Ecologies of Collaborative Selves in the Writing Classroom

Abstract

While group work and peer review are nearly ubiquitous in the university writing classroom, they have changed very little since the Bruffee-Trimbur debates. Often, we focus on assessment and outcomes, rather than the ways writing is always emerging from collaboration with other people, objects, and ideas. Through our department's mentoring program, we worked with students to better understand what makes them effective collaborators. We found that collaboration comes from a place of self-efficacy, a sense of responsibility within the collaboration. As such, we argue that collaboration and self-efficacy are entangled and ontological, not isolated activities or skills to be mastered.

Introduction

It was about a month into the spring semester, and three students in a transfer section of first-year composition at the University of Hawai'i at Mānoa were sitting in my office for a mentor meeting. For a group project, they each had to write their own paper but on a shared subject—in this case, three online educational tools. None of them had started yet. After only a few minutes of talking, though, one of the more assertive students in the group started asking questions, and suddenly, they were collaborating with very little prompting from me. Even in the moment, their spontaneity felt surreal, but it was precisely that quality that drew my attention away from the project and toward their collaboration. While I did not record the conversation, my reflections on that day's meeting revolved around, not so much the assignment or the nitty-gritty details of revision but, rather, on ways of being that the students reflected in their interactions.

My students – who we will call Jaime, Jason, and Jennifer – likewise, spent very little time digging into the assignment itself. Yet, they felt prepared to write a draft by the time they left based on the conversations they did have. Jaime, who often showed leadership and a great deal of confidence in group activities, talked about her own writing and worked with me to use the moment to model a certain style of writing, rather than to show off or take charge. For her, the report-like nature of the assignment made sense, so she brought a sense of style that could help unify the disparate compositions. Jason, a highly self-reflective and compassionate writer, and a few years older than the others, then took the conversation about style as a starting point and asked questions about his own writing that sparked a group-level self-reflection on the possibilities the assignment held. As the other two spoke, Jennifer listened carefully and introduced spaces for reflection. The ways in which she engaged implicitly invited Jaime and Jason to consider other viewpoints than their own, converting their view of the project from an individual product to be turned in to a more collaborative process to be worked through. As they bounced ideas off of one another and entered into an animated discussion on education, publication, and the value

¹ This course was listed as ENG190: Composition I for Transfers, section 001. It was taught in the Spring 2018 semester under the instruction of Tracy Cissell. I served as a classroom-embedded tutor, or "mentor," to help students with their writing and with the transition to college life. Sarah was (and is) the director of the program.

of group work, I observed again and again how well they worked as a group, catching a glimpse of the kinds of collaboration and critical thinking we will explore here.²

These initial observations, alongside the students' later sense of success in completing the assignment, serve as a starting point by which we look more carefully at this kind of collaboration as something more than just another example of group work. Building from the mentor meeting, we will argue that the extra-textual elements – like audience – and the objects – like the specific programs they were looking at, as well as concepts like education or data – with which the students engaged fueled their conversation as part of the collaborative process and helped them to think critically about their individual essays in different ways. We would never claim that the students were not concerned with the final product and their grade, but they also showed concern about the collaboration itself, the ways in which their ideas developed within what we will consider a larger ecology that encompasses writing, the objects and ideas with which we interact, and ways of living and being in the world. As we reflected on this mentor meeting and wondered how we could help others in the class engage in similar ways, we started to see a connection between collaboration, ecologies in and beyond the writing classroom, and ontologies of self.

It is this specific set of connections that we will address here. We start with an overview of the problem my fellow authors and I see in the way collaboration is addressed in many of our classrooms, including the literature, professional writing, and rhetoric classes in which I teach each semester. While we appreciate the role group work has to play in the classroom, we would like to resituate the conversation to view collaboration as a means, rather than an end. We also demonstrate the ways in which collaboration fits into ongoing conversations about self-efficacy as a student's sense of their responsibility to both a group and to their larger community. It is with this framework in mind that the following sections outline first the original unit as it was taught at the University of Hawai'i, then the iterations of the revision model as they developed in the first-year writing, as well as literature and professional writing, courses I taught at the University of Illinois Urbana-Champaign. What emerges in our own revisions to the model is an ethic of collaborative self-efficacy that we encouraged in our students and employed ourselves in order to address both our own work and the work of our students as situated in and responsible to other ideas, objects, and people.³ Finally, we explore some of the ways in which others might employ and reimagine this model in order to teach collaborative self-efficacy, and

² A note on authorship: While I (Erin) did most of the writing and in-class work to develop the models explicated here, none of that work was done in isolation. As the three of us considered collaboration and self-efficacy in the classroom, we also wanted to consider our own collaborative practices. Sarah, as the director of the mentor program at the University of Hawai'i at Mānoa, and Tracy, with whom I worked to develop these models in the classroom, have been integral to both researching and writing this article. As such, we consider each other as equal collaborators in the project. The "I" in this paper represents my own thinking and engagement with students, while the "we" represents our collaborative thinking and research processes. We will discuss these at more length as we discuss collaborative self-efficacy below.

³ We are using the phrase "ideas, objects, and people" as a simplified (admittedly, problematic) way of referring to all the living and nonliving "things" that are part of our everyday engagements with the world. Scholars like Timothy Morton, Karen Barad, Bruno Latour, and Donna Haraway offer a few frameworks for understanding this kind of engagement, and, while each has their own orientations to interconnectedness and agency, they all emphasize entanglements, engagement, and dynamism. Our work aligns with theirs in its attention to all writing as entangled, or collaborative.

revision itself, in their own courses. Ultimately, we argue that, by modeling our own practices as we do here with revision and asking students to practice those models while revising them to meet individual needs, we foster habits of collaborative self-efficacy that emphasize the ways in which students are always thinking critically and writing in relation with other ideas, objects, and people.

We will continue to define and interrogate our use of collaboration and self-efficacy as we go, but we begin with a sense of both as foundational to debates about critical thinking. In *Double Helix* alone, a number of educators have linked collaboration or peer review with student's development of critical thinking skills. Justin King Rademaekers and Lauren Detweiler (2019) emphasize "the role of language in critical thought" and attend to critical thinking "not just as it happens in the mind" (p. 2). While they are explicitly interested in the collaborations between students and teachers when writing is assessed, their move away from the interiority of the mind and toward the need to communicate thinking through language begins to address the collaborative nature of thought. Justin Nedzesky, Meredith Bennett, and Kristin Klucevsek (2022), in their analysis of a studentrun scientific journal, make this relationship explicit, writing, "Peer review is, in itself, a critical thinking activity" (p. 1). For them, students only learn about their own writing and research when they evaluate that of others. In other words, students learn at least as much when they peer review the work of others as they do from having their work peer reviewed. Reflection, or critical thought, occurs when the writer sees themselves in relation to the writing and thinking of others. We take those relationships seriously and extend them to include the many objects and ideas students encounter, as well as people outside of the classroom. In so doing, we redefine critical thinking as not simply self-reflection but, rather, a sense of responsibility to those relationships. We reimagine critical thinking as self-efficacy. Since early debates between Robert Ennis and John McPeck on the state of critical thinking, educators have attempted to move critical thinking away from a skill to be learned in the pursuit of vocational achievement (see Hayes et al. 2019). We continue that effort here by decentering the interiority of thought in favor of the relationality of responsibility. Toward that end, we use "self-efficacy" as synonymous with "critical thinking."

Resituating Collaboration and Self-Efficacy

The other students in Jaime, Jason, and Jennifer's class were also advanced writers. Most of them had already completed a writing course at another institution, and they felt confident in their ability to form an argument on the page. Yet, most of them struggled with revision and gave the same kinds of surface-level feedback during peer review that we often see in freshman writing classrooms. Based on their early drafts and utilization of peer review and mentor feedback, Tracy expressed concern that, while they had learned to follow the rules, they did not know how to develop ideas and offer substantive feedback on their own. They could engage in the skill we call collaboration but struggled to engage in critical thinking to make decisions in relation to other students. review was treated as an activity to be completed in class for a grade. It was rarely, if ever, seen as a form of collaboration, an opportunity to engage with other ideas, objects, and people toward new ways of critical thinking and being. In reflecting on my own undergraduate experiences with peer review, I also felt frustration at how perfunctory the process always seemed. While it was valuable

to get a sense of what was confusing, or of egregious grammatical errors, my peer review experiences always felt forced. Yet, all three of us, as educators, really believe in peer review, so we wanted to find a way to reframe not only peer review but also collaboration in writing as an end within itself, rather than a standardized activity.

Scholars like Misty Anne Winzenried, Lillian Campbell, Roger Chao, and Alison Cardinal (2017) address this kind of student "talk about writing," building the conversation about collaboration as a means rather than an end (p. 1). Because they are interested in student talk *about* writing though, this more recent work on collaboration neglects both student responsibility, or self-efficacy, and the ongoing collaborations with ideas, objects, and people both in- and outside the classroom in which students are always engaged. Even more so, collaboration in the fields of Writing Studies and Composition more broadly is nearly synonymous with assigned group work or peer review in which students converse with other students to produce something. The product is the end goal, and the conversation that produces it is expected to occur between two or more people who learn to compromise in order to achieve that goal.

Often, in education, critical thinking is likewise treated as synonymous with activities or materials like peer review or offering a clear thesis (Ennis 1993; Anderson et al. 2001). While this work can be an effective way for students to produce better writing, students are typically more wary and suspicious of its value. Peer review is often seen as an activity that is relegated to the writing classroom, and group work, no matter the discipline, is dreaded as a way for unmotivated students to leave all the work of a course project to others and critical thinking is seen as a waste of time. In response, we follow scholars like Nicole L.P. Stedman and Brittany L. Adams (2014) in their shift from skills or activities to student engagement in classroom relationships. We explore collaboration as the goal, in and of itself. It is our hope that collaboration, as a way of thinking and being in the world, becomes more meaningful for students and that it might offer new possibilities for how students live and work within emerging ecologies of ideas, objects, and people. Within these ecologies, we include the many disciplines in which students work, as well as our own applications of these models in different contexts, as when I teach business writing or help students communicate scientific research. In our view, this model is ideal for nonwriting classrooms, where students can guide discussions about their own work with peers and teachers who are not necessarily trained or in classes not designed to teach writing. In particular, we suggest that, through participation in what we will call collaborative writing "habits," writers might emerge as responsive and responsible subjects who think and live in-relation.

As we began to think about collaboration in this way, we still found ourselves reflecting on the individual students before we could get to the ecology within which the group was working. In my emails to Tracy and meetings with Sarah, I kept coming back to Jaime and Jason in particular, each because their participation gave them such a strong presence in class. Individually, it made sense that these two students could work so well in groups, given Jaime's desire to lead and Jason's compassionate questioning, but we weren't willing to accept that it was simply a matter of the individual self. Other students might not enter consciously into everyday collaborations, but perhaps they could be invited in. Discarding the writer as individual would not do, but neither would an essentialist consideration of the self. We felt we needed to better understand both the particularity of

our students and their entanglements to explore the kind of collaboration we wanted to cultivate.

We leaned into our reflections on the particularity of Jaime and Jason, and a relationship between self and the ecologies within which the self collaborates began to take shape. Jaime, Jason, and Jennifer, each in their own way, consistently showed in their group meeting that they were self-reflective and willing to critique their own ideas, as well as those of others. We usually ask students to critique one another's work in the hopes that they will eventually be able to do the same in their own work, but these students were starting from a place of self-critique. This kind of self-efficacy seemed to be the key. They knew how to ask productive questions and to respond to others' thoughts because they thought critically about their own work. When I was asked to design a unit for Tracy's class, we looked for a way to help students develop the same kind of self-efficacy in their cultivations of and contributions to collaborative communities in and out of the classroom. We wanted to see collaboration and self-efficacy together emerge as ongoing practices, rather than as obligatory writing activities.

As such, we view collaboration and self-efficacy (and critical thinking) as entangled and ontological and not as isolated activities or skills to be mastered. William Duffy (2014) provides a useful foundation for rethinking this relationship in his own redefinition of collaboration, which "like all discourse production, never occurs in a bubble; there is always a complex of ecologies within which our discourse transpires, ecologies we (can ever only partially) distinguish by observing the various relationships between and among objects within these environments" (p. 423). An object-based understanding of collaboration, one in which the student enters into a dialogue with ideas, as well as other beings (broadly conceived), provides a framework for collaboration as an ongoing process. It does not go quite far enough, however. Sid Dobrin, similarly, repositions the writer as a part of a whole, focusing on the whole, which he considers to be writing itself. In this sense, the subject is not a determinable individual, or even a person, but "an intricate complexity inseparable from technology and language" (*Postcomposition*, 2011, p. 86). This approach risks an erasure of the writer and their affect, but, when put in conversation with Duffy, it begins to imagine the writer as just as responsible and affective as any of the objects, or ideas, in the ecological relationship. With Dobrin's and Duffy's models in mind, we look to decenter the singular project or individual, while rethinking the role of the writing subject as both entangled and responsible. As we see it, it was through their ability to ask questions and imagine connections as a practice of self-critique that Jaime, James, and Jennifer's project began to emerge within an ecology comprising online educational spaces, other educators, themselves as students, and an array of other, often implicit, ideas, objects, and people.

Writers, including our students, are always collaborating with the world around them, co-composing new and emergent relationships even as they are entangled in them. Critical thinking as self-efficacy, then, becomes an ethical practice, or what Aristotle might call a "habit," as the actively emergent subject (the writer) is necessarily made responsible as an entangled being who is simultaneously co-creating the world, even in small and constantly shifting ways. For us, such responsibility cannot be overlooked in or out of the composition classroom; it asks us to consider the entanglements in which our students write, however fleeting. As many of us do not wish to produce a particular kind of subject in

our classrooms, however, we also look for ways to foster this kind of interdependent relationality within emergent ecologies through an understanding of self-efficacy and collaboration as part of ongoing processes of becoming. Writing teachers can encourage the emergent, writing subject to collaborate through writing habits that increase their attentiveness to the ideas, objects, and people with which they are (and could be) entangled. Within this framework, the writer carries responsibility as both (self-efficacious) co-creator and (collaborative,) entangled participant in structures that are in an ever-shifting process of becoming. We draw on our experiences with Jaime, Jason, and Jennifer, as well as a series of revisable models for peer review, to explore this set of relationships.

[...]

Collaborative Ecologies

Since Bruffee and Trimbur's initial debate, group work and peer review have been standard practices in the writing classroom, and in more recent years, collaborative writing in online spaces, like wikis, has also become a common assignment and practice. In these capacities, however, the idea of collaboration has remained true to its earliest conceptualizations as a skill that produces better writing in the writing process, rather than an ongoing process in itself. It is all about the end result (e.g., the job). As Megan Lynn Isaac (2012) explains, "Both employers and civic leaders continue to emphasize the importance of young adults developing the skills that enable them to succeed at collective efforts" (p. 88). Collaboration comes to stand in for a corporate working environment in which we assume our students will become enmeshed. While this approach to collaboration, and those that resemble it, is useful for thinking about our work in the classroom, especially as we think about the ways in which students might enter the working world, it does not address the ways in which collaborators are always working within and becoming with ecologies of writing. Instead, much like Bruffee's initial approach, group work is an autonomous activity or skill, rather than an ontology; it is entombed in the classroom.

Of course, much of the work we do will happen in relation to the classroom, but it does not have to be viewed as ending there. The peer review model with which we started emerged, in large part, out of our own collaborations with each other and with other ideas, objects, and people in our environment—in other words, out of the everyday collaborations in which we are all already participating. Because of my role as a mentor, we also had director-TA, instructor-TA, instructor-director, and instructor-director-TA collaborations – as well as those with students – built into our environment. As such, we do not see our pedagogy or our students' thinking as stemming solely from our work with students within an academic environment. By having students revise again and again, rewriting one assignment at least four times and all in conversation with other ideas through peer review, we asked students to view their work as part of these larger ecologies of collaboration. Their work does not just stem from their own thoughts and opinions, or for that matter, from a prompt an instructor provides; it emerges from ongoing, everyday collaborations with ideas, objects, and people. Sometimes these collaborations are built in, as with mentoring and peer review, but they also emerge in everyday interactions. They are ontological, part of the ways in which we live in the world, much like critical thinking

itself. The built-in environments provide a model for the possibilities we see in other interactions. We want to continue modeling for students, but we also want the ways in which we do this modeling to make visible larger ecologies, as well as the student's embeddedness within them.

Our starting model was intentionally repetitive, an attempt to think through how modeling becomes everyday practice. We start with the logistic, but then move to the contingent and habitual. While the activity of collaboration (in this case, peer review) is still present, it resists closure as it opens into ongoing habits of self-efficacy. As Duffy explains, the "connection between thinking well and conversing well" (per Bruffee's claim that "thought is internalized conversation") has led to an overdetermined need to catalogue "types or degrees of collaboration to explain collaboration itself" (Duffy, 2014, p. 421; Bruffee, 1984, p. 639). In other words, "what counts as collaboration is determined by certain logistic configurations, but it is a third party that actually delineates these logistics beforehand and in such ways that arbitrarily render collaboration a generic moniker for specific [closed] activities" (Duffy, 2014, p. 420), rather than a mode of critical thinking and engagement. When we, writing teachers, ask our students to collaborate on a project, we, as the third party, typically assign roles (even if students can opt into the roles of their choice), scaffold smaller parts of the project and assign deadlines for each, ask students to log their contributions to the project and to evaluate their group mates' contributions, and set detailed parameters for what the end product should look like.

These might be "best practices" to better guarantee the equal distribution of labor among participants and to create some quality control, but in order to work, these best practices elide the inevitable imbalances of power, as well as the differences in student capacity and investment, instead of asking students to negotiate those differences. In short, difference becomes meaningless to the group, except in some empty valuing of "difference as such." Instead of drawing attention to students' ongoing entanglements with ideas, objects, and people in their daily lives as ontological relationships that we can help to develop in the classroom, group work as closed activity limits collaboration by focusing on a predetermined end product and its effect on an individual student's grade.

For example, in our own, very different, experiences with the mentoring program at the University of Hawai'i, we have found mentor and instructor discussions of collaboration quickly move from what collaboration can actually do (e.g., offer students opportunities to participate in ongoing negotiations of meaning within shifting power relations) to the delineation of distinctly "collaborative" activities and how one can (or cannot) assess them fairly. In a telling moment of a graduate course on the "Theory and Practice of Teaching Composition," the key problem of collaborative learning was identified as assessment. While we readily acknowledge that it is difficult to assess collaborative projects and content, the focus on assessment locates collaboration in products. It does not acknowledge that collaboration is happening as an ontological relationship that is ongoing, whether we assess it or not.

Duffy's object-oriented definition begins to respond to this blind spot in composition's approach to collaboration. Writing is situated within a complex of ecologies, no longer the work of a unified Enlightenment subject who enters into a conversation to produce a unified, individual product. Instead, interlocutors – including ideas, objects, and people – emerge in discourse, written or otherwise, through their entanglements. The unified subject or text, that which is, becomes impossible as "interlocutors share meaning

in passing, not a systematic theory of meaning that exists prior to actual moments of discourse" (Duffy, 2014, p. 423). Meaning, like the text and its interlocutors, is always in a process of becoming through collaboration.

That is why, as we continued to revise our own models, we started with student's interactions not only with each other and with us but also with other objects (as well as people and ideas). The starting model asked students to interact with their own writing as an idea or object—a text rather than an assignment. They started in discussion with peers and with me, allowing them to develop their own thinking from that of others. We do not expect them to have a developed process as such. They are instead asked to view their writing process as always in development as they learn from models and ideas they encounter in the classroom and beyond it. Finally, though, they must also revise their own text, without input from others. While such a step might seem to negate collaboration, it instead extends collaboration to the writing itself. As they develop their ideas, they must also understand those ideas as implicated in larger networks of meaning and critique them accordingly. They employ critical thinking as self-efficacy to take responsibility for their own ideas in relation. Not only does this ask students to move beyond sentence-level revisions, it also asks them to move beyond a consideration of writing as assignment. They become responsible for their thinking and collaboration in emergent ecologies. We also consider our model as part of such ecologies, however, so we do not expect it as object to work for every student or even every group of students. Just as their writing emerges, itself participating in larger ecologies, so do we consider our model as emergent and mutable.

As a result, the models and examples we offer are only iterations of a larger set of possibilities. We aim to center collaboration and self-efficacy as mutually constitutive, not construct yet another fixed paradigm for group work. When I moved to the University of Illinois, I encountered an entirely different student population, as well as the online environment in which most of us found ourselves teaching in 2020. Without the in-person mentoring environment in which the three of us collaborated, the starting model ceased to be feasible. While the online environment was temporary, the lack of built-in collaborative environment was not. We cannot always expect to teach alongside mentors or in programs that structurally encourage ecological pedagogies. Our students may also respond differently based on the ecologies in which they are already embedded. When the starting model proved ineffectual in an online environment that dramatically muted classroom interactions, and in which students could easily turn off their cameras and remove themselves from that environment, we intensified our focus on student texts as objects and ideas, as already present texts within a field. We hoped that these texts would come to model larger ecologies by enacting collaboration, as well as habitual self-efficacy, on the page. My class began to incorporate other already present texts and everyday collaborations, including conversations with friends or informal writing practices like journaling, as well. In peer review, we incorporated annotations through which students could collaborate outside of, or even without, a shared classroom space. Utilizing annotations in lieu of in-class peer review, these combined practices asked students to engage critically with their ideas and the ideas of others as part of ongoing conversations.

In this annotation model, instead of meeting with a mentor, students are asked to annotate their own text, asking questions and commenting on their choices. They take responsibility for the text and their ideas and guide the peer review process with their own questions. Then, in an asynchronous peer review session, another student responds to each

and every annotation and includes their own comments and questions. I, as the instructor, then do the same.

Unlike the starting model, the annotation model also allowed us to track students' collaborations in more demonstrable ways. The visible ecologies that develop as one sentence is connected to an annotation that is then connected to a comment that is followed by additional comments help us, and our students, to physically see the text – including a number of ideas, objects and people – as its own collaborative space, which then extends to a larger ecology. In an iteration of a rhetorical analysis, I asked my students to write in two stages. They started with an analysis of a favorite song, a text with which they already felt comfortable, then received feedback, then continued the drafting process by putting that song in conversation with a related news piece. The news article could be anything from a review to a reflection on a similar topic, so long as they could make the connection clear in their analysis. This assignment was designed to compound the possible collaborations—song is put in conversation with source, which is put in conversation with the student's ideas and then expanded via conversation with a peer and with the instructor. More importantly perhaps, it made those collaborations visible, at least for the people who participated in them. In this excerpt from the analysis of one of my students, Abigail or Abbey, we see a number of collaborations begin to emerge:

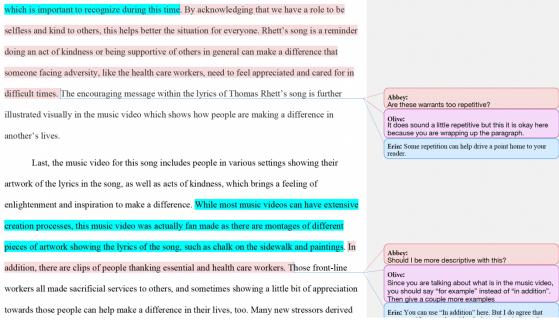
> In the beginning of 2020, the world witnessed the COVID-19 pandemic start to make its way internationally, and during March of 2020, it became much more prevalent and threatening to the United States, causing a nation-wide lockdown. The case numbers began to climb Abbey:
>
> I'm pretty sure anyone who reads this is already aware of the pandemic. Should I rephrase this while keeping in mind that my audience is already aware of this? Or should I leave it since it helps transition into the rest of drastically, people could not attend their jobs in person, and health workers were bombarded with staggering amounts of infected patients who needed critical care and attention. In fact, a psychiatric cross-sectional study done by ScienceDirect showed the mental health effects on Erin: Yes, it is short and to the point, giving context without burdening a reader who is already familiar with that context. healthcare workers caused by stresses of the pandemic. In the same month when all of this was Plus, vou're giving the piece more reach because no someone could read it in 20 years and still know what's going worsening, country singer Thomas Rhett released a song called "Be a Light", which includes four other well known country artists. While the article focuses on displaying harmful effects of Erin: Study? > see suggested edit Erin: Say more! This is an excellent specific introduction to your topic, per the lesson on introductions. Plus, since it is part of your thesis, it would be good for us to have a little the pandemic on mental health of medical workers through data and scientific evidence, Thomas Rhett's song utilizes its country genre, lyrics, and music video to encourage kindness and to be a Erin: Excellent! good neighbor, especially during the pandemic.

Abbey begins with a pretty standard introduction, giving context for the comparison she will make, introducing the two sources she will compare, and providing a thesis statement. Her writing, then, could be that of the isolated Enlightenment subject who exemplifies the writer of academic discourse; yet, her thinking does not stop at the boundaries of the assignment. With the very first sentence, she gives context, not as a required task in the process of writing an introduction, but as her comment shows, as a way of considering her readers as collaborators who will help to construct knowledge as they read a document that is no longer in her control yet still in progress. When she asks, "Should I rephrase this while keeping in mind that my audience is already aware of this?" she opens up the space of her writing to a communal experience of the COVID-19 pandemic and takes responsibility for her ideas as they are affected by and affect that shared experience.

Her peer review partner, who we will call Olive, is then able to enter into the process of peer review as a member of that community, not only a fellow student who is

asked to understand the text within the confines of the classroom but also a part of the emerging ecology that COVID continues to construct and reconstruct. She does not substantively change the writing in this initial paragraph but, in so doing, she and Abbey are able to enter into revision as ecological practice. The point is not change for change's sake but an engagement with the processes of meaning making of which the text is a part. They each also come to realize that not every reader will have lived during the height of the pandemic, anticipating future readers who extend far beyond the one-semester class.

We are also struck, even in this first paragraph, by the ways in which Abbey views her chosen song and source as in conversation with one another. Compared with the lists we often see from students when they write a rhetorical analysis – "This text shows ethos/pathos/logos by..." – the indirect citationality that Abbey notices in the ways the song entangles affect with the scientific data of the article develops an ecology (however small) encompassing the two sources, as well as her analysis of it and other, sometimes implicit, ideas, objects and people. In other words, her text is not simply a product to be turned in to show her understanding of the elements of rhetorical analysis that were taught in class. It also adeptly fits itself into a larger conversation. We see this not as a freshman's advanced grasp of the conventions of academic writing but as an understanding of her text in collaboration. As the draft continues, it, understandably, begins to lose its grasp on those conventions, lapsing into broad generalizations and even losing track of the ways in which the song enters into conversation with scientific data:



What it does not lose sight of, though, is its sense of collaboration. With her use of the pronoun "we," which we discourage only for its generalization and not for its use of first person, she implicates herself and, presumably, her readers – as well as the audience of Rhett's song and the readers of emerging data on COVID – in the responsibility of care she identifies in the song. Her analysis considers the ways in which collaborations emerge out of this responsibility, showing "how people are making a difference in each other's lives." Writing – whether it be of song lyrics or of analysis – moves beyond the individual writer or reader and into a collaborative ecology. Her concerns about repetition and description show an ongoing consideration of audience and the ways in which she is

creating meaning alongside the texts she analyzes. Collaboration emerges on the page via the web of comments, the comparative work of the analysis, and the content of that comparison. The modeled peer review process and assignment ask her, and her fellow students, not simply to accomplish the task of peer review, but to view their work as itself always collaborative.

In many ways, Abbey's text was exemplary of this process; other students did not necessarily respond in the same way. We view this, however, as exactly in line with our understanding of collaboration, in which any singular model creates just another activity. Models should be ever shifting, just as collaborations are, bringing students into conversations and showing how they are already implicated in ongoing collaboration. Now, I invite students to find their own models in writings by their favorite authors and in genres that are meaningful to them, allowing this model to work across disciplines. Even though none of us teach science courses, our students can look to other scientists to learn about their own writing. The annotation model is just one way of asking students to enter into those conversations in more explicit ways. We model it here because we hope it will continue to emerge and change. We also feel that Abbey's specific example begins to imagine the connections between collaboration and self-efficacy as mutually constitutive. Once the students had received feedback, they were asked to revise their final draft and, in so doing, respond to each comment thread, even if only to check it off. In other words, they were asked to take responsibility for their ideas and to imagine the final submission as something other than a final product. Because the comments remain in the text as an ecology of their own, a visual web of questions and ideas, the text could be considered as still in progress. Even if the student never returns to that particular piece of writing, the collaboration, not the product, is centered.

[...]

Works Cited

Anderson et al. (2001). Peer Interaction and the Learning of Critial Thinking Skills in Further Education Students. *Instructional Science*, *29*, 1-32. https://www.jstor.org/stable/41953539.

Aristotle. (2002). Nicomachean Ethics (J. Sachs, Ed.). Focus.

Bandura, A. (1993). Perceived Self-Efficacy in Cognitive Development and Functioning. *Educational Psychologist*, 28(2), 117-48. https://doi-org.proxy2.library.illinois.edu/10.1207/s15326985ep2802 3

Bruffee, K. A. (1984). Collaborative Learning and the 'Conversation of Mankind.' *College English*, 46(7), 635-52.

Cooper, M. (1986). The Ecology of Writing. *College English*, 48(4), 365-75. https://doiorg.proxy2.library.illinois.edu/10.2307/377264.

Dobrin, S. (2011). *Postcompostion*. Southern Illinois University Press.

- Dobrin, S. & Weisser, C. (2002). *Natural Discourse: Toward Ecocomposition*. State University of New York Press.
- Duffy, W. (2014). Collaboration (in) Theory: Reworking the Social Turn's Conversational Imperative. *College English*, 76(5), 416-35. https://www.jstor.org/stable/24238154.
- Hayes, J., Pasquaretta, P., & Pritchett, G. (2019). Critial Thinking Futures. *Double Helix, 7*, 1-2. doi: 10.37514/DBH-J.2019.7.1.01.
- Isaac, M. L. (2012). 'I Hate Group Work!' Social Loafers, Indignant Peers, and the Drama of the Classroom. *The English Journal*, 101(4), 83-9. http://www.jstor.org/stable/41415478.
- Kornbluh, A. (2019). *The Order of Forms: Realism, Formalism, and Social Space*. University of Chicago Press.
- Nedzesky, J., Bennett, M., & Klucevsek, K. (2022). Analysis of Peer Review in a Student-Run Scientific Journal. *Double Helix*, 10, 1-22. doi: 10.37514/DBH-J.2021.10.1.04.
- Rademaekers, J. K. & Detweiler, L. (2019). Performing Critical Thinking in Written Language: Defining Critical Thinking from the Assessor's View. *Double Helix, 7*, 1-19. doi: 10.37514/DBH-J.2019.7.1.02.
- Stedman, N. & Adams, B. (2014). Getting It to Click: Students Self-Perceived Critical Thinking Style and Perceptions of Critical Thinking Instruction in Face-to-Face and Online Course Delivery. *NACTA Journal*, *58*(3), 236-243. https://www.jstor.org/stable/10.2307/nactajournal.58.3.236.
- Winzenried, M. A., Campbell, L., Chao, R., & Cardinal, A. (2017). Co-Constructing Writing Knowledge: Students' Collaborative Talk across Contexts. *Composition Forum*, 37. https://eric.ed.gov/?id=E[1162152].