus where the study took place). Hispanic students numbered 11,497 (43.8%), making them

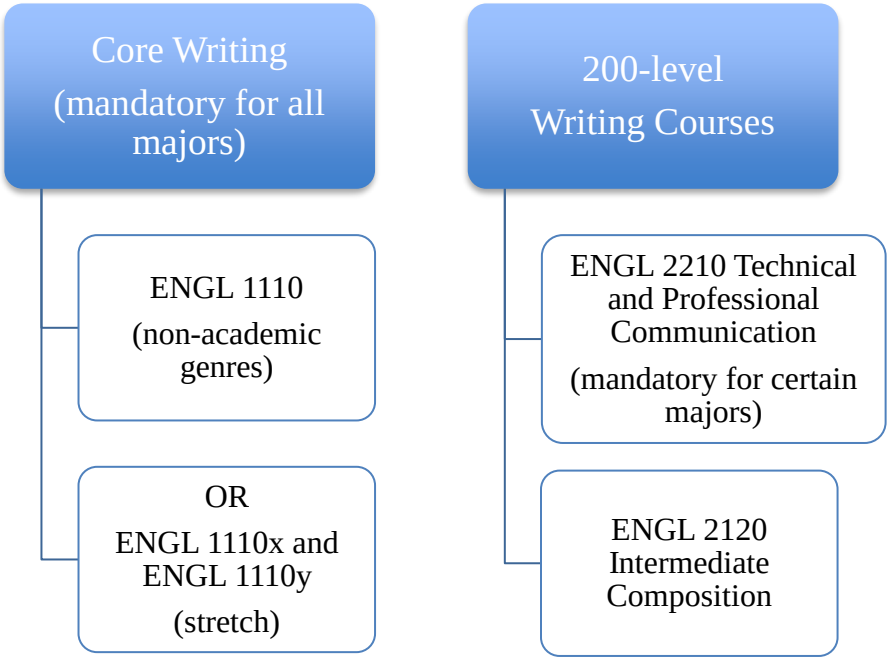
the most prevalent ethnicity among the whole student population and on the Main campus.

UNM Core Writing Program

Due to a lack of studies on collaborative peer review in technical and professional communication (TPC) classes, I conducted this research in this class, which is part of the UNM Core Writing Program. The program functions within the UNM Department of English Language and Literature and consists of 100-level and 200-level 3-credit courses, with rhetorical thinking, genre approach, reflection, multimodal composition, college peer review, and linguistic pluralism being the capstones of teaching writing at UNM to help students to become flexible writers who can adapt their skills to a variety of situations (Figure 2).

Figure 2

Structure of the University of New Mexico Writing Program



From 100-level courses, students are required to take ENGL 1110 course (one semester, mainstream), which is aimed at teaching them the foundations of non-academic genres and the basics of the writing process. If students do not score for the mainstream English course, they are placed in a remedial one-semester ENGL 1110x course and, if they receive a passing grade, are required to take ENGL 1110y (in the next semester or later), which is a continuation of ENGL 1110x. Thus, remedial courses allow students to study with the same curriculum as the mainstream course but with more detailed instruction and ample time for writing. Another option for remedial placement is ENGL 1110z course in the studio format, where a smaller section size allows the instructor to spend more one-on-one time with students. The genres commonly studied in these classes are discourse communities, profiles, reviews, and memoirs.

The next required 100-level class is ENGL 1120, where students enhance their knowledge and skills on those rhetorical concepts and writing practices they mastered in ENGL 1110 or related remedial courses. Additionally, students become familiar with the basics of academic writing, such as working with secondary sources and document formatting and become exposed to academic writing genres, such as the annotated bibliography, article review, argument, and proposal.

When students pass the mandatory ENGL 1110 and ENGL 1120 courses, they are required to take one more course to satisfy Area 1: Writing and Speaking within the UNM Core Curriculum—either within the UNM Core Writing Program or outside of it. The UNM Core Writing Program offers ENGL 2210 TPC and ENGL 2120 Intermediate Composition, a theme-based course, where students study and practice various rhetorical forms and become even more versatile writers. Other possible courses outside of the

UNM Core Writing Program are public speaking, reasoning and critical thinking, and rhetoric and discourse. Students choose TPC because of their major's requirement or based on their personal preferences. Hence, this course cannot be called mandatory in its fullest sense. Due to this circumstance, the student contingent in TPC class sections can be remarkably more conscious of their educational needs and feel more responsible for their success than students in the 100-level writing courses, some of whom even disagree with the requirement to take them.

Thus, students enrolled in TPC already possess a significant baggage of rhetorical knowledge and writing skills. In this course, together with mainstream students who took both ENGL 1110 and 1120 courses, some students scored high on the placement test and tested out of ENGL 1110 or even ENGL 1120 course (the latter rarely happens, though.)

Class Design

According to the official webpage of the UNM Department of English Language and Literature,

> English 2210: Technical and Professional Communication introduces students to the different types of documents found in the workplace. Students focus on how to analyze and understand readers; needs as well as develop a coherent structure, clear style, and compelling page layout. Students learn useful writing and research strategies they can use as they write correspondence, procedures, resumes, presentations, proposals, and multi-page reports ("Department", 2021, para. 7).

The student learning outcomes of this course are Project Planning, Project Analysis, Content Development, Organizational Design, Written Communication, Visual

Communication, Reviewing and Editing, Content Management, Production and Delivery. The peer review process, which is the topic of this research, falls under Project Planning, which presupposes composing technical documents in teams; Written Communication, which calls for composing clear, stylistically responsible prose that avoids errors and pays attention to audience needs; and Reviewing and Editing, which processes aim at achieving final clear style, user-centered writing, and error-free spelling and mechanics.

The TPC class section I used for the data collection was web-enhanced with Blackboard Learn and met face-to-face on Tuesdays and Thursdays for 75 minutes. The final assessment in the class was not an exam essay but a final electronic portfolio where students post their final reflection (which is on their accomplishments in the class, together with their projections on how the skills they developed in the class will help them to become better writers in the future) and the projects, together with initial drafts and project reflections. The UNM Core Writing Program allows writing instructors extensive agency in designing their courses. The only requirements are to stick to the mandatory student learning outcomes and to assign the final portfolio.

The projects I assigned to students were the recommendations report, instructions, professional correspondence dossier, and the final portfolio website. The idea behind this sequence was that I assigned the most challenging project (the recommendations report that required academic research) at the beginning of the semester and the easiest project (the professional correspondence dossier that required minimum research and multimodal work) at the end of the semester. This strategy turned out to be more than appropriate when life became extremely hectic with the first lockdown in the middle of the semester due to the COVID-19 pandemic. The class finished the first two projects before the

university transitioned to the online mode, so the last two projects—the professional correspondence dossier and final portfolio website—were the only ones students had to accomplish in the online mode.

All the projects included a multimodal aspect to a certain extent: a poster for the recommendations report (with posterpresentations.com), a video with the help of any video editor or a do-it-yourself presentation (with Microsoft Sway) for the instructions set, images or short videos for the professional correspondence dossier, and Google Sites for the final portfolio website (though students were allowed to use another website builder.) According to the course calendar, Project 1, the most time-consuming one, was supposed to be accomplished in five weeks. Projects 2, 3, and the final portfolio were supposed to be accomplished during four, three, and two weeks respectively.

For Project 1 Recommendations Report, students chose a problem in one of their closest communities (workplace, a student organization, neighborhood, etc.) To help the community solve the problem, students conducted library and empirical research, completed the problem analysis, selected or created relevant visuals (graphs, charts, or tables), and proposed a course of action, also proving that the chosen solution was the most effective way to improve the situation. I allocated five weeks for this project, starting the second week of the semester, whereas the first week of class was devoted to introductions, course conventions, and overarching conversations.

For Project 2 Instructions, which lasted four weeks, students prepared a set of instructions to help people successfully perform a specific task they will be performing for the first time in their life. For the form, students had two options: to use Microsoft

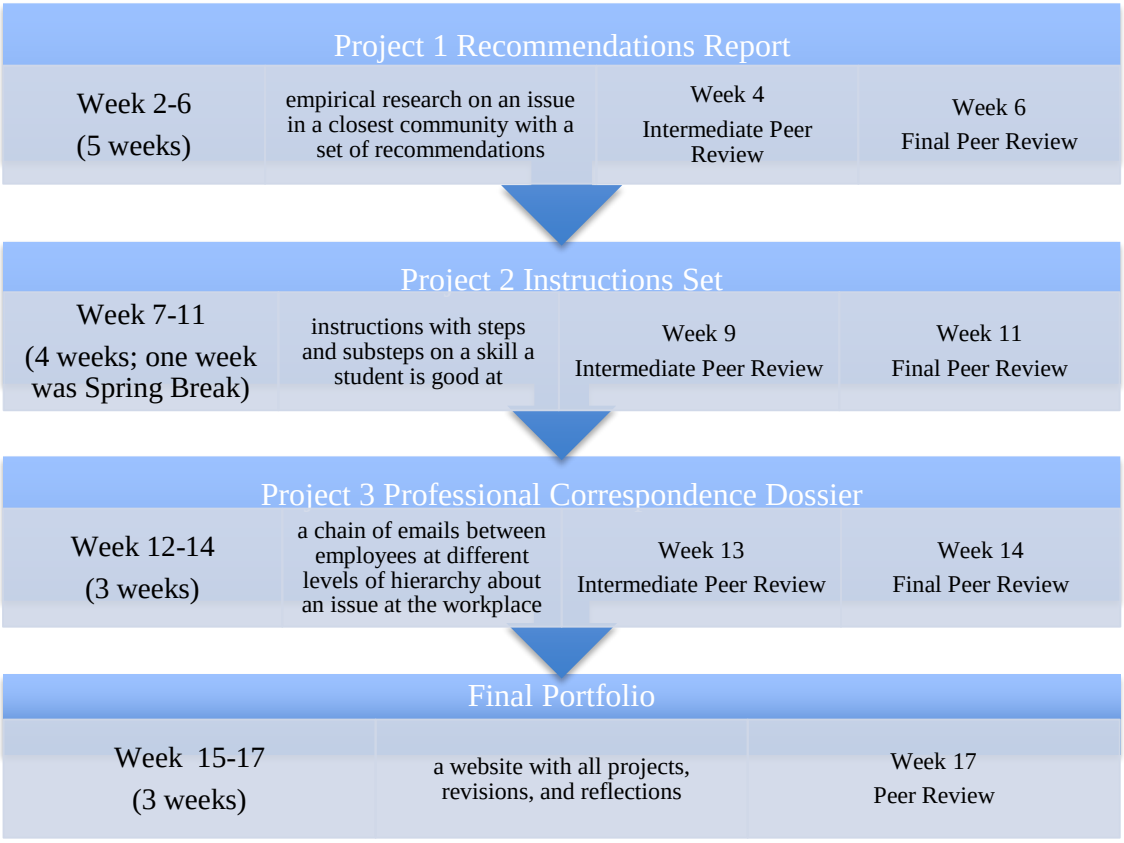
Sway to create a webpage with compelling visuals or to use any video editor to create a top-down video with captions and voice-over.

Students accomplished Projects 3 and 4 during the second, online part of the Spring 2020 semester, and I used the three peer review sessions on those projects for my data collection. For Project 3 Professional Correspondence Dossier, which lasted three weeks, students invented a situation about their working conditions that needed to be changed based on their current or past work experiences. For that purpose, students developed a chain of emails: complaint (employee complains to the boss), inquiry (boss asks a question to another employee who is in charge or more knowledgeable), response to an inquiry (employee in charge responds to the boss), adjustment (boss responds to the one who complained), and memo (boss sends out a memo to all company employees), all emails being supported by relevant visuals (see Appendix B for the full prompt.) Project 4 Final Portfolio was a website that served as a repository for all projects with reflections and revisions, supplemented by the student's bio, professional resume, and final reflection (see Appendix C for the full prompt.)

In addition to the main projects, students regularly participated in class discussions (the room where the class was meeting had round tables that were convenient for that purpose), journal writing, peer reviewing, and quizzes for every textbook chapter. Besides, each main project included two peer review sessions—intermediate and final—except for the last one, which only had one peer review (Figure 3).

Figure 3

Writing Projects in ENGL 2210 TPC with Description and Peer Review Timeline



When the university's leadership decided to cancel face-to-face instruction starting March 23, 2020 (right after Spring break) due to the pandemic, all instruction was transferred to online, for which I substituted weekly video lectures and discussion-board assignments for the face-to-face component (mini-lectures and discussions) while main projects, reflective journals, and quizzes remained in place.

Participants

The participant sample of six students whom I recruited because they gave their consent to participate in the study completed all study activities. The age range was from 19 to 25 years. Almost all of the participants received A's for their previous writing class (Table 1).

Table 1

Study Participants

Participants	Age	Origin	Grades for the previous English class
Ellie[6]	25	local (Albuquerque)	A
Andy	20	from a smaller city in the state	A
Sarah	18	out of state	A
Harvey	24	local but transferred from another university out of state	unknown
Trent	21	local (Albuquerque)	A+
Raymond	19	local (Albuquerque)	A-

Peer Review Design

Before the first peer review, during an in-class session, students received brief training on the peer review procedure in this class, types of peer feedback (overall and specific), and the peer review evaluation rubric (see Appendix D). After the theoretical part, the class did the mock face-to-face peer review (based on a student paper from the departmental custom edition[7]). Finally, I showed students several samples of successfully reviewed papers.

Each project, except for the final portfolio, was peer-reviewed twice: in the middle (the primary purpose was to encourage students to work on the project given that some students procrastinate and do not start working until the last week) and at the end

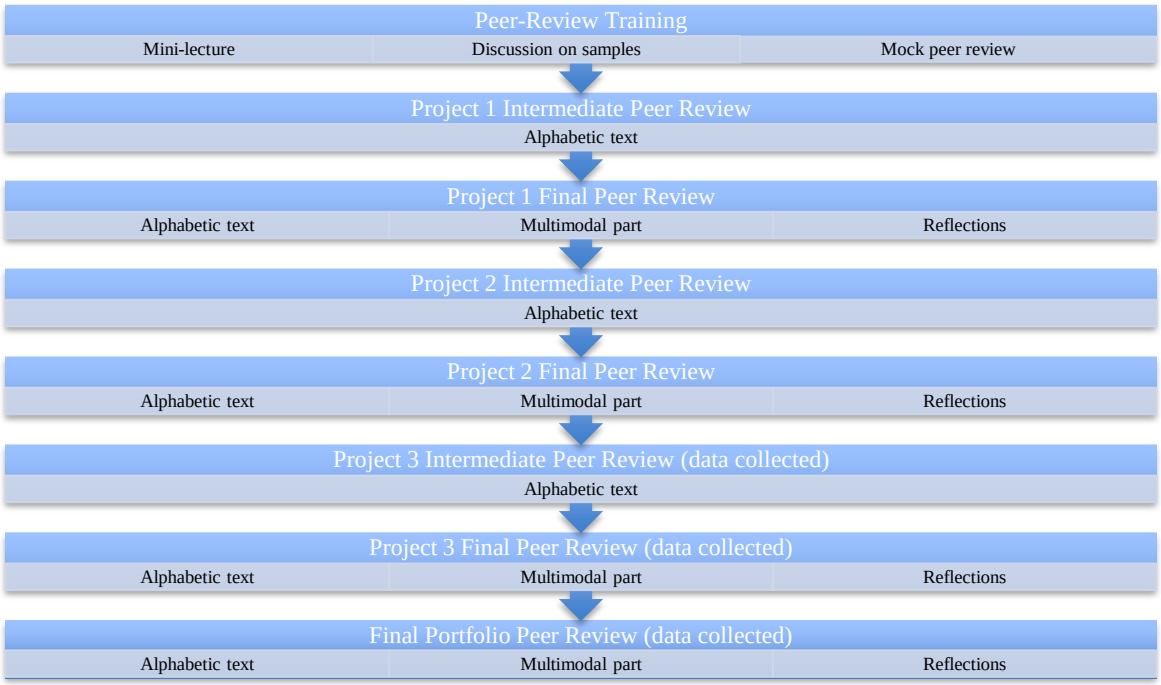
[6] All students' names are pseudonyms that they chose.

[7] The departmental custom edition is a textbook tailored to the program's needs. It contains first-year composition curricula and policies, the main approach to teaching specific to UNM's Core Writing Program, and student writing samples.

right before the final submission (to check the observation of the prompt requirements and genre conventions). The final portfolio was peer-reviewed only once, three days before the due date (the last day of class) (Figure 4).

Figure 4

The Peer Review Process in the Technical and Professional Communication Class in This Study



Peer Review Design

Before Covid-19 (Not Used for the Data Collection)

The peer review procedure before the transition to online due to the Covid-19 pandemic was as follows (see Appendix E). Students would upload their projects to the relevant discussion board forum before the actual peer review day and do the peer review during class. After that, students would have discussions in pairs (15 minutes for each

round of discussions) to clarify comments in case of confusion and discuss other aspects of the project that had yet to be touched upon in the written comments.

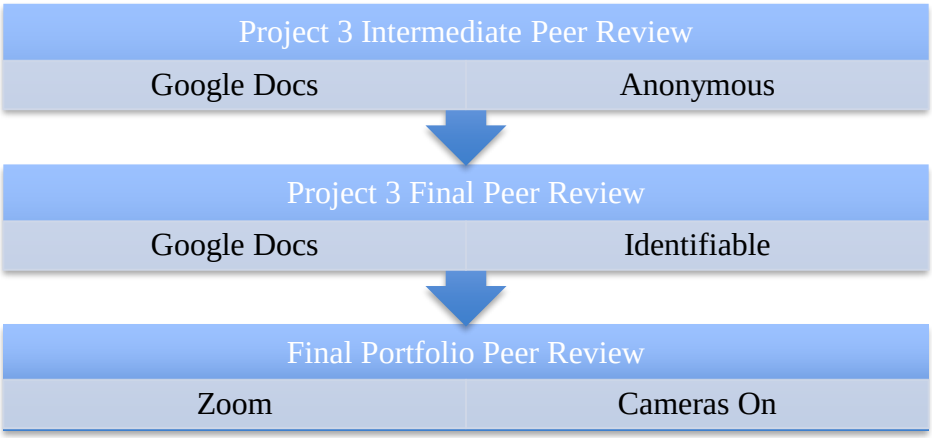
During Covid-19 (Used for the Data Collection)

I modified the peer review procedure with the transition to online after spring break. As the class was unable to do peer reviewing in person anymore, for the sake of preserving the collaborative component of the class, I chose to switch from groups of two to groups of three, so students received more exposure to their classmates' work but, at the same time, could spend a sufficient amount of time commenting on each draft in detail. For the modes, I chose to use Google Docs (as this platform allowed synchronous interaction, unlike the discussion board in our LMS) for the subsequent two peer review sessions on Project 3 and Zoom for the last peer reviewing session on the final portfolio as an apogee of our group activities.

The intermediate peer review session for Project 3 was Google Doc anonymous. I asked students to sign out of their Google accounts before clicking on the link I provided and begin or end each comment with a pseudonym. The final peer review on Project 3 was Google Doc identifiable, where students were supposed to ensure they signed in to their Google accounts to provide comments under their real names. The last peer review session on the final portfolio was a Zoom videoconference for which all students joined the main session at their designated times and discussed the feedback they had prepared in advance. The instructor was technically present, and her camera was on, but students did not see her because she was not in front of the screen (Figure 5).

Figure 5

Peer Review Design in the Technical and Professional Communication Class During COVID-19



For each of those sessions, study participants were divided into groups of three that were different each time. Different grouping of students for every peer review session was meant to expose students to different group design each time and different peer review partners. However, due to a small number of participants, each of them had to be placed twice with the same classmate.

The Project 3 Intermediate Peer Review was worth 2 points, but the Project 3 Final Peer Review was worth 30 points, where 10 points were earned for the timely submission of the paper to the discussion board and 10 points for each peer review (Table 2).

Table 2

Peer Review Evaluation Rubric

Criteria	Proficient	Competent	Novice
	10 points	5 points	0 points
Timeli-ness	Student submitted their draft on time.	Student submitted their draft within 3 hours after the due time.	Student submitted their draft after lapse of 3 hours after the due time.
Peer Reviews (2)	17 to 20 points Student actively provided valuable and respectful comments.	8 to 16 points Student provided some valuable comments.	0 to 7 points Student provided little or no valuable feedback, AND/OR student provided feedback after the due time.

Data Collection

The work on the documentation for the UNM Institutional Review Board began immediately after I received information about the university's transition to the online mode.

After receiving IRB approval for this study (UNM IRB #1574548-3), I recruited students from my class via email. To inform me of their consent to participate, the students were asked to email me with the phrase "I consent to participate in this study." If a regular practice is to ask study participants to print off the form, sign it, scan it, and send it back to investigators, this simplified consent procedure was appropriate under lockdown conditions when students stopped having access to printing and scanning services on campus. The consent form informed students about the study conducted in this class and asked them for their permission for the following:

1. To collect and analyze drafts with peer review comments (for Google Doc sessions).

2. To collect and analyze final drafts.

3. To video-record via Zoom one peer review session.

4. To analyze the Zoom transcript regarding student peer review comments and interaction.

The collection of these sources allowed me to trace and analyze students' interactions during peer review sessions and analyze them to single out the best collaborative practices alongside practices that needed improvement. The peer review work was not compensated, as it was part of regular coursework for the class.

The data for this study were collected in the following order:

1. Students completed asynchronous anonymous peer review (Intermediate for Project 3).
2. Students completed asynchronous identifiable peer review (Final for Project 3).
3. Students participated in a recorded video conference peer review (for the Final Portfolio Project).
4. Peer review and final drafts were collected.

The data collection was finished in May 2020.

Sources of Data

Survey

At the beginning of the study, the students participated in the survey via Survey Monkey, which collected students' demographics (students' age and where they were from), and allowed them to choose pseudonyms for participation in the study.

Peer Review Sessions

As said before, the last three peer review sessions were used for data collection. For the Google Doc anonymous peer review session, I created separate Google Docs with instructions (see Appendix F) for each of the two groups and sent the links to students by email. The students were instructed to go to their Google accounts and sign out (to be able to comment anonymously). Then they copied and pasted their drafts to the Google Doc, carefully deleting their names and other identifiers while using their chosen pseudonyms in the heading. Finally, they made anonymous comments under their pseudonym to the peers' projects according to the peer review prompt. The procedure was almost the same for the Google Doc identifiable peer review session. I created separate Google Docs for each group, and the students posted and commented in the same way but ensured that they signed in to their Google accounts so their peers could see to whom the paper belonged and who was commenting (see Appendix G).

For the Zoom face-to-face peer review session, I created a forum on the discussion board on Blackboard Learn where students posted the links to their final portfolio websites. Having grouped students into three groups, I emailed them with instructions (see Appendix H) and links to the websites of those classmates they were assigned to review. They shared their feedback during the Zoom session. Each Zoom

peer review session was to take 20 minutes. I encouraged the students to take notes to use them later for their revision. The Zoom sessions were recorded and transcribed by Zoom.

Drafts

I obtained students' peer review drafts (together with the final portfolio links) from the class Blackboard Learn page from both the discussion board (drafts meant for peer review) and the Grade Center (drafts meant for grading by the instructor). The alphabetic texts were downloaded to my personal computer. The links to the final portfolio websites were saved to a separate Word document, and the websites' pages were screenshot in case the student participants decided to unpublish or delete their websites.

Data Analysis

To meet the needs of a case study more effectively, this research adopted a mixed-methods approach where case-oriented and variable-oriented approaches were combined (Miles, Huberman, & Saldana, 2014). The methods used are described below:

Data Transcription

The Zoom peer review discussion was transcribed automatically by Zoom and thoroughly edited by me. The level of transcription complexity was complex for the peer review discussion and included, in addition to the words spoken, paralinguistic features such as self-corrections, intonation, pauses, gestures, and other body movements (Wilkinson, 2004). The edited transcripts were read by me several times, and the technique of jotting (Johnson & Christensen, 2019) was applied to take notes of preliminary insights.

Ethnographic Analysis

To achieve a fuller understanding of students' peer review discussions, I applied

the method of ethnographic analysis (Emerson, Fretz, Shaw, 2011). This method allowed me to analyze the collaborative component of student discussions, the main point of which was feedback that students prepared in advance and their negotiation of its value for the group. The analysis of comment types of participants shed light on the group's hierarchy and modes of behavior that participants chose to make their peer review experiences most satisfactory for themselves. The analysis of participants' non-verbal behavior showed their reactions to the flow of the conversation that were not obvious from their verbal communication. Besides, peer review discussions were examined regarding the turn-taking behavior of participants, mainly who makes the first post, who comments first, etc. I also considered the outer circumstances and events that preceded or followed the peer review discussion (such as email communication between students and me) to contextualize the data more effectively (Johnson & Christensen, 2019). In addition, this analysis included some elements of the conversation analysis as participants constantly analyzed one another's remarks and behavior, being interested in the smooth flow of the discussion. Although the conversation analysis is used specifically for analyzing naturally occurring conversations (Drew, 2010), I consider a peer review discussion natural if not moderated by the instructor.

Coding

I analyzed the drafts that students pasted into Google Docs for the anonymous and identifiable peer review sessions and used for commenting in the margins together with the Zoom video session to single out separate segments and common themes in comments. The coding process included two cycles (Miles, Huberman, & Saldana, 2014; Johnson & Christensen, 2019) where discourse analysis (Willig, 2003) was aimed at

determining types of peer review comments involved, and thematic analysis (Johnson & Christensen, 2019; Terry, Hayfield, Clarke, & Braun, 2017) was meant to determine broader categories in peer review comments. Though a similar coding process has previously been applied by other researchers who studied the problems of peer review and analyzed students' peer review comments (Lockhart & Ng, 1995; Mangelsdorf & Schlumberger, 1992; Zhu & Mitchell, 2012), I developed new inductive descriptive codes (Johnson & Christensen, 2019), as my sources were different from those studies. To achieve consistency in codes, I repeatedly returned to already coded items for revision in case newly made codes changed the picture, so developing open codes was a recursive process. Naming open codes involved the invention of abbreviations and contractions that denoted different kinds of peer review feedback from the position of their purpose. At the same time, my strategy was deductive as I wanted to see how the themes for this research would be similar to those revealed by other researchers. It turned out that the themes I discovered were similar, so for naming the stances, I used the previously invented terminology. I borrowed the terms "prescriptive" and "evaluative" from the study of Lockhart and Ng (1995) and "collaborative" from the study of Mangelsdorf and Schlumberger (1992).

As other researchers, I divided student peer review conversations by separate comments (715 in total), each representing a particular type of idea unit, and, based on them, derived three peer review stances: collaborative, evaluative, and prescriptive. The table below represents the taxonomy of peer review stances and types of comments in this study (Table 3).

As it becomes evident from Table 3, the collaborative stance types of comments were the most numerous, which included those that contributed to the more effective transmission of information, perception of ideas, and the flow of peer review conversations. The comment types in the evaluative stance included general and specific praise and critique. Finally, prescriptive stance types of comments included suggestions and summarizing of comments.

Table 3

Taxonomy of Peer Review Stances, Types of Comments, and Their Total Number

Stances	Types of Comments		n
Collaborative	ACC	Acceptance	
Stance	AFCLAR	Asking For Clarification	
	AFINF	Asking For Information	
	AFO	Asking For Opinion	
	ALL	Alleviation	
	AOE	Appeal To Own Experience	
	CF	Confirmation	
	CLAR	Clarification	
	EXM	Example	
	EXP	Explanation	
	GRAT	Gratitude	
	INF	Information	
	O	Opinion	
	ORG	Organizational Moments	
	PH	Phatic	
	REIT	Reiteration	
	REQ	Request	

Evaluative Stance	GCR	General Critique	
	GP	General Praise	
	SPCR	Specific Critique	
	SPPR	Specific Praise	4
Prescriptive Stance	S	Suggestion	
	SC	Summarizing Comments	2

Enumeration

As the codes were finalized, I quantified them to determine how frequently they appear in the data (Johnson & Christensen, 2019). The distribution of stances across peer review modes demonstrated that the collaborative stance heavily prevailed in the Zoom mode and was least used in the Google Doc identifiable mode. In contrast, prescriptive stance was present at the same level in both Google Doc modes and heavily decreased in the Zoom mode. As for the evaluative stance, it prevailed in the Google Doc identifiable mode, was represented to a lesser extent in the Google Doc anonymous mode, and least in the Zoom mode (Table 4).

Table 4

Occurrence of Peer Review Stances Across Peer Review Modes

Stances	Peer Review 1 Google Doc Anonymous		Peer Review 2 Google Doc Identifiable		Peer Review 3 Zoom		Total n for each stance	Total % for each stance
	n	%	n	%	n	%	n	%
Collaborative	67	42	80	32	314	84	461	53
Prescriptive	58	38	90	38	24	9	172	28
Evaluative	20	20	41	30	21	7	82	19
Total	145	100	211	100	359	100	715	100

Here I will demonstrate comment types that I derived within each stance across all peer review sessions based on their quantity. So, the collaborative stance, which was the most numerous, will be analyzed first, with prescriptive and evaluative stances following it.

Description and Examples of Comment Types

Collaborative Stance

Student comments within the collaborative stance represented the most numerous comment types and the majority of possible sentence types: declarative, interrogative, and exclamative[8]. Declarative comments were made for clarification, explanation, alleviation, reiteration, and other peer review moves meant for effective conversation maintenance, which was especially important during the Zoom peer review session. Interrogative comments were made when students asked for opinions, clarifications, or information, and most of them naturally occurred during the Zoom session. Exclamative comments occurred during the Zoom session only and were rare because students tried to behave professionally (Table 5).

Table 5

Collaborative Stance Comment Examples

Types of Comments	Google Docs	Zoom
ACC		Yeah. I was ... yeah. I was going through my project and I realized "ummm! I'm I don't have that … in there! "
AFCLAR	Do you mean "I should" or "you should"?	Are you talking about the … reflections? Is that what you're …

[8] Imperative comments, such as "Do this," fell under the prescriptive stance.

AFINF		Are you gonna do a … SLO reflection for each project or just, like, overall?
AFO		Do you think I'm going a little overboard, does it not look professional, in a way …?
ALL	Overall just a few grammar errors that are easy to fix.	And then for the student learning outcomes, be sure to add umm, I think, you need like a different page for each SLO … which I didn't do [the reviewer makes a suggestion but alleviates the effect by saying that this suggestion relates to her, too.]
AOE		Like how I did, I put it like a whole other text block and just copied and pasted it … for each project.
CLAR	R: Try to be more confident. When asking for a solution, do not leave any room for speculation.	- I was worried I was like, I don't know if it's been Unprofessional to do that, but that's … that's good … that's good to know.
CF		- Umm, I liked that. I liked that it looks different than everybody else's umm… - Really.
EXM	W: So we will be reviewing on how we can make it better for our employees. R: Instead of that you could say "We will review how we can make it more efficient for our employees."	
EXPL	R: Make sure your sentence structures are direct and simple. I had a hard time trying to decipher who was being talked about at times, this is an easy fix with the proper placement of commas.	I wasn't sure whether or not to include it, cuz I know our book says to.
GRAT		Thank you.
INF		- Are you gonna do a … SLO

		reflection for each project or just, like, overall? - Yeah, I'm doing, doing, one for each, doing a paragraph for each.
O		I liked that it looks different than everybody else's umm…
PH		Oh … okay, I got … I got you
REIT	Initial Comment: What does that mean? Reiterated Comment: Who is the higher management?	Initial Comment: Umm … oh, and … I'm not sure if you just include it in your website, but the video for the revisions is mandatory, right? Reiterated Comment: Uh, with the video thing, just be sure to upload that.
REQ		I know my SLOs weren't put on there. So don't eat me up for that, please, yet.

Note 1. To decode abbreviations, see Table 3 on p. 65.

Note 2. W stands for "writer"; R stands for "reader".

Note 2. Dashes (-) before comments mean that the comment is part of a conversation.

I chose to distinguish between explanations and clarifications in my peer review comment taxonomy due to a significant difference between them. My vision is that explanations provide a rationale behind a suggestion, and it is easy to imagine "because" after the latter even if it is absent. For example, in the comment "The wording here "much too short" sounds a bit off here. Try "insufficient" or "lacking", the second sentence is a suggestion, but the first one is an explanation, and it is easy to connect them with "because." So, the revised version will sound like "Try 'insufficient' or 'lacking' instead of 'much too short' because this wording sounds a bit off here."

On the contrary, clarifications only supplemented a suggestion through paraphrase and interpretation. For example, in the comment, "Try to be more confident. When asking for a solution, do not leave any room for speculation," the second phrase is a suggestion; however, the first one is a clarification because it does not explain (and cannot be connected to the suggestion with "because") but only paraphrases the suggestion by generalizing it. The reason why suggestions often follow their supplements might be that reviewers, as their mental transaction is complete, subconsciously prefer to start commenting with their conclusion and only then proceed to pointing to the issue itself.

Explanations or clarifications were made through declarative statements when reviewers expressed willingness to go further with their comment than simply to make a suggestion and to ensure that their comment was understandable and helpful. Alleviations (e.g., "other than that …") were made to improve the atmosphere of the discussion and to ensure that writers were not hurt by critique. Reiterations raised the value of the other reviewer's comment by paraphrasing it.

Asking-for-clarification comments that were made during the Google Doc sessions did not ask for answers but expressed the reviewers' confusions and, therefore, inability or unwillingness to make a direct suggestion (e.g., "Do you mean "I should" or "you should"?) However, questions in Zoom asked for specific information the one who asked wanted to hear whether it concerned the previous point of discussion (e.g., "Are you talking about the … reflections? ") or introduced a new topic for discussion (e.g., "Are you gonna do a … SLO reflection for each project or just, like, overall?")

Most of collaborative types of comments were used during the Zoom session and did not occur in the Google Doc sessions. Those were various utterances intended to maintain the flow of the conversation, such as phatic (e.g., "uhuh"), acceptance remarks where writers agreed with the feedback (e.g., "Yeah … I was going through my project and I realized "ummm! I'm I don't have that … in there! "), or confirmations when the other reviewer expressed agreement with the other reviewer's feedback (e.g., "Really") or when the reviewer chose to confirm their feedback after the writer already agreed with it ("Yeah"). Rare types of comments included gratitude ("Thank you") and requests (e.g., "Don't eat me up for that, please, yet.")

The examples in Tables 5, 6, and 7 demonstrate that not all kinds of comments are present with all peer review modes; in particular, those comments that supported the flow of Zoom conversations, such as phatic comments, were obviously non-existent in the Google Doc modes. However, suggestions with or without additions, such as clarifications and explanations that were abundantly used by students in Google Docs did not disappear in Zoom, as can be seen from Tables 5, 6, and 7 at a glance but transformed into similar kinds of comments more typical and effective for oral discussions where the reaction from the interlocutor is presupposed.

Prescriptive Stance

Prescriptive comments made by the study participants directly recommended to reviewers what the latter needed to change in their drafts and how (Table 6).

Table 6

Prescriptive Stance Comment Examples

Types of Comments	Google Docs (W – Writer; R – Reviewer)	Zoom

S	The "and to have them" part sounds weird. Try to reword it.	So, do two separate things.
SC	R: Just a little rewording of a few sentences …	Like I said, the only big thing that I saw was just that .... umm … that one long … umm … section … where you're explaining the … SLOs, I think, I would just break that up and it would … be easier to read.

Note. To decode abbreviations, see Table 3 on p. 64.

This type of comments was expressed through the imperative mood (e.g., "try", "do"), subjunctive mood (e.g., "I would", "you could"), verbless wishes (e.g., "just a little rewording"), pointing to the type of mistake (e.g., "simple spelling error"), or providing the correct variant, according to the reviewer's opinion (e.g., "Try "insufficient").

Evaluative Stance

Student comments within the evaluative stance included remarks that did not contain direct suggestions but expressed reviewers' attitudes toward what they read. Sometimes reviewers chose to directly appeal to their feelings (e.g., "I liked it"), but mostly they used impersonal structures, such as "there is/are" or made the aspects of the text they were referred to the subjects of their sentences (e.g., "Nice pictures") I divided these comments into praise and critique that both could be general or specific, that is, related to a particular aspect of the text. In most cases, students produced evaluative comments for their final comments on the draft in addition to their marginal feedback; however, sometimes evaluations occurred in the margins, too (Table 7).

Table 7

Evaluative Stance Comment Examples

Types of Comments	Google Docs	Zoom
GP	Overall I liked it …	Everything else seemed fine, too.

SPP	… and I liked how you resolved things.	And nice pictures, like, very professional.
GCR	There are a few minor tweaks needed here and there.	
SPCR	While I knew what you meant...your lead into the questions was slightly confusing.	Umm … I just read through your … portfolio and I mean … umm … obviously there's things that you just have to put in there.

Note. To decode abbreviations, see Table 3 on p. 65.

Evaluative comments meant to critique allowed students to express their feedback less categorically way, especially when possible revision did not seem obvious (e.g., "your lead into the questions was slightly confusing") or the reviewer was unwilling to delve into details (e.g., "there's things that you just have to put in there").

Conclusion

The research methodology and methods used in this study were aimed at providing me with tools for uncovering student peer review interactions through the prism of collaboration. The research design included components that originally were not part of the study and those that were developed specifically for the study. Among the first ones were the program and course design alongside the researcher/instructor's response to the COVID-19 lockdown (design of peer review sessions). Those components that were designed specifically in response to the study's research questions were the survey on demographic data (for the purpose of better understanding of participant contexts), different grouping of students for each peer review session (for the purpose of their exposure to diverse group designs), collection of pre- and post peer review drafts (for the purpose of analyzing the context of peer review commenting), and methods of data analysis intended to uncover the most and least collaborative features in student peer

review interactions (for the purpose of developing recommendations for designing a peer review process with reduced level of stress and anxiety).

Having analyzed the scholarship on peer review stances, I decided to borrow already existing terminology and named the stances I identified in my research as "collaborative," "prescriptive," and "evaluative." This analysis generated 23 comment types, where 17 belonged to the collaborative stance, 4 to the evaluative stance, and 2 to the prescriptive stance. The collaborative stance heavily prevailed in the Zoom per review mode, while in Google Doc modes, the prescriptive and collaborative stances were used at approximately the same level. The evaluative stance occurred least in all peer review modes under consideration but was used least in the Zoom mode.

In the collaborative stance, the variety of comment types was the most significant and included peer review moves where reviewers strove to make their feedback as straightforward as possible and resorted to examples, explanations, and clarifications; cases when they struggled with identifying a writing issue and preferred to ask a question (even if, in Google Docs, no answer was presupposed); questions when reviewers were not confident about the correct interpretation of the assignment; opinions on writing aspects that were not regulated by the prompt; and other comment types that were aimed at promoting student interactions, or collaboration. The comment types within the prescriptive stance were most straightforward and included constructive feedback that was expressed primarily through imperative grammar forms; summarizing, or, in other words, generalizing, of constructive feedback belonged to the prescriptive stance, too. The evaluative stance comment types were also quite obvious and included praise and

critique, both being general (i.e., not hinged upon any particular aspect of writing) and specific.

I found that some comment types were used across all modes, while others were present exclusively in the Zoom mode, especially those meant for maintaining communication channels and reacting to provided feedback.

In the next three chapters, I will analyze student peer review discourse as related to collaboration.

Chapter 3: Google Doc Anonymous Peer Review Session

Collaboration was defined in Chapter 2 as a set of features that contribute to mindful interaction between peer review partners. In this chapter, I argue that collaborative features related to the Google Doc mode that are beneficial for the emotional environment in a peer review group are posting drafts on time and thoughtful, non-repetitive, unobtrusive, timely feedback on various aspects of the draft with a visible effort and clear intention to make the feedback understandable and reasonable to the writer. Additionally I argue that a collaborative reviewer should be mindful of the other reviewer's need to provide feedback, thus being aware of the limits of marginal space.

Overview and Student Participation

The Project 3 Intermediate Peer Review (anonymous) (see Appendix E for complete instructions sent out to students through LMS) conducted through Google Docs was the first occasion the students in this class reconnected after three weeks of the announced COVID-19 lockdown. Students were supposed to post their drafts before our regular class time (on April 14, Tuesday, by 12:30 pm, which was the time when the class had met in face-to-face mode before) to fulfill the peer review assignment during our regular class time (12:30-1:45 pm). That meant that each student had 35 minutes to fulfill both reviews, which time was ample, also given that, for the intermediate peer review, students submitted only three out of five emails (each email being around 300 words). Also, without lowering their grade, I allowed students not to review peer drafts that would be submitted late (i.e., after the beginning of the class or even after class).

The focus of the peer review activity was broad because I, as a researcher, was particularly interested in the most authentic student responses that would not be limited to

any particular aspects. The instructions sounded as follows, "You will review your peer's papers according to the project prompt's requirements and evaluation rubric but without giving grades. Also, you will need to identify two strengths of the paper and two areas of improvement. Give details." (Appendix E) Additionally, the prompt called for both marginal comments and a final comment at the end but without specifications on what kinds of comments should be placed in the margins and what should be saved for the final comments. The number of comments required for credit was not specified by the prompt either.

In Group 1, Harvey posted his paper an hour before the class time started, Andy posted hers half an hour after the beginning of class, and Sarah posted hers in the evening, which was long after the class was over. Due to Sarah's late posting, only Andy and Harvey reviewed each other's papers during class time, while Sarah added her comments later and received no comments on her draft. In Group 2, Trent had posted his draft an hour before the class time, Ellie posted hers right before class, and Raymond posted his 13 minutes after the class time had begun.

Not all students were equally active during this peer review session. As obviously seen from Table 8, Trent (n3 per draft on average) commented much less compared to more active Ellie (n33 per draft on average) and Raymond (n21 per draft on average).

Table 8

Student Participation in the Google Doc Anonymous Peer Review Session (Professional Correspondence Dossier Intermediate Peer Review)

	Readers (go first) and Writers (go second)								
Reviewers	ArH	HrA	SrA	ErT	RrT	RrE	TrE	ErR	TrR
Total n comments	14	10	9	39	18	24	4	27	2

Note. "ArH" stands for "Andy reviews Harvey"

Additionally, not all students demonstrated an equal distribution of comments across reviewed drafts. For example, in Group 1, Andy commented extensively on Harvey's first email; however, her comments on the second and third emails were scarce, and none of them contained such detailed and thoughtful suggestions as those that she provided on the first email. Harvey's commenting on Andy's draft had a similar pattern. As for Sarah, not only she commented only on one draft instead of two, but, on that draft, she only commented on the last email and disregarded the first two. In Group 2, Ellie commented almost equally but provided many more comments on the third email, both of Trent's and Raymond's drafts. Raymond demonstrated mixed performance as he left more comments on the first Trent's email, less on the second email, and none on the third email. However, commenting upon Ellie's draft, he left almost an equal number of comments on each of her emails.

For the most part, I classified all feedback as collaborative as it was reasonable and properly presented. Late posting that occurred in one of the groups did not contribute to helpful collaboration because it allowed the other two group members not to comment on it and, thus, deprived them from the opportunity to practice their reviewing skills more. Besides, there is a chance that uneven commenting, especially on drafts clearly divided in separate parts (in this case, emails), could look as a lack of effort and triggered discontent in authors. Finally, scarce commenting of one participant looked noticeable against the background of abundant comments made by others and could have arisen discontent in the authors. These aspects need to be addressed in the peer review design for the purpose of collaboration improvement.

Collaboration Across Peer Review Stances

Occurrence

Though most of the students demonstrated a similar trend to use more comments in the collaborative stance rather than in others, some students turned out leaned more to the prescriptive stance: Harvey made 70% of all of his comments in the prescriptive stance, while other students made prescriptive comments within the range of 29% and 46% (Table 9).

Table 9

Peer Review Stances in the Google Doc Anonymous Peer Review Session (Professional Correspondence Dossier Intermediate Peer Review)

	Readers (go first) and Writers (go second)								
Reviewers	ArH	HrA	SrA	ErT	RrT	RrE	TrE	ErR	TrR
Types of Comments									
				Prescriptive Stance					
S	3	6	2	14	8	10	2	8	
SC	1	1	1	2		1		1	
Total n	4	7	3	16	8	11	2	9	
Total %	29	70	33	41	44	46	50	33	0
				Collaborative Stance					
AFCLAR	1			3				2	
CLAR				2	1	6	1	4	
EXPL	2		1	6	3	3		4	
EXM	4	1	1	9	2	1		4	
REIT			2						1
ALL	1		1			1			
Total n	8	1	5	20	6	11	1	14	1
Total %	57	10	56	51	33	46	25	52	50
				Evaluative Stance					
GP	1				1				
SPP	1	2	1	2	2			3	
SPCR				1	1	2	1	1	1
Total n	2	2	1	3	4	2	1	4	1
Total %	14	20	11	8	23	8	25	15	50

Note. "ArH" stands for "Andy reviews Harvey"

As for collaborative comments, Andy, Sarah, and Ellie clearly demonstrated a more prominent occurrence of them than Trent, Harvey, and Raymond: 57% with Andy, 56% with Sarah, and 52% with Ellie. Though Trent also made 50% of collaborative comments in his review of Raymond's draft, he made only 25% in his review of Ellie's draft, so I evaluated his performance based on the average, i.e., 38%. Also, the data on Trent's performance is skewed due to a low amount of comments he left on both drafts he reviewed (n4 for Ellie and n2 for Raymond).

Finally, the evaluative stance was least common for all students, though some made more of them than others. Trent demonstrated the largest occurrence; however, as I noted above, the data on him is unreliable. Andy, Harvey, and Raymond provided around 20% of evaluative feedback, while Ellie and Raymond produced around 10% of evaluations.

Overall, the average data on all students demonstrate that the prescriptive and collaborative stances were used at approximately the same level (38% and 42%, respectively), while the evaluative stance turned out to be an obvious outsider (20%).

Collaborative Discourse

For the purpose of answering the research questions in this study, in particular, to uncover the collaborative features in student peer review discourse, in this section, I will analyze only comments in the collaborative and evaluative stance. The former clearly demonstrate students' willingness to engage in a dialogue or express unobtrusive opinions. The latter, even though not designed as aimed at a dialogue, also express opinions and create a favorable emotional environment. Though comments in the collaborative and evaluative stances theoretically can lead to tension, in case they express

negative attitudes, the participants in this study did not demonstrate those. However, the prescriptive stance mostly included comments formulated through the imperative mood as commands that could potentially lead to tension. For this reason, the analysis of the prescriptive stance comments will not be conducted.

Collaborative Stance. The collaborative stance was most numerous compared to other stances presented in the anonymous mode, and it was represented through examples, explanations, questions where reviewers asked writers for clarifications, clarifications, alleviations that meant to alleviate the effect of critique, and reiterations where students reiterated the commend that other reviewers had provided earlier (Table 10).

Table 10

Google Doc Anonymous Mode: Occurrence of the Types of Comments in the Collaborative Stance

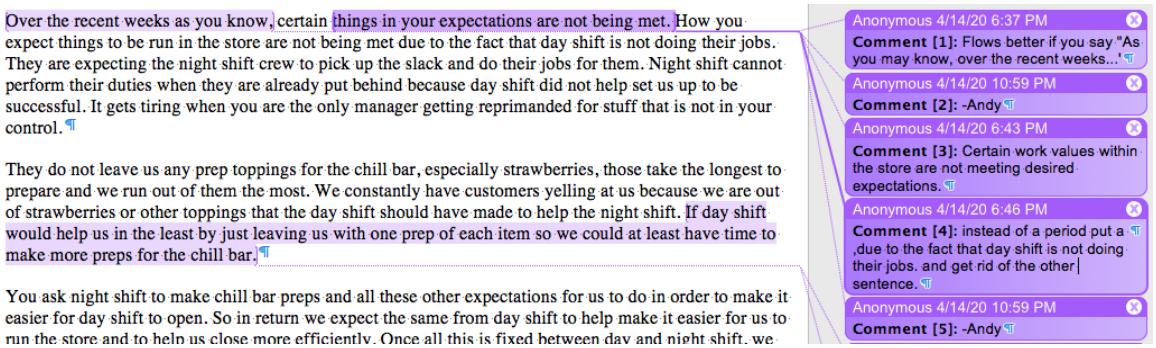
Types of Comments		Occurrence n	Percentage %
EXM	Example	22	32
EXPL	Explanation	19	28
CLAR	Clarification	14	21
AFCLAR	Asking for Clarification	6	9
ALL	Alleviation	3	5
REIT	Reiteration	3	5
Total		67	100

Examples. Students offered comments of this type in different ways, such as providing detailed instructions on revision or simply highlighting the point of issue and providing the correct variant in the margins.

For example, Andy showed herself as a student with a high ability to see the text structure and provided several comments on how to make writing more concise (Figure 6):

Figure 6

Type of Comment: Example (with the Reviewer's Text)



Harvey's text: Over the recent weeks as you know, certain things in your expectations are not being met. How you expect things to be run in the store are not being met due to the fact that day shift is not doing their jobs."

Andy's comment: Instead of a period put a comma <u>due to the fact that day shift is not doing their jobs.</u> And get rid of the other sentence (underlined is the example itself – S.T.)

Due to the absence of quotation marks, this comment sounded confusing to me; however, after having read it twice, I was able to understand it and see its value. Andy's version was supposed to be the following: *"Over the recent weeks as you know, certain things in your expectations are not being met due to the fact that day shift is not doing their jobs,"* which not only made the sentence shorter but also more formal, which was exactly what professional correspondence genre conventions call for.

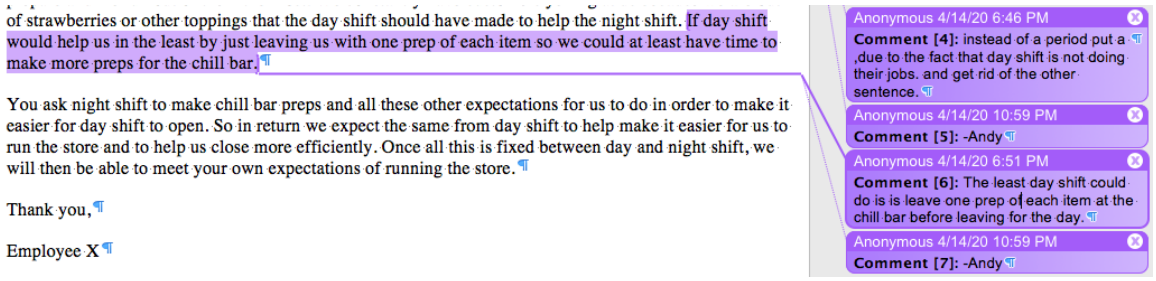
In some instances, the study participants used hedging to make suggestions with examples sound less authoritative. For example, seeing the absence of a closing remark in Trent's draft, Raymond suggested: *"Try saying thank you for you time stressing how important this is as well,"* which was, on the one hand, provided helpful details, but on the other hand, sounded less categorical and gave Trent room to develop his own wording (in case, the latter would choose to use this comment for revision.)

At a sentence and word level, the strategy of providing detailed instructions was also applied. For example, Ellie commented on Trent's "asap": *"Should be in caps "ASAP" or spelled out,"* which offered Trent two options to revise his writing. Or Harvey commented on Andy's "un-fair" with: *"Take away the dash in unfair,"* which obviously looked more comprehensible compared to as if he chose only to write "unfair", which could have been easily overlooked by the writer. Sometimes, comments with examples looked like mini-lessons, for example: *"Do not use conjunctions to start your sentences i.e., and, but, or, because, etc.",* which demonstrated the reviewer's willingness to not only correct that particular point of issue but to prevent further flaws of this kind.

Another type of collaborative comments with examples was a simple provision of the reviewer's version. For example, Andy chose to do it to comment on another confusing sentence Harvey had composed after she had produced her previous convoluted comment (Figure 7):

Figure 7

Type of Comment: Example (without the Reviewer's Text)



Harvey's text: If day shift would help us in the least by just leaving us with one prep of each item so we could at least have time to make more preps for the chill bar.

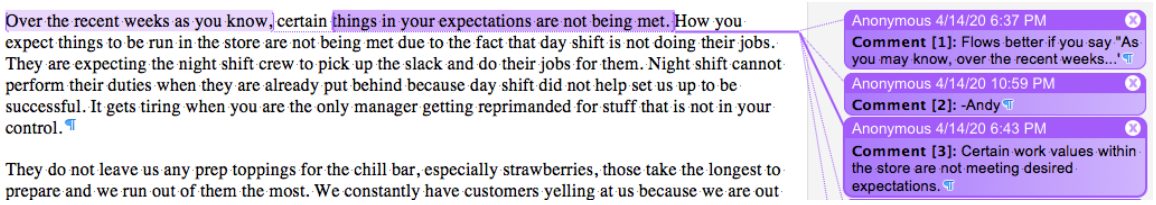
Andy's comment: The least day shift could do is leave one prep of each item at the chill bar before leaving for the day.

Not only Andy's version was more concise, but she also changed the syntax, thus making the sentence easier to understand.

However, not all comments called for shorter representation. For example, this is how Andy rewrote Harvey's sentence, where she not only changed the word choice but also restructured it to make it more formal (Figure 8):

Figure 8

Type of Comment: Example Calling for More Formal Style



Harvey's text: Certain things in your expectations are not being met.

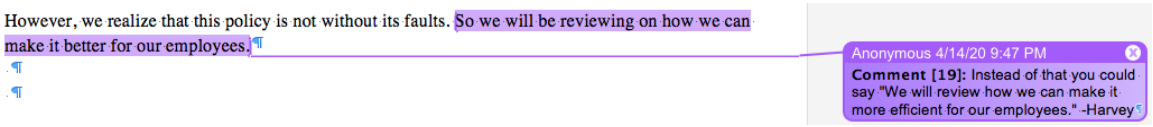
Andy's comment: Certain work values within the store are not meeting desired expectations.

Here Andy suggested substituting "certain work values" for "certain things" but improved the rest of the wording as well, making the sentence more responding to the professional correspondence style. Obviously, she remembered that earlier, we had discussed in class the differences between academic and non-academic English and agreed that such vague nouns as "thing" should be replaced with more specific ones.

Provisions of the reviewer's version were also sometimes accompanied by hedging, as in the case of Harvey's comment to Andy (Figure 9):

Figure 9

Type of Comment: Example Calling for Hedging



Andy's text: So we will be reviewing on how we can make it better for our employees.

Harvey's comment: Instead of that you could say "We will review how we can make it more efficient for our employees."

At a word level, the study participants also used the direct provision approach, especially for spelling and punctuation issues.

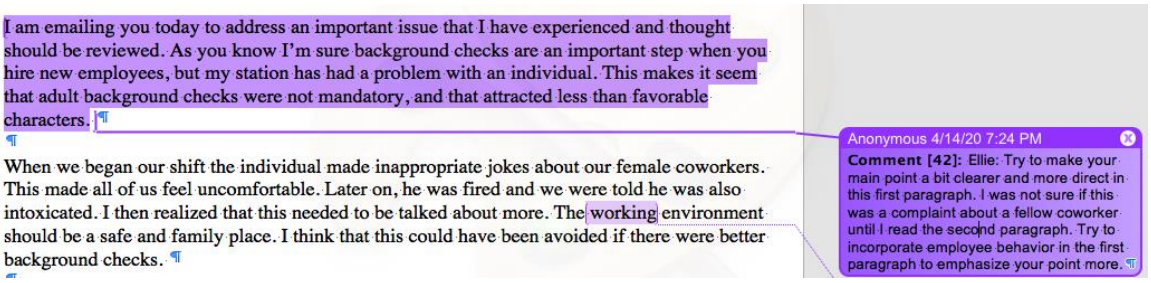
In sum, even without delving deeply into the analysis of revisions made based on peer review feedback, the comments described above look collaborative, that is, intelligible and self-sufficient and, therefore, helpful for revisions.

Explanations. Explanations used by the study participants were either based on their understanding of the genre conventions and prompt requirements or their feelings

toward the writer's text. The majority of explanatory comments involve feedback on the text or genre level, for example (Figure 10):

Figure 10

Type of Comment: Explanation on Genre



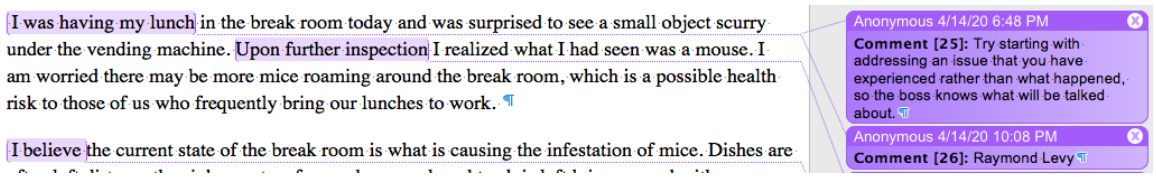
Ellie's comment: Try to make your main point a bit clearer and more direct in this first paragraph. I was not sure if this was a complaint about a fellow coworker until I read the second paragraph.

Ellie's suggestion concerns both the genre conventions and the reviewer's perception of the text, thus being very informative. With her explanation in the second sentence, she does not only point at the disparity between the genre conventions and the draft but explains why the genre conventions are so important because they directly help the reader to understand the point of the text.

In certain cases, explanatory references to the genre conventions appeal to audience awareness. For example, a comment on the same topic as above but from a different reviewer (Figure 11):

Figure 11

Type of Comment: Explanation on Audience Awareness



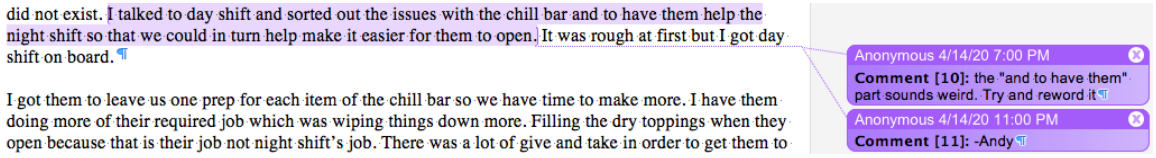
Raymond's comment: Try starting with addressing an issue that you have experienced rather than what happened, so the boss knows what will be talked about.

In his suggestion, Raymond uses an explanation to justify his comment and also to make it sound milder.

Explanations that concerned style and grammar were mostly based only on the reviewers' knowledge they had acquired before, because those aspects were not a focus of this class, for example (Figure 12):

Figure 12

Type of Comment: Explanation on Style



Andy's comment: The "and to have them" part sounds weird. Try to reword it.

Obviously, Andy struggled with offering the correct revision (because, in other cases, she would eagerly offer her own rewording) and only suggested revising without showing how. However, "sounds weird" (or "a bit off," "confusing") reasoning often occurred in students' peer review comments, obviously being a common part of student peer review discourse.

In sum, explanations were mainly made at higher level writing issues, such as text and genre, sounded substantial, and demonstrated the reviewers' collaborative intention to contribute to their classmates' drafts meaningfully.

Clarifications. Comments in this category touched upon all levels of the text and mainly occurred in the final comments that students provided at the end of student writers' drafts. For example, in his comment on text organization, Raymond provides two clarifications (Figure 13):

Figure 13

Type of Comment: Clarification on Format

General Comment from Raymond to Ellie:
You did a great job with your ideas and sentence organization. It is clear to read and simple enough to get your ideas across. Just look out for confusing sentences from certain perspectives. Make sure that your format is easy to read to try making headings when you are listing main solutions. Formatting is hard to do with how you are doing it, but it's definitely possible. Make sure to understand the prompt with the third email, but overall I believe that you are doing a great job. Make sure that you begin and end with courtesies. Try to be very direct with responses; Do not try to fluff the emails. Make sure to make this personal and explain how important the issue is by describing your feelings.

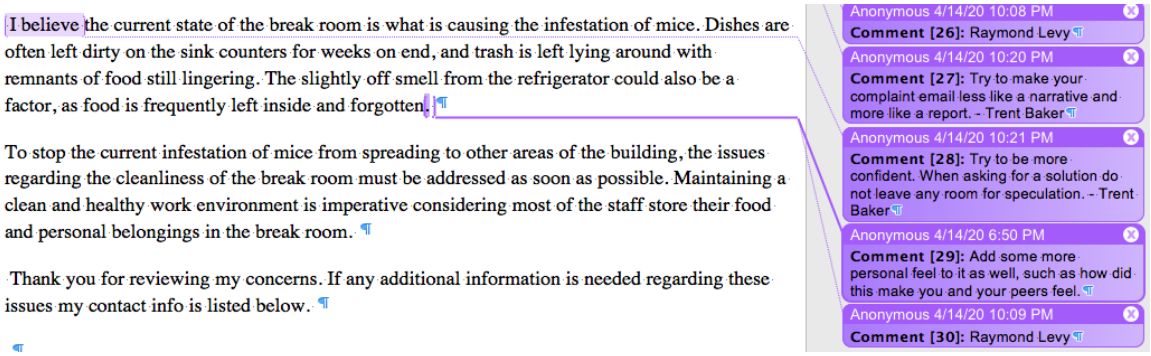
Raymond's comment: Make sure that your format is easy to read. Try making headings when you are listing main solutions. Formatting is hard to do with how you are doing it, but it's definitely possible.

Raymond's main idea concerned headings that would highlight solutions, but he chose to augment it with generalizing the issue by naming it (formatting) and also with hedging ("formatting is hard to do"), which intended not only to clarify but alleviate the negative character of his comment.

Another example concerns content (Figure 14):

Figure 14

Type of Comment: Clarification on Content



Raymond's comment: Add some more personal feel to it as well, such as how did this make you and your peers feel.

In his comment, Raymond suggests adding more pathos by appealing to feelings. Similar to his comment above, he generalizes the issue by naming it "[a lack of] personal feel" and then clarifies it.

Comments on tone also took place in this category, for instance (Figure 15 and 15):

Figure 15

Type of Comment: Clarification on Tone - 1

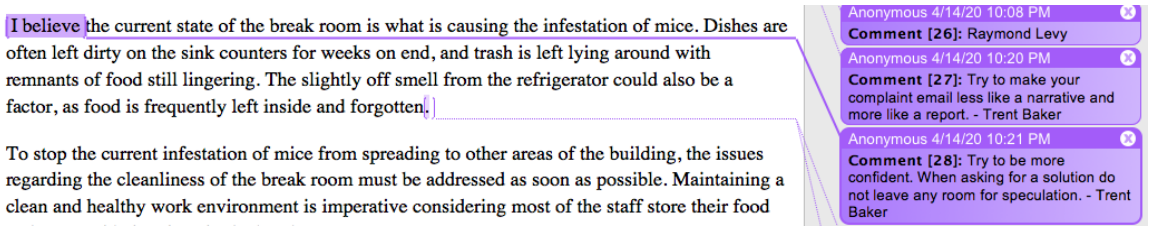
Feedback from Ellie to Trent Baker:
I found quite a few grammatical errors in all three emails. Make sure your sentence structures are direct and simple. I had a hard time trying to decipher who was being talked about at times, this is an easy fix with the proper placement of commas. The tone in email #3 was off in certain places. The tone read as angry and pointed, almost establishing blame. Make sure the tone is consistent throughout and delivered in a professional way. I did find places where the tone was direct and appropriate for a business email. I would use those sections of your emails as a guide to the rest of your delivery. Closing statements should also be included in each email. Reiterate the main point and offer acknowledgements and thanks. Overall, I think your topic is great and very relevant to what is currently happening.

Ellie's comment on Trent's draft: The tone in email #3 was off in certain places. The tone read as angry and pointed, almost establishing blame. Make sure the tone is

consistent throughout and delivered in a professional way.

Figure 16

Type of Comment: Clarification on Tone 2



Trent's comment on Ellie's draft: Try to be more confident. <u>When asking for a solution, do not leave any room for speculation.</u>

It is interesting to observe how students try to be persuasive in proving to each other opposite approaches to establishing the right tone in professional emails. In both of the comments above, reviewers started with the effect the tone used by the author produced upon the reader and continued with direct suggestions on improving the problem specifically.

Sometimes clarification comments touch upon the writing-as-a-process aspect of the class, for example (Figure 17):

Figure 17

Type of Comment: Clarification on Writing as a Process

General Comment from Raymond For Trent:
I felt like this was well written. However, make sure to proofread your work and fix any spelling and grammatical errors. Make sure to look at sentence structure and organization so that your emails are efficient and easy to read. Remember that this is in a professional email format and that these need to be polite and easy to follow. Make sure to begin and end with courtesies. Make sure to provide any additional information that might be in an email format. You did a good job with responding to the prompt. Make sure that every sentence does not use slang and is direct. You are following good ideas in your email and I think that you know what you are looking for.

Raymond's comment: However, make sure to proofread your work and fix any spelling and grammatical errors.

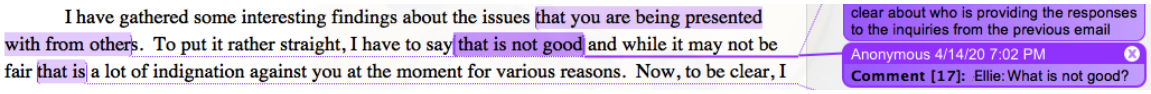
Here not only Raymond recommends proofreading but also points to what to pay particular attention to.

In sum, clarifications demonstrated students' knowledge of the genre conventions and skill to navigate the rhetorical situation in the prompt, alongside trying their best to make their comments understandable to authors, which definitely makes their feedback collaborative.

Asking-For-Clarification. Clarification requests were made in the case of reviewers' confusions and primarily at a sentence and word level, for example (Figure 18):

Figure 18

Type of Comment: Asking for Clarification on a Vague Pronoun



Trent's text: To put it rather straight, I have to say that is not good and while it may not be fair that is a lot of indignation against you at the moment for various reasons.

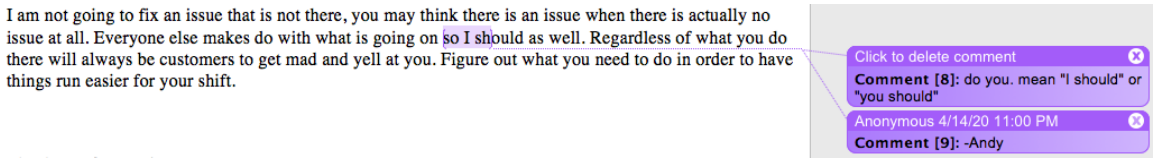
Ellie's comment: What is not good?

In her comment, Ellie asked a specifying question by pointing to the vague meaning of the pronoun "that". The question format made the feedback more concise and illustrative compared a possible prescriptive format with the imperative mood.

Or another comment (Figure 19):

Figure 19

Type of Comment: Asking for Clarification on a Confusing Pronoun Reference



Harvey's text: Everyone else makes do with what is going on so I should as well.

Andy's Comment: Do you mean "I should" or "you should"?

Andy was confused because Harvey's sentence produced a defeated expectancy effect, so she asked a question about who should perform the action.

Alleviations. This type of comments served to help authors digest constructive critique and demonstrated that reviewers indeed cared about the impression their feedback produced. Comments of this type often started with "but" or "other than that," for example (Figure 20 and 21):

Figure 20

Type of Comment: Alleviation Presented as an Opinion

Feedback from Ellie to Raymond:
Remember to emphasize your main point in your introductory paragraph for email #1. Make sure the information about the issue is being delivered directly. I found a few sentence structure errors along with some grammar mistakes but those can be fixed through proofreading. The tone of your emails are appropriate and professional, so I would say the delivery is very well done. The structure is also well done, you provide all the essential components needed for the organization and design. An important note - from my understanding email #1 is the complaint to a boss, and email #2 is the boss making an inquiry about the complaint to a higher up such as a manager or corporate leader. Email #3 is the higher up's response to the boss's inquiry email. Three individuals should be involved and at the moment only the employee and the boss are interacting, make sure to read the prompt to avoid confusion.

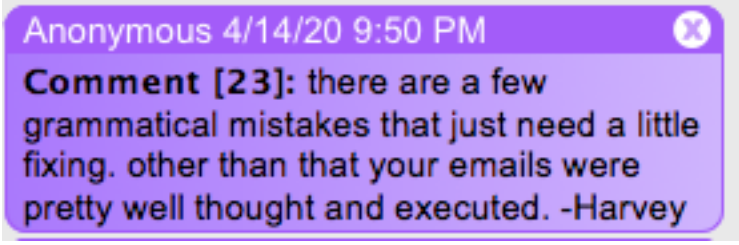
Ellie's comment: I found a few sentence structure errors along with some grammar mistakes <u>but those can be fixed through proofreading.</u>

In this comment, Ellie gave her opinion on how easily an issue can be fixed, thus alleviating the effect of her criticism.

In the next example, alleviation was provided through a specific praise comment. I chose to distinguish alleviations from praising evaluative comments when the latter were attached to negative comments and meant to show respect to the writer's probably hurt feelings (Figure 21).

Figure 21

Type of Comment: Alleviation Presented as Specific Praise[9]



Harvey's comment: There are a few grammatical mistakes that just need a little fixing. Other than that your emails were pretty well thought and executed.

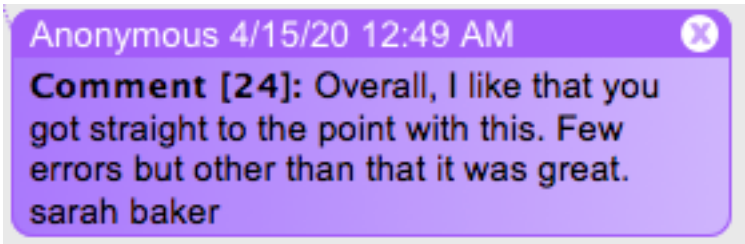
In the comment above, Harvey praised the writer after he summarized his criticism to alleviate a possible negative impression of his feedback.

Reiterations. Comments of this type showed that a comment was in line with the one made by the other reviewer. It is difficult to say if the second reviewer indeed intended to support the opinion of their classmate and simply expressed their own one. However, in the eyes of the writer, similar comments on the same issue were most likely seen as collaboration. It is interesting that in both cases, reiterations are worded in a different style compared to the initial comment (Figure 22 and 23):

Figure 22

[9] Though this comment is formatted as a marginal one, it is a final comment that relates to the entire draft.

Type of Comment: Reiteration Demonstrating a More Colloquial Style Compared to the Initial Comment[10]

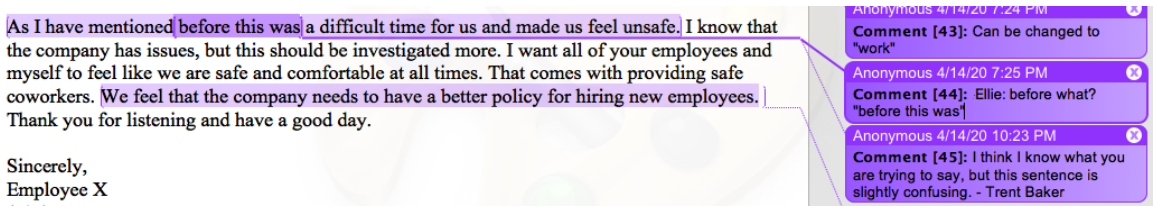


Harvey's Comment: There are a few grammatical mistakes that just need a little fixing. Other than that your emails were pretty well thought and executed.

Sarah's Reiteration: Few errors but other than that it was great.

Figure 23

Type of Comment: Reiteration Demonstrating a More Sophisticated Style Compared to the Initial Comment



Raymond's text: As I have mentioned before this was a difficult time for us and made us feel unsafe.

Ellie's Comment: Before what? "Before this was"

Trent's Reiteration: I think I know what you are trying to say, but this sentence is slightly confusing.

[10] This comment was placed right after the one above (Figure 21).

In the first example, Sarah made her comment sound more colloquial and different from Harvey's; in the second example, the situation was the opposite, where Ellie's comment was in a low register, and Trent paraphrased it with hedging and making it sound more professional.

As seen in the examples, reviewers often combined collaborative comments to address the same writing issue. These comments often augmented a prescriptive suggestion provided in the imperative mood by explaining, clarifying, providing an example, or alleviating the effect of critique. Question comments allowed authors to start thinking about an issue and develop their own way of solving it. Overall, collaborative stance comments were very helpful for the overall working atmosphere in terms of supporting both the writers and fellow reviewers. If writers felt that they could potentially respond to reviewers and their feelings were important, reviewers could potentially receive support from colleagues in case their comment turned out confusing.

Evaluative Stance. The evaluative stance comments fell under two basic categories: praise and critique. Given the data presented in Table 11, the majority of evaluative feedback students provided was specific, with 33% and 61% for praise and critique, respectively, with general praise constituting only 6%; general critique comments were not made by students.

Table 11

Google Doc Anonymous Mode: Occurrence of the Types of Comments in the Evaluative Stance

Types of Comments	Occurrence n	Percentage %

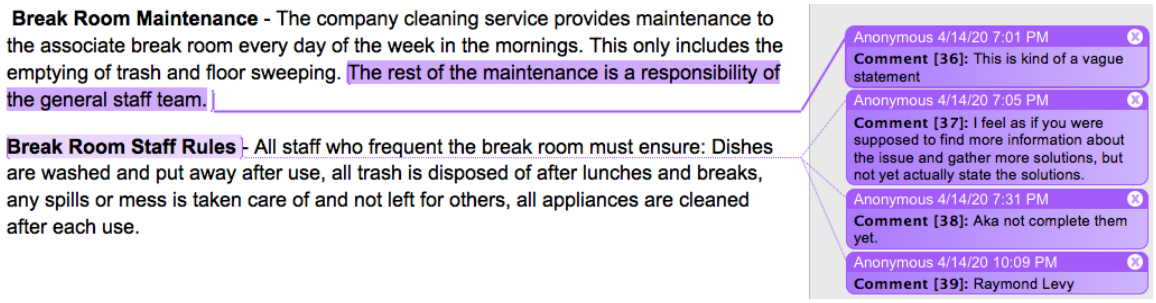
SPCR	Specific Critique	20	61
PP	Specific Praise	11	33
GP	General Praise	2	6
GCR	General Critique	0	0
Total		33	

Praising comments were mostly found in students' final comments they made due to the prompt requirement in addition to marginal comments. In turn, critique occurred mainly in the margins and never in the final comments.

Specific Critique. The majority of critique was provided by students on the content and mostly for the margins rather than for the final comment, for example (Figure 24):

Figure 24

Type of Comment: Specific Critique on Clarity



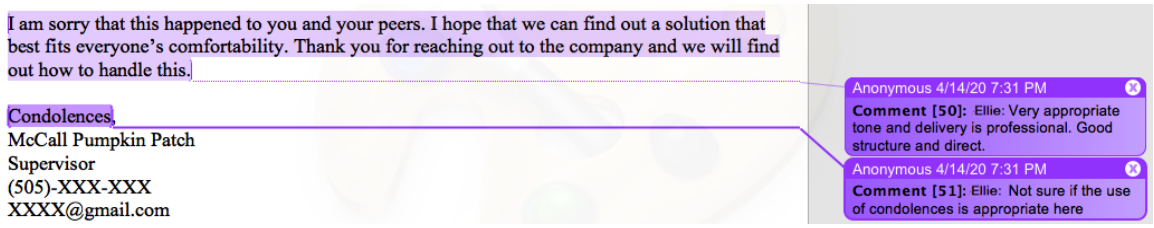
Raymond's comment: This is kind of a vague statement.

This comment clearly calls for revising; however as long as it appeals to the reviewer's feelings rather than sounds as commands, I interpret it as an evaluative one.

The following are examples of specific critique on genre and structure (Figure 25 and 26):

Figure 25

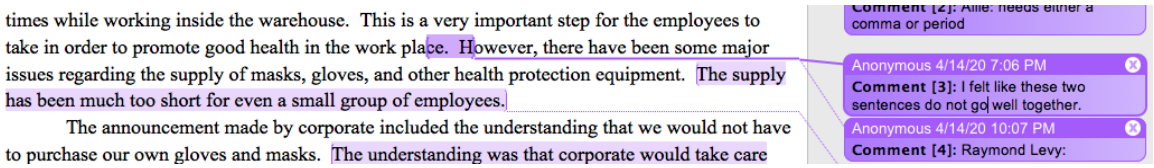
Type of Comment: Specific Critique on Genre Conventions



Ellie's comment: Not sure if the use of condolences is appropriate here.

Figure 26

Type of Comment: Specific Critique on Coherence



Raymond's comment: I felt like these two sentences do not go well together.

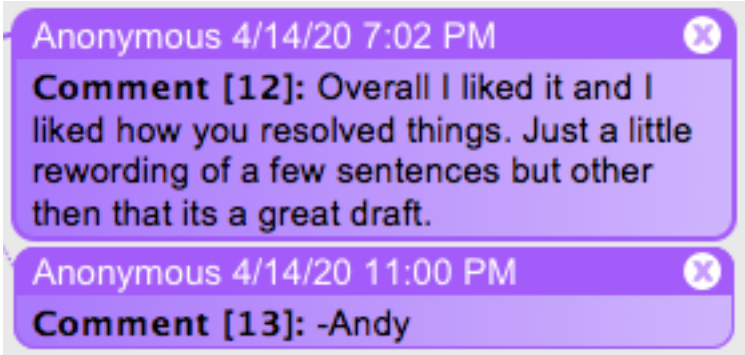
The comments above demonstrated the reviewers' uncertainty about their impression of writing and maybe their unwillingness to delve deeper into formulating a prescription, so they preferred to choose milder wording.

In sum, critique resembled prescriptive comments, while praising comments were less informative but mostly worked for creating a positive aftermath of the peer review session where the atmosphere might have been spoiled by prescriptive commenting. Not all students felt equally comfortable with the evaluative stance because, for example, Trent did not post any single praising comment (he did not write the final comment) and other students—Harvey, Andy, and Sarah—did not post any single critique. This disparity means that commenting in the evaluative stance can be purposefully touched upon in the peer review training to enhance the collaborative atmosphere of the activity.

Specific Praise. Praise on content and genre demonstrated that students paid special attention to those aspects of writing. For example, that is how students formulated their comments on content (Figure 27 and 15):

Figure 27

Type of Comment: Specific Praise on Content



Andy's comment: … I liked how you resolved things.

Ellie's comment: Overall, I think your topic is great and very relevant to what is currently happening (see Figure 15).

These comments prove that reading and reviewing those drafts engaged students, and they appreciated well-developed content.

In the comments on the genre, students touched upon various aspects that we discussed in class, such as organization, design, and tone, for example:

Raymond's comment: You did a good job with responding to the prompt (see Figure 17).

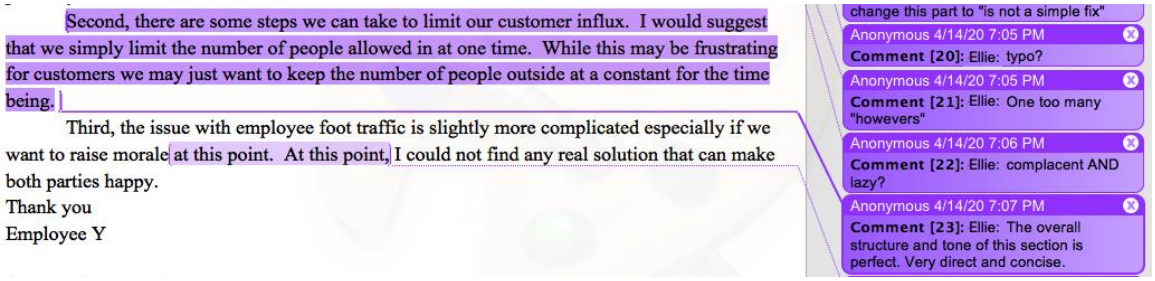
Ellie's comment: The tone of your emails are appropriate and professional (see Figure 20).

Ellie's comment: The structure is also well done, you provide all the essential components needed for the organization and design (see Figure 20).

In some instances, students made references to structure at a text and sentence level, for example (Figure 28 and 13):

Figure 28

Type of Comment: Specific Praise on Genre Conventions - 1



Ellie's comment: The overall structure and tone of this section is perfect.

Raymond's comment: You did a great job with your ideas and sentence organization (see Figure 13).

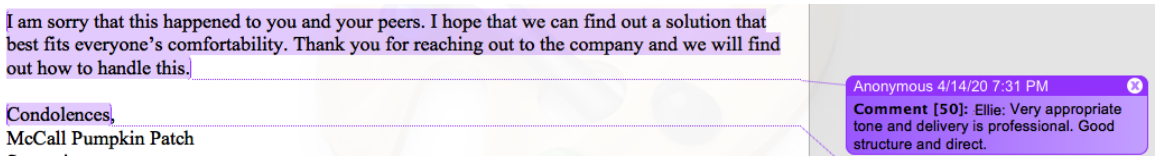
These comments demonstrate students' ability to focus on different aspects of writing and clearly formulate their ideas about them.

To ensure a more intelligible delivery of ideas, students provided clarifications to their praising comments, for example (Figure 13 and 29):

Raymond's comment: You did a great job with your ideas and sentence organization. <u>It is clear to read and simple enough to get your ideas across</u> (see Figure 13).

Figure 29

Type of Comment: Specific Praise on Genre Conventions - 2



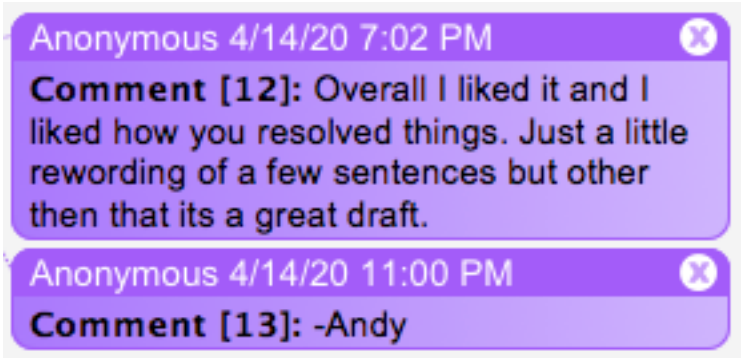
Ellie's comment: Very appropriate tone and delivery is professional. Good structure and direct.

Comments similar to Ellie's were normally provided by students in the final comment. On the contrary, she provided hers in the margins, where she followed her traditional practice to find a well-written section in the writer's draft and use it as an example for them to apply to the rest of the draft.

General Praise. Comments of this type were meant to create a positive mood in authors and served as an introduction to final comments. Being vague and even resembling by their function phatic comments in the collaborative stance, they were always accompanied by more substantial feedback, for example (Figure 30 and 17):

Figure 30

Type of Comment: General Praise



Andy's comment: Overall, I liked it, and I liked how you resolved things. Just a little rewording of a few sentences …

Here Andy preferred to start with a generic statement, then she proceeded to more specific praise, and only after she segued to summarizing her marginal feedback.

Raymond's comment: I felt like this was well written. However, make sure to proofread your work and fix any spelling and grammatical errors… (see Figure 17)

Both Andy and Raymond used general praise to prepare for summarizing their prescriptive comments.

Overall, evaluative comments, though not sounding formally collaborative, still can be called such because they contribute to a more positive atmosphere in a peer review group. Constructive critique expressed though reviewer's feelings sounds less categorical compared to comments in the prescriptive stance, which can be promoted in the peer review training.

Notes for Improved Collaboration in Peer Review Design and Training

Repetition of Comments

Repetition of comments was an issue that, as I noticed, could contribute to an uncollaborative tension between students. By repetition of comments, I mean that students commented several times on the same issue, thus creating unnecessary comment "noise." For example, when Harvey first noticed that Andy started her sentence with a conjunction, he commented: "Take "and" out of the beginning of sentences." After that, Harvey saw that the entire second paragraph consisted of sentences starting with conjunctions, and he decided to make his point more explicit: "Do not use conjunctions to start your sentences i.e., and, but, or, because, etc., " which this time sounded like a mini-lesson. When Harvey saw the same style in the second email, he decided to reinstate his point and again commented: "No conjunctions at the beginning of a sentence. " In the third email, again, there also was a sentence with a conjunction at the beginning, but

Harvey did not comment. Though Harvey's incentive to explain his point definitely deserves respect, especially given that he tried different formats to express it and the directness was getting stronger each time, my vision is that the student author could see all of those comments after the first one looked unnecessary and cluttered. The aspect of comment repetitiveness needs to be addressed in the peer review training to ensure that students do not spend precious time on expressing the same idea again and again and behave more collaboratively in their feedback trusting that authors are capable of understanding the feedback the first time it is provided.

Congruence of Feedback Provided and Received and Correlation with Drafts

The comparative analysis of students' drafts and the feedback they provided to classmates revealed that some students' peer review comments were congruent with the issues in their own drafts. For example, here is Harvey's suggestion on the style he made to Andy:

> *Andy's text: So we will be reviewing on how we can make it better for our employees.*
>
> *Harvey's comment: Instead of that you could say "We will review how we can make it more efficient for our employees." (see Figure 9)*

In his suggestion with example, not only Harvey made the verb form sound stronger, but he also suggested replacing the generic word "better" with the more solid and specific word "efficient." This suggestion was surprising to me because Harvey's own draft was abundant in colloquialisms frowned upon in business communication, such as "get things done"; "pick up the slack"; "I am not going to fix an issue that is not there; you may think there is an issue when there is actually no issue at all" (though higher-

register words, such as "efficient," "alleviate," and "reprimand" were also present in his draft); thus, the comment he made to Andy was more than relevant to his own writing style.

Andy also noticed that Harvey's writing style needed improvement and made several comments that were aimed at adding more professionalism to Harvey's draft:

Harvey's text: Over the recent weeks as you know, certain things in your expectations are not being met.

Andy's comment 1: Flows better if you say "As you may know, over the recent weeks ..." (see Figure 6).

Andy's comment 2: Certain work values within the store are not meeting desired expectations (see Figure 6).

In her comments, not only Andy swapped parts of the sentence but also substituted "certain work values" for "certain things" making the wording more formal and changed the tense form in the second part of the sentence. She rationalized her comments by referring to the improved flow: "Flows better if you say." So, Andy and Harvey demonstrated that they both knew how to elevate each other's writing style but, for some reason, failed to see the same issues in their own drafts.

Another case of *mutual commenting* occurred with Ellie and Raymond, who both suggested that the writer needed to formulate the main point in the first paragraph clearer:

Ellie's comment on Raymond's text: Try to make your main point a bit clearer and more direct in this first paragraph. I was not sure if this was a complaint about a

fellow coworker until I read the second paragraph (see Figure 10).

Raymond's comment on Ellie's text: Try starting with addressing an issue that you have experienced rather than what happened, so the boss knows what will be talked about (Figure 11).

Both of these comments referred to the genre conventions that call for stating the issue early on, and the only difference concerned chosen rhetorical strategies. If Ellie chose pathos and rationalized her comment by describing her feelings, Raymond resorted to logos and referred to the possible boss' confusion.

Obviously, comment congruence is an interesting point to discuss during the peer review training when we can recommend that students apply comments they leave on others' drafts to their own writing. Knowing that comments a student leaves on a peer draft can be helpful for their own revisions will only enhance the collaborative effect of the peer review because the entire peer review situation allows students to provide feedback as if to themselves.

Conclusion

The collaborative atmosphere in the Google Doc anonymous peer review session was partially disturbed by those students who did not post their drafts on time. Still, most students posted on time and provided a plethora of helpful and diverse feedback.

In the collaborative stance, the most frequent comment types were alleviation, example, and explanation, while the less frequent were clarification, asking for clarification, and reiteration. In the evaluative stance, the specific critique was prevalent,

and specific praise was also often used, while general praise was very scarce, and general critique was not used. Half of the students demonstrated the collaborative performance more than others during that peer review session, one student used the collaborative and prescriptive stances at the same level, and two made their comments mainly in the prescriptive stance. The evaluative stance was used extensively by one student, while others used it much less frequently, which probably means a certain level of discomfort with providing this kind of feedback. Still, the evaluative stance needs to be trained because it contributes to a more positive and collaborative environment. Also, the training should consider replacing of the command format in prescriptive comments by collaborative or evaluative comments with the same meaning.

Regarding student participation, not all students demonstrated equal involvement. Some students left abundant comments while others' comments were scarce. Also, some did not comment equally throughout the draft by either leaving more comments at the beginning and very few or even none closer to the end or by providing more comments closer to the end. To make peer feedback look more harmonious and appealing to authors, it is desirable to teach students to spread it equally across the draft.

Some moments if addressed during the peer review training would significantly enhance student collaboration and make the peer review activity more helpful for the writing process of both authors and reviewers. Repetitive comments on the same aspect of writing occupied space and looked obtrusively. Students can be recommended to avoid repetitive comments to ensure that they respect authors and trust their capability to understand a problem based on one comment rather than several. Another point worth noting was congruence of feedback where comments reflected issues in the reviewer's

own draft. Students can be advised to review their comments for the purpose of applying them to their own revisions.

Chapter 4: Google Doc Identifiable Peer Review Session

In this chapter, I argue that additional collaborative features related to the Google Doc modes that are beneficial for the emotional environment in a peer review group are applying to themself the same expectations that one applies to others' peer review performance; equal commenting throughout the draft, preferably in the collaborative and evaluative stances; providing focused feedback so one comment is devoted to one aspect of writing; revising comments for their clarity; eliminating excessive marginal commenting; providing a properly structured final comment; and beginning feedback with praise. Also, comparison of peer review comments in both Google Doc modes demonstrated visible students' learning growth even on those aspects that were not addressed by instruction.

Overview

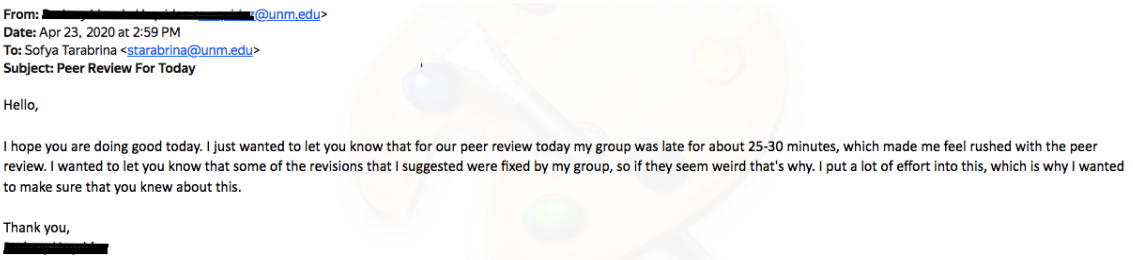
The Project 3 Final Peer Review was identifiable and took place on April 21, 2020, Tuesday, a week after intermediate anonymous peer review, and three days before the final submission of the project. Students were supposed to post their drafts in advance to fulfill the peer review assignment during our regular class time. As with the anonymous peer review session, each student had 35 minutes to fulfill each of the two reviews, which was less than during the last peer review as students submitted the whole draft rather than three emails out of five. As last time, I allowed students not to review papers if those were submitted way late into the class time or even after class without deducting their points.

As that peer review session was not anonymous, students commented under their real names; however, for the purposes of this study, I will describe this piece of data using students' pseudonyms that they chose at the stage of their recruitment.

In one group, the peer review session was accompanied by significant anxiety and discontent caused by late posting and, probably, personal attitudes. While Raymond posted his draft on time, Harvey posted his 20 minutes later and Trent posted his half an hour later after the class time had started, which made Raymond very anxious. After class, he even sent me an email (Figure 31):

Figure 31

Raymond's Email



From: [redacted]@unm.edu>
Date: Apr 23, 2020 at 2:59 PM
To: Sofya Tarabrina <starabrina@unm.edu>
Subject: Peer Review For Today

Hello,

I hope you are doing good today. I just wanted to let you know that for our peer review today my group was late for about 25-30 minutes, which made me feel rushed with the peer review. I wanted to let you know that some of the revisions that I suggested were fixed by my group, so if they seem weird that's why. I put a lot of effort into this, which is why I wanted to make sure that you knew about this.

Thank you,
[redacted]

> *... I just wanted to let you know that for our peer review today my group was late for about 25-30 minutes, which made me feel rushed with the peer review. I wanted to let you know that some of the revisions that I suggested were fixed by my group, so if they seem weird that's why. I put a lot of effort into this, which is why I wanted to make sure that you knew about this.*

After the peer review session was over, I looked through the history of comments and did not find any changes that Raymond's peer review partners could have made to his comments, so, in my response, I reassured him that his work remained intact. On my end, I was surprised that Raymond brought up that issue because, during the anonymous peer

review, it was he who had posted his draft late (though, only 13 minutes later after the class time started.) As for Trent and Harvey, posting their drafts late had been typical for them during the first half of the semester.

Another possible point of discontent might have been caused by the Project 1 peer review work between Raymond and Trent earlier in the semester. On Trent's paper, Raymond made many detailed repetitive comments primarily on grammar and mechanics (which issue was indeed common for Trent's writing) and some comments on organization (many of them starting with "do not forget" and "make sure"), all comments being critical. The subsequent peer review encounter between Trent and Raymond happened during the anonymous peer review session, with which it is hard to say whether it affected their relationship or it did not. Though students were unaware of each other identities and Raymond commented much less at that time, still there was a chance that Trent could identify him.

In the other group, Andy and Sarah had worked together before during the first half of the semester when they both produced high quality feedback for each other. As to Ellie, she had never worked with Sarah before but worked only with Andy, and their collaboration had been very productive.

For that peer review session, Andy and Ellie posted their drafts before class time, but that was not the case with Sarah. The day before, Sarah sent me an email saying that, due to her job, she would do the peer review later. However, not only did she comment on her classmates' drafts after the class time had been over, but she was also very late with posting her own draft (four hours after the peer review session had been over), the same way she had done in the previous anonymous session.

As it occurred in the anonymous mode, not all students commented across drafts equally. For example, Harvey commented on Raymond's draft after Trent and left comments only on those pages with the visible space in the margins. Raymond commented less (n25) on the first draft (Harvey's) and much more (n38) on the second draft (Trent's). This disparity was probably caused by Raymond's major concerns on two of Harvey's emails, which he pointed to and, due to which he probably found it unnecessary to comment on other aspects. Andy noticed an issue with Sarah's draft, an insufficient length, and chose to make content suggestions only on the first three emails rather than on all five. Sarah commented very selectively, as in the previous peer review session, and most emails did not receive her feedback. As I noted in the context of the previous peer review session, students can be recommended to distribute their feedback more evenly for the sake of producing a more collaborative impression upon authors who could feel that some parts of their draft were neglected by reviewers.

Similar to the anonymous mode peer review session, not all students equally participated (Table 12). Raymond (n43 on average) and Ellie (n40) were the most active reviewers, Harvey (n11 on average) and Andy (n19 on average) "placed second," while Trent (n9) and Sarah (n4) participated least actively.

Table 12

Student Participation in the Google Doc Identifiable Peer Review Session (Professional Correspondence Dossier Final Peer Review)

	Readers (go first) and Writers (go second)										
Reviewers	TrR	HrR	TrH	RrH	RrT	HrT	ErA	SrA	ArE	SrE	ArS
Total n comments	12	17	6	33	53	5	40	5	25	2	13

Note. "TrR" stands for "Trent reviews Raymond"

In general, student involvement in the peer review process was similar in both Google Doc peer review sessions, with Ellie and Raymond providing most numerous comments, Harvey and Andy demonstrating a medium activity, and Sarah and Trent being least active.

Collaboration Across Peer Review Stances

Occurrence

Students demonstrated miscellaneous peer-review performance regarding stances (Table 13). Raymond, Harvey, and Andy were consistent and made most of their comments on both drafts in one stance: Raymond stuck to the prescriptive stance, while Harvey and Andy preferred the collaborative stance in their commenting. Trent was flexible and commented mainly prescriptively on Harvey's draft and mainly collaboratively on Raymond's draft (probably because he was familiar with Harvey and could afford less careful behavior toward him.) The data on Ellie and Sarah were skewed as Ellie reviewed only one draft during that peer review session (as Sarah submitted hers very late), and Sarah's comments were very scarce.

Table 13

Peer Review Stances in the Google Doc Identifiable Peer Review Session (Professional Correspondence Dossier Final Peer Review)

	Readers (go first) and Writers (go second)										
Reviewers	TrR	HrR	TrH	RrH	RrT	HrT	ErA	SrA	ArE	SrE	ArS
Types of Comments											
	Prescriptive Stance										
S	3	5	2	15	23		15	4	8		6
SC	1	1	1	1	3		1		1		
Total n	4	6	3	16	26	0	16	4	9	0	6
Total %	33	35	50	49	49	0	40	80	36	0	46
	Collaborative Stance										

AFCLAR	2	4	1	1	2						
CLAR							1		1		
EXPL	1	1		10	13		6	1	3		3
EXM	1	2			1	1	8		5		3
REIT		2									
ALL	1				2		1		1		
OPI					1						1
Total n	5	9	1	11	19	1	16	1	10	0	7
Total %	42	53	17	33	36	17	40	20	40	0	54
					Evaluative Stance						
GP	1	2		2	1	1	1		1		
SPP			1	3	4	3	5		4	2	
GCR						1					
SPCR	2		1	1	3		2		1		
Total n	3	2	2	6	8	5	8	0	6	2	0
Total %	25	12	33	18	15	83	20	0	24	100	0

Note. "TrR" stands for "Trent reviews Raymond"

In the identifiable mode, the evaluative stance was presented more widely (30% versus 20% in the anonymous session; see Table 4) and even prevailed over other stances in Sarah and Harvey's comments; however, in only one of the drafts, on which they commented. With Harvey, it was possible that he felt so much respect for Trent who was his friend that most of his comments to him were praise. Sarah's two single comments on Ellie's draft were praise, while Andy's draft did not receive any single praising comment from Sarah[11]. Andy also made evaluative comments to Ellie (24%) and not to Sarah. The latter happened probably because Andy started reviewing Sarah's draft a few hours later than it had been posted and Sarah had left her comments. This means that Andy was able to see Sarah's feedback and probably noticed the absence of praise, which might have determined her character of commenting on Sarah's draft. These observations allow me to suggest that collaboration would significantly improve if the instructor explains to

[11] The same situation repeated during the Zoom peer review when Andy did not receive any single praising comment from Raymond while his praise to Ellie was abundant.

students different kinds of feedback in terms of peer review stances and recommends them to use the evaluative stance more extensively to avoid tension and discontent in authors.

A surprising data was on Harvey, who had been the most "prescriptive" reviewer during the anonymous peer review session (70%) (Table 9) but made much fewer prescriptive comments in the identifiable mode (35%). A possible reason for such a disparity may be the difference in modes. In the identifiable mode, group members were not only familiar with each other. They had opinions on one another based on the previous in-person group activities in class, and there could be academic competition among Trent, Harvey, and Raymond. Raymond was the most prolific reviewer in that peer review session (n33 for Harvey and n53 for Trent). Harvey provided very thoughtful and collaborative feedback, thus producing 35% of all his feedback (on average) in the collaborative stance during that peer review session as opposed to 10% in the anonymous mode (to illustrate, here is one of his questions to Raymond that were typical for his commenting in that peer review session: "how is having it done twice going to make a difference? twice by the same person or by two different HR employees?") As for Trent, he made more prescriptive comments in this session (42% on average) compared to the anonymous session (25% on average). This possible competition, the conflicting relationship between Trent and Raymond, and the conflict situation during the peer review session itself (caused by Trent's and Harvey's late posting, which made Raymond work in a rush) led Raymond and Harvey demonstrate peer review performance that was different from what I observed during the previous peer review session.

I observed the same disparity in commenting in the other group. As Sarah and Andy had already been peer review partners in the anonymous session, comparing their comments on each other's drafts was interesting. So, Sarah's commenting on Andy's draft in the identifiable mode was more prescriptive (80%) than in the anonymous mode (33%). Andy's commenting on Sarah's draft was similar though had a smaller range than in Sarah's case: 29% of prescriptive comments in the anonymous mode versus 46% in the identifiable one.

Thus, the identifiable peer review mode may have affected some students' peer review performance, making them comment more prescriptively, as with Sarah and Andy, or more collaboratively, as with Harvey. Also, some students demonstrated uneven stance-wise commenting across the two drafts they reviewed. As I said before, collaborative peer review training can address those issues and recommend more even commenting in terms of quantity and stance representation.

Collaborative Discourse

As I already explained in relation to the anonymous peer review session, the prescriptive stance will not be analyzed due to it irrelevance to the idea of collaborative peer review.

Collaborative Stance. Unlike what had happened in the anonymous mode, where the collaborative stance was most numerous (42%), in the identifiable mode, the situation was different, and the collaborative stance comments occurred in 10% fewer cases (32%). However, the variance of comment types was slightly larger, and to the existing toolbox, students added opinions. Unlike the anonymous mode where the most frequent comment type was example (32%) (Table 9), the most common

collaborative comment type in the identifiable session was explanation (47%) (Table 14).

Table 14

Google Doc Identifiable Mode: Occurrence of the Types of Comments in the Collaborative Stance

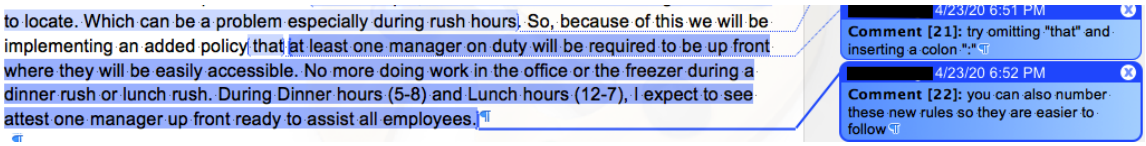
Types of Comments		Occurrence	Percentage
EXPL	Explanation	39	47
EXM	Example	21	26
AFCLAR	Asking for Clarification	10	12
ALL	Alleviation	5	6
CLAR	Clarification	2	3
REIT	Reiteration	2	3
OPI	Opinion	2	3
Total		81	100

Explanations. Explanations noticeably prevailed in the identifiable mode (47% versus 28% (see Table 10)). This disparity might have been caused due to the mode that was incentive to making feedback more understandable.

Most of the explanations were made on genre and prompt requirements, for example (Figure 32):

Figure 32

Type of Comment: Explanation on Formatting



Andy's text: So, because of this we will be implementing an added policy that at least one manager on duty will be required to be up front where they will be easily accessible. No more doing work in the office or the

freezer during a dinner rush or lunch rush. During Dinner hours (5-8) and Lunch hours (12-7), I expect to see attest one manager up front ready to assist all employees.

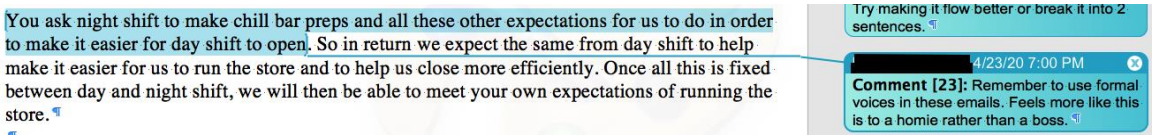
Ellie's comment: You can also number these new rules so they are easier to follow.

In class, we discussed in detail how bulleted points help make professional writing more straightforward, so Ellie reiterated that point here.

Another example of an explanation on genre (Figure 33):

Figure 33

Type of Comment: Explanation on Genre



Harvey's text: You ask night shift to make chill bar preps and all these other expectations for us to do in order to make it easier for day shift to open.

Raymond's comment: Remember to use formal voices in these emails. Feels more like this is to a homie rather than a boss.

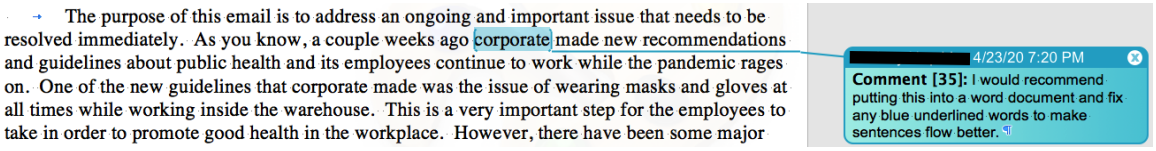
The formal voice was always an issue with Harvey's drafts for this project, and Raymond pointed to it, providing a vivid comparison.

Within this category, explanations on the writing process were a new kind of commenting that had never taken place in the anonymous mode. Some students were willing to educate their peers on how the latter could improve their drafts if they applied

specific techniques and also explain *why* those techniques would be helpful, for example (Figure 34):

Figure 34

Type of Comment: Explanation on Writing as a Process



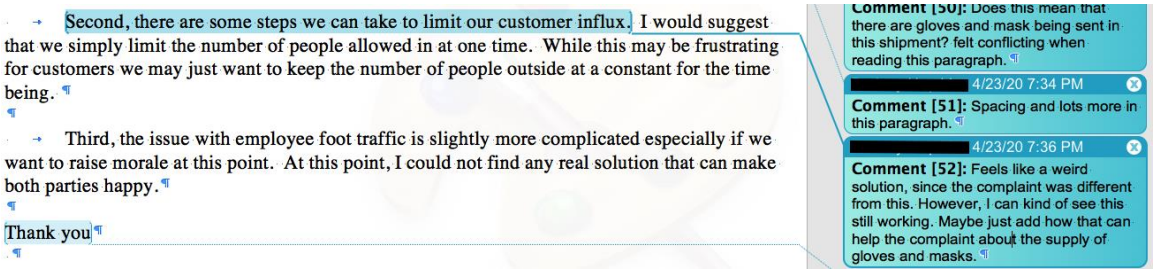
Raymond's comment: I would recommend putting this into a word document and fix any blue underlined words to make sentences flow better.

Ellie's comment: Just make sure you are reading everything back and that it all makes sense to an outsider who may not know what is being talked about.

Other textual issues, such as content and sentence structure, were much less prevalent in this category and accrued very few comments, for example (Figure 35 and 36):

Figure 35

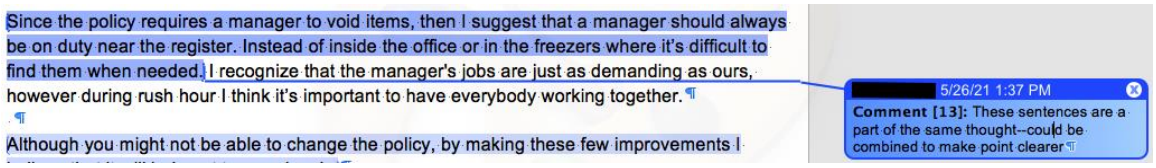
Type of Comment: Explanation on Content



Raymond's comment: Feels like a weird solution, since the complaint was different from this.

Figure 36

Type of Comment: Explanation on Sentence Structure



Ellie's comment: <u>These sentences are a part of the same thought</u>--could be combined to make point clearer.

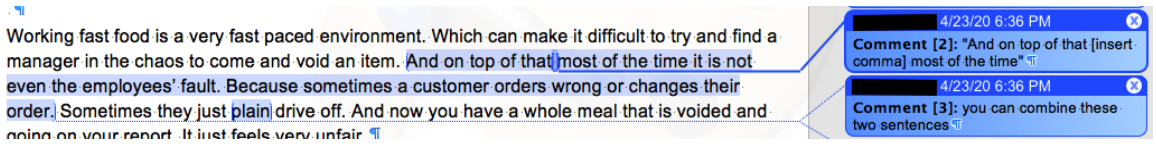
In these examples, Raymond saw a disparity between the solution and the initial point and pointed to it but chose to appeal to his feelings to avoid sounding rude. In turn, Ellie paid attention to an issue typical for Andy's writing and pointed to it but in a more logical way than Raymond.

Overall, explanations in the identifiable mode demonstrated a more thoughtful attitude of reviewers to their classmates compared to the anonymous mode.

Examples. Examples covered all aspects of English, such as genre, content, style, sentence structure, grammar, and mechanics. Most of the comments in this category pointed to grammar errors, especially punctuation, for instance:

Figure 37

Type of Comment: Example on Grammar

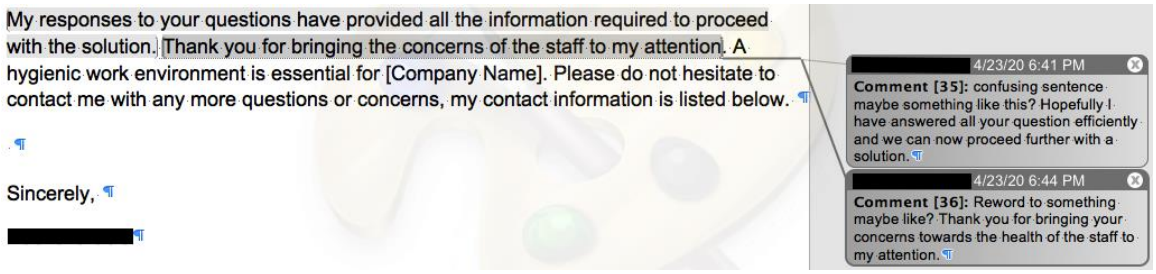


Ellie's comment: "And on top of that [insert comma] most of the time"

Other aspects of English, such as genre, content, style, sentence structure, and word choice, received much fewer comments, for example (Figure 38):

Figure 38

Type of Comment: Example on Content with Hedging



Ellie's text: Thank you for bringing the concerns of the staff to my attention.

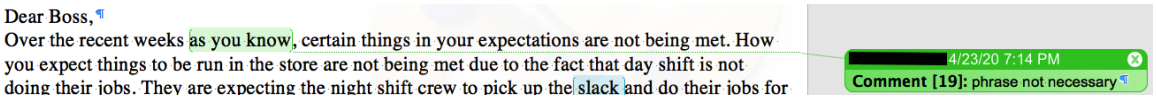
Andy's comment: Reword to something maybe like? "Thank you for bringing your concerns towards the health of the staff to my attention."

Here Andy's comment concerned the content where she suggested emphasizing that the complaint came from a specific employee rather than the entire "staff". The replacement of the article "the" with the pronoun "your" made the idea sound more personal and less abstract. Besides, Andy suggested including the point of concern—health—that made the sentence sound more specific and, hence, more professional. Finally, the way she introduced her comment by using words that had a meaning of uncertainty ("something maybe like") intended to alleviate the disturbing effect of critique and demonstrated that Andy cared about Ellie's feelings.

Another example of commenting on content (Figure 39):

Figure 39

Type of Comment: Example on Content Without Hedging



Harvey's text: Over the recent weeks as you know, certain things in your expectations are not being met.

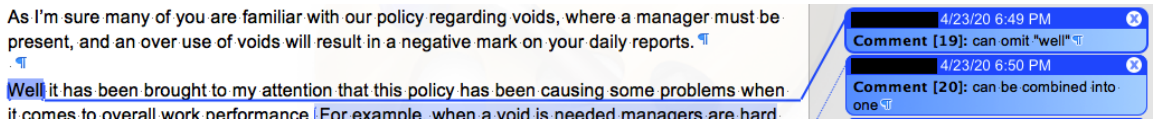
Trent's comment: Phrase not necessary.

This comment was different in style and did not show any concern about the author's feelings, unlike Andy's comment above.

Commenting on style and sentence structure also occurred in the category of comments with examples, for example (Figure 40):

Figure 40

Type of Comment: Example on Style



Andy's text: Well it has been brought to my attention that this policy has been causing some problems when it comes to overall work performance.

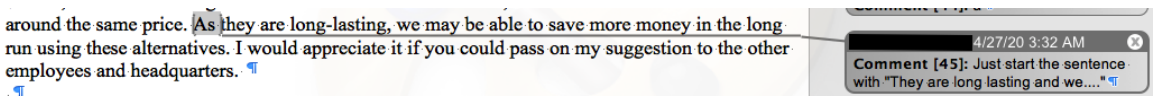
Ellie's comment: Can omit "well."

In her comment, Ellie suggested making the style sound less colloquial and more professional, likely thinking that explanations were extra. However, she chose to introduce her suggestion with "can," which made it an option for the author rather than a prescription.

Here is an example of commenting on the sentence structure (Figure 41):

Figure 41

Type of Comment: Example on Sentence Structure



Sarah's text: As they are long-lasting, we may be able to save more money in the long run using these alternatives.

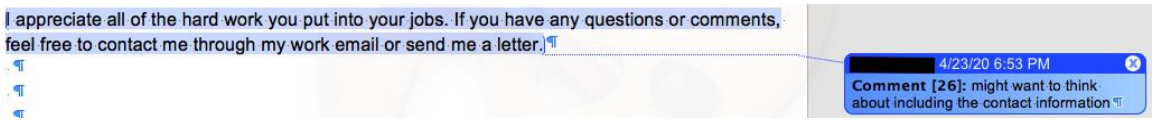
Andy's comment: Just start the sentence with "They are long lasting and we...."

Here Andy suggested changing the compound sentence to complex, which flowed better in her understanding. As usual, she alleviated her critique with "just" to sound less like an order.

Comments on genre and word choice were even less frequent in this category, for example (Figure 42):

Figure 42

Type of Comment: Example on Genre



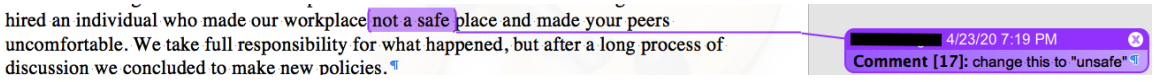
Ellie's comment: Might want to think about including the contact information.

Again, as in the examples above, when students wanted to make their comment sound less categorical, Ellie started with "might want to think," though contact information was clearly stated as a mandatory element for the assignment.

Here is an example of commenting on word choice (Figure 43):

Figure 43

Type of Comment: Example on Word Choice



Raymond's text: We hired an individual who made our workplace not a safe place and made your peers uncomfortable.

Harvey's comment: Change this to "unsafe."

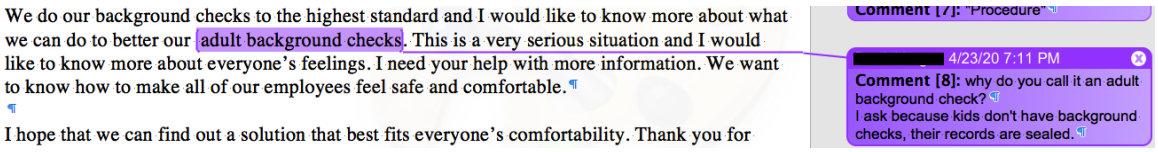
This peremptory comment did not leave any chance to think there were other possibilities to improve the sentence if those changes were needed at all.

Overall, comments with examples would significantly benefit from adding to them relevant explanations that would give them a good portion of logos and ethos.

Asking for Clarification. Most clarification requests were made on confusions about content and pointed to a lack of logic in the writers' drafts. The questions ranged from the basic "What does that mean?" to much more profound engagement with the content, for example (Figure 44 and 45):

Figure 44

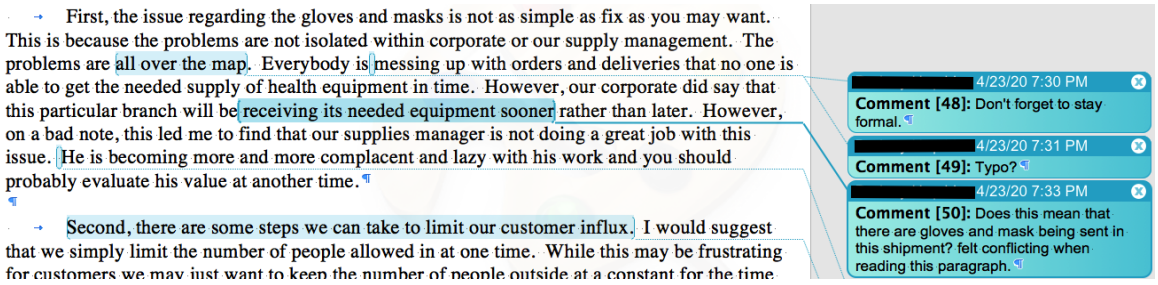
Type of Comment: Asking for Clarification on Content - 1



Harvey's comment: Why do you call it an adult background check? I ask because kids don't have background checks, their records are sealed.

Figure 45

Type of Comment: Asking for Clarification on Content - 2



Raymond's comment: Does this mean that there are gloves and masks being sent in this shipment? Felt conflicting when reading this paragraph.

These thoughtful comments demonstrated reviewers' genuine interest in the "plot" evolving in the draft, and evoked high-quality feedback.

Alleviations. As in the anonymous mode, superficial positive feedback was supposed to balance previous negative feedback, for example (Figure 46, 47, 48):

Figure 46

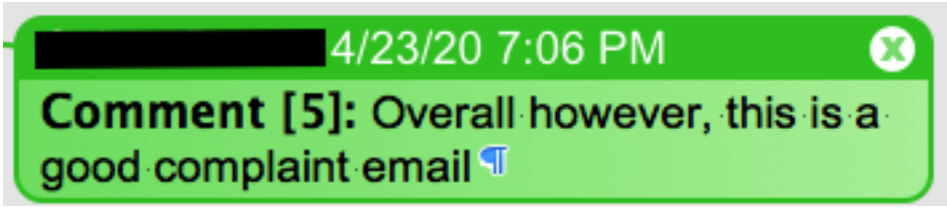
Type of Comment: Stretched Alleviation

Raymond's comment: Don't forget to have a good conclusion. This is short and good, but try adding in more.

This comment sounds contradictory, as Raymond suggested working on a better conclusion at first and then stated that it was already good. However, given that he worked in a rush, he did his best.

Figure 47

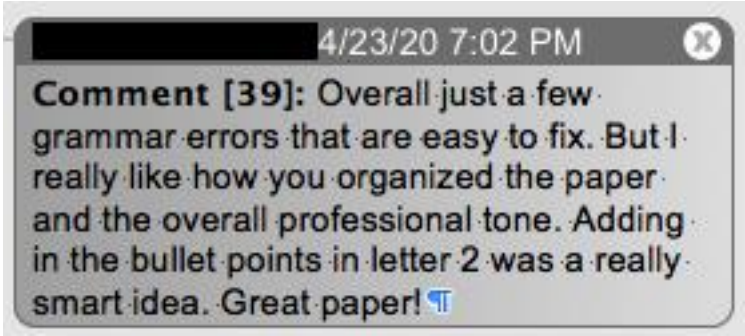
Type of Comment: Discouraging Alleviation



Trent's comment: Overall, however, this is a good complaint email.

Figure 48

Type of Comment: Encouraging Alleviation



Andy's comment: Overall just a few grammar errors that are easy to fix.

Both Trent's and Andy's comments sounded encouraging; however, Trent, with his "overall, however," hinted at the issues in the draft that needed attention, but Andy alleviated even more by saying that those issues were all about grammar.

Opinions. Opinions were always made on such aspects of the assignment that were least certain and allowed different interpretations, for example:

Raymond's comment: Feels like a weird solution, since the complaint was different from this. <u>However, I can kind of see this still working.</u> Maybe just add how that can help the complaint about the supply of gloves and masks (see Figure 35).

The first phrase in this comment belongs to the specific critique; however, the next sentence shows Raymond's attitude to it or his *opinion* about the situation.

Clarifications. Comments of this type demonstrated reviewers' willingness to add details to their initial suggestion by making it more straightforward, for example (Figure 49):

Figure 49

Type of Comment: Clarification

General Comment for [redacted]

I think your overall tone for each letter is appropriate and delivered professionally. The back and forth engagement is respectful, especially from the boss' side. The content also fits the requirements of the prompt and the entire organization and design follows the genres accurately. I did find a few areas where sentences/thoughts did not seem fully developed. Sentences stopped abruptly and a new one was formed, that could have been combined with the previous sentence. Just make sure you are reading everything back and that it all makes sense to an outsider who may not know what is being talked about. I did also find a few grammatical errors but those are an easy fix. Overall your project 3 is strong so far.

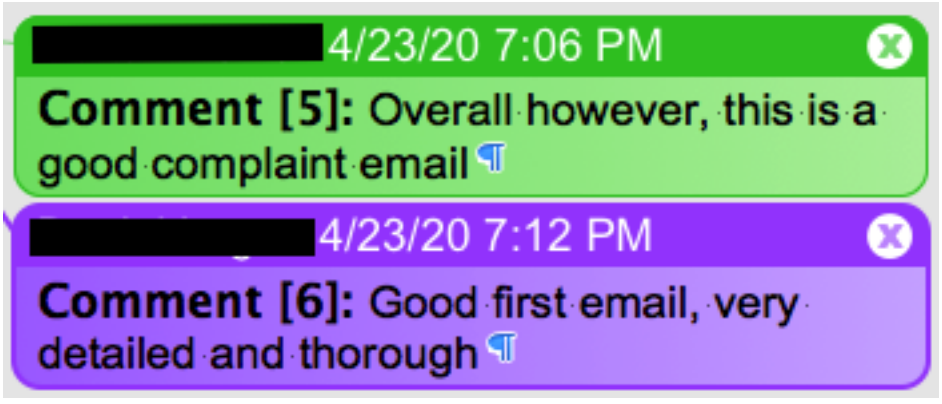
Ellie's comment: I did find a few areas where sentences/thoughts did not seem fully developed. Sentences stopped abruptly and a new one was formed, that could have been combined with the previous sentence.

Here Ellie made a general statement about flaws in the flow but chose to illustrate in detail the issue Andy's writing had.

Reiterations. Similar to the anonymous mode, reiterations took place, and, again, reviewers chose not to repeat but express the same idea differently, for example (Figure 50):

Figure 50

Type of Comment: Reiteration



Trent's comment: Overall however, this is a good complaint email.

Harvey's comment: Good first email, very detailed and thorough.

Both comments contain phrasing "good email"; however, Trent's comment was alleviating and superficial, and Harvey's comment was encouraging and informative; thus, the same meaning was seasoned with a different connotation.

In sum, comments in the collaborative stance demonstrate a higher interest in reviewers to provide helpful feedback that also sounds much less aggressive than if to formulate it in the prescriptive stance. Instructors planning peer review activities can take this consideration into account to teach students to create and maintain a more collaborative environment.

Evaluative Stance. Similar to the anonymous mode, the evaluative stance in the identifiable mode was presented through basic comment types—praise and critique—in the general and specific format. If in the anonymous mode, the most common evaluative comment type was specific critique (61%) (Table 11), in the identifiable mode specific praise was most common (52%) (Table 15). Obviously, identifiable authors disposed to praise rather than to critique.

Table 15

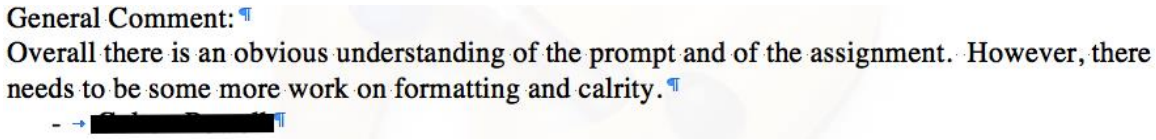
Google Doc Identifiable Mode: Occurrence of the Types of Comments in the Evaluative Stance

Types of Comments		Occurrence	Percentage
SPP	Specific Praise	22	52
SPC	Specific Critique	10	24
GP	General Praise	9	21
SPC	General Critique	1	3
Total		42	100

Specific Praise. The majority of specific praise occurred on genre conventions, for example (Figure 51 and 52):

Figure 51

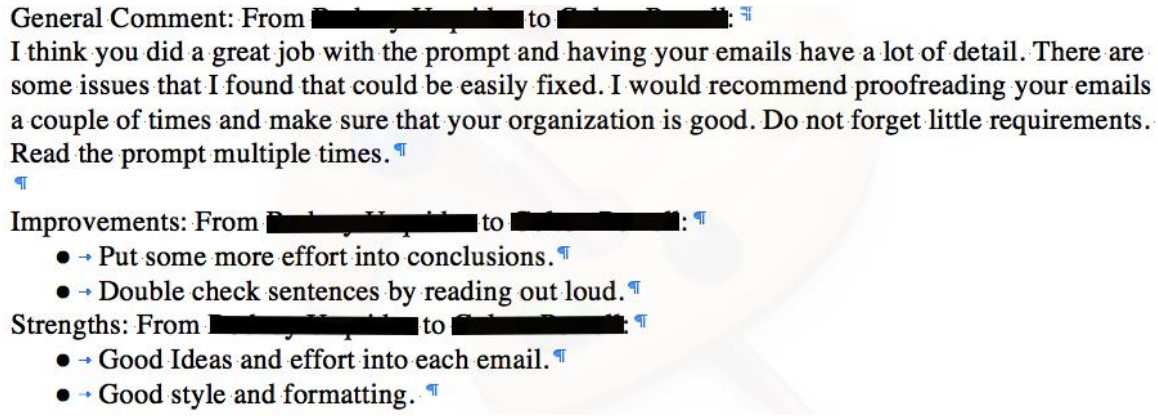
Type of Comment: Specific Praise on Genre - 1


General Comment:
Overall there is an obvious understanding of the prompt and of the assignment. However, there needs to be some more work on formatting and calrity.
- [redacted]

Trent's Comment: Overall there is an obvious understanding of the prompt and of the assignment.

Figure 52

Type of Comment: Specific Praise on Genre - 2


General Comment: From [redacted] to [redacted]:
I think you did a great job with the prompt and having your emails have a lot of detail. There are some issues that I found that could be easily fixed. I would recommend proofreading your emails a couple of times and make sure that your organization is good. Do not forget little requirements. Read the prompt multiple times.

Improvements: From [redacted] to [redacted]:
- Put some more effort into conclusions.
- Double check sentences by reading out loud.

Strengths: From [redacted] to [redacted]:
- Good Ideas and effort into each email.
- Good style and formatting.

Raymond's comment: I think you did a great job with the prompt, and your emails have a lot of detail.

Both of the comments above emphasized the importance of following prompt requirements. Trent's comment would benefit from more clarity because it is difficult to understand why "prompt" and "assignment" are different to him. By "assignment," he might have meant "genre," which is where an in-person discussion could help. In turn,

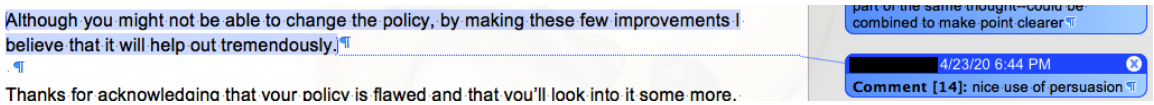
Raymond's comment was clear and accented details as one of the main features of the professional correspondence genre.

Other appeals to the genre included references to tone (e.g., "Great professional tone!", "I think your overall tone for each letter is appropriate and delivered professionally") and text organization (e.g., "The emails are pretty straightforward and professional," "I liked how you organized this area. It makes it very easy to follow," "I like the bullet points, very professional and straight to the point"), demonstrating that students could look *at* the text and critically evaluate it.

Additionally, there were two unique comments on those aspects that most reviewers did not pay attention to (Figure 53 and 49):

Figure 53

Type of Comment: Specific Praise on Rhetoric



Ellie's comment: Nice use of persuasion.

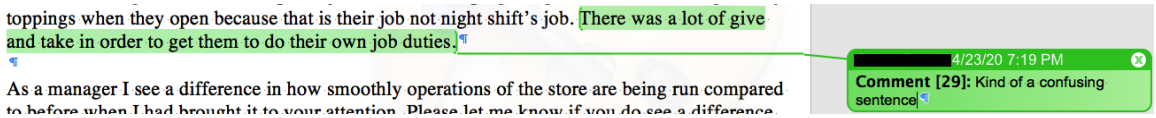
Ellie's comment: The back and forth engagement is respectful, especially from the boss' side (see Figure 49).

Through her comments, Ellie demonstrated that she could pay attention to other moments that we discussed in class but that were not emphasized in the assignment prompt. Honestly, I felt a sense of deep satisfaction that I always feel when I come across an extraordinary understanding of the course material.

Specific Critique. The most common focus of specific critique was awkward phrasing when reviewers struggled to determine the exact cause of their confusion, for example (Figure 54):

Figure 54

Type of Comment: Specific Critique on Unclear Meaning – 1



Raymond's text: There was a lot of give and take in order to get them to do their own job duties.

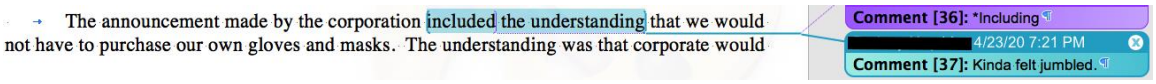
Trent's Comment: Kind of a confusing sentence.

Here Trent only pointed at his confusion but chose to express it less affirmatively by adding "kind of" so the author would not feel obliged to change his text.

Another example (Figure 55):

Figure 55

Type of Comment: Specific Critique on Unclear Meaning - 2



Trent's text: The announcement made by the corporation included the understanding that we would not have to purchase our own gloves and masks.

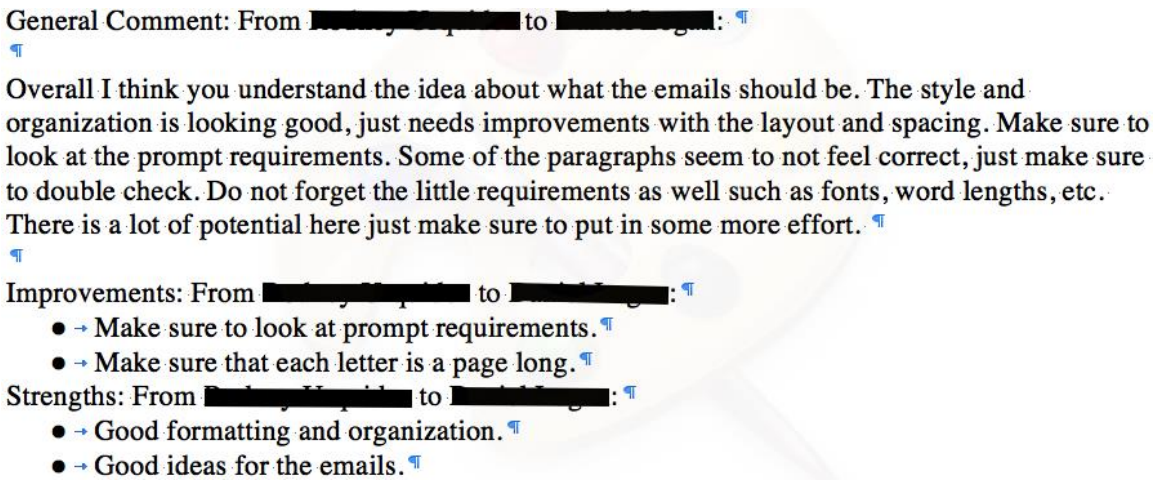
Raymond's comment: Kinda felt jumbled.

Here Raymond appealed to his feelings to avoid delivering his comment as an objective fact and added even more uncertainty by trying to connect to his peer through informal language.

Other comments with specific critique were made on genre, writing style, word choice, and grammar, for example (Figure 56):

Figure 56

Type of Comment: Specific Critique on Format


General Comment: From [redacted] to [redacted]:

Overall I think you understand the idea about what the emails should be. The style and organization is looking good, just needs improvements with the layout and spacing. Make sure to look at the prompt requirements. Some of the paragraphs seem to not feel correct, just make sure to double check. Do not forget the little requirements as well such as fonts, word lengths, etc. There is a lot of potential here just make sure to put in some more effort.

Improvements: From [redacted] to [redacted]:

- Make sure to look at prompt requirements.
- Make sure that each letter is a page long.

Strengths: From [redacted] to [redacted]:

- Good formatting and organization.
- Good ideas for the emails.

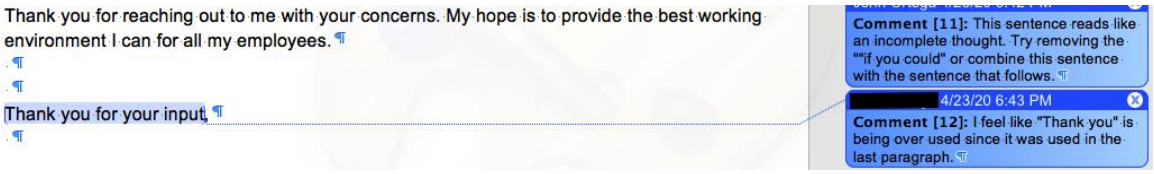
Raymond's comment: The style and organization is looking good, just needs improvements with the layout and spacing.

This comment consisted of both positive and negative feedback, where the latter was mitigated with "just" and delivered in an evaluative rather than prescriptive "you need" format.

Another example (Figure 57):

Figure 57

Type of Comment: Specific Critique on Writing Style



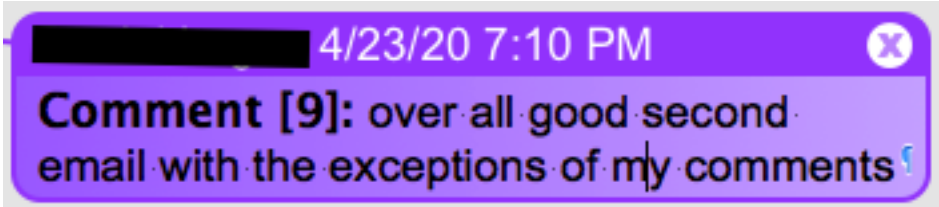
Ellie's comment: I feel like "Thank you" is being over used since it was used in the last paragraph.

Here Ellie pointed to the writing style that would benefit from avoiding repetitiveness (however, in her comment, she herself showed an example of such repetitiveness by having "used" twice in a row.

General Praise. For the general praise comments, the most common introductory word was "overall," with which students started their final comment, and normally praise was indeed praise (e.g., "Overall your Project 3 is strong so far," "Great paper!") Still, in several cases, praise contained negative connotations, for example (Figure 58 and 56):

Figure 58

Type of Comment: General Praise with a Negative Connotation



Harvey's comment: Overall, good second email with the exceptions of my comments.

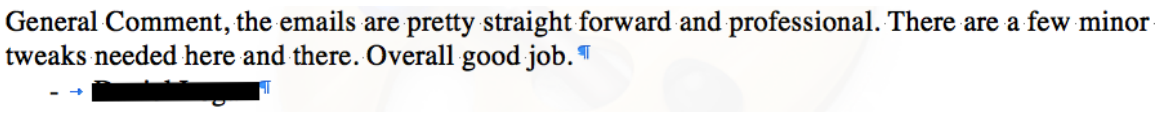
Raymond's comment: There is a lot of potential here (Figure 57).

In Harvey's comment, his praise was limited by the word "exceptions," which made it sound less encouraging than it should have. In the case of Raymond's comment, the word "potential" looked unexpected, mainly because that peer review was final and took place two days before the final submission. So, "potential" sounded discouraging, presupposing that many substantial revisions were needed.

General Critique. Typically reviewers tried to express their constructive evaluations in a specified manner, so this comment type occurred only once (Figure 59):

Figure 59

Type of Comment: General Critique



Harvey's comment: There are a few minor tweaks needed here and there.

As the author's friend, Harvey provided no specific critique and only one suggestion in the example format. Still, as Trent's draft had certain issues, Harvey expressed his feedback in the least categorical way to avoid pressure on the author.

Overall, similar to the evaluative stance in the anonymous mode, in the identifiable mode evaluative comments were even more necessary to maintain the collaborative environment due to higher need in maintaining a positive atmosphere. The increased amount of praising sounded more encouraging to authors, especially given that this peer review session happened two days before the deadline. Also, *specific* praise and critique allowed reviewers sound more professional and made authors feel that their drafts were treated with due responsibility.

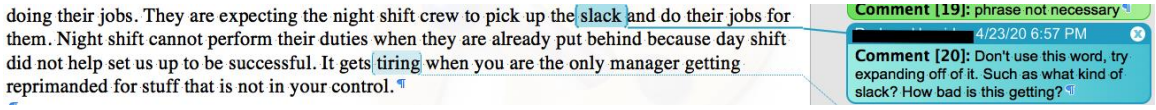
Notes for Improved Collaboration in Peer Review Design and Training

Lack of Focus

One of the issues that characterized the feedback of one of the most active participants in the Google Doc identifiable mode modes was a lack of focus within one comment. In his explanations, Raymond would quickly digress from his initial idea and switch to a different one, for example (Figure 60):

Figure 60

Lack of Focus in Commenting

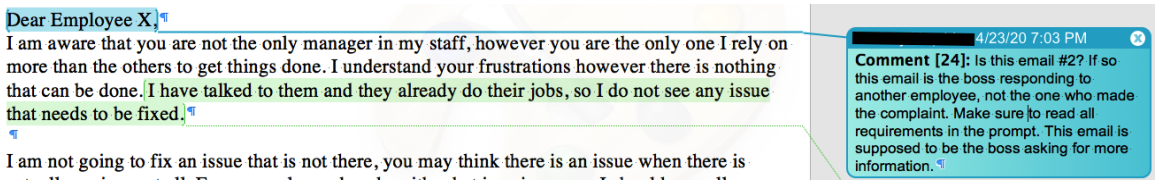


Raymond's comment: Don't use this word, try expanding off of it. Such as what kind of slack? How bad is this getting?

Another comment (Figure 61):

Figure 61

Unclear Interpretation of the Prompt



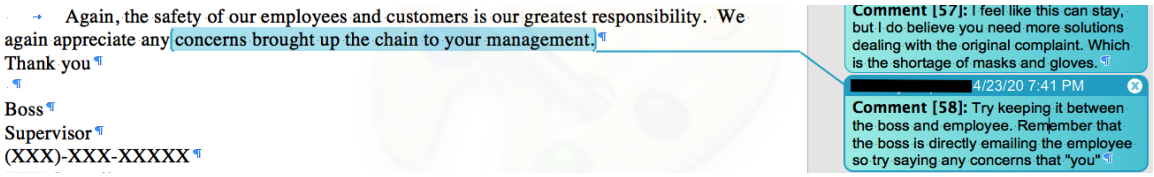
Raymond's comment: Is this email #2? If so this email is the boss responding to another employee, not the one who made the complaint. Make sure to read all requirements in the prompt. This email is supposed to be the boss asking for more information.

The first comment started as a suggestion on word choice, but then it became a suggestion on content, making it confusing. In the second comment, Raymond could stop in the middle; however, he chose to repeat his urge to read the prompt and even provided the relevant information from it. Such a manner of commenting could be perceived as overwhelming, less confident, and made it difficult for writers to focus on the main idea.

Sometimes, Raymond's comments sounded unclear on the grammar and syntax level, for example (Figure 62):

Figure 62

Unclear Comment



Trent's text: Again, the safety of our employees and customers is our greatest responsibility. We again appreciate any concerns brought up the chain to your management.

Raymond's comment: Try keeping it between the boss and employee. Remember that the boss is directly emailing the employee so try saying any concerns that "you"

It is hard to say if this comment was clear to Trent, as he ignored it in his revision. However, I tried hard, and it took me a while to understand what Raymond meant by it. The problem was the misplaced quotation mark, which should have been "Remember that the boss is directly emailing the employee, so try saying "any concerns that *you*…" Italics on "you" would not be extra and would help to emphasize the change, proposed by Raymond. Such confusing writing might have been caused by the rush that Raymond experienced during that peer review session due to Harvey and Trent having posted their drafts late; nevertheless, despite a lack of time, Raymond still chose to leave multiple comments to produce a good impression of him as a reviewer.

As collaborative peer review comments should obviously be understandable without making authors to spend time to decode them, I highly recommend instructors to explain to students the value of revision in peer review. Comments that demonstrate that the reviewer put an obvious effort in not only inventing but also in expressing them in a professional way, contribute to higher collaboration resulting in trust in peer feedback.

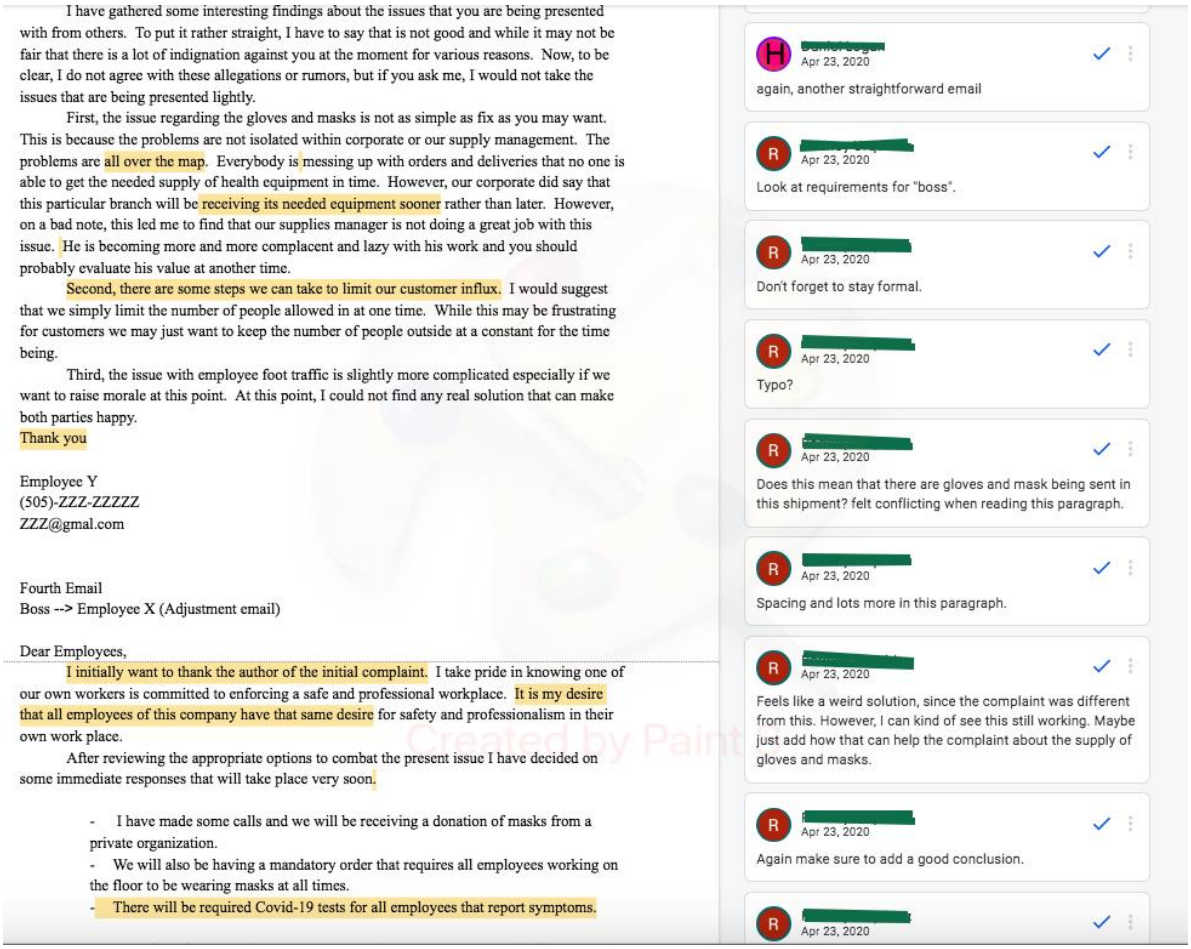
Excessive Commenting

Excessive commenting occurred when one reviewer left too many marginal comments on a page, which visually left little to no space for the second reviewer who was a few minutes behind. Though no visible space in the margins does not mean that a new comment cannot be made, the page might start looking unwelcoming for the other reviewer. Besides, excessive comments likely look overwhelming to the authors.

Across all peer review sessions analyzed in this study, Raymond and Ellie were the most prolific commenters. In this section, I will only analyze student interaction in Group 1, where Raymond was a member. Raymond pointed out several times that the writer needed to read the prompt and overused phrases "do not forget" and "make sure". In the example below, we see that almost all of the comments on Trent's draft were made by Raymond and only one by Harvey (Figure 63).

Figure 63

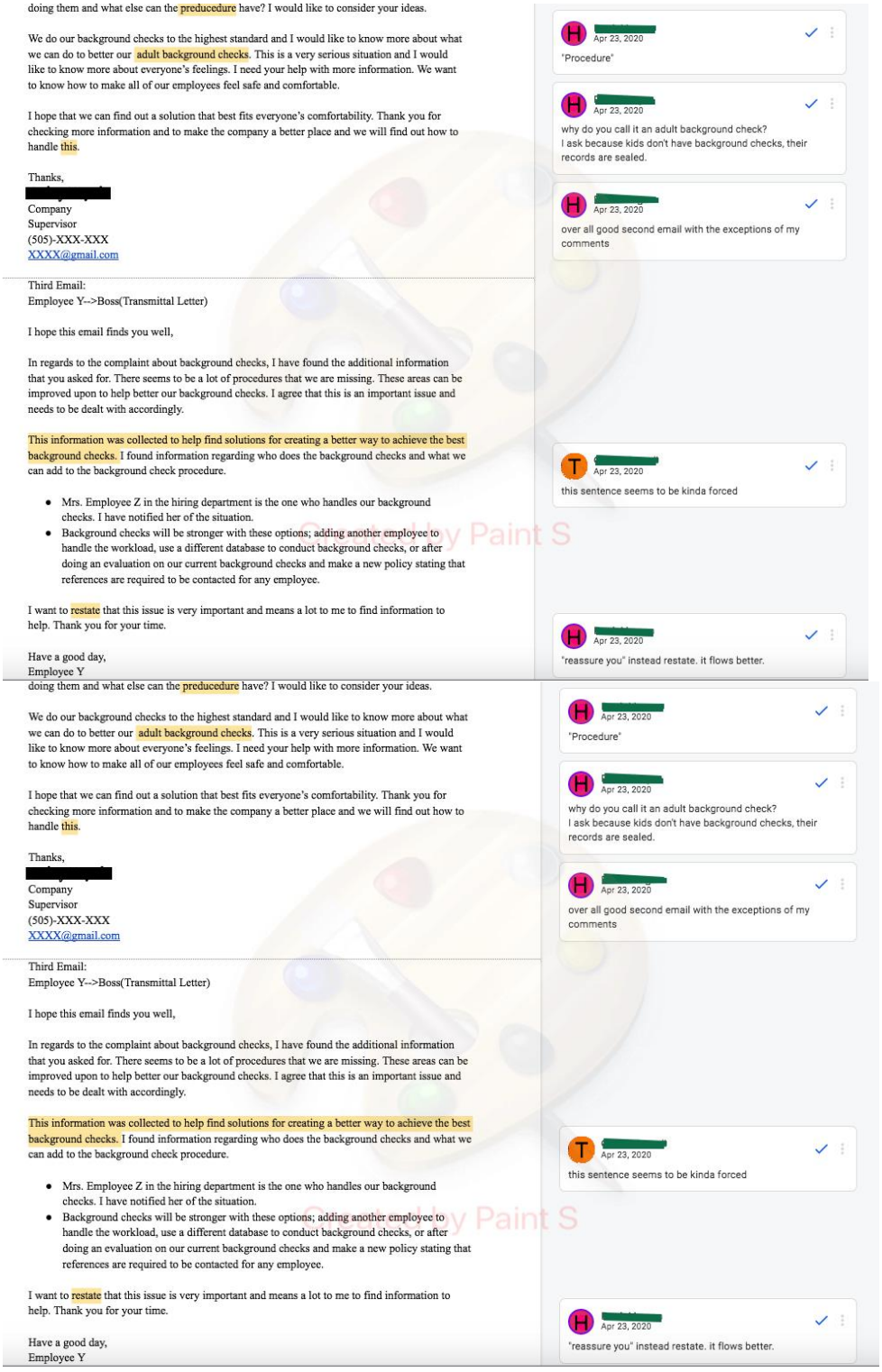
Raymond is Commenting Excessively in Google Docs



Google Docs do not show the exact time when a comment is made; however, when I saved the document in Microsoft Word, the exact time became visible and showed that Harvey had been a few minutes behind Raymond. There was a probability that Raymond's extensive commenting discouraged Harvey from making his input on Trent's draft. Obviously, some of Raymond's abundant comments could be easily omitted, especially those on a typo and spacing, and the one that started with "again," which referred to the earlier comment on the ineffective conclusion. On the contrary, the next image clearly demonstrates how extensively Harvey commented under different circumstances (Figure 64).

Figure 64

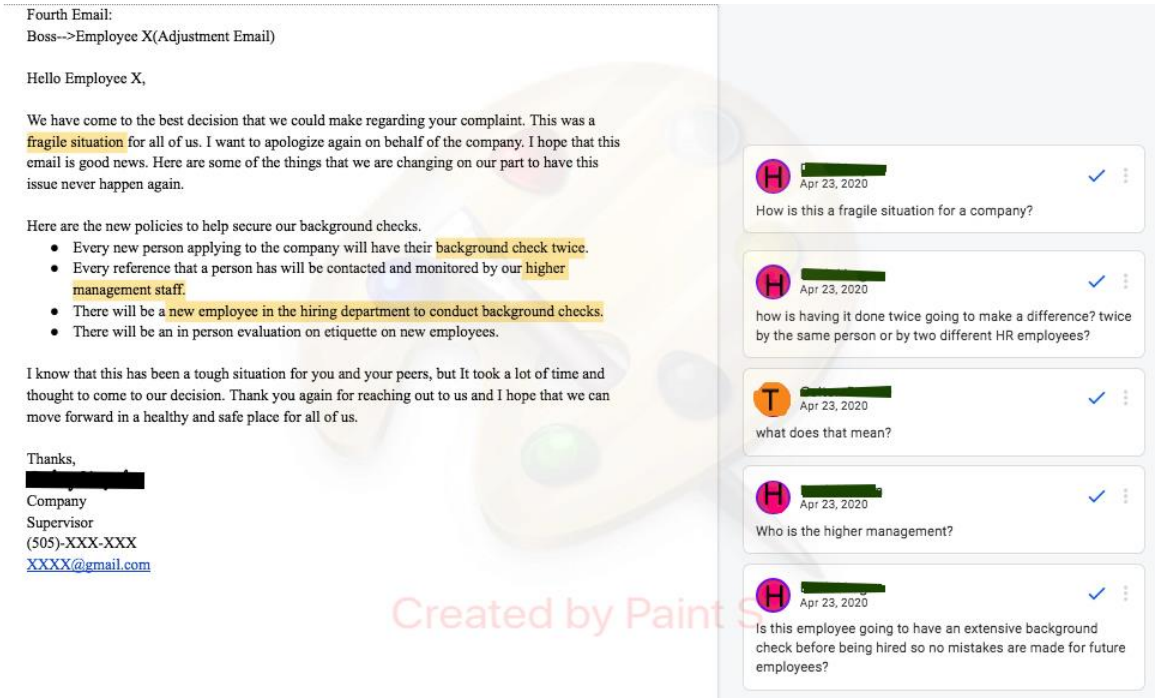
Harvey is Commenting Excessively in Google Docs



doing them and what else can the preducedure have? I would like to consider your ideas.
We do our background checks to the highest standard and I would like to know more about what we can do to better our adult background checks. This is a very serious situation and I would like to know more about everyone's feelings. I need your help with more information. We want to know how to make all of our employees feel safe and comfortable.
I hope that we can find out a solution that best fits everyone's comfortability. Thank you for checking more information and to make the company a better place and we will find out how to handle this.
Thanks,
[redacted]
Company
Supervisor
(505)-XXX-XXX
XXXX@gmail.com
Third Email:
Employee Y-->Boss(Transmittal Letter)
I hope this email finds you well,
In regards to the complaint about background checks, I have found the additional information that you asked for. There seems to be a lot of procedures that we are missing. These areas can be improved upon to help better our background checks. I agree that this is an important issue and needs to be dealt with accordingly.
This information was collected to help find solutions for creating a better way to achieve the best background checks. I found information regarding who does the background checks and what we can add to the background check procedure.
Mrs. Employee Z in the hiring department is the one who handles our background checks. I have notified her of the situation.
Background checks will be stronger with these options; adding another employee to handle the workload, use a different database to conduct background checks, or after doing an evaluation on our current background checks and make a new policy stating that references are required to be contacted for any employee.
I want to restate that this issue is very important and means a lot to me to find information to help. Thank you for your time.
Have a good day,
Employee Y
Apr 23, 2020
"Procedure"
Apr 23, 2020
why do you call it an adult background check?
I ask because kids don't have background checks, their records are sealed.
Apr 23, 2020
over all good second email with the exceptions of my comments
Apr 23, 2020
this sentence seems to be kinda forced
Apr 23, 2020
"reassure you" instead restate. it flows better.

Figure 64 (continued)

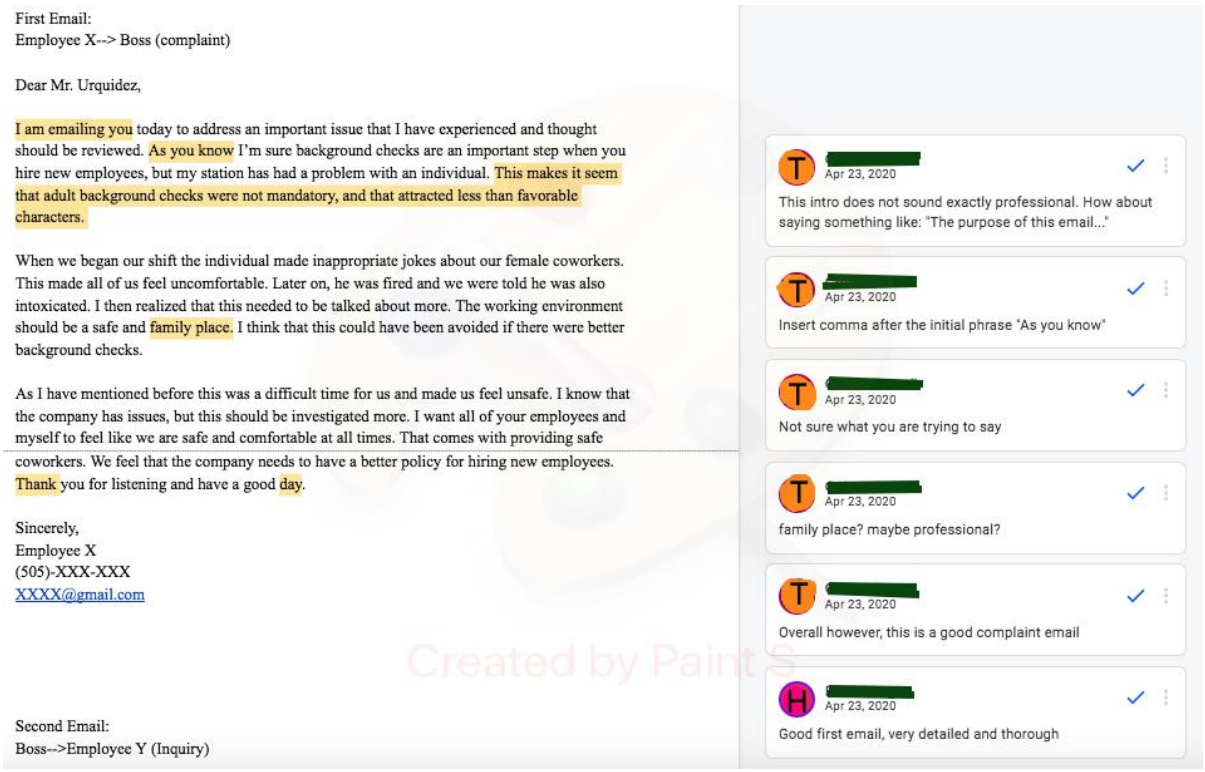
Harvey is Commenting Excessively in Google Docs



We see Harvey's comments on Raymond's draft asking for clarifications on the content, providing suggestions on word choice and spelling, and general praise with clarification. It is evident that Harvey's commenting skills flourished against the background of Trent's frugal comments. On the contrary, Harvey did not comment much on those pages of Raymond's draft, where Trent made his comments a few minutes earlier (Figure 65).

Figure 65

Harvey is Commenting Much Less Due to Limited Space



Thus, obviously, instructing students to choose only relevant comments for posting on a Google Doc will help them avoid uncollaborative fighting for marginal space. Though most of the comments demonstrated in the screenshots were valid and had strong potential to be used for revision, some of them could have been saved for the final comment at the end without occupying precious space in the margins (for example, insufficient conclusions in Harvey's draft, which Raymond pointed to several times). If reviewers are instructed to comment in the margins moderately, they will have an opportunity to comment on drafts equally without being overwhelmed by another reviewer's excessive productivity and will still become familiar with other reviewers' ideas on the draft. Another reason for selective and thought-through commenting concerns writers who can be overwhelmed by excessive feedback (Breuch, 2004), which will hardly lead to a positive reception of peer review.

Mini-lessons

Mini-lessons on the writing process were another noticeable difference between the discourses in the anonymous and identifiable modes. By mini-lessons, I mean comments that resemble *instruction* on certain aspects of writing rather than feedback on the author's writing as such. In the anonymous mode, I saw only two comments containing tips for writers on what techniques to apply to improve their drafts (see Figure 17 and 20):

> *Raymond's comment: However, make sure to proofread your work and fix any spelling and grammatical error (see Figure 17).*
>
> *Ellie's comment: I found a few sentence structure errors along with some grammar mistakes but those can be fixed through proofreading (see Figure 20).*

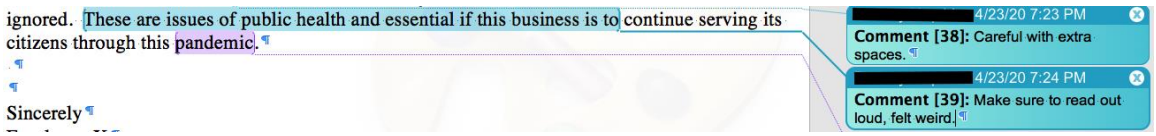
Nevertheless, in the identifiable session, writing process tips occurred more often. In the examples below, Raymond and Ellie provided recommendations on what *strategies* the authors could apply to improve their text:

> *Raymond's comments: 1. I would recommend putting this into a word document and fix any blue underlined words to make sentences flow better (Figure 34).*
>
> *2. Make sure to read out loud, felt weird*[12] *(Figure 66).*

Figure 66

Raymond's Mini-lesson

[12] Recommendation to read the text out loud occurred at least one more time in Raymond's feedback.



3. I would recommend proofreading your emails a couple of times and make sure that your organization is good (Figure 52).

4. Read the prompt multiple times[13] *(Figure 52).*

Ellie's comment: Just make sure you are reading everything back and that it all makes sense to an outsider who may not know what is being talked about (Figure 49).

With Ellie, she demonstrated the same rate of using mini-lessons across both Google Doc sessions (one comment). However, with Raymond, I received an impression that the identifiable mode did evoke a more personal and, therefore, responsible attitude to the task on his end. Thus, this observation made me think that identifiable mode, as opposed to anonymous mode, contributes to a more thoughtful and, therefore, collaborative attitude to the peer review task.

Final Commenting

The differences in student final commenting across the two Google Doc modes concerned the availability of comments, use of praise, and structure.

Availability of the Final Comment. For most students, the change in modes did not make any difference in their final comments. However, for some of them, the difference was noticeable. For example, Trent ignored the requirement to write final comments in the anonymous mode; however, he wrote a short one during the identifiable

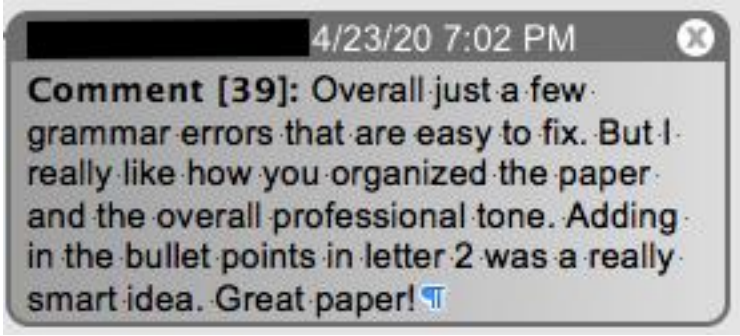
[13]Recommendation to read the prompt occurred three more times in Raymond's feedback.

session for Raymond. Trent's other peer review partner, Harvey, did not receive any final comment from him, probably because both students, being friends, interacted on projects outside of class.

Use of Praise. I provided no instructions on how the final comment was supposed to be structured, and even the length requirement was not specified. However, the length requirement for the final comment had been specified for the pre-lockdown peer review sessions (150 words), and I assumed that students would keep the previous requirement in mind. That turned out to be the case with only two students—Ellie and Raymond—but with most participants, the final comments were short, for example (Figure 67):

Figure 67

Andy's Short Final Comment



Andy's comment: Overall just a few grammar errors that are easy to fix. But I really like how you organized the paper and the overall professional tone. Adding in the bullet points in letter 2 was a really smart idea. Great paper!

Raymond, one of the most active reviewers, always started his final comment with praise. As for Ellie, she never used praise at the beginning of her comments during the anonymous session, immediately proceeding to critique (Table 16).

Table 16

Ellie's First Phrases in Google Doc Final Comments

Anonymous Session	Identifiable Session
I found quite a few grammatical errors in all three emails (see Figure 15).	I think your overall tone for each letter is appropriate and delivered professionally (see Figure 49).

During the identifiable session, Ellie did start her final comment (the only one) with praise. She did not provide a final comment to her other peer review partner at the identifiable session, as the latter (Sarah) had submitted her draft late, and Ellie did not review it. So, it is impossible to say if the difference in first phrases was caused by the mode or the fact that Ellie and Andy had already been familiar due to previous in-class activities.

Learning Growth. Both of the most active participants demonstrated significant improvements in the structure of their final commenting during the identifiable mode compared to the anonymous one. Below is one of Ellie's anonymous final comments (Figure 20 and Table 17).

Table 17

Ellie's Final Comment During the Anonymous Google Doc Session (Analysis)

Comment	Aspect of the Assignment
Remember to emphasize your main point in your introductory paragraph for email #1. Make sure the information about the issue is being delivered directly.	thesis text organization
I found a few sentence structure errors along with some grammar mistakes but those can be fixed through proofreading.	grammar mini-lesson
The tone of your emails are appropriate and professional, so I would say the delivery is very well done.	tone
The structure is also well done, you provide all the essential components needed for the organization and design.	overall structure genre conventions
An important note - from my understanding email #1 is the	prompt requirements

complaint to a boss, and email #2 is the boss making an inquiry about the complaint to a higher up such as a manager or corporate leader. Email #3 is the higher up's response to the boss's inquiry email. Three individuals should be involved and at the moment only the employee and the boss are interacting, make sure to read the prompt to avoid confusion.

In this comment, Ellie jumps from higher-level issues to lower-level ones and then back, which makes her feedback incoherent; the absence of a closing remark makes her comment sound unfinished. Her other anonymous final comment (on Trent's draft) demonstrated a more effective structure and had a closing remark. However, it still started from lower-level issues and finished with higher-level ones, which made it sound illogical.

During the identifiable session, Ellie produced a final comment that showed a noticeable change. She consistently moved from higher- to lower-level issues of the draft, and there was no jumping back and forth between them (Figure 49 and Table 18).

Table 18

Ellie's Final Comment During the Identifiable Google Doc Session

Comment on Andy's Draft	Aspect of the Assignment
I think your overall tone for each letter is appropriate and delivered professionally. The back and forth engagement is respectful, especially from the boss' side.	tone
The content also fits the requirements of the prompt and the entire organization and design follows the genres accurately.	prompt requirements
I did find a few areas where sentences/thoughts did not seem fully developed. Sentences stopped abruptly and a new one was formed, that could have been combined with the previous sentence. Just make sure you are reading everything back and that it all makes sense to an outsider who may not know what is being talked about.	sentence structure
I did also find a few grammatical errors but those are an easy fix.	grammar

Overall your project 3 is strong so far. general praise

By starting with tone and prompt requirements and finishing with sentence structures and grammar, Ellie made her final comment flow smoothly and addressed the issues of the draft consistently. On the other hand, it is difficult to say what specific factor caused such an improvement, either the change from anonymity to the identifiable mode or the circumstance that Ellie and Andy had been familiar with each other due to previous in-person class activities. Besides, it would have been interesting to see what Ellie's comment to her other review would be if the latter had posted her draft on time. Nevertheless, the change in structure was impressive and looked more responsive to the needs of the audience, who always appreciate if a paper *flows well* (a common comment students make during peer review.)

As for Raymond, his final comments across both Google Doc modes were problematic not only due to his manner of jumping between higher-level issues of the draft to lower-level ones but also due to repetitive phrases that could seem annoying to readers. Nevertheless, despite those problems, Raymond's growth became visible in his identifiable final comments. Below is Raymond's anonymous final comment to Ellie that demonstrates an unsystematic structure (Table 19 and Figure 13).

Table 19

Raymond's Final Comment (Google Doc Anonymous Peer Review)

Comment	Aspect of the Assignment	Instructor's Interpretation
You did a great job with your ideas and sentence organization. It is clear to read and simple enough to get your ideas across.	content text organization	
Just look out for confusing sentences from	grammar? content?	The word "just" sounds as if this is going to be the

certain perspectives.	what perspectives?	last idea, but Raymond continues.
Make sure that your format is easy to read to try making headings when you are listing main solutions. Formatting is hard to do with how you are doing it, but it's definitely possible.	format	This comment is confusing, as Raymond does not clarify why he thinks Ellie's format is flawed (instead of headings suggested by Raymond, she used bold text) and why, in his opinion, reformatting her draft would be hard.
Make sure to understand the prompt with the third email, but overall I believe that you are doing a great job.	prompt specific praise on following the prompt requirements? or general praise?	Again, "overall" sounds like the end of Raymond's feedback, but he continues.
Make sure that you begin and end with courtesies. Try to be very direct with responses; Do not try to fluff the emails. Make sure to make this personal and explain how important the issue is by describing your feelings.	genre conventions style	

In this comment, Raymond's feedback is unsystematic as he jumps from higher-level issues to lower-level issues and then back. Besides, he finishes his comment without any closing remark, which is still present in the middle of his comment ("overall ..."). As for his tone, it sounds too authoritative because Raymond uses the imperative mood and the phrase "make sure" excessively. Due to this wording, Raymond's feedback sounds unorganized and unfocused. However, during the identifiable peer review, he used a more logical and presentable structure for his final comment (Table 20 and Figure 56).

Table 20

Raymond's Final Comment (Google Doc Identifiable Peer Review)

Comment on Harvey's Draft	Aspect of the Assignment
Overall I think you understand the idea about what the emails should be.	general praise
The style and organization is looking good, just needs improvements with the layout and spacing.	style organization formatting
Make sure to look at the prompt requirements. Some of the paragraphs seem to not feel correct, just make sure to double check.	prompt requirements
Do not forget the little requirements as well such as fonts, word lengths, etc.	formatting
There is a lot of potential here just make sure to put in some more effort.	general praise general critique
Improvements: ● Make sure to look at prompt requirements. ● Make sure that each letter is a page long.	 prompt requirements
Strengths: ● Good formatting and organization. ● Good ideas for the emails.	 formatting content

This comment still needs substantial revisions in terms of more effective structuring, so higher-level issues go first, and more mindful phrasing without repetitive "make sure" is used. Also, Raymond's manner of compiling both major and minor, positive and negative feedback in one sentence makes his message difficult to understand. Finally, ideas on the same topic could be easily combined in one sentence, for example, the ones about layout and spacing and little requirements. Nonetheless, Raymond's effort to improve by developing those sections of bulleted points to sound more organized deserves appreciation.

In sum, improvements in final comments across the Google Doc modes described above clearly demonstrate that learning growth can occur even without the instructor's direct interference. Though it would be worth including the point about the necessity to invent the final comment and make it compelling in the collaborative peer review

training, naturally, all aspects of peer review can never be encompassed. Still, with students who are active participants in the learning process, the instructor can be confident that writing issues might eventually improve on their own without directly addressing them in class and in instructor feedback.

Conclusion

The Google Doc identifiable peer review session happened in a more emotional atmosphere that was caused not only by the mode itself but by late posting that made others work in a rush or even do the review after the designated class time.

Students demonstrated diverse peer review performance during this session. Some students were more consistent and had a preferred stance in commenting on both drafts, while other students made more comments in one stance on one draft but more comments in another stance on the other draft. Additionally, some students even changed their stance orientation compared to the anonymous peer review. The discourse in the collaborative and evaluative stances became more diverse. In this session, the collaborative stance included the opinion as a new comment type, which was not present in the anonymous mode, while the evaluative stance included the general critique. Obviously, to increase collaboration in peer review, it is desirable to instruct students to use the collaborative and evaluative stances more extensively and avoid the prescriptive stance.

Among one of the issues in student peer review performance, I noticed uncollaborative marginal commenting that needed regulation in peer review instructions. Some of my students commented abundantly, thus occupying all marginal space and preventing the other reviewer from commenting on the page. From those abundant

comments, some of them were repetitive and could be omitted or saved for the final comment, and some were confusing and needed revision.

An exciting moment I observed in this session was the students' learning growth. Some of them struggled with structuring their final comment in the anonymous session but significantly improved on it during the identifiable session and without any intervention on my end. That means that, even if an instructor cannot address every issue they see in student writing, there is a chance that the learning process improvement of collaboration will happen in any case.

Overall, the Google Doc identifiable session differed from the anonymous session in many aspects, though certain moments were similar. Besides, the details in student interactions that I observed present a plethora of opportunities for improvement in the activity's design to make it more collaborative.

Chapter 5: Zoom Peer Review Session

In this chapter, I argue that Zoom peer review creates the most fertile ground for practicing collaborative and evaluative stances that contribute to the most productive environment in a peer review group. The Zoom mode allows students to discuss complex topics not meant for asynchronous modes. During peer review training, students should be taught about the importance of preparation and mindfulness in structuring their discussion so all group members receive an equal amount of feedback, especially the type of feedback they requested. Access to peer review transcripts allows the instructor to become familiar with all peer review interactions in class, understand student struggles better, and modify instruction accordingly.

Overview

The last peer review session for that class was on final portfolio websites, for which I sent out the announcement through LMS on May 5, 2020 (Sunday) and attached the document with detailed instructions (Appendix H) and the Google Doc for students to upload the links to their final portfolios. The instructions specified the time by which the students were supposed to upload the links to their websites to the designated Google Doc (by 11:59 pm on Wednesday, May 7) and also mentioned that the websites were not expected to be fully completed.

Two days before the peer review day, all of my participants received personal reminders to their emails, and my warning to not give them point compensation for participation in the study if they did not participate in the upcoming peer review[14]. However, as happened in the previous peer review sessions, some students did not post

[14] The point compensation was part of the consent to participate.

their links on time. Four participants—Ellie, Andy, Trent, and Sarah—posted their links on time. Raymond posted his link on the actual peer review day, May 7, at 10:59 am, after I had sent him another reminder email twenty minutes earlier, to which he immediately responded that he had lost track of the week being busy with other classes. Harvey posted his link on May 7 at 11:32 am after I sent him the second email reminder three minutes earlier. The lack of certainty on who is going to participate in the peer review made me regroup students in a rush two hours and a half before the start time of the peer review session thus leaving all participants with little time to review their classmates' drafts, especially given that they might have had other classes during that time period.

The peer review discussion in Group 1 went according to plan, where all participants showed themselves as responsible collaborators and tried their best to contribute to the discussion to the maximum of their capabilities. Based on their thoughtful discussion, one could never say that students prepared for it under time pressure caused by Raymond's late posting. As the group had 20 minutes in total, they spent five minutes discussing Raymond's work, with Ellie and Andy receiving seven and five minutes, respectively. With Andy's draft, the group did not finish their discussion before they ran out of time, so Andy was the most disadvantaged group member.

During this discussion, Ellie assumed a leadership role and was in the most favorable position because she was familiar with both Raymond and Andy due to their previous group interactions. As for Raymond and Andy, they met for peer review for the first time and experienced more anxiety than Ellie. As I observed their non-verbal behavior through the recording of the Zoom peer review session, Andy frequently wrung

her fingers and Raymond anxiously bit his lips, both of which I attributed to nervousness, stress, or anxiety. So, a good connection between Raymond and Ellie allowed them to feel like equal players on the field, which was demonstrated in how easily they passed the moderation baton to each other. At the same time, based on lack of participation, Andy seemed a little like an outsider. In terms of feedback content, Ellie noticeably struggled with generating meaningful feedback and primarily picked formal features; that is why hearing the feedback of the other reviewer could have contributed to her discomfort. On the contrary, Raymond was more inventive and, thus, more effective as a reviewer being able to provide his feedback on both text organization and content. Finally, Andy was the best at generating various positive feedback and efficient questions for the author.

In Group 2, the peer review discussion was significantly different from what Group 1 demonstrated as one group member (Sarah) showed up late, unprepared, and did not collaborate much. Two other group members were in an unequal friendly relationship, which affected their discussion. Trent was patronizing, sometimes mocking, or ignoring Harvey, perhaps due to a perceived feeling of authority over him, and Harvey appeared shy and nervous but trying to conceal it. To illustrate, when I asked Harvey to turn on the camera, he was unwilling to do it, and Trent, seeing this reluctance, said: "[Harvey], turn on your camera. It's not that hard". After that Harvey turned it on. Also, as Trent was providing his feedback to Harvey, the latter was wringing his fingers and demonstrating very limited verbal reaction.

After Harvey, Trent, and I, as their instructor, clarified organizational questions, they productively reviewed each other's drafts for five minutes; however, Trent provided much more thoughtful feedback to Harvey than Harvey did for him. Then Sarah finally

joined, she briefly apologized and explained why she was late (due to the time zone difference that, as she said, she was unaware of.) After that, she started figuring out where to access the websites of Trent and Harvey, thus letting them know that she was unprepared. Trent expressed non-verbal disappointment at her lack of preparation by using harsh and almost rude intonation when answering Sarah's question about where to find the website links. After she found the links to the websites, she tried to look through the others' websites on the fly. After a minute of silence, Harvey started talking to Sarah on an unrelated topic. Sarah kept the conversation up, at the same time trying to invent her feedback. Trent cautiously joined them later.

Finally, Sarah provided her feedback to Harvey that was general and uninformative, which was unsurprising as it was challenging to formulate meaningful ideas under those conditions. It also turned out that Harvey cut out at that moment and did not hear Sarah. When Harvey joined back, he let the group know that he did not hear Sarah as he did not comment on her feedback to him. As for Sarah, she never bothered to find out why Harvey said nothing in response to her feedback. After that, it was expected that Sarah would review Trent's website, and she even asked Trent a question about it, to which he answered eagerly. Then Harvey, still waiting for Sarah's feedback, finally inquired, and she repeated it. A long three-minute pause followed, during which Trent and Harvey engaged in a half-a-minute playful conversation while Trent waited for Sarah's feedback.

Hearing that the group was silent, I decided to inquire about how their peer review was going, and it turned out that Sarah had already provided her feedback to Trent, which was, in her understanding, the question she had asked him. Trent was

confused; however, took his turn and provided his feedback to Sarah, which he did in the same shallow manner that she had used earlier commenting on Harvey's work; Sarah's only response was "yeah" two or three times. Then, Harvey provided his feedback to Sarah, to which she showed no reaction (not even a "yeah"). Another long pause hung in the air, after which Sarah asked Trent about his project, to which he responded. In a few minutes, their time was over. Thus, the Group 2 peer review session was much less effective and much more frustrating for all group members than Group 1's discussion.

A possible reason for the misfortune of Group 2 was Sarah's adverse circumstances in which she found herself as COVID-19 hit. Though Sarah had demonstrated good peer review performance during the first half of the semester, the Spring 2020 lockdown made her return to her home state in a different time zone, which made her adaptation to "the new normal" even more difficult. Additionally, it turned out that Sarah had a job whose hours coincided with our class time when the class was performing peer review activities (which she explained in her email to me, but which had never been the case during the first half of the semester.) Finally, Sarah had never participated in an in-person peer review with Trent and Harvey but only participated in the anonymous peer review session with Harvey. Possibly, a lack of emotional connection made her feel less inclined to providing them helpful feedback.

As for Trent and Harvey, they developed a close connection due to group discussions in which our class had become regularly engaged before COVID-19. During the peer review session analyzed in this chapter, Trent demonstrated concerned behavior, seeing that the discussion was not going the way it should have, though, frequently allowing himself to laugh silently. Meanwhile, Harvey started all irrelevant conversations

during pauses caused by Sarah's insufficient performance and miscommunication, which undermined the peer review session even more.

As happened with the previous peer review sessions in the Google Doc modes, not all students equally participated in the discussions. With Google Doc sessions, the only measurable variable was students' comments that they wrote on the draft. On the contrary, with the Zoom mode, the variables were much more diverse: comments made to each of the authors within a group, comments made in response to feedback, and comments made during the discussion. While the first category speaks for itself, by comments made in response to feedback, I mean comments made by the author while their reviewer was sharing the feedback prepared in advance; and by discussion, I mean comments that were made outside of the feedback prepared by reviewers in advance and also comments on organization. Table 21 shows that Raymond and Ellie were the most active participants (echoing the results on the Google Doc peer review sessions) and produced 120 and 95 comments, respectively. Andy and Trent demonstrated moderate activity and produced 51 and 49 comments, respectively. The least productive participants were Harvey and Sarah, with 23 and 20 comments, respectively.

Table 21

Student Participation in the Zoom Peer Review Session (Final Portfolio Website Peer Review)

	Review 1 n	Review 2 n	RF n	D n	Total n
Andy	12 to Raymond	11 to Ellie	13	15	51
Ellie	17 to Raymond	9 to Andy	29	40	95
Raymond	26 to Ellie	18 to Andy	21	55	120
Harvey	7 to Trent	3 to Sarah	10	3	23
Trent	26 to Harvey	5 to Sarah	7	11	49
Sarah	8 to Harvey	3 to Trent	3	7	20

Note 1. n stands for "number of comments."
Note 2. RF stands for "Response to feedback."
Note 3. D stands for "Participation in the discussion."

Additionally, the student feedback rate was different across authors. For example, if Andy and Harvey commented on drafts almost equally (n12 and n11 with Andy; n7 and n3 with Harvey), Ellie, Raymond, and Trent showed drastically different commenting rates with different authors. Ellie made 17 comments to Raymond and only 9 to Andy; Raymond produced 26 comments to Ellie and only 18 to Andy; Trent was very active in reviewing Harvey's draft (n26) but very passive with Sarah's draft (n5).

In the category of response to feedback, Group 1 participants demonstrated approximately the same activity rate as in other categories of interaction; that is, the students who were more active in providing feedback were more active in responding to it. In Group 2, the results were different, and Harvey was not very active in providing feedback but was the most active in responding to feedback. Alternatively, Trent, the most active feedback giver, produced almost four times fewer comments in response (which can be explained by Harvey's limited feedback to him.)

Discussions were very extensive in Group 1 and minimal in Group 2. In Group 1, Raymond was most talkative and emotional (n55), Ellie was also active but more reserved (n40), and Andy was less confident and most silent (n15). In Group 2, only Trent and Sarah exchanged a few remarks (n11 and n7, respectively) on both drafts and organization. At the same time, Harvey only participated in the organizational discussion to help Sarah find the links. (Though Harvey was very active in irrelevant discussions, those remarks are not taken into account.)

Collaboration Across Peer Review Stances

Occurrence

Though all students demonstrated a similar trend to use primarily collaborative comments during this peer review session, some students turned out to be more "prescriptive" than others: Sarah made 50% of all of her comments in the prescriptive stance; Andy and Harvey's feedback consisted of 25% and 24% (on average) of prescriptive comments, respectively. Raymond turned out to be the least prescriptive commenter, with only 12 % of prescriptions in his feedback to Ellie and 2% in discussion (Table 22).

In the evaluative stance, the only types of comments were praising one, either general or specific, unlike with the Google Doc modes where students provided specific critique. In the Zoom mode, all those critiquing ideas were expressed through collaborative comments. The undoubted leader in the evaluative stance was Andy, with her abundant praising feedback, particularly to Ellie. Also, Sarah used praising significantly in her short-spoken feedback (25%), too.

In the collaborative stance, Sarah, Raymond, and Harvey succeeded most of all and provided 100% comments in more than one category. Also, Raymond and Sarah provided all of their feedback to one of the authors in their group purely in collaborative comments. The category "Response to Feedback" by default presupposed that students use exclusively collaborative comments; still, Trent was able to use a prescriptive comment even in this category when he summarized Harvey's feedback to him ("So, SLOs"), thus *prescribing* to himself.

Collaborative Discourse

Collaborative Stance. Given that the collaborative stance in Zoom turned out to be not only the most numerous but the most prominent (84%), unlike in the Google Doc modes where it occurred at approximately the same rate as the prescriptive stance (42% and 38% in the anonymous mode and 32% and 38% in the identifiable mode for the collaborative and prescriptive stances, respectively), it is evident that the Zoom peer review mode created a highly collaborative peer review discourse. Not only were students able to formulate their feedback differently due to immediate reactions from authors, but the Zoom discourse allowed them to discuss multiple ideas and issues that could have never emerged under the Google Doc modes. The variance of comment types in the collaborative stance across the modes was ascending: if in the anonymous mode, collaborative comments consisted only in asking for clarifications, alleviations, and reiterations, two more added to them in the identifiable mode—explanations and opinions, while in the Zoom mode, collaborative comments included all types.

Table 22

Peer Review Stances in the Zoom Peer Review Session (Final Portfolio Website Peer Review)

	Andy				Ellie				Raymond				Harvey				Trent				Sarah			
	rR	rE	RF	D	rR	rA	RF	D	rE	rA	RF	D	rT	rS	RF	D	rH	rS	RF	D	rH	rT	RF	D
Prescriptive Stance																								
S	2				1	2			2			1	1	1			5	1			1			
SC	1				1				1										1		3			
Total n	3	0	0	0	2	2	0	0	3	0	0	1	1	1	0	0	5	1	1	0	4	0	0	0
Total %	25	0	0	0	12	22	0	0	12	0	0	2	14	34	0	0	19	20	15	0	50	0	0	0
Collaborative Stance																								
PH	1	1	7	1	3	1	10	9	10	5	12	15	1		7		1	1	3	2	1	1	3	
CF	2	1	1	4	2		2	4	2		3	10	1						1	1	1			1
ORG				1				6				10				3				6				5
EXPL			1	1	2	1	3	2	1	2	2	3			1		4							
O				3		2	1	4	0	4		3					2	1		2				
CLAR			2		1	2	2	1	2	2		1	1	2	1		4							
ALL	4				3		0	1	2	3		5					2					1		
AOE	1	1		1			5	3	1			2	1				3							
ACC		1	1		1		3	1	1		1													
AFCLAR					1		0	1	2	1	2						1		1	0				
AFINF				1								4			1							1		1
AFO		1	1	1				2		1		1												
INF				1				3									1		1	1				
GRAT							3	1			1													
REIT		1																1						
REQ													1											
Total n	8	6	13	14	13	6	29	38	21	18	21	54	5	2	10	3	18	3	6	11	2	3	3	7
Total %	67	55	100	93	76	67	100	95	80	100	100	98	72	66	100	100	69	60	85	100	25	100	100	100
Evaluative Stance																								
GP	1	2			2	1							1				2	1			2			
SPP		3		1				2	2								1							
Total n	1	5	0	1	2	1	0	2	2	0	0	0	1	0	0	0	3	1	0	0	2	0	0	0
Total %	8	45	0	7	12	11	0	5	8	0	0	0	14	0	0	0	12	20	0	0	25	0	0	0

Note 1. "rR" stands for "Reviews Raymond."

Note 2. RF stands for "Response to feedback."

Note 3. D stands for "Participation in the discussion."

The most frequent comment type was phatic comments[15], intended to help students effectively maintain communication channels that were 95, or 35%, of all collaborative comments during that peer review session. The least frequent type of comment was request that occurred only once and only because peer review partners were friends (Table 23).

Table 23

Zoom Mode: Occurrence of the Types of Comments in the Collaborative Stance

Types of Comments		Occurrence
PH	Phatic	95
CF	Confirmation	36
ORG	Organization	30
EXPL	Explanation	23
O	Opinion	22
CLAR	Clarification	21
ALL	Alleviation	21
AOE	Appeal to Own Experience	18
ACC	Acceptance	9
AFCLAR	Asking for Clarification	9
AFINF	Asking for Information	8
AFO	Asking for Opinion	7
INF	Information	7
GRAT	Gratitude	5
REIT	Reiteration	2
REQ	Request	1
Total		314

Phatic Comments. Phatic comments (used for social or emotive purposes rather than for communicating information), expressed various communicative ideas roughly broken down as readiness, agreement or acceptance, willingness to support an interlocutor emotionally, and processing the information. However, phatic comments allow a speaker to express multiple communication signals that can be interwoven

[15] Phatic - of, relating to, or being speech used for social or emotive purposes rather than for communicating information (Merriam-Webster, 2022)

within one phrase or even one word. In the example below, at a glance, Trent uses an introductory phrase to show his readiness to provide feedback to Sarah:

Trent: Okay, I looked at yours… I just finished looking at yours, [Sarah] …

However, Trent uses this phatic phrase not only as an introduction and, thus, willingness to start a review but also as a means to accord to Sarah's attitude during that peer review session. As Sarah was not prepared with her reviews, Trent quickly pretended that he had also looked at her work on the fly, which was not true based on the detailed feedback he provided.

Or, in a dialogue between Ellie and Raymond, Raymond interrupted Ellie to show his readiness to hear her feedback:

Ellie: Okay, so … from yours, [Raymond] …

R: Yesss.

E: I didn't have a lot of notes.

Here Raymond shows his willingness to hear what Ellie has for him and his excitement and respect toward Ellie's opinion of his work.

In the following example, Raymond expressed his readiness to finish a topic because he was the one who started it:

Raymond: Okay. Well that's, that's definitely something new to me, and that's … that's really cool.

The topic they discussed concerned providing references on a resume, and all peer review partners had different approaches to the matter. Students exchanged ideas without persuading anyone to change their opinion. By the last segment of his remark, Raymond showed indifference and sounded slightly irritated.

Below are examples picked across the entire peer review session that demonstrate students' readiness to finish a review:

1. Raymond: Umm … That's all I got.

2. Ellie: But ... after that …, I think you're done with yours and I didn't see any big … problems.

3. Harvey: Then everything else was overall pretty decent.

4. Trent: That's my … that's my review.

These closing phrases helped the peer review discussions flow better and allowed other reviewers to understand that the discussion can move forward.

Signals demonstrating agreement or acceptance of what a student heard were expressed through simple phrases, such as "right," "true, true," "okay," and others, and made student interaction more engaging. They were used when students heard information that was expected. In turn, when the information was unexpected, it took some time to process it, which was expressed either through interjections, such as "mmm," or through out loud thinking, for example:

Ellie: For projects one and three, you don't have the reflective memo, I think.

Raymond: Okay… Yeah, no, I yeah … wait, project … project one … and … three …

Ellie: I think I wrote that down right.

As Raymond heard Ellie's feedback he mechanically said "okay," still, a moment later, he realized that he did not understand what Ellie meant and started thinking out loud. Ellie chose to verify that her information was correct.

The least common phatic expressions were also produced by Raymond, who showed himself as a very emotional person (which was apparent even in the course of the Google Doc sessions, too). Those were expressions of positive evaluation and sympathy: "Wow!", "Oh wow," and "Oh!" (the latter was uttered after Ellie complained about her struggle with recording a video.)

Overall, phatic comments significantly helped to liven up student interaction and made discussions sound natural and more collaborative.

Confirmation. Confirmation comments were the next most numerous comments after phatic phrases. They were used primarily to confirm the importance of a speaker's idea, agree with another speaker's idea, confirm that another speaker's reaction was heard, and confirm the information about which another speaker was not sure. In the example below, Sarah asked Trent about a detail of the assignment:

Sarah: Hey, [Trent], are you gonna do a … SLO reflection for each project or just, like, overall?

Trent: Yeah, I'm doing, doing, one for each, doing a paragraph for each.

Sarah: Okay, cool. I just wanted to make sure.

By her last phrase, Sarah confirmed that she heard what Trent told her and emphasized that her question was important.

In the next example, Andy provided positive feedback to Ellie, and Raymond confirmed her idea:

Andy: I was actually even getting, like … inspiration.

Raymond: Sssame here! Same here!

In this exchange, Raymond enthusiastically supported Andy's evaluation, thus making her opinion more objective and valuable for Ellie.

In the next example, there are two cases of confirmation, where at first Raymond agreed with Andy's feedback, and then Andy confirmed that she had heard Raymond's reaction but still chose to emphasize her point:

Andy: … and then what I think you need to, like, upload the revised[16] *project.*

Raymond: Yeah.

Andy: Yeah, all that.

By his indifferent "yeah," Raymond expressed his agreement with what he had known, even without Andy's reminder. In turn, Andy chose to confirm her idea and, maybe, encourage Raymond as it was unclear how much work was in store for him to fulfill that prompt requirement (only to upload the project or actually revise it).

So, confirmation comments, similar to phatic ones, helped discussion participants promptly and naturally react to what others uttered but also express additional connotations, thus enriching the interaction with new collaborative meanings.

Organizational Comments. Organizational moments discussed by students were the following: the order of reviews, Internet cutouts, location of links, sharing screens, and others. Still, even these neutral topics could evoke subtle meanings and further develop relationships between participants. For example, the first organizational

[16] Underscored vowels in the middle of words mean logical stress which occurs when a speaker pronounces a word in such a way that it stands out against the background of other words in a sentence. The underscoring sign is adopted from the glossary of transcript symbols by Jefferson (2004).

discussion in Group 1 was devoted to deciding which work they should review first and screen sharing:

Ellie: Whose do we wanna do first?

Raymond: (after a short pause) You can do mine if you want.

Ellie: Okay.

Raymond: Okay. Should we share our screens? Is that … how we wanna do that there? Or …

Ellie: We can. I've already looked at … the websites beforehand, so I have notes.

Raymond: (unintelligible agreement)

Ellie: But I can share if you guys … don't understand what I'm talking about.

Raymond: No, I'll probably just ask you a question if … if that's all right.

Andy: Okay, good.

Ellie: Okay.

During this short introductory conversation, students not only discussed technical moments but established intra-group relationships and demonstrated their characters. Ellie immediately declared herself as a moderator by starting the discussion. In the middle of it, she established her authority by emphasizing that she was prepared and had notes (later, she referred to her notes verbally several times.) Additionally, she let others know that she did not feel comfortable with screen sharing, showing that even she, an apparent leader, had insecurities like any human.

Raymond also showed himself as an active participant by volunteering to be reviewed first (though before that he made a small polite pause to ensure no one else wanted.) After that, he inquired about screen sharing, which I encouraged students to

do in the instructions. Having heard Ellie's reluctant agreement, he immediately accorded to her and agreed not to share screen, proving to be a delicate peer review partner, willing to recognize others' feelings and adapt to them.

As for Andy, in this conversation, she established herself as an outsider by only uttering "okay" and noticeably experiencing difficulty chiming in Ellie and Raymond's active discussion.

So, discussions on technical moments helped student collaborators ensure a good flow of the peer review session, establish their position within a group, and clarify personal preferences.

Explanations. Explanatory comments fell under two major categories: those that were provided by authors on their drafts and those that reviewers provided to explain their suggestions. For example, Andy asked her reviewers a question and explained why it was crucial for her:

> *Andy: Also … my video, I think I recorded it like ten times. So I was just like over-recording and I just uploaded whatever I did last. So did you guys listen to it? Did it make sense? Because I couldn't, I couldn't listen to it. I was like …*

In her dramatically phrased remark, Andy pointed to her anxiety about her revision video, thus explaining the reason for her question. Andy's explanation sounded the opposite of her partners' confident behavior and probably, was meant to push them to give at least some praise to her (because she did not receive any single praising comment during that peer review session.)

In the next example, Trent explained to Harvey how and why to improve a web page design:

Trent: Maybe on your Project 2, move your YouTube link a little more to the next to your Project 2 paper just so it's more easier to find, because I found it where, I found it like in a weird spot like just from my eyes and reading it, you know what I'm saying?

In addition to stating his suggestion, Trent explained that the change was necessary because the link's current position made it difficult to find due to it being too far from the text it belonged to. The explanation is accompanied by a hedging word "just" to make it sound slightly less serious.

So, explanations provided additional details to questions and suggestions and allowed collaborators to express their attitude to the topic, thus letting others know the degree of its importance.

Opinions. Students made opinionated comments in those cases when they wanted to share their take on the peer review process, assignment requirements, and minor details on suggestions or draft quality initiated by reviewers or requested by authors. For example, in the comment below, Ellie expressed her opinion on their peer review discussion:

Ellie: Again, I think we're all just trying to, like, find things to give feedback on. So I'm just going through.

During that peer review session, Ellie apparently struggled with inventing higher-order feedback and mainly pointed to superficial issues, such as large paragraphs grammar, and typos. Though she clearly noticed that others did not have that problem, with this comment, she still tried to present the issue as if it concerned everybody and not only her.

In the next example, Raymond pointed to the fact that all Andy's major projects looked revised, while the prompt required a revision of one major project only:

> *Raymond: Um, I guess, I guess one thing that I … kind of noticed, I don't know if it's really a big problem or not, but you kind of have, like, revised projects through every single project that you have and I feel like that might be confusing in terms of, like, … when … when in the prompt, it kind of says that you need to have one major project revised.*

Here Raymond expressed concern about Andy's website and chose an opinion format because Andy did more than was required by the prompt rather than less. However, Raymond fairly pointed at the main issue with Andy's approach to the assignment, which was confusion with the revised project. In the end, this confusion led to Andy not receiving the peer feedback she requested.

In the next example, Trent tried to persuade Harvey that including an image on the final portfolio front page would increase his authority in the eyes of his audience:

> *Trent: Umm, so, also, I put a picture just there because it kind of just show it's always better to put a face to when you're reading something like a like a portfolio … When I read, I like to see how … I like to know what person looking (unintelligible) looks like when they write it, you know what I'm saying?*

Though the final portfolio website prompt required using an author's image on the home page, that was a minor requirement, and Trent perfectly understood it. So, the format he chose for his feedback was not a direct suggestion (which would not

have sounded authentic as Harvey read the prompt, too) but an explanatory opinion that helpfully supplemented the prompt's language.

So, opinions added much versatility to the collaborators' toolbox of comments allowing them to express feedback in which they were not fully confident or, at least, wanted to show it that way and distinguish between the level of importance of textual issues.

Clarifications. Clarifying comments appeared rather homogenous and always followed explanations as a supplement. In the series of Ellie's comments below, she had to clarify her idea because the author did not understand her:

Ellie: … for projects 1 and 3, you don't have the reflective memo, I think.

[After that an exchange between Raymond and Ellie took place where the former expressed his confusion and the latter also became confused by the fact that he did not pick up on her idea immediately.]

Ellie: Yeah, so what we have to do is just like put those in reflective … or not reflective, in memo format. <u>It's like reformat it.</u>

Raymond: Oh okay, I got I got you!

Here, Ellie felt that her explanation of the prompt requirement was insufficient and chose to paraphrase it, mainly because the wrong word slipped her tongue at first. Only after that Raymond finally accepted her idea.

In the next situation, Ellie clarified the origin of her images, praised by Andy:

Andy: And nice pictures, like, very professional.

Ellie: Thank you. It was thanks to my brother, actually. <u>That was taken on my phone. My busted IPhone 7.</u>

Ellie could not limit her reaction to "thank you" and had to expand due to politeness conventions. So, she explained who the photographer was and chose to clarify that the device was broken (which sounded as if others were supposed to have heard from Ellie about the iPhone issue before). Ellie's clarification sounded like she wanted to downplay her achievement, maybe because she received too much praise from her reviewers during that peer review session.

In the next comment, Harvey talked about making student learning outcome reflections more specific regarding the author's writing experiences:

> *Harvey: The only thing that I saw, like, especially, like, for [Sarah], mainly, for, I mean, more, more [Trent]'s than [Sarah]'s but, like, for some of your SLOs, like, you could be more, … like, specifying, like, in your descriptiveness, like, what you did learn and not just to give it fluff, but, like, you could just do that just as an overall thing. Give it a little more context.*

Here Harvey first expressed his idea rather vaguely ("specifying in your descriptiveness") but then corrected himself, tried to explain what he meant ("what you did learn and not just to give it fluff"), and then clarified his point ("give it a little more context.") The success of his explanation and clarification is questionable because Sarah never reacted to his feedback, but, in any case, they show a pattern that students often chose to sound clearer in their feedback.

In all, clarifications provided by students sounded as if the latter really cared about the effectiveness of their feedback and obviously made discussions more collaborative, engaging, and informative.

Alleviations. Alleviating comments were used by students to make their suggestions or critical opinions on someone's work less severe and could include soothing additions, refer to their own negative experience with the assignment, point that it was not a suggestion but rather a private opinion, or use concluding praise, starting with "other than that," "otherwise," or similar wording. For example, Ellie was talking about minor level issues with Andy's website:

Ellie: I did see some, umm, like, grammar errors and just like typos, very small though, so I would just make sure to go back through everything and make sure there aren't any errors.

After Ellie pointed out problematic grammar and typos, she immediately added that those issues were insignificant, so Andy would not get very upset with that critique.

In the comment below, Sarah unobtrusively inquired about Trent's revision project, which was absent on his website. She was willing to know if he forgot about that part of the assignment or was working on it:

Sarah: Umm, [Trent], which project are you redoing?

Trent: Project 3, it's not in there yet.

Sarah: Okay.

Trent: … that's what, but Project 3 is my revision.

Sarah: I am missing a ton of stuff … in mine, too. So …

After Sarah learned that Trent was working on his revision (about which he informed her), she calmed him down by saying that her website was not perfect, too.

The next comment was part of a conversation on how to help Andy improve the design of her website:

Raymond: … so I feel like that might make it clear … for me… But I mean, again, it's kinda, I don't know how I see. How do you see it, [Ellie]?

Raymond emphasized that he did not suggest anything specific but only pointed to a problem, and it was the author's prerogative to decide how to improve it. Also, he chose to involve Ellie, thus, splitting up the responsibility for providing a more straightforward suggestion to Andy.

In another comment, after Andy provided some critique on Raymond's website, she added:

Andy: But otherwise, I think it looks pretty good. You just need to … finish it.

Andy's alleviating phrase allowed her to wrap up her feedback to Raymond on a high note and leave him with a good impression of her input.

Overall, alleviations allowed students to ensure they did not evoke any hard feelings or conflict with their constructive feedback. Such an attitude was remarkable also because that peer review session was the last one at the very end of the semester, and the probability that the students would ever meet one another again was very low. Despite this, students preferred to maintain healthy collaboration.

Appeal to Own Experience. By appealing to own experience, students could make mild suggestions by offering their vision of an aspect of the assignment. Appeals took place when a reviewer wanted to clarify their suggestion, when an author wanted to anticipate feedback or to explain why they approached an aspect of the assignment in that particular way, and during a discussion when an author asked questions to

reviewers. For example, Trent pointed to the fact that reflections were absent on Harvey's Project 3 web page:

Trent: Your Project 3 … Remember, did you include your reflections for these? Underneath?

Harvey: Ahh … they were, they were actually in the projects themselves, I didn't separate them.

Trent: Oh yeah, so, do two separate things, or like how I did I put it like a whole other text block and just copied and pasted it … for each project.

After Harvey explained what happened with his reflections, Trent made his suggestion and clarified, based on his own experience, how else Harvey could approach the task.

In the next example, Harvey, having finished his feedback to Trent, anticipated the latter's critique on missing parts of the assignment:

Harvey: I know my SLOs weren't put on there.

This comment was helpful because it allowed Trent to skip the topic of SLOs in his review and spend time on other, no less important aspects.

In the next comment, Ellie explained why she had not included references on her resume, about which Raymond asked her:

Ellie: So, um, for that … I wasn't sure whether or not to include it, cuz I know our book says to. Umm, but just from my experience and from what I've been told, typically, they don't … put references in there like you tell them could, like, offer references.

In her comment, Ellie justified her approach by emphasizing that her sources of information on how to approach the assignment were not only the textbook and instructor but also her own experience and other people she considered knowledgeable.

In the example below, Ellie complained about her difficulties with using Google Sites when the group was discussing Raymond's creative approach to the assignment:

> *Ellie: I was, like, I kind of wish I did that, but, personally, with … Google Sites, I was having, like, trouble, like, with whatever it had is, like, the, default settings. So I just, like, kind of just followed what it was allowing me to do.*

Ellie complained about her negative experiences and sounded jealous of Raymond's success with the website builder. I received an impression that having expressed herself, Ellie felt, to a certain extent, relieved and started perceiving the assignment more positively. Also, Raymond received praise that did not sound bland, such as a regular "you did a good job."

Thus, appeals to own experience allowed students to share more valuable ideas on the aspects of writing and to make discussions more engaging and less formal. Also, given that all people love talking about themselves, this type of comments contributed to a more positive and collaborative atmosphere in the session.

Acceptance. Comments of acceptance are, to a certain extent, similar to confirmation comments ("okay," "yeah," "right"); however, the latter are more indifferent and only manifest that the one to whom the remark was intended heard it and is ready for the next portion of information. In turn, acceptance means a more enthusiastic and meaningful agreement that tells that the speaker is on the side of the

feedback provider. For example, in the following comment, Raymond agrees with Ellie's point that he did not have reflective memos on his final website:

Raymond: Yeah. I was ... yeah. I was going through my project and I realized "ummm! I'm … I don't have that in there! "

Before that, Raymond and Ellie spent a minute discussing what particular aspect of the assignment Ellie meant in her feedback. By his eager acceptance, Raymond successfully defused the situation and left Ellie satisfied with her feedback, who was glad that it found such an enthusiastic response from Raymond.

In the other example, Andy agreed with Ellie's feedback on her student learning outcomes:

Andy: Yeah, I need to do … more of my SLOs.

Again, as in the previous case, such an acceptance means that Andy took the feedback close to heart and respected the reviewer's input.

In all, acceptance remarks allowed students to see true reactions to their reviews and contributed to the more collaborative development of discussions.

Asking for Clarification. Clarifying questions were used by both reviewers and authors. Reviewers sought to understand the reason for what they observed in an author's draft, and that information allowed them to find the right angle for their feedback. As for the authors, they asked clarifying questions in case the feedback was confusing. Besides, specifying questions were asked on the fly during discussions. In the example below, Raymond brought up a question about the absence of references on Ellie's resume:

Raymond: Umm, on your resume … resume, though … did you forget to put, like, references and what not, just because that's a really big part … of resumes?

Here Raymond was genuinely interested if Ellie forgot to provide references or did not provide them on purpose. That question evoked a lengthy discussion, during which group members expressed their approaches to references on resumes and explained them in detail.

In the next comment, Trent became confused by Harvey's convoluted feedback and preferred to clarify by also summarizing it:

Harvey: And it was just everything was good except for the SLOs could be more descriptive in depth as a description itself like with the SLOs and stuff like that I just saw that they could be more descriptive and how they describe what you learned versus just the overall gist of what you've learned.

Trent: Okay. So, more specificities?

Harvey: Yeah, more or less. Yeah.

There is a probability that Trent, who was Harvey's friend and also, to a certain extent, his mentor, only wanted to show Harvey how his feedback could be more concise. Also, his clarifying question allowed Trent to use an intelligent word that Harvey immediately used in his feedback to Sarah that was almost identical to the one he provided for Trent ("like, you could be more, … like, specifying, like, in your descriptiveness.")

Overall, asking for clarification was a helpful way for reviewers to tailor their feedback to the authors' needs and for authors to provide indirect feedback on project feedback. Last but not least, this type of comments helped maintain a collaborative flow of discussions.

Asking-for-Information and Information. Information questions and answers to them were two types of comments that went together. Information questions were similar to clarification questions but differed in that aspect that presupposed direct specific answers and were not discussion-generating. Students asked them about such aspects of the assignment as technical realization, prompt interpretation, and the details a reviewer needed to know to provide appropriate feedback. For example, in Group 1, students spent some time discussing the screen recording that was required by the prompt for the revision video. Questions such as "How did you record your screen" and "Did it automatically pick up your voice while you recorded it?" helped them to exchange experiences and support one another because the process was, to a certain extent, frustrating. In other cases, students were unsure about how to approach the assignment, like in the following example:

Sarah: ... [Trent], are you gonna do an SLO reflection for each project or just, like, overall?

Trent: Yeah, I'm doing, doing, one for each, doing a paragraph for each.

Sarah asked that question to ensure that she was on the right track with the assignment, and Trent helped her out.

In the next example, Andy asked her reviewers for their opinion on her revision video:

Andy: Also, my video … did you guys listen to it? Did it make sense?

Raymond: So, um, so I guess my question is, what was the project that you're focusing on for, like, major revision?

Andy: Three.

Raymond: It was three?

…

Ellie: Oh, okay. I think because I saw, like, your Project 2 video I was getting confused by that.

Raymond: Exaaactly.

It turned out that Andy's reviewers could not provide her with the feedback she asked them for because of the confusing structure of her website, due to which they did not know what video they were supposed to watch. Without asking those questions to her, it would be impossible for Raymond and Ellie to decide on an adequate response to Andy.

So, asking for information and providing direct, unambiguous answers allowed collaborators to navigate the topic of the discussion and the writing process better.

Asking for Opinion. Unlike the previous pair of comment types, asking-for-opinion and opinion comments did not go hand in hand because opinions were expressed much more often and often without any prompt from the author. As for opinion requests, they were used much rarer probably because most of them, as will be seen in the examples below, were not spontaneous but were prepared by the authors in advance. For example, Raymond asked his reviewers about the style and design of his website, a question that he had prepared in advance:

Raymond: I guess … umm … a question that I have for you, guys, so I … am trying to be somewhat creative and kind of, like, my background stuff and what not. Do you think I'm going a little overboard, does it not look professional, in a way?

Because this question did not presuppose a direct and short answer, students became engaged in a discussion that lasted a few minutes.

Another example demonstrates an asking-for-opinion question comment that emerged spontaneously. Ellie first asked for an opinion on her revision video and, when her classmates suggested a revision write-up for better clarity, she asked for more details:

Ellie: I could, like, so, like, write it nExt to the video or something?

As Ellie was saying this, she, as she often did during that peer discussion, turned to her notes and wrote something down, which made it clear that she considered her classmates' opinions critical for her.

The next example illustrates a one-of-a-kind usage of opinion requests where a reviewer redirected a question to the other reviewer. The group was discussing the optimal way of design for Andy's website, and Raymond expressed his opinion; however, he chose to split up his responsibility with Ellie:

Raymond: So I feel like that might make it clear for me. But I mean, again, it's kinda, I don't know how I see. <u>How do you see it, [Ellie]?</u>

I noticed that all of Raymond's feedback used a large amount of hedging, and this suggestion was no exception. To sound less authoritative, he formatted his point as

an asking-for-opinion question, as if he was not fully confident in his vision and turned to Ellie for support or for switching attention from himself.

In all, asking-for-opinion comments helped students make feedback more tailored to authors' writing needs and make peer discussions sound more natural and collaborative. Students did not share only the feedback they had prepared in advance but generated feedback on the fly.

Gratitude. Thankful comments belonged to those types of comments that were used rarely. I found only three of them; two belonged to Ellie and one to Raymond. All of them referred to exceptionally valuable feedback. In the first case, Raymond thanked Ellie for pointing to the required memo format for reflections:

Raymond: Um, no, it's good that you … said that.

Before that, there was a long discussion between them because, at first, Raymond could not understand what Ellie was talking about, and, after that, Ellie referred to her own experience by explaining how she almost forgot about that requirement and did that last minute and how hard it was to keep in mind all of those requirements. Raymond's comment sounded not only grateful but also soothing for Ellie who talked about her struggles with the assignment several times during that peer review.

In the next case, Ellie thanked Raymond for pointing out that her revision video needed improvement.

Ellie: Yeah, no. <u>That's good feedback.</u>

"Good feedback" meant that Raymond not only made his point but supported it with thorough explanations and clarifications.

Lastly, Ellie said "thank you" to Andy for the latter's praise on the design of her website. Probably, she was particularly pleased to hear Andy's praise because, as Ellie had complained earlier, she struggled with Google sites. Andy's words proved that she was still successful with the assignment despite all the difficulties.

So, all feedback that received special gratitude was either detailed or concerned an aspect of the assignment that was particularly meaningful to the author.

Reiteration of Others' Comments. This type of comment was also extremely rare, because, in most cases, students tried to invent authentic feedback. Among all students, only Andy was the one who considered reiterations appropriate:

1. Ellie (initial comment): Umm … oh, and … I'm not sure if you just include it in your website, but the video for the revisions is mandatory, right? Right?

Andy (reiterated comment): Uh, with the video thing, just be sure to upload that.

2. Raymond (initial comment): I think it was really well organized, and I did like the color scheme as well.

Andy (reiterated comment): I like the color scheme as well.

In the first case, Andy heard the initial comment but chose to repeat it for confirmation. With the second comment, based on how she formulated it, it is unclear if she did not pay attention to Raymond's earlier remark or repeated the idea on purpose.

There was one more case of reiteration when Trent formulated his feedback to Sarah:

Sarah (initial comment): I mean, you're obviously just, like, missing stuff, like, you already know you're missing [feedback to Harvey].

Trent (reiterated comment): It just, we're all just missing a few things that we can put in by tomorrow [his feedback to Sarah].

That situation was different from those described above, as Trent was definitely capable of producing higher-quality feedback (which he had demonstrated earlier in his review of Harvey's website, when Sarah had not joined yet). However, having realized that Sarah was not going to provide any feedback to him besides a question that Trent even did not decode as feedback, he might have decided to pay her back. For that purpose, he chose the same wording Sarah used in her superficial feedback to Harvey. However, also knowing that I, as their instructor, was going to look through the recording and grade their performance, Trent made one specific comment to Sarah.

In all, reiteration comments in their unprompted format (in Andy's case), in my understanding, looked very appropriate and should to be addressed during peer review training because they allow more collaboration between the two reviewers.

Request. That type of comment was used only once between Harvey and Trent in the absence of Sarah:

Harvey: I know my SLOs weren't put on there. So don't eat me up for that, please, yet.

Here Harvey just finished his feedback to Trent and anticipated possible feedback from him. So, he preferred to acknowledge upfront that his student learning outcome reflections were missing, which allowed Trent to save time on that. Still, the

style Harvey chose showed that the students were friends and had been engaged in informal interaction before that peer review session.

Overall, comments within the collaborative stance obviously made student discussions sound productive and natural. Not only they allowed for effective information exchange but helped collaborators pick up on one another's attitudes and, based on that, to adapt their feedback to the ever-changing communicative situation. Collaborative comments obviously contributed to the reduction of tension that visibly sparked a few times and created a more favorable environment.

Evaluative Stance. Unlike Google Doc modes that were characterized by praise and critique that both could be general and specific, the Zoom peer review session was remarkable for evaluative feedback that was purely praise. That was probably because students tried to make their peer review interaction as conflict-free as possible (Table 24).

Table 24

Zoom Mode: Occurrence of the Types of Comments in the Evaluative Stance

Types of Comments		Occurrence
GP	General Praise	12
SP	Specific Praise	9
Total		21

General praise was expressed through positive and negative phrasing where the latter would roughly state that there *are not many/any issues* in the draft. For example:

1. Ellie: Okay, so … from yours, [Raymond], I didn't have a lot of … notes.

2. Andy: Umm … I didn't really see anything to, like, change like grammar-wise or, like, reword anything.

3. Ellie: Umm… so, for yours, I didn't have a lot of stuff, either.

4. *Trent: Besides that … umm … and then [unintelligible] the SLOs… err… err… I don't see anything else that … .*

5. *Sarah: … but I didn't see anything that I would like saying needs to get red … redone or, like, fix anything.*

General praise with positive wording was used at approximately the same rate. For example:

1. *Andy: Overall, I really like yours.*

2. *Trent: Ah, for you, and I'm looking at it… for your … personal statement at the beginning, I really like it.*

3. *Sarah: I think it looks pretty good.*

4. *Ellie: Everything else seemed fine, too.*

5. *Raymond: Umm … oh! On your, uh … honestly I didn't have much to say about it, too.*

Mainly, general praise served as a convenient way to start or to finish feedback and was never discussion generating, while evoking only formal confirmative remarks by authors. As for specific praise, it was sometimes caused by a *specific* question of the author and often generated discussions that helped students to learn new ways to approach the assignment. For example, the three comments below made by Ellie and Andy emerged due to Raymond's question about the style and design of his website:

Raymond: I guess … umm … a question that I have for you, guys, so I … am trying to be somewhat creative and kind of, like, my background stuff and what not. Do you think I'm going a little overboard, does it not look professional, in a way?

…

Ellie: Yeah, you can do more with it because I didn't know you could do all of that.

Andy: Yeah, I really liked the background, too. When I opened it, I was like, oh, that's pretty.

Ellie: … but I think it's really good that you're doing that, I found it easy to find everything so …

During this discussion, the students became engaged in sharing their experiences with Google Sites.

The next three comments that I picked from the entire peer review session were not prompted by the author, but the reviewer invented them on her own:

1. Andy: I was actually even getting, like … inspiration.

2. Andy: And then I liked your video doing the corrections.

3. Andy: And nice pictures, like, very professional.

All the three praising comments made by Andy sparked discussions on implementing a poster that proved Ellie's rhetorical approach to the assignment rather than simply a prompt following one; on Ellie's revision video, on which she immediately asked a question; and on Ellie's photos she used for her website.

The next three comments did not generate any discussions but served as an effective balance to constructive feedback:

1. Andy: I really liked how organized it is and, like … umm … how I could see everything.

2. Trent: And … if we … Good, we can. I can see all your projects, none of them is blocked or need permission.

3. Raymond: I think it was really well organized and I did like the color scheme as well.

Overall, comments in the evaluative stance, similar to comments in the collaborative stance, contributed to a more positive and encouraging atmosphere in groups. Besides, the in-person mode allowed students to make them more collaborative by generating informative discussions.

Notes for Improved Collaboration in Peer Review Design and Training

Many Words Lead to Many Ideas

Comparing student interactions in Google Doc modes and in Zoom mode allowed me to see the differences in collaborative peer review discourse. In Google Doc modes, collaborative comments were reduced to examples, explanations, clarifications, or occasional questions. In Zoom, collaboration was presented by not only those types of comments but also by opinions, appeals to own experiences, acceptances, conformations, gratitude, exchanges of information, and others. As a result, a suggestion that, in Google Docs, took only several words to express, in Zoom, grew into a dialogue that could lasted a few minutes from the beginning to the end. For example, what, in Google Docs, could be phrased as simply as "Make sure that you use the memo format for your reflections" was revealed in the discussion:

Ellie: Err… I did have that … for projects one and three, you don't have the reflective memo, I think.

Raymond: Okay. Yeah, no, I yeah … wait, project … project one and three…

Ellie: I think I wrote that down right.

Raymond: Are you talking about the … reflections? Is that what you're …

Ellie: Yeah, so we have to do is just, like, put those in reflective … or not reflective, in memo format. It's, like, reformat it.

Raymond: Oh, okay, I got I got you.

Ellie: Yeah … Cuz that's one of the things I forgot to do so I ended up doing that last minute as well cuz [unintelligible because Raymond interrupted her] …

Raymond: Yeah. I was ... yeah…I was going through my project and I realized "ummm! I'm I don't have that … in there!" Obviously, I had it …

Ellie: Yeah ...

Raymond: I just didn't have it in there. … Um, no, it's good that you … said that …

Ellie: Yeah, there's just like a lot to it that … I know it's like easy to forget.

Raymond: Uhuh.

As seen in the above dialogue, one comment on the prompt requirement provoked a whole string of confirmations, clarification requests, clarifications, acceptances, alleviations, and appeals to own experience, let alone phatic comments. Such a long exchange may look like a waste of time, especially given that the group chose not to share screens, which was the reason for Raymond's confusion from the beginning of the discussion above. In Google Docs, Ellie would be able to insert a comment in the right place, which would leave no ambiguities. Nevertheless, with its verbosity, the Zoom mode allowed students to touch upon important topics such as website design, Google Sites, usability, images, screen recording, references for resumes, prompt interpretations,

approaches to the assignment, and personal statements. That was informative not only for students but for me as their instructor as well, as now I know how they perceived different aspects of writing that I taught in my class and what moments I need to pay attention to make the assignment more straightforward. In other words, not only students benefitted from enhanced collaboration but even I as their instructor became part of it, though indirectly.

The Burden of Ill-preparation

During the Zoom peer review session, Sarah faced a visibly deprecating attitude from her peer review partners. It started to emerge at the beginning of the session when students and I had to discuss how the group would proceed if Sarah would not show up. When she finally did, Trent and Harvey had just finished their peer reviews of each other's websites. After Sarah apologized and explained that her tardiness was caused by the time zone difference she had forgotten, it also turned out that she was unprepared with her reviews:

Sarah: …where is… did she send the link in the email?

Trent: What are you talking about? [Here Trent's intonation was harsh and almost rude]

Sarah: For your project ... [Sarah sounded confused by Trent's harsh response]

As Trent and Harvey explained to Sarah where to find the links to their websites, Harvey decided to reproach her: "Overachieving over here." Thereby Harvey let Sarah know that, unlike her, Trent and he demonstrated excellent peer review performance. Several minutes later, when Sarah was absorbed in looking through Harvey's website, Harvey interrupted her process by addressing her disrespectfully:

Harvey: Hey, an hour behind! [Sarah had used that wording earlier, when explained that she was late because she was an hour behind them.] … Where are you in California? …

Sarah had nothing to do but combine her on-the-fly reviewing and the conversation initiated by Harvey. Finally, she let everyone know that she was ready with Harvey's website, but all she invented was the following:

Sarah: Umm, [Harvey], I just read through your … portfolio and I mean … umm … obviously there's things that you just have to put in there, but I didn't see anything that I would like saying needs to get redone or, like, fix anything. I think it looks pretty good.

Of course, this review looked very poor compared to the thorough review Harvey had earlier received from Trent and which Sarah had not heard. However, Trent as a good collaborator chose to support Sarah:

Trent: Yeah, honestly, that's all of ours at this point … because stuff like …

Sarah: Yeah.

Trent: Honestly, I think all three of ours look decent for this at this point.

The next step was supposed to be Sarah's review of Trent's website, where the main point of confusion occurred. The impression both Trent and Harvey received was that Sarah was looking through Trent's website. In reality, she was going about her business. Trent's last remark must have sounded like support for her that, to her mind, absolved her from the necessity to provide him feedback. Besides, she could feel that she could not add anything different to what she had already said about Harvey's portfolio, like, "missing stuff, like, you already know you're missing… looks good." So, Sarah was

no longer involved in the peer review process, while others still waited for something from her.

On the other hand, if Sarah knew that she had finished with reviews, she could have asked Trent and Harvey for their feedback on her website, but she never did that. Even if she thought Trent's feedback was his short remark right before his pause, she still did not hear anything from Harvey but seemed okay with that. So, Sarah was going about her business, looking at her phone, smiling, and occasionally looking at the screen to ensure that nothing required her attention.

Meanwhile, Trent and Harvey became engaged in an irrelevant conversation again, and I interfered. It turned out that Trent was waiting for Sarah's feedback, and Sarah was confident that she had already provided it:

Trent: … I think [Sarah] is looking at ours right now.

Sarah: Yeah, already looked … I just finished looking at all of yours.

Trent: Okay [here Trent's facial expression and intonation expressed confusion as he expected to hear more on his project from Sarah. Still, Sarah's response meant that it was now Trent's turn to give her feedback.]

Trent: Okay, I looked at yours…. I just finished looking at yours, [Sarah.]

Sarah: Okay.

Trent: Basically it's the same thing as all of ours. I think, like, umm, on first SLO you are missing Project 1's SLO.

Sarah: Yeah.

Trent: But honestly … it's honestly fine. It just … we're all just missing a few things that we can put in by tomorrow.

Trent was in a difficult situation because he knew peer review was graded, so he provided one specific detail (on SLOs) to show me, their instructor, that he was actually ready with his feedback to Sarah. But on the other hand, he perfectly knew that he was not going to provide detailed feedback to her as he did to Harvey. So, in his feedback to Sarah, Trent used the same wording and demonstrated the same superficial attitude. I am not sure if Sarah fully understood what was going on because she was not present at Trent's and Harvey initial interaction, but I am sure that Harvey understood Trent's rhetorical choices.

As Sarah's input in the peer review discussion was minimal, the group was left with a good amount of time before their session was over. Trent and Harvey again became engaged in an unauthorized interaction, this time sending messages to each other. Sarah saw it and noticeably suffered from uninvolvement. When I said their time was over and the group exchanged final "thank yous" and "goodbyes," she looked exhausted.

This situation demonstrates that the success of peer review activity heavily depends on the combined collaborative effort of all group members. During this peer review session, not only the discussion suffered because one student was unprepared, but another student chose to adapt to her performance and mock minimal preparedness. Also, a student who perfectly knew that her feedback was insufficient felt as if she was not eligible for eliciting feedback on her own draft. In other words, if one group member malfunctions, it affects the performance of the entire group because a collaborative discussion presupposes equal involvement.

An Outsider Does Not Receive Well-deserved Feedback

If in Group 2 Sarah was an objective outsider due to her insufficient performance, in Group 1 an outsider was Andy and only due to her character[17] and, maybe, circumstances that did not depend on her.

In Group 1, Ellie was in the most favorable position due to her leadership temperament and also because she was familiar with both Andy and Raymond through group activities before the class transferred fully online. Raymond was second in terms of leadership because he was a confident reviewer and an emotional and talkative person; however, he was familiar primarily with Ellie and less with Andy. In turn, Andy appeared shy and less confident and had the experience of working only with Ellie. As a result, her website was the last to be reviewed.

From the very beginning of the peer review session, Andy's position became apparent as she did not participate in the initial discussion between Ellie and Raymond when they discussed organizational moments such as whose website would be reviewed first and if they should share screens. Andy's input was only "okay, good."

During the discussion on Raymond's work, Andy was the second, and Ellie never asked her if she wanted to be the first reviewer. Andy made three reasonable points that were a mixture of critique and praise that did not evoke any discussion. When Raymond asked his reviewers a question, Ellie seized the initiative and, having answered the questions, began talking about her difficulties with technology. Andy's response, again, was short and without referring to her own experiences.

[17] Maybe a factor that Andy was not from Albuquerque but from a small city in the north of the state could be a reason for her shyness.

When the group was ready to review Ellie's website, Raymond asked Andy if she wanted to do it first, and Andy willingly agreed. All her feedback to Ellie was much praise and two thought-provoking questions. However, in those discussions (together with the one when Ellie asked her reviewers a question), Raymond was Ellie's primary interlocutor, and not Andy. At a certain point, Raymond started sharing his feedback to Ellie without asking Andy if she had finished (to be fair, I also received the impression that she had finished, but actually, she had not.) The feedback he provided was on a topical problem, and Andy briefly participated, though again, most of the exchange was between Raymond and Ellie. As they finished, Andy proceeded with her praise, which evoked another discussion. In the end, Raymond provided his last portion of feedback to Ellie, which again evoked a discussion, in which Andy did not participate.

As the group moved on to Andy's draft, Ellie, similar to what she said to Raymond, provided several comments on formal features with the only praising comment, "I didn't have a lot of stuff, either." As for Raymond's feedback, he never uttered a single praising comment to Andy—neither general nor specific—but immediately started with critique. I can only guess about the reasons for such behavior: either he felt that the time was pressing or due to his lack of personal connection with Andy. In any case, I felt deeply sorry for Andy, who earlier had provided so much praising feedback to both of her peer review partners. However, the discussion on an issue with Andy's website design was fruitful, but, as usual, with minimal participation from Andy. The last segment of the review was particularly disappointing for Andy. She asked a question that meant a lot to her: "Also … my video …I think I recorded it like ten times. So I was just, like, over-recording and I just uploaded whatever I did last. So did

you guys listen to it? Did it make sense? Because I couldn't, I couldn't listen to it. I was like …" During this emotional speech, Andy was making emphatic hand gestures and laughing embarrasedly. However, it turned out that both Ellie and Raymond misunderstood the structure of her website and ignored the part she was particularly interested in.

Overall, both Sarah's and Andy's cases demonstrate that, in a group of three as opposed to groups of two, one author may get better treatment from the reviewer than the other. The reasons for that may be either obvious, as with Sarah, or fuzzy, as with Andy. Nonetheless, even if to take into account Andy's negative experiences during that peer review session, the group significantly benefited from Andy's thoughtful questions, and Andy, in turn, benefited from listening to how others provided feedback on the same draft that she also reviewed. However, for the improvement of collaboration in that sense that no peer review partner feels left behind students can be recommended that they prepare equal feedback to each of the authors in terms of its amount and stances.

Conclusion

I started this chapter by describing the circumstances under which the preparation for the Zoom peer review session took place. The atmosphere was tense for students and me because the session presupposed the preparation of peer feedback in advance, and some students were very late with posting their links. Still, the tardiness with posting did not affect the work of the groups, and most students were prepared. Group 1 demonstrated good collaboration and produced a significant amount of high quality feedback. On the contrary, Group 2 struggled due to one student who showed up late and was unprepared.

As for peer review stances, in this session, the collaborative stance was prevalent (87%), the other two stances constituting almost equal percentages (6% and 7%). The collaborative stance was the most diverse and included the largest amount of comment types compared to the evaluative and prescriptive stances. Among all types of collaborative comments, phatic comments (meant for conversation maintenance) were the most abundant and by a wide margin, which might mean that they were the main prerequisite for effective collaboration. Confirmation, organization, explanation, opinion, clarification, alleviation, and appeal to own experience were less frequent but also numerous. The rest comment types, such as acceptance, asking for clarification, asking for information, information, gratitude, reiteration, and request were least frequent. Collaborative comments helped students to make their discussions sound more natural, formulate their feedback unobtrusively, hear authors' reactions, and discuss topics outside of peer feedback *per se*.

Comments in the evaluative stance were scarce and limited to praise only, unlike with Google Doc modes. Mainly, praising comments served a formal role as beginning and ending phrases for feedback; however, in some instances, praising comments also evoked meaningful discussions, which makes it possible to refer them to collaborative elements of the peer review discussion.

As already occurred in Google Doc modes, in Zoom, students demonstrated different involvement in peer review discussion due to differences in temperament, different abilities to analyze critically, unequal relationships, a lack of preparation, and others. Those variations in peer review performance shaped the participation of others, thus creating a mutually dependent system, which proves that, to make it successful,

collaborative peer review requires concentration of all effort and even in this case tension can still be present due to factors that cannot be controlled.

An undoubted plus of the Zoom mode that contributed to more enhanced collaboration is an opportunity to discuss drafts at a higher speed compared to written modes. Fast exchange of ideas allowed students to raise important topics that helped them understand the assignment better even though those topics were beyond the scope of improvement of drafts (which is normally considered one of the main foci of peer review.) Even though those discussions might seem verbose and time-consuming compared to the representation of similar ideas in a written format, they are still worth engaging in them due to their priceless input into creation of a favorable collaborative mood in participants who generate knowledge together.

Chapter 6: Discussion and Conclusions

Though peer review as a college writing class activity has been broadly researched in composition scholarship since the 1970s, this study shows that there are still questions and aspects of peer review that have not received enough attention. The reason for this insufficiency in research is that peer review is a multi-faceted activity that involves a myriad of factors involving not only the instructor's vision and approach to conducting peer review in class but also the students' visions and approaches to participation provision. I tried to look closer at students' peer review performance interactions to find answers to one of the main questions in peer review scholarship: how to make peer review more helpful for students' writing processes while reducing the load of anxiety and dissatisfaction of this activity (Murau, 1993; Braine, 1996; Morgan, Fuisting, & White, 2014; Ruecker, 2014). I argue that creating such conditions that would allow students to intensively collaborate, thus making the development of quality feedback a mutual process rather than a unilateral one, will reduce student dissatisfaction with the peer review activity. If a student is dissatisfied with feedback and the entire peer review process, this outcome is on both the reviewer and the writer because the peer review activity is based on mutual responsibility.

In this chapter, I correlate this study's results on peer review stances to the results of other studies, discuss peer review modes through the prism of collaboration, analyze the value of the anonymous mode, provide recommendations on a successful collaborative peer review session structure, group, formation, and peer review training, formulate the benefits of conducting peer review in class for instructors, and finish with the conclusion.

Most Collaborative Peer Review Modes (Research Question 1)

The analysis of the occurrences of comment types that allowed me to deduce three peer review stances—prescriptive, evaluative, and collaborative—demonstrated that students' collaboration was different across the three modes. In Google Doc modes, some students consistently built their feedback around one stance in both sessions. In contrast, others' feedback was more fluid and characterized by belonging to different stances across both Google Doc modes and even across the two drafts they reviewed. As for the Zoom session, all students demonstrated obvious collaborative behavior and commented primarily in the collaborative stance and minimally in the prescriptive and evaluative stances. This finding looks to a certain extent similar to the results obtained by Mangelsdorf and Schlumberger (1992) and Lockhart and Ng (1995), where most participants displayed primarily one stance in their peer review behavior, while some of them demonstrated characteristics of all stances. Lockhart and Ng (1995) did not aim to find percentages for each stance within their sample; however, Mangelsdorf and Schlumberger (1992) calculated occurrences of the types of comments in a way similar to what I did and obtained 45% for the prescriptive stance, 23% for the interpretive stance, and 32% for the collaborative stance. If to compare their results to what I obtained in this study (28% for the prescriptive stance; 53% for the collaborative stance; 19% for the evaluative stance (Table 4)), there is little resemblance seen. However, the variety of results is caused by the differences in the methodologies applied.

One of the differences that strikes the eye is the interpretive stance derived both by Lockhart and Ng (1995) and by Mangelsdorf and Schlumberger (1992), which my participants did not demonstrate. The interpretive stance means that students imposed

their own ideas onto the text (Mangelsdorf & Schlumberger, 1992) or used peer review "as a forum for presenting their personal reactions" to the topic (Lockhart & Ng, 1995, p. 620). The most obvious reason for this disparity may be that the topics used for the writing assignments in both studies cited above were sensitive topics of general knowledge, such as suicide, immigration, beauty, euthanasia, marriage, overpopulation, etc. Not surprisingly, student reviewers would become very engaged with those topics and eager to participate in knowledge production rather than in discussing textual characteristics of drafts. In turn, the assignments I used in my technical and professional communication class allowed students to choose topics only within the scope of professional communication. So, for Project 3 (which was under discussion in the Google Doc peer review sessions), my students chose topics focused on workplace issues, such as unsanitary working conditions or ineffective management policies that were much less emotional, complex, and universal but more down to earth and required more work on details. For this reason, my participants might have been less touched by the topics themselves and more focused on the writing quality of drafts, orienting to the prompt requirements and their own writing proficiency. Though rare comments were made on content, I chose to classify them as belonging to the prescriptive, evaluative, and collaborative stances rather than single out a separate interpretive stance for them.

The prescriptive stance was used more extensively in the Google Doc peer reviews (38% in both modes compared to 9% in Zoom), which seemed like, under the circumstances of one-way communication, students found it easier to suggest, even though I tried to design peer review process in a more collaborative way and specified in the instructions that they could ask and answer questions in Google Docs (Appendices F

and G). So, students mainly chose to pick issues and recommend fixing them by simply pointing to them (suggestion) or pointing and adding supplemental information (explanation, example, clarification) that was supposed to make their suggestion more effective and which I classified as belonging to the collaborative stance. Obviously, Google Doc peer reviews were perceived by students primarily as a chance to help classmates improve their papers and to practice their own critical thinking rather than to collaborate.

The occurrence of commenting within the collaborative stance in Google Doc peer reviews in my study was similar to those in other studies (42% for the anonymous and 32% for the identifiable mode versus 32% in Mangelsdorf and Schlumberger's (1992) study), which may be explained by the fact that the latter study also was conducted on a written-based peer review, thus being focused more on editing rather than on communication[18]. However, the evaluative mode results demonstrated a significant difference between the anonymous and identifiable modes: 20% and 30%, respectively. Also, the difference concerned the use of praise and critique across the two modes. If in the anonymous mode, specific critique constituted 61% of all evaluative feedback; in the identifiable mode, it was only 27%. Thus, students found it less appropriate to critique writers they knew, at least by name.

[18] However, in the study of Neumann and Kopcha (2019), when middle school participants reviewed through Google Docs, they did respond to their reviewers' comments, thus creating discussion threads. Mostly, those replies were confirmations of their agreement with the provided feedback, which in the end, did not lead to many revisions. The low effect on revisions disappointed the scholars; however, at any event, these results proved that collaboration is possible in Google Docs. It is not clear if students were particularly instructed to leave comments to comments, but the scholars noted that students had been regularly engaged in collaborative learning in that class.

As for the stance results in Zoom mode—9% for prescriptive, 84% for collaborative, and 7% for evaluative—there is no similar research to compare them. Mangelsdorf and Schlumberger's (1992) peer review mode was, to a certain extent, similar to the Google Doc modes in this study, as they assigned their participants to review a paper of an anonymous student outside of the class and write them a letter with their feedback. In turn, Lockhart and Ng (1995) used traditional face-to-face peer review but did not calculate stance occurrences. Nevertheless, when comparing the Zoom results with those found with Google Docs, it is evident that the difference between the modes and the projects played a crucial part in affecting the level of collaboration in students' peer feedback. Evaluative comments were present in Zoom but were much fewer (7% versus 30% and 20% in the anonymous and identifiable Google Doc mode, respectively), and praise was used primarily as polite introductory and conclusive phrases in a collaborative conversation.

Another possible reason for the small number of evaluative comments may be that, for the Zoom peer review, peer feedback was less regulated compared to the Google Doc peer reviews, where students were asked to write a final comment at the end in addition to marginal comments. Hence, in Google Docs, they had to invent how to differentiate the content between these two types of comments. In turn, collaborative comments in Zoom, aimed at the exchange of ideas, were abundant due to the excitedness of the assignment (multimodal portfolio), where all students were novices in terms of technology and digital writing. So, they were not inclined to provide prescriptive or evaluative feedback but preferred to discuss design and technology (aspects that were non-existent in Mangelsdorf and Schlumberger (1992) and Lockhart and Ng (1995)

studies) rather than texts. An equal lack of experience in digital writing also contributed to the minute number of prescriptive comments in Zoom, as prescribing sounded illogical when the reviewer was as inexperienced as the writer. Last but not least, students were excited to see one another again after the switch to an online learning mode a month and a half earlier, so the Zoom peer review was, in addition to the considerations mentioned above, a chance to socialize and vent.

In sum, the Zoom peer review session demonstrated the highest level of collaboration among students due to the rhetorical situation that prevented most of the students from using the command language typical for the prescriptive stance. On the other hand, the Google Doc modes though did not have such a strong collaborative component as the Zoom mode, still can be applied in class because commenting within the collaborative and prescriptive stance in those modes was approximately at the same level.

Most Collaborative Peer Review Design (Research Question 2)

Renaming of the Concept of Peer Review

One of the aspects that that needs improvement is student collaboration, which, as this study demonstrated, could be higher in the Google Doc modes. As we know, collaboration is highly valued in education in general and in the field of teaching writing due to allowing students to practice reviewing skills of higher level, generate meaningful knowledge, and boost their confidence and self-esteem (Bruffee, 1984; Cheng, 2013; Cornis-Pope & Woodlief, 2003; Engeström, 2008; Hewett & Robidoux, 2010; López-Pellisa, Rotger, & Rodríguez-Gallego, 2021; Storch, 2019; Wallace, 1994), which will inevitably lead to more positive emotional environment. To help students build a

collaborative environment in peer review, not only the relevant design can help, such as doing it face-to-face (via Zoom or in-class), but the instructor can also present the peer review activity to students as a *peer conference* rather than through habitual terms. The problem with the terms that we all use, hear from students, and come across in scholarship—peer feedback/response/editing/evaluation—is that even if the reviewer receives no reaction from the writer, this activity is still called peer feedback, response, etc. However, renaming peer review as a peer conference in the context of peer review training and labeling it this way in the syllabus and the LMS will leave no chance for students to see it as a one-way process but only as a collaborative feedback exchange.

To promote the exchange of ideas and help students generate the content for their discussions, the prompt will ask students to prepare for writers challenging questions or requests to elaborate on genre, content, design, and technological execution. Teston, Previte, and Hashlamon (2019) suggested effective models, for example, for questioning accessibility where the question can be formulated as "How can we revise this so that deaf, hard-of-hearing, blind, and/or audiences whose first language isn't English can access it?" (p. 203) Or, for questioning aesthetics, the elaborating request can be as follows "Tell me more about your experience with trying to strike a balance between making this look good and making it do the kind of rhetorical work you want it to do." (p. 203) This approach will allow student peer conference groups to achieve efficient collaborative communication aimed both at finding optimal solutions for writers and highlighting helpful perspectives for reviewers.

What Kinds of Peer Feedback Promote Collaboration?

Peer conferencing design depends significantly on the goals the instructor sets, mainly the skills they aspire to develop in students (Stewart, 2019). Given the above conversation about the importance of the collaborative peer conferencing stance that helps students to develop active listening and to generate efficient ideas on drafts improvement, it is essential to design peer conferencing activities in such a way that it will create optimal conditions for this kind of commenting (Appendix I). The findings of this study demonstrate that writing-based modes of feedback only allow for the concise expression of textual issues with limited collaborative attempts. Not surprisingly, for writing-based Google Doc modes, participants in this study chose to comment primarily on issues they found feasible to identify and explain in brief. However, student comments in the Zoom mode demonstrated that face-to-face peer conferencing is the best environment for students to comment collaboratively because oral communication makes it possible to express more complicated ideas that require, in addition to pointing to them, explanations, clarifications, examples, questions, and other collaborative moves for the more efficient conveyance of meaning.

Nonetheless, a significant disadvantage of the face-to-face peer conferencing if conducted in the classroom where student groups review papers at separate tables, is that students feel less accountable for productive collaboration because the instructor cannot be present at all of these conversations, even of moving around the classroom. With such sporadic instructor's presence, student discussions can easily go in the wrong direction, for example, when a group consists of students in close relationships (as happened in the less functional group where Trent and Harvey were friends). A lack of instructor's

involvement is not a problem if peer conference discussions are not graded; however, to be able to grade them, the instructor should make students aware that the former has access to their discussions. To ensure the instructor's constant presence, one alternative is to conduct peer conferencing via Zoom and schedule discussions in such a way that the instructor may be invisibly present (the instructor's video is on, but the instructor is not in front of the camera, so students know that they are not watched at every moment) and interfere as a last resort. When I noticed that the students in one of my second peer conferencing groups were silent, I interfered in the conversation, and my interference allowed students to understand the issue and continue their discussion. Another advantage of Zoom peer conferencing is that the instructor may easily grade the interaction by quickly skimming the transcript. To obtain transcripts, the instructor can make a student in each breakout room a co-host who will record a discussion for further submission to the instructor. As saving a transcript is impossible without recording the interaction (at least on Zoom), students need to be informed that the instructor will use the transcript or recording for grading purposes.

However, Google Doc peer conferencing, either in the anonymous or identifiable mode, can also be designed in such a way that the collaborative commenting is promoted. Even though not much collaboration can be expected in this case, peer conferencing can be designed to promote commenting on the aspect more relevant to student learning outcomes of the class, such as rhetorical choices and text organization, rather than lower-lever issues, such as grammar and spelling. To achieve this, students can be required not to leave comments in the margins but only a final comment at the end of a document or as a reply to the writer's thread. The rhetorical situation of the final comment will make

commenting on commas inappropriate and push students to focus on more contentious points. In addition to the requirement to leave a final comment only, the prompt can state explicitly that commenting on grammar, spelling, and mechanics is to be avoided. The instructor can even help students practice higher-level commenting in the preliminary peer conferencing training with a mock peer conferencing. Finally, if an in-person peer conferencing is planned after the Google Doc step, higher-level comments in Google Docs can potentially spark fruitful student conversations, thus enhancing collaboration.

Anonymous Peer Conferencing Mode: How Collaborative Can It Be?

Similar to the problem of correlation between studies that I discussed above regarding peer conferencing studies, the aspect of anonymity can also hardly be correlated due to differences in methodologies. Many studies are aimed at finding how much the factor of anonymity affects the ratio of critical peer feedback. A common result of those studies is that students commented critically more in the anonymous mode (Lu & Bol, 2007; Panadero & Alqassab, 2019; Seifert & Feliks, 2019). So, in the study by Lu and Bol (2007), first-year writing students provided 4.38 negative comments per draft ("negative" meaning revision-oriented) and only 2.29 per draft in the identifiable one, which confirms the trend that the anonymous peer conferencing mode contributes to more negative commenting. However, this research focused not on revision-oriented versus non-revision oriented peer feedback but the *language* and examples from student comments demonstrated that critical feedback can be provided in any of the stances—prescriptive, collaborative, or evaluative.

Regarding the aspect of collaboration, this study shows that the collaborative stance was more prominent in the anonymous mode compared to the identifiable mode

(42% versus 32%, respectively) (Table 4). In addition, the evaluative stance, even though I singled it out into a separate category, is also *collaborative* in that sense that it promotes mindfulness and the desire to avoid conflicts in student interactions. The results on the evaluative stance are 20% in the anonymous mode and 30% in the identifiable mode, which means that the evaluative stance comments in the identifiable mode partially occupied the space collaborative comments had taken before (30%-20%=32%-42%). Given that the prescriptive stance was used at the same ration across both Google Doc modes (38%), the collaborative and evaluative stance ratio equal 62% for both of them, which means that both Google Doc anonymous and Google Doc identifiable modes create a beneficial environment for student collaboration.

Nevertheless, the context of the research is definitely an important factor to be taken into account in the data interpretation. Technical and professional communication class students are experienced peer reviewers who were exposed to the peer conferencing activity both outside of class and in this class during the first half of the semester (before the class transitioned to the online mode due to the pandemic students had already had four peer conferencing sessions). Finally, a small sample of participants could also affect the data.

Collaborative Peer Conferencing Session Structure

While asynchronous peer conferencing sessions conducted through LMS or Google Docs flow relatively smoother, in-person peer conferencing needs to be thoroughly structured to ensure that student collaboration is effective when students spend equal time on each writer and do not waste precious time on chit-chatting. For this purpose, it makes sense to appoint the most reliable students as moderators and

timekeepers. In the current study, moderators were not appointed by the instructor. The guidelines for the Zoom peer conferencing (Appendix G) encouraged group members to choose moderators on their own. Though groups never discussed this aspect openly, Ellie and Trent were more inclined to carry out moderating functions and started leading discussions. Unfortunately, they ended up not coping with their duties because, in Ellie's group, Raymond chimed in with his feedback before Andy finished hers; in Trent's group, Trent became confused when Sarah's performance that was different from the one he and Harvey had demonstrated earlier destroyed the working atmosphere of the session, and he chose passive observation rather than active interference. An apparent reason for Ellie and Trent's challenges is that not only they were grass-roots moderators rather than appointed by the instructor, but also they were not fully aware of moderator functions in the peer conferencing context. To improve this aspect, the appointment of moderators and their training by the instructor seems the most expedient and helpful measure that will also partially eliminate power conflicts within a group.

Still, here comes a question: based on what information or factors should an instructor make these decisions? To determine the most suitable and reliable students, the instructor can resort to the instructor-led peer conferencing format (Ching, 2014) for the first peer conferencing session in the semester and observe student behavior. Based on these observations, the instructor will be able to not only single out prospective moderators but also see how effectively students interact and consider these observations for the future forming of peer conferencing groups. Another aspect that needs consideration where instructor-led peer conferencing may be helpful is shy students who may quickly become outsiders in the course of a peer conference session and not receive

enough attention (similar to what happened to Andy, who did not receive answers to her questions to reviewers due the group running out of time.) To prevent such situations, the instructor can form groups based on their observations during instructor-led peer conferencing and other class activities, such as class and group discussions. The obtained information may help the instructor assign the commenting order so the shyest student's draft is discussed first. Additionally, the assigned commenting order may help avoid embarrassing moments on who goes first, who goes next, etc. (as happened to one of the two groups in this study.)

Appointed moderators should rigidly follow the peer conferencing procedure developed by the instructor; for example, the first reviewer provides feedback, then the second reviewer provides feedback, and finally, the discussion takes place (questions from the writer, then questions from reviewers). Besides, students can be instructed that discussion can occupy most of the time as it embodies true collaboration, which, as I argued before, is an indispensable component of a successful peer conferencing process. Finally, moderators can be instructed to be more conscious of possible issues with the Internet and communication (as happened in the less functional peer conferencing group in this study), especially if group members never had a chance to work with one another in class before. In case of seeming technical issues, the moderator needs to ask them what was the last idea they heard and to repeat or ask the last speaker to repeat. In case of unusual silence, the moderator should inquire about the issue and make an appropriate decision about the next course of the discussion.

Last but not least is the aspect of grading peer conferencing, which decision instructors can take to make students more accountable. Though it may seem that grading

will limit the authenticity of student communication, the results of this study demonstrated that numerous factors shaped student peer conferencing collaboration. The awareness that their work would be graded did not deter some of them from performing less effectively than others. Given this, I am confident that, despite grading, peer conferencing conversation still belongs to students, and class aspects are interpreted in a different way and at a different angle than if they would talk to the instructor directly. Moreover, even with grading, student interaction does not become less genuine and versatile and serves as a pleasant break from formal instruction.

Group Formation for Enhanced Collaboration

Groups of Three: What Can They Offer?

Researchers analyze peer conferencing activities where groups consist primarily of two (Lockhart & Ng, 1995; Ho, 2015; Rodway, 2017) or three students (Zhu & Mitchell, 2012: Cao, Yu, & Huang, 2019). Though I have not found any explanations in the studies cited above as to why researchers chose groups of two or groups of three designs, my initial understanding was that groups of two allow students to focus deeper on their partner's paper and, thus, provide feedback of higher quality. For this reason, I conducted peer conferencing in groups of two before my class design radically changed due to the COVID-19 lockdown in March 2020. With the transition to online learning, my students became deprived of their regular collaborative class environment, and I decided to switch to groups of three for peer conferencing. Groups of three allowed my students to partially compensate for the in-person peer conferencing time that had always been an indispensable component of the peer conferencing design in my class; group discussions before the lockdown had also happened in groups of 3-4. Finally, one more

reason that influenced my peer conferencing design was that the model research for my study focused on groups of three (Zhu, 2001). As I knew I would use those peer conferencing sessions for data collection, peer conferencing groups of three became a part of my methodology for this study.

Through my close observations of the two Zoom peer conferencing sessions, I noticed that reviewers demonstrated significant attention to other reviewers' feedback to the writer. I noticed that the first reviewer was anxious to hear the second reviewer's comments, probably because there was a possibility that the next reviewer's feedback would be better than the first one (for example, that happened to Ellie, who was not so good at seeing writing issues at a global level and was concerned to hear that kind of feedback from Andy.) Also, the second reviewer may be anxious while listening to the first reviewer because the latter may voice the feedback that the former prepared; so, the second reviewer may have nothing to add other than to confirm what the first reviewer just said (for instance, Andy demonstrated visible anxiety as she was listening to Ellie's (first reviewer's) feedback to Raymond). These observations made me think that hearing the other reviewer's feedback can be beneficial and has a collaborative learning component in it, which is not possible with groups of two.

Hearing someone else's feedback on a draft, on which a student just provided or is going to provide feedback, is helpful because students, in a sense, *hear feedback on their own feedback.* Additionally, students can learn to perceive this feedback adequately and not feel uncomfortable confirming their agreement with the other reviewer's point. Although "reiteration of another reviewer's comment" was among the types of comments I singled out, it rarely occurred: only five times in both Google Doc peer conferencing

sessions and ten times during the Zoom peer conferencing. My vision is that students should be encouraged to use reiteration more often as, in this case, this feedback would sound more authoritative to the writer and be perceived by them as a public opinion rather than a personal point of view. Moreover, reviewers may benefit from hearing others' comments regarding peer feedback *per se* and language usage (for example, Harvey heard how Trent formulated his idea and immediately used almost the same wording in his own feedback.) Partially, these findings correlate with Masters, Madhyastha, and Shakouri (2008), whose research involved an explanation-sharing network ExplaNet, where students posted explanations to the instructor's prompts. Their results showed that students who viewed others' explanations before submitting their own demonstrated more significant improvement in submission scores and scores on the final exam than those who did not. Equally important for collaborative peer conferencing is reading the other reviewer's comments in Google Doc peer conferencing, which will effectively contribute to improving reviewing skills.

On a side note, it is desirable not to allow friends to be in the same group (if the instructor is aware of a relationship among students) because this personal connection will inevitably interfere with the peer conferencing collaboration. Especially such placement will play a negative part in a group of three where a member outside of this friendship will feel left out and uncomfortable because they will surely notice the parallel interaction between friends. In this study, the friendship between Harvey and Trent negatively affected both their identifiable Google Doc peer conferencing with Raymond and the Zoom peer conferencing with Sarah.

On the whole, peer conferencing groups of three contribute to more intensive collaboration and broaden opportunities to enhance student reviewers' skills not only at the level of writing as the class's primary focus but also at the level of language usage, which is no less critical.

Beneficial Conflicts

The total count of comments demonstrated that some students showed much more diligence than others: Ellie, Andy, and Raymond made 18 comments per draft on average, while Trent, Harvey, and Sarah made only seven comments per draft. I even received the impression that more prolific comments were made by reviewers to demonstrate their excellence. Both cases I am referring to (Raymond and Andy) took place during the Google Doc identifiable session.

One of the examples of an unusually excellent peer conferencing performance occurred in the group where two students, Harvey and Trent, posted their drafts way after class time started. Late posting made the third student, Raymond, very anxious that he would not be able to finish reviewing their drafts on time, so he even emailed me his complaint and concern. Nevertheless, despite time pressure and the fact that the drafts for this peer conferencing were one and a half times longer than for the anonymous peer conferencing, Raymond managed to produce more comments on Trent's and Harvey's drafts than he had done during the anonymous session. As for other group members, Harvey produced many more collaborative comments, questioning clarity and logic, than in the anonymous mode. There is a probability that the tension in the group could also result from stereotypical male competition (Carter & Kushnick, 2018); however, as the data on gender identities were not collected, this is only an assumption.

The other situation of tension occurred in the other group and was also connected with the late submission. I already described in the previous chapters that Sarah had started struggling with school due to the sudden transition to the online mode, unplanned moving back to her home state, and turmoil in her family. For all those reasons, she was late with posting her drafts with both Google Docs sessions, and I allowed my students not to review late drafts without losing points. First, late posting again happened during the anonymous peer conferencing: Sarah posted her draft in the evening and left a couple of comments on Harvey and Andy's drafts but received no comments from them. During the identifiable peer conferencing, Sarah again posted her draft late and, again, left very few comments on the others' drafts. Surprisingly, she received high quality feedback from Andy, who spent her free time on that. Andy's feedback was at a content level because Sarah's draft did not meet the length requirement. So, Andy made helpful detailed suggestions on how Sarah could expand her ideas. As with Raymond and Harvey, Andy's unusual performance that she put an effort where she was not required to do it could also be ascribed to female intrasexual competition (Hess, 2022), where Andy probably wanted to demonstrate her exceptional reviewing skills to Sarah. So, a conclusion that could be made on those two situations is that, though students do not demonstrate all components of a truly collaborative peer conference and create emotional tension, they at least demonstrate visible effort in producing feedback.

Zhu (2001) pointed to the perceived inferior position of L2 students, who were often interrupted by domestic students. However, I could not trace this aspect because my study did not involve L2 writers. The only examples of interruption I noticed were in one Zoom peer conferencing group, where Ellie and Raymond interrupted each other, each of

them once. Those interruptions probably happened because both Ellie and Raymond, who perhaps view themselves as authoritative figures, observably fought for power during the entire discussion. In addition, a lack of behavioral convergence in speech style and body language also seemed to lead to tense communication between them. While Ellie's speech was more measured, Raymond spoke more impetuously, and the difference in speech rates did not contribute to their positive evaluation of each other (Manson, Bryant, Gervais, & Kline, 2013). The same concerned Raymond's intensive gesticulation compared to Ellie's more reserved manner of behavior, which also seemed to lead to a lack of impersonal synchrony and did not benefit their collaboration. Thus, the factor of a lack of psychological compatibility is that factor that is beyond our control and can decrease collaboration, regardless of how carefully we as instructors try to craft peer conferencing activities in our classes.

In all, more research is needed on the effect of gender and race identities of students upon their peer conferencing performance. At this point, a good solution could be conducting the first peer conferencing in the semester in the form of instructor-led conferences (Ching, 2014) where students learn the desired peer conferencing culture and behavior from the instructor. Even though power-related conflicts will still be present, the tension in peer conferencing groups may be lower, thus raising the quality of student collaboration.

Most Collaborative Elements in Peer Conferencing Interaction (Research Question 3)

Specificity Versus Non-Specificity of Feedback

Another aspect to include in the collaborative peer conference training is explaining to students the advantages of specific feedback over non-specific one and practicing to invent the former. My Zoom session findings demonstrate that students broadly used evaluative non-specific (or "general," which term I used throughout my results chapters) praise or critique for polite introductions and conclusions (which is in line with the results of Guardado & Shi (2007) who also marked that students used positive feedback "to sugarcoat the criticism"), for example,

1. *Ellie: Okay, so … from yours … I didn't have a lot of notes [which meant that the work was good, and I interpreted it as general praise – S.T.]*
2. *Sarah: I mean, you're obviously just, like, missing stuff, like, you already know you're missing [general critique where fillers were used to alleviate its negative effect.]*

Such vague comments do not presuppose any reactions other than "okay" or "thank you" at best or, in most cases, only silent agreement because this kind of feedback is not revision-oriented, and student writers simply wait for the "beef" of peer conference. It is *a specific* positive or constructive critique that, according to the results of this study, successfully generates fruitful conversations and provokes an exciting exchange of experiences. The question format is highly desirable, for example:

Raymond: Umm, on your resume … …resume, though … did you forget to put, like, references and what not, just because that's a really big part … of resumes? [19]

This remark evoked an engaging and informative conversation about references, mainly due to Raymond's question format that made the writer respond. After Ellie's response, the third group member contributed, too.

Or another example of an effective conversation starter:

Andy: And nice pictures, like, very professional.

Here Andy not only pointed to the quality of images but also attributed to them a fundamental characteristic: their professionalism. This detail sounded very flattering and made the writer explain the origin of her images. The third group member also added to the conversation.

On the contrary, a lack of detail and an inapt feedback format does not contribute to collaboration. The example below illustrates how a reasonable higher-order comment turned out to be unable to spark a conversation:

Harvey's: … with the SLOs and stuff like that … um … I just saw that they could be more descriptive and how they describe what YOU learned versus just the overall gist of what you've learned.

Harvey commented to Trent on the latter's outcome reflections that, in Harvey's opinion, needed more detail. However, this feedback was presented ineffectively because

[19] Raymond could easily talk fluently without fillers, pauses, and repetitions in other situations but chose this manner to sound less confident and, hence, less peremptorily with his criticism.

it did not contain a specific example to clarify its idea. Though Trent, being confused, even asked a clarifying question, it was not apparent if he understood Harvey's idea:

Trent's reaction: Okay ... so, more specificities?

Harvey's explanation: Yeah, more or less. Yeah.

This dialogue does not sound productive because, at first, Harvey's initial comment was vague. Trent's question to him was general (presupposing the "yes" or "no" answer) rather than specific (starting with a question word) and, thus, did not presuppose a specific response. Finally, Harvey's answer was short and non-specifying, which ruined his feedback.

So, explaining to students that higher-order feedback needs to be illustrated with examples to avoid vagueness and clarify how the draft can be revised is crucial. Thus, during the peer conference training, the instructor can explain to students how to format their specific feedback collaboratively by showing examples of feedback on different levels that will include minimal aggression and invasion of the writer's territory.

Revision-Oriented Feedback Versus Non-revision Oriented Feedback

Another aspect of peer conference training related to feedback specificity is helping students who struggle with generating revision-oriented comments. My participants mentioned their struggles in their Zoom conversation; for example, Ellie said with annoyance, "I think we're all just trying to … find things to give feedback on". Andy expressed a similar idea by saying, "I was … really trying to nitpick, and I really couldn't find anything." To prevent those struggles, the instructor may recommend students to focus on positive aspects of the draft; however, make their positive critique *specific* rather than providing a vague evaluation, such as "Overall this was well written." For this

purpose, if what strikes the eye at a glance seems not enough (first response to the text), reviewers can address the assignment's evaluation rubrics and build their comments on to what extent the writer succeeded in terms on the genre and topic choice, persuasion strategies, style, and so on. Another strategy is to annotate the text and see how clearly the reviewer can see the structure of the draft. If the structure is less transparent than it could be, the reviewer can invent critique on that point, thus generating quality higher-order feedback. If the structure is mainly flawless, the reviewer has another point to praise the writer. So, collaborative feedback presupposes that even it is not revision-oriented, it can still lead to discussions, during which beneficial topics can emerge.

Marginal Commenting in Google Docs

As the data analysis showed, marginal commenting lacked collaborative features in some instances due to its unreasonable excessiveness and confusion. To avoid this, it is possible to conduct peer conferences in the discussion format only, where students discuss drafts in a group. If the instructor still finds marginal commenting necessary, it is possible to teach students to use it more effectively when the number of comments at different levels is regulated. A possible way to do it may be one comment per each writing aspect: prompt requirements, genre, content, paragraph structure, sentence structure, grammar, spelling, and mechanics.

Though earlier I argued against minor-level commenting as it can hardly lead to a collaborative discussion, it is still possible and beneficial if minor-level issues are not the primary focus of peer feedback. For example, though I always recommend using spell-checking programs for my students, such programs can miss spelling mistakes, such as homophones "their" and "there." Given that many people confuse homophones in writing,

such feedback would be appropriate. As for mechanics, writing courses do not focus extensively on it, due to this, many students struggle, for instance, with unnecessary capitalization and will benefit from feedback on this aspect from more knowledgeable peers. These aspects should be adequately explained and illustrated during peer conference training.

The idea of regulated margin commenting emerged from the cases I faced in the current study. Among my participants, two record holders provided the most numerous comments in Google Docs. Their extensive commenting that occupied most of the marginal space made the pages look unwelcoming for the next reviewer, who would be several minutes behind them (Figure 9). Even though Google Docs will find room for all comments, it is understandable that the next reviewer may quickly feel discouraged. That is why regulations on the amount and types of comments would help to avoid such situations. Of course, there is always an option to conduct peer conferences in groups of two rather than three, but, in this case, the collaborative effect will be significantly reduced.

The problem here is that, in my experience, many students view any writing outside of major assignments as informal and allow themselves to neglect the needs of their audience, who want clear and unambiguous writing while demonstrating a much more polished writing in their drafts[20]. Besides, revision is essential not only for marginal but for final comments, too, as the latter may contain repetitions and confusing jumps from lower-order textual issues to higher-order ones and then back (Raymond's final

[20] On the contrary, other students (for example, Harvey and Trent) demonstrated the opposite peer conferencing performance when they commented consciously and clearly, using good grammar and writing style. However, their drafts needed substantial revisions on all those aspects.

comments demonstrated those features.) For this reason, the instructor can highlight this point in the peer conference training and explain that final comments also need to follow the paragraph organization principles students are familiar with so well. In addition, for the purpose of improved peer conferencing collaboration, the instructor can teach students how to structure their comments effectively by showing good and bad examples and explaining the necessity to revise the feedback they produced before sharing it with authors.

To view this idea more broadly, peer comments also need revision as any other writing assignment, as they represent a separate genre and have genre conventions. As part of the scope of professional writing, peer comments are reader-oriented as they call for immediate action. So, if students are provided with a peer conference prompt that will regulate the number and types of comments they are supposed to generate, the course of actions may be as follows: at first, reviewers can leave marginal comments as they read, then revise them, and only leave the most relevant ones; if comments repeat, they may be removed from the margins, but used for the final comment. Revised comments will definitely contribute to the positive response on the authors end (even if reviewers will never know about it) and enhance the collaborative nature of peer conferencing.

To make the process of revising comments even more effective, the instructor can additionally assign the usage of such computer programs as SWoRD, a web-based reciprocal peer conference system (Cho, 2008), Ruby on Rails-based web service (Ramachandran & Gehringer, 2010), and Natural Language Processing techniques (Xiong, Litman, & Schunn, 2010) that will allow reviewers to evaluate peer comments on their helpfulness. After student reviewers evaluate their own feedback, they may decide if

they want to keep, revise, or delete it. More thorough work on preparing their feedback will surely make student collaboration during peer conferencing more productive.

Active Listening and Adding to the Discussion

Another crucial aspect of collaborative peer conferences that students need to learn is active listening to others' comments in the reviewer role, reacting to them with agreement or disagreement, and supplementing them. As feedback *per se* is never exhaustive, it is common for two reviewers to notice different points in the draft that need attention and prepare different feedback. To ensure that a peer conference is truly collaborative, students need to learn not just to wait for their turn to provide feedback but to react to other reviewers' ideas. Reacting will, firstly, make feedback sound more valid, secondly, offer a different perspective, and thirdly, allow the listening reviewer not to be left out of the conversation.

Nevertheless, it may also be possible that the first reviewer will voice the feedback that the second reviewer prepared. In this case, it is more than appropriate for the second reviewer to paraphrase their feedback, thus restating it. If the first reviewer voiced feedback the second reviewer was not going to provide, the latter needs to address those points by agreeing or disagreeing with them (at their discretion) with explanations. Participating in a conversation when, theoretically, a student can stay aside and wait for the moment they will have to talk may reduce anxiety by those who feel less confident in their ability to produce quality collaborative feedback.

Peer Conference Etiquette

The concepts of active listening and thoughtful questions discussed above are indispensable components of peer conference etiquette. Nevertheless, the instructor can

explain to students that other no less important aspects constitute collaborative peer conference etiquette. To ensure that students develop collaboration characterized by mutual respect, preparation needs to be addressed during peer conference training and should be rigidly regulated. For example, if a student uploads their paper to the designated place (LMS or Google Docs) but does not provide comments or does not prepare feedback, they still attend the peer conference and participate in discussing feedback that the other reviewer prepared for them. They also need to promise their peers to review their drafts as soon as possible (until the end of the day or the next day).

From the pilot survey that I conducted several years ago for informational purposes, I learned that students feel disappointed if they put effort into reviewing a paper but do not receive adequate feedback in return, which is also in line with a student opinion from the study of Fan and Xu (2020). So, as relationships mean a lot for students (given their unwillingness to offend by providing critique), the instructor can explain that inefficient or absent reviews can easily spoil relationships and deprive the peer conferencing activity of its collaborative component.

Using First Names

Finally, I noticed through my observations of Zoom peer conference discussions that collaboration could be more effective if students addressed one another by name. The instructor can encourage them to do so because, as video conferencing is more awkward than regular face-to-face communication, names are essential to clearly understand whom the speaker addresses. Also, calling a person by name (at least once at the beginning of the discussion) sounds more respectful than addressing them without it and improves the overall environment of the peer conference.

Moreover, using names is relevant for the Google Doc peer conferences if students are required to provide the final comment. Starting the final comment with the author's first name will make it more personal and affect the author, so they may feel more inclined to use the feedback for revision.

Benefits of Peer Conferences for Instructors

Conducting collaborative peer conferencing that conditions a productive exchange of ideas relevant to class learning outcomes with a minimum of stress is beneficial not only for students' learning progress but also for the instructor's professional growth. Student peer feedback is an additional source of feedback to the instructor alongside course evaluations and students' direct questions they ask in class, during office hours, and at conferences. When the instructor has access to student comments they make in Google Docs or through video conferencing, they can analyze it and see what aspects students comment on. Thanks to student peer feedback, I often find flaws in my prompts or instructions that are confusing or lack details. For example, through the Zoom peer conference transcript in this study, I realized that I needed to give more thorough instructions on structuring and designing the revision video because my students discussed it and failed to come to a unanimous decision.

This idea echoes the one of Ching (2014), who marked that there were several times when hearing peer feedback on a student's work changed his attitude toward that work from considering it "inadequate or problematic" (p. 25) to a better understanding of the writer's intentions. For Ching, such discoveries made him reconsider his approaches to responding to student work. In my case, student feedback made me alter my teaching practices that I had considered pretty successful before or those pieces of my instruction

that simply needed more detail. In other words, the collaborative nature of peer conferencing does not presuppose benefits to students only, but to the instructor who also uses student feedback for their revisions on the prompt or class level.

Theoretically, the instructor can obtain indirect student feedback from the grading process, too, if they see an obvious flaw in the draft. However, it is often hard to tell if that flaw is caused by student's misunderstanding of the assignment or because they ignored that aspect for some reason. Of course, the instructor can always ask a student directly at a follow-up conference; still, conferences are time-consuming to conduct often. On the contrary, looking through peer conference transcripts is much more efficient and will allow the instructor quickly see the points of confusion and make effective changes to further instruction. Thus, it is in the instructor's best interest to use student peer feedback to the best advantage. In this case, the idea of peer conference collaboration acquires a new meaning: not only is this activity beneficial for students (both writers and reviewers), but also for the instructor, for whom it becomes a constant source of pedagogical growth.

Conclusion

Though this study sheds some light on some aspects of peer conferencing in writing classes that had not received enough scholarly attention, more research is still needed to make the peer conferencing process more collaborative for students, especially given the small sample of participants in this study. The same research design that was used in this study can be used to uncover more factors due to which the collaborative component suffered. Also, after implementation of the recommendations to the design and organization of the peer conferencing activity, future research may focus on the following problems:

- To examine students' attitudes about synchronous and asynchronous peer conferencing modes and respective technologies analyzed above and to correlate them to their performance in those modes. Does a positive attitude to a mode mean a more collaborative performance in that mode?
- To correlate students' peer conferencing performance with the revisions they make on their drafts after it. Does more collaborative peer conferencing performance lead to more revisions?
- To examine students' attitudes towards different peer review stances. Do they agree that collaborative peer review is more beneficial for various outcomes of this activity or do they value one-way prescriptive peer review more?
- To analyze instructors' attitudes to different technological options to conduct collaborative peer conferencing. What factors affect their teaching choices?

Though this study's initial point of departure was peer conference stances, a small participant sample and case study design allowed me to uncover interesting issues in

student peer conference interactions that need further investigation. New studies could use the findings of this study as *their* point of departure and reveal even more aspects of the peer conference activity that will make attending to them in research even more rewarding for students and instructors.

Besides addressing research gaps, some additions to traditional research design in peer conferencing studies would be beneficial for further development of the topic: for instance, taking into account not only the overall structure of the class (e.g., how many drafts students are supposed to prepare and how many peer conferences they will go through) but also the aspect of collaboration in this class *per se,* in particular, and the amount and design of ice-breakers, group discussions, and other similar activities. This supplement to the conceptual design of a peer conferencing study will help evaluate the extent of community building in class that undoubtedly affects the collaborative peer conferencing process.

As writing instructors and researchers, we need to understand how every aspect of the writing classroom is indispensable to our students' success. One of the crucial class components instructors need to put their effort into is a responsive, collaborative community, which means that "it must emphasize a dynamic, flexible practice of listening deeply and actively, setting aside assumptions, and making space for distributed creation and negotiation of knowledges and designs" (Shivers-McNair, Gonzales, Zhyvotovska, 2018, p. 44). Peer conferencing, being only one kind of available activities, contributing to the building of a collaborative community, is only possible to use in class effectively if the instructor knows in detail what is happening in student groups.

This research allowed me to understand more fully why peer conferencing activities may cause dissatisfaction in students. By looking closer at student interactions and observing those aspects of peer conferencing that are generally not visible through surveys or interviews on student attitudes to peer conferencing, I could see real situations that caused students' anxiety and frustration. These findings will help instructors effectively design the collaborative peer conferencing process by considering more factors than those typically paid attention to in designing this activity (Neumann & Kopcha, 2019). The skills acquired during a thoroughly designed collaborative peer conferencing will allow students "to learn how to manage conflict in constructive ways" even though conflicts may seem invisible at first glance (Johnson-Sheehan & Paine, 2019, p. 401). With careful consideration of multiple pedagogical factors, collaborative peer conferencing in a technical and professional communication class and other writing classes can reach a new level of benefit and satisfaction for students and instructors and lead to more positive student learning outcomes.

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Appendices

Appendix A: Survey at the Beginning of the Study

Name _____

Age _____

What do you consider your hometown? _____

What was the final grade you received in your last English class? _____

Please choose a pseudonym that you will be using for this study. __

Appendix B: Project 3 Professional Correspondence Dossier Prompt

Topic. More than sure, each of you has a job (or had a job in the past.) Based on your current or past experience, come up with the situation when something about your working conditions needed to be changed (these are not your coworkers or your boss! Try to come up with something inanimate, e.g., mold in the office, etc.) For this project,

1. Imagine that you are an *employee* at your workplace. You are dissatisfied with the working conditions and are writing a **complaint email** to your boss about the issue. Please pick only one issue.
2. Then imagine that you are your *boss* who received this complaint. Your task is to investigate the situation by writing to those in charge **an inquiry**. In the inquiry email, you ask them for additional information about the issue described in the complaint you received.
3. After that, imagine that you are the *employee who is supposed to give the boss additional information* about the issue they are investigating. Write them **a response to their inquiry** (or **a transmittal letter** accompanying a document that regulates the norms under discussion.)
4. Now you are the *boss* again. Write an **adjustment email** to the initial complaint letter explaining how the working conditions will be changed. If you cannot satisfy the complaint, write **a refusal letter** explaining your reasoning.
5. As the *boss***,** write a **memo** for all of the employees in similar positions, explaining to them how the working conditions will be changed (or will not be changed) based on the information you got and the actions you undertook to make this decision.

So, here is what your draft should consist of:

1. Complaint Email
2. Inquiry
3. Response To Inquiry/ Transmittal Letter
4. Adjustment Email/Refusal Letter
5. Memo

Goal. With this assignment, your goal is to demonstrate that you have mastered all the genres of professional correspondence that will allow you to be a more effective worker. Besides, if you are into fiction writing, you will be able to write novels involving industrial backgrounds with better authenticity.

Specifics. Each of the five letters should be one full page in length but no longer, so **around 300 words**. Ensure you carefully observe all the necessary formats (see Chapter 6 of TCT for reference). Use a script font to "sign" your name (for the boss' persona). Format your letters' texts single-spaced, in a 12-point sans serif font, and with one-inch margins all around.

Multimodality. Try to make your emails multimodal if necessary. For example, if you are complaining about the mold, take a picture of this and attach it to the email. If you are responding to your boss' inquiry, use graphs or charts to illustrate your point, etc.

Your letter must include/address the following:

1) Content:

- Ensure that all documents have a proper one-paragraph introduction with a clearly identified subject, purpose, and main point. Also, include background information that clarifies the issue to the reader. Finally, stress why this issue is inconvenient and why you want your reader to address that.
- Develop a good body for each document so that each body would be reasonably divided into paragraphs based on the topics you will cover. Remember your purposes so you will not digress from them.
- Finish all your letters with conclusions that will thank the readers for their attention. Restate your main point, reminding your readers of what action you want them to take. Look to the future, explaining briefly what will or should happen next.
- Use a professional tone throughout.

2) Format:

- Format all of the letters professionally, as demonstrated in *Technical Communication Today*
- Make all the letters a full-page long, but one-page long at maximum.

Reflections. For this project, you will need to write a reflection accounting for the authenticity of your writing. This reflection will help me evaluate and grade your project, so make sure you carefully consider the following questions and answer **ALL of the questions:**

1. How hard was it for you to choose among those situations when you wanted your working conditions to be changed? Explain our final choice.

2. How similar/different was the development of events in real life from how you presented it in your correspondence for this assignment?
3. How has this assignment changed your understanding of the communicative processes in the workplace?
4. What else would you like your instructor to know when evaluating this project?

Project SLOs:

By completing the assigned readings, activities, and assignments in this project unit, you will learn the following SLOs for professional writing. Think about these as you work through this unit, reflecting on how they pertain to your coursework. Remember that you will have to write outcome reflections for this project within your portfolio:

Content Development. Understanding how genre conventions impact writing. Using contextual information to place specialized information into the appropriate genre. Before you start drafting, go back to Chapter 6 in TCT, review all the genres you need, and determine their differences. Keeping that in mind, also try to put yourself in each person's shoes on behalf of whom you will be writing to sound authentic.

Written Communication. Composing clear, stylistically responsible prose that avoids errors and pays attention to audience needs. Make sure you remember how busy all the members of these communications are. Write in the plain polished style, not trying to sound smart but instead doing your best to express your ideas clearly.

Reviewing and Editing. Across media and contexts, ensuring final clear style, user-centered writing, and error-free spelling and mechanics. After you finish drafting, take a rest for one day, and then send all the emails to yourself. See how they look in real email

service. With each email, put on that persona who will be the actual recipient. Watch for your emotions. Determine if all your stylistic choices are fit. In the end, make sure that your emails are free from errors and typos.

Evaluation Rubrics

Qualities	Highly Effective (4.0-3.6)	Satisfactory (3.59-2.8)	Needs Further Attention (2.79-2.4)	Unsatisfactory (2.3-0)
Addresses Intended Audiences (10%)	The writer thoroughly analyzed each audiences' needs and made each writing piece appropriate.	The writer does not satisfy their audiences' needs in all cases and makes occasional stylistic mistakes.	The writer demonstrates a sporadic understanding of the audiences' needs, thus making their writing ineffective.	The writer does not take into account the audiences' needs.
Clear Sense of Purpose (10%)	The writer demonstrates a clear sense of purpose throughout the whole project.	The writer demonstrates a clear sense of purpose throughout most of the project.	The writer needs to revise most of the project keeping in mind the purpose in each case.	The writer has not attempted to determine a purpose for the project.
Objective and logical information presented (20%)	The writer sounds objective and logical in each rhetorical situation developed in the project.	Objectivity and logic can be seen in most of the composed texts.	The writer demonstrates objectivity and logic only partially throughout the project.	The writer demonstrates no logic or objectivity throughout the project.
Sufficient Detail/Content (20%)	The writer presents enough detail in each case, thus making the emails sound exhaustive.	The writer does not always present enough details in the emails thus causing some questions by the readers.	The writer needs to explain their points in more detail to improve communication effectiveness.	The writer does not give enough details to clarify their points thus making the communication ineffective.
Conventions (20%)	The writer diligently follows all the genre and formatting conventions.	The writer follows all the required conventions almost everywhere.	The writer needs to refresh their knowledge of the required genre and formatting conventions to improve communication	The genre and formatting conventions are disregarded almost everywhere.

Reflections (20%)	The writer shows that they put much effort into this project to make it sound authentic. It allowed them to get the most benefit from it towards becoming a better technical writer and coworker.	The writer tried to explain their attempt to make the project sound authentic. However, the desired result was not achieved in all cases.	The writer made little attempt to connect the project with real workplace communication.	The writer wrote no reflection.

Appendix C: Final Portfolio Prompt

Purpose. The portfolio is an electronic collection of your work that you will create in either Wix or Weebly, and this portfolio allows you to practice working in this professional genre and demonstrate what you learn this semester about writing, rhetoric, and multimodal communication, as well as some broader core skills and knowledge. Unlike an examination, where the teacher asks you a few questions to answer, the portfolio encourages you to write about a wide range of skills and knowledge you develop in the course. To create a robust portfolio, you will start working from the beginning of the course.

Audience. Imagine that your audience for the portfolio is not only your instructor and the UNM English department but also possibly a prospective employee. You will create this portfolio to use as part of an application for a future job. Many employers expect applicants to have a portfolio of professional documents to share. Because you are crafting this portfolio to serve the needs of a specific audience, a company considering you as an applicant, you will want to make sure it is easy to use, cleanly written and designed, and error-free. Make sure your color choices are wise, your media functions correctly, all of your embedded links are working, and no one has to seek "permission" to view any files (it happens every semester that some students forget to grant others permission!). The portfolio website must be multimodal in that it must contain smart usage of design and rich media (color, font choice, spacing, videos, images, etc.)

Specifics

1. Projects. Your portfolio will house all of your major projects in the course, which you should be revising throughout the semester based on the feedback you receive from your instructor, your peers (and CAPS tutors, if you seek feedback from them), and also based on whatever you decide to change. Post the draft you submitted for a grade as an attached document, and post the revised draft right on the page (copy and paste all the elements of your projects on the page.)

2. Project Reflections. For project, you will have to write accompanying Project Reflections, where you account for your audience choice, purpose, and medium. These Project Reflection documents should be one-page memos (written in standard memorandum format; see Ch. 6) that appear on each project's page.

3. SLO Reflections. You will also compose SLO Reflections. These will exist in the designated areas on the left-hand sidebar of your portfolio (each of the nine reflections in a separate tab so that you will have nine SLO reflection tabs in total.) In each of the nine SLO Reflections, you will write about how your projects contributed to your learning of the course outcomes (see the syllabus for all of them).

Remember to provide evidence (specific examples) that you have learned what you claim to have learned. The "evidence" that you provide will come from the writing and other activities you do this semester; use examples from those texts and activities to show what you learned.

Each of the SLO reflections should be at least 300 words. In short, you need to take those SLO reflections that you wrote for each of your projects and revise them accordingly by adding more to make them discuss all of your projects instead of one.

When you address your learning in both project and SLO reflections, discuss only your own writing experience, do not write with an impersonal tone but try to use "I" as much as possible. Also, indulge in hindsight: what would you have done differently if …

4. Homepage with Personal Statement and Resume. Craft thoughtfully and engagingly designed homepage for your portfolio. On this page, include your image with your neutral and slightly smiling face, your resume, and your bio/personal statement, composed near the end of the course. In the bio, tell me a little about yourself, what you learned this semester, and what major revisions you made to the projects based on the instructor's feedback. Your bio is a brief "about me" welcome to the portfolio. The resume is a complete picture of who you are and what skills you have.

5. Reflective Memo (should be placed to the Home page). Based on the Project and SLO Reflections you write throughout the semester, toward the final week of the semester, you will craft a 500-word Reflective Memo to me and/or a potential employer, where you will address your learning of all of the nine outcomes for the course; be sure you address SLOs 2, 6 and 7, in particular. In this memo, reflect on your learning **and how the lessons learned in the class can be helpful in your future**, especially regarding your entrance into the twenty-first-century workforce. You can—and are encouraged to—develop a short video to accompany this memo, too, which will explain to your instructor the revisions you made to your projects throughout the course (based on the instructor's and peers' feedback), highlighting areas in the text/project you improved. Regardless of whether or not you choose to create a video to explain what you have learned, you MUST write in your reflection memo, to be located on or as a link

from the homepage, how you feel the lessons you learned in this class will be beneficial to your future endeavors. Your written final memo must be **in pdf format, at least 500 words**, with effective headings and subheadings, and must emphasize your learning of SLOs 2, 6, and 9 (and must mention all nine SLOs).

To expand on the above, your Reflective Memo will be an extension of (or attached to) your course home page. The memo must be a summative reflection of your work in this course in **standard memorandum format** (review Chapter 6 in your textbook) and addressed to your instructor or future employer. You will evaluate what you learned and discuss how the central skills of ENGL 2210 have prepared you for other writing and communication opportunities that you will encounter in your university career and in your future profession.

6. Revision of One of the Projects and the Video (mandatory). In Week 14 of our class, you will begin a comprehensive revision of one of the course's major projects. This major project revision and the mandatory video "walk-through" of your revisions must appear on the project's page.

7. Use the portfolio space to showcase your learning of multimodal concepts. Use artifacts like videos, podcasts, graphics, images, links to outside pages, etc., to represent your learning of the course outcomes. (Use a different image for each web page.)

Helpful Hints

1. You will have some time to discuss your emerging portfolio with peers in your class. You can use that time effectively if you are prepared to share your work with classmates

and seek the feedback you need most from peers. Look at what peers do in their portfolios to get ideas for your portfolio.

2. For every project in this class, we are asking you to write Student Learning Outcomes (SLO) Reflections (mentioned above), addressing how the project helped you learn the skills (SLOs) the course teaches. You can—and should—use any written material you produced while creating the project as "evidence," including excerpts from class notes, peer review comments, instructor comments, your final draft of the project, etc. You will use these SLO Reflections to create a more formal memo reflection as described above and further in the section below. You will also complete Project Reflection memos (three for Projects 1, 2, 3), but do not confuse these with the SLO reflections.

3. Consider the following items as sources of evidence for your portfolio: excerpts from final versions of writing projects, drafts of projects, invention work, transcripts of peer review sessions, and external material that you have found on the Web in other media.

4. Because English 2210 is designed to help you write more effectively in the academic, professional, civic, and personal arenas of your life, feel free to use writing from outside this course in your portfolio. It is also useful to explain how you can use writing in these arenas.

Final Portfolio Grading Rubrics

Focus & Development				**20%**
Consistently presents clear, nuanced main points amply supported by compelling logical evidence throughout the portfolio; incorporates sources in a responsible meaningful way that enriches student's ideas.	Consistently presents clear, college-level main points that are effectively supported throughout the portfolio; incorporates sources responsibly that further student's ideas.	Occasionally includes information that may stray from otherwise consistently supported main points; offers generally adequate support for ideas; incorporates sources responsibly that furthers student's ideas.	Lacks clearly established main points or relies on illogical or weak supporting evidence in more than one essay; incorporates sources that clearly dominate student's ideas or fail to support student's obviously.	

Structure Consistently employs organizational choices that promote impressive clarity of expression, foster a sense that essays are cohesive units, and use reader-friendly transitions and focused, ordered paragraphing.	Consistently employs organizational choices that promote clarity of expression; foster sense that essays are cohesive units; use effective transitions and focused, ordered paragraphing.	Occasionally presents paragraphs that lack a clear purpose, focus, or logical breaks; offers information generally presented in logical order.	Uses organizational choices that frequently confuse the reader, either within individual paragraphs or within an essay as a whole; presents paragraphs that often lack logical breaks, purpose, or focus.	**20%**
Grammar & Mechanics Offers sentences that are nearly grammatically and mechanically flawless throughout the portfolio.	Offers sentences that contain few serious grammatical and mechanical problems throughout the portfolio.	Occasionally presents sentences with grammatical and mechanical problems, though errors do not generally inhibit readability.	Contains frequent grammatical and mechanical problems that frequently inhibit readability.	**10%**
Style Presents highly readable prose, sophisticated and varied sentence structures, high-level diction, and appropriate tone throughout the portfolio.	Presents smooth, easily understood prose, varied sentence structures, college-level diction, and appropriate tone throughout the portfolio.	Occasionally contains wordy or awkward prose; overly simplistic diction; repetition of sentence structures or word choices; and inappropriate tone.	Frequently relies on weak or inappropriate stylistic choices (diction, tone, sentence structure) that distract the reader and detract from clarity of expression.	**20%**
Multimodality The portfolio features well-designed, rhetorically effective multimodal components appropriate for the author's purpose and intended audience. The pages are designed to reflect the author's individuality.	Most of the portfolio features well-designed, rhetorically effective multimodal components appropriate for the author's purpose and intended audience.	The portfolio partially features multimodal elements that are not rhetorically effective or are minimally effective for the audience being addressed.	The portfolio features multimodal components, but these elements are not rhetorically effective. OR The writer has not attempted to include multimodal elements as a part of the projects.	**20 %**
Presentation (see the guidelines on the Discussion Board)				**10 %**
Portfolios that meet any of the following criteria will be considered incomplete and will result in a failing grade ("F") for the course: 1. Portfolio contains one or more large unattributed quotations or multiple short unattributed quotations. 2. Portfolio lacks any of the six pieces of required writing: personal statement, resume, formal reflective memo, final and revised drafts, three project reflections, and nine SLO reflections. 3. Portfolio contains any one essay that does not meet the minimum length requirement.				**F**

Final Portfolio Website Outline

Home Page (personal statement, resume, reflective memo)

Project 1 (and Project reflection)
Project 2 (and Project reflection)
Project 3 (and Project reflection) – one of the projects must have a video "walk-through" of your revision process
SLO Reflections (with nine subpages for each SLO)

Final Portfolio Project Breakdown
Week 14
1st half
- To read the prompt (at least twice)
- To prepare your checklist

2nd half
- To pick a project for revision
- To create a website (all the tabs)

Week 15
1st half
- to prepare a resume and personal statement

2nd half
- to revise the project and create a video

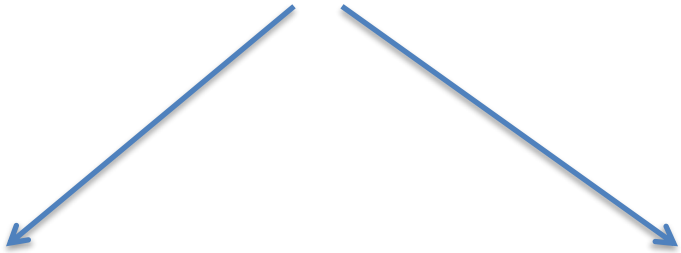
Week 16
1st half
- to write the reflective memo

2nd half
- to work on SLO reflections

Friday/Saturday – final submission

Appendix D: Peer Review Course Materials

TYPES OF PEER FEEDBACK



FINAL
(at the end)

- How does it sound?
- What do you think?
- Does it make sense?

SPECIFIC
(in the margins)

- Assignment prompt guidelines
- Thesis statement
- Topic sentences
- Organization
- Syntax, Grammar, Punctuation, and Spelling

THE 'HOW' OF PEER REVIEW

While reviewing a draft on your own:

- When you are confused while reading, mark an X in the text (or in the margins) where you are confused.
- Make polite suggestions in the margins.
- Write a final comment at the end of the draft.

While discussing papers in class:

- Ask the writer to explain their ideas.
- Ask the reader specific questions about your paper.
- Try to brainstorm together on how to improve the papers.

KEEP IN MIND THAT PEER REVIEW IS COLLABORATION!

Not just an exposition of your ideas on your peer's paper.

So, get engaged in dialogue.

PEER REVIEW EVALUATION RUBRIC

Uploaded on time	5
Uploaded everything required	10
Provided many helpful comments in the margins	8
Provided a helpful final comment at the end	7
Total	30

Appendix E: Peer Review Design In ENGL 2210 Before COVID-19

Stage 1. At-home peer review

Students upload their papers to the Project Peer Review Discussion Board and review them according to the guidelines to the forum (see below) by making comments in the textual file (in the margins and/or inside) and then writing a final comment at the end.

Stage 2. Face-to-face discussion

After virtual peer review is completed, pairs (or groups of three if there is an odd number of students in the section) discuss their papers with each other, asking specifying questions and providing details.

Instructions on the LMS Discussion Board

Post your draft of Project X (together with both reflections) to this forum.

Write at least three questions for your peer reviewers in the Message field. What do you want him/her to focus on the most? What are you unsure of?

Post your draft with the questions by 11:59 pm on XXXXXX.

On the next day in class, respond to two projects: the student above your post and the student below.

IMPORTANT! When you open the forum, ready to do the peer review, ensure that the arrow right to the word DATE is UP!

If you do not do this, it will be confusing which post is below and which is above. It will mean that one student will get three peer reviews while another will get one or none.

After you figure out whose drafts you will need to review, download the drafts to your computer and do the review for 25 min.

Your review should include your comments in the margins and your final comment (at least 150 words in length) at the end of the author's text.

After you are ready with your reviews, upload them to the forum as replies to the authors' threads by Wednesday at 11:59 pm.

The first person to post reviews the person below and the last person. The last person to post has to respond to the person above and the first person.

Finally, a word of caution. You may only receive one peer review instead of two. Sometimes students do not follow directions or are confused about whom they should review. Do not worry about it.

If you feel you need more feedback, we urge you to reach out to the Center for Academic Programs Support (CAPS) either in person or online. A web link for CAPS can be found on the left-hand side of your screen. It is named: Center for Academic Program Support - CAPS.

Appendix F: Instructions for the Anonymous Google Doc Peer Review Session

Dear student,

This peer review session will be held outside of class at a place convenient to you (only your computer with Internet access is required.)

1. You will send me your draft by email the day before (by midnight). In the morning, you will get an email from me with a link to the Google doc and the pseudonym you chose for this study. I will remind you of your pseudonym if you forget.
2. Before you open the Google doc, you will go to your Google account and ensure you **are signed out.** Signing out is necessary to be able to post and comment anonymously. If you miss this step and reveal your identity, you will not get credit for this peer review session.
3. Then you will go to your draft and remove all identifiers from it. These might be found in your header, heading, or at the end of the document where you provided your contacts.
4. Then you will go back to my email and copy and paste the link to the Google doc in your browser.
5. You will copy your draft from the original document and paste it into the Google doc. Your peers will do the same.
6. You will review your peer's papers according to the project prompt's requirements and evaluation rubric but without giving grades. Also, you will need to identify two strengths of the paper and two areas of improvement. Give details.

7. Your review will consist of comments in the margins and a final comment at the end of each paper.
8. Your comments (marginal and final) should start with your pseudonym, so your peers and I can see whose comments belong to whom.
9. Feel free to ask your peers questions if you want clarification on their comments (at the end of their final comment on your paper). Remember to start each of your questions with your pseudonym and address your pee review partners by their pseudonyms, so they and I know whose question belongs to whom. Make sure that you check if any of your peers asked you questions and answer them.
10. You are supposed to start and finish the whole task during the regular time of our class period, which is from 12:30 to 1:45 pm. That means that you will have 25 minutes for each paper (if there will be four students in your group) or 35 minutes (if there will be three students in your group.)

That is it. Thank you!

Appendix G: Instructions for the Identifiable Google Doc Peer Review Session

Dear student,

This peer review session will be held outside of class at a place convenient to you (only your computer with Internet access is required.)

1. You will send me your draft by email the day before (by midnight). In the morning, you will get an email from me with a link to the Google doc.
2. Before you open the Google doc, you will go to your Google account and ensure you **are signed in.** Signing in is necessary to post and comment **under your real name.** If you miss this step and hide your identity, you will not get credit for this peer review session.
3. Then you will go back to my email and copy and paste the link to the Google doc to your browser.
4. You will copy your draft from the original document and paste it into the Google doc. Your peers will do the same.
5. You will review your peer's papers according to the project prompt's requirements and evaluation rubric but without giving grades. Also, you will need to identify two strengths of the paper and two areas of improvement. Give details.
6. Your review will consist of comments in the margins and a final comment at the end of each paper.
7. Feel free to ask your peers questions if you want clarifications on their comments (at the end of their final comment on your paper). Make sure that you check if any of your peers asked you questions and answer them.

8. You are supposed to start and finish the whole task during the regular time of our class period, which is from 12:30 to 1:45 pm. That means that you will have 25 minutes for each paper (if there will be four students in your group) or 35 minutes (if there will be three students in your group.)

That is it. Thank you!

Appendix H: Instructions for the Zoom Peer Review Session

Dear student,

This peer review session will be held via Zoom. Your discussions will be video-recorded (for grading purposes).

1. The Zoom session will be held on Thursday, May 7, from 12:30 to 1:45 pm (our regular class time.)

2. You will post the links to your final portfolios to the designated Google doc the day before by midnight (Wednesday, May 6, by 11:59 pm) for your classmates to access them in advance.

3. Next morning, I will form the groups and send out the Zoom link and the group information. Each student will join the Zoom meeting at the designated time.

4. Before we start the Zoom meeting, you should review your classmates' final portfolios (through the Final Portfolio Peer Review Google doc) and formulate your feedback (make a bulleted list on a sheet of paper and keep it handy during the meeting.) Also, you need to download the Zoom app on your computers (theoretically, Zoom can work through the Internet, but my experience with that was unsatisfactory.)

5. Also, I encourage you to use the "Share Content" function to show the paper under review on the screen and point to what you are talking about with your cursor. To activate it, please read this article https://support.zoom.us/hc/en-us/articles/201362153-How-Do-I-Share-My-Screen-

6. To join the Zoom meeting, click on the link I will provide in my email.

Keep in mind these tips:

7. Keep the background noise to a minimum.

8. Speak clearly into the microphone, and refrain from shuffling papers, typing loudly, or talking among themselves.

9. Choose an external microphone over a built-in one for better sound quality (if you have one.)

10. I will be present (as I will be hosting the meeting), but I will not be a moderator.

11. As you join the meeting as a group, appoint a moderator and choose whose portfolio the group will review first.

12. After deciding which paper will be reviewed first, pull it up on the screen (using the "Share Content" function), so you know what your peers will discuss.

13. As there will be 15 minutes for the meeting, take 5 minutes to discuss each of the papers according to the peer review prompt requirements by taking turns.

14. If you forget to say something about a draft and the group already moves forward, feel free to write your ideas in the Zoom Chat (click on "More" and then "Chat.")

15. The draft's author will be taking notes to use for future revision.

16. Choose whose paper the group will review next.

17. Repeat steps 9-13.

That is it. Thank you!

After the meeting, I will send you the recording so you can review your classmates' feedback.

Appendix I: Recommendations for Instructors on Conducting Collaborative Peer Conferences in Class

For Peer Review Design

1. **Writing-based and oral modes.** Both writing-based and oral modes of peer conferencing are equally beneficial to students. Even though the former do not possess the same potential for collaboration as the latter, writing-based allow students to learn to formulate their feedback concisely, while oral modes allow them to learn to express more complicated ideas and build their feedback off of others' ideas.

2. **Zoom advantages for the instructor.** Conducting oral peer conferencing via Zoom is more helpful for the instructor as it allows them to receive access to all student interactions (through transcripts) and take into account the points of confusion uncovered during the discussions for further class activities. Besides, access to transcripts makes grading peer conferences more efficient.

3. **Instructor-led peer conferences.** This type of peer conferencing may be a good option for peer conference training, where the instructor will demonstrate in action to students how to formulate more collaborative feedback.

4. **Anonymous or identifiable?** Both anonymous and identifiable peer conference modes are beneficial to students. They can be equally collaborative, thus being effective not only in terms of feedback but also in terms of creating a more positive atmosphere in class. However, this study focused on a higher-level writing class, which could have affected the results. In lower-level writing classes, the effect of modes may be different.

5. **Groups of three** are more collaborative than groups of two because they allow students to compare their feedback with the feedback of the other reviewer on the same draft. However, students may be instructed that reiteration of comments, i.e., when the second reviewer verbally confirms their agreement with the first reviewer's feedback by paraphrasing it, is highly desirable because it makes the feedback look more weighty and valued in the eyes of the author.

6. **Moderators and timekeepers.** When planning a collaborative Zoom peer conference, the instructor needs to appoint a moderator and a timekeeper to ensure that each student draft receives equal discussion time and that discussions follow a rigid structure without time-consuming digressions. The instructor-led peer conferencing may be an apt option to learn which students could perform those roles effectively.

7. **Grading affect.** Instructors should not be afraid that grading will make peer conferences less natural. The results of this study demonstrate that student collaboration is shaped by multiple factors, even though students are aware of further grading of their participation.

8. **Friends need to be placed in separate groups.** If possible, the instructor should avoid placing students with deep personal connections in the same peer conference group (in case the instructor is aware of it). Personal connections make it difficult for students to switch to professional collaboration. Also, the third student in the group will feel uncomfortable.

9. **Beneficial contradictions.** Though contradictions may quickly occur in peer conferencing groups, they will not necessarily be detrimental to student peer review

collaboration. On the contrary, if contradictions lead to healthy competition, student peer conference performance may even improve.

For Peer Review Training

1. **Renaming the concept of peer review.** I recommend renaming peer review to *peer conferencing.* Even if peer review is naturally a group activity, the term "review" *per se* does not presuppose that the author's response is expected. However, the author's response, in particular, and *exchange* of ideas, in general, is an indispensable component of professional collaboration, preparation to which is one of the rationales for conducting this activity in class.

2. **Focusing on global writing issues.** To teach students to focus on higher-level writing issues rather than on lower-level ones, the instructor can ask students to provide only a final comment at the end rather than marginal comments. With such a regulation, commenting on lower-level issues, such as spelling, punctuation, and mechanics, will be less appropriate, thus leading to more productive collaboration on the ideas more relevant to student learning outcomes.

3. **Specific feedback.** Students need to be taught to provide specific evaluative feedback ("Nice photos" as opposed to "Good job") as this kind of feedback leads to collaborative discussions. Formulating such feedback in a question format will allow students to share their experiences with the assignment, which can lead to additional insights and learning growth.

4. **Positive feedback.** The instructor may teach students to focus on generating positive feedback if a reviewer struggles with generating constructive feedback due to the well-written draft. Possible strategies are text annotation, which may allow a reviewer to

reveal organizational flaws in the text, and rhetorical analysis, which will help reveal to what extent the text serves the purpose it was initially meant for. In other words, if a draft is so good that it needs no improvement, then the collaborative reviewer's task is to prove why it is so good.

5. **Marginal commenting.** In case the instructor assigns marginal commenting, they need to regulate how many comments students need to generate and what kind of comments to prevent overwhelming and repetitive commenting with some reviewers and, on the other hand, insufficient commenting with others to maintain an equal level of collaboration. Possible options are to prohibit commenting on minor issues of the text, thus pushing students to comment only on global issues, or to assign one comment on each aspect of writing.

6. **Active listening and adding to the discussion.** In the case of oral peer conferences, the other reviewer should actively listen to the first reviewer's feedback and react verbally, for example, by agreeing with points they actually agree with. If the second reviewer keeps silent, they may feel left out of the discussion and become more anxious, waiting for their turn to speak. For this reason, the training on collaborative peer conferencing can instruct students in the second reviewer roles to address the points made by the first reviewer.

7. **Peer conference etiquette.** In case a student attends a peer conference but is not ready with reviews of others' drafts, to be collaborative, they need to promise to prepare reviews as soon as possible, preferably during the same day. Otherwise, those reviewers who spent time preparing feedback for the unprepared reviewer will feel dissatisfied.

8. **Using first names.** With oral discussions, using first names, especially when starting feedback sharing or addressing a peer conference partner when they do not expect this, is essential so the group can avoid miscommunication and enhance collaboration.