Cognitive Presence in FYC: Collaborative Learning that Supports Individual Authoring

Mary K. Stewart

Abstract: Collaborative learning theory points to knowledge construction as an outcome of peer interaction, justifying widespread implementation of collaborative activities (like small group discussion) that scaffold toward individual writing projects. This article offers a qualitative investigation into the process of collaborating with peers and the extent to which peer interaction facilitates knowledge construction. More specifically, I present two case studies from FYC courses, one of a debate activity that successfully facilitated knowledge construction and the other of a Google document activity that was not successful. The methodology—triangulating interviews, observations, and an analysis of student writing—presents a replicable strategy for measuring knowledge construction as a result of peer interaction in FYC. I analyze these findings in light of the Community of Inquiry Framework, arguing that the knowledge construction (cognitive presence) that resulted from the collaborative activities I observed was supported by the instructor emphasizing multiple perspectives in the activity design (teaching presence) and establishing a strong sense of community (social presence).

As any writing instructor committed to student-centered learning is well aware, designing successful collaborative activities is challenging. Controlling for variables like student motivation and group dynamics is difficult, as is ensuring that multiple groups in a single class have a positive experience. Furthermore, even if peer interaction appears to be going well, assessing whether or not collaborative learning occurs is almost impossible. Students may appear to work well together, but does that mean they developed a new understanding of course concepts because they interacted with peers?

Despite these challenges, collaborative learning is a cornerstone of composition pedagogy. We persist because collaborative learning theory robustly supports the notion that learning is a fundamentally social activity. As Kenneth Bruffee, building upon Lev Vygotsky’s theory of internalization, maintains, “[a]ll higher functions originate as actual relations between human individuals” (Collaborative Learning 57). Vygotsky describes this in terms of young children who talk out loud to themselves. As they grow, that self-directed speech becomes internalized as reflective thinking, and this internal reflection enables higher order thinking processes. As Bruffee explains it, “what we experience as reflective thought is related causally to social conversation” (“Collaborative Learning” 639). Engaging in dialogue with others is a model for internal dialogue, which is the reflective thought that facilitates critical thinking and cognitive development.

Vygotsky specifically focused on children’s cognitive development, but his theories have been applied to adolescent and adult learning. Britton explains that the main implication of Vygotsky’s ideas for pedagogy is that “the teacher can no longer act as the ‘middle-man’ in all learning” because “education is an effect of community” (25). Instead of being a conduit for transmitting knowledge, the instructor is a designer of learning communities and a facilitator of collaboration. Writing instructors and scholars will be familiar with two common applications of this concept to classroom practice: Freire’s “problem posing” education and the “guide on the side” philosophy of student-centered learning (King). Put simply, interacting with peers exposes students to diverse viewpoints. When students reflect upon and then integrate their prior knowledge with outside perspectives, they gain a deeper understanding of their own interpretations of a concept and, ultimately, may construct new knowledge. Furthermore, interactive learning privileges student perspectives, which empowers students to engage more deeply in the learning process.

Collaborative learning in the composition classroom introduces students to the idea that there is not one “right” way to write or think “successfully,” and models the fact that thinking (and writing) is a negotiation between the individual
and society (as outside perspective or audience). It is thus not surprising that our field has embraced student-centered, collaborative classrooms. Clark argues that composition instructors “usually associate the term ‘collaboration’ with something positive, something anti-authoritarian, something that is good for students—people who espouse collaboration in our profession are the ‘good guys’” (519). Kuralt similarly points out that “the tenor of most collaboration research is overwhelmingly positive” (1), such that collaboration “is almost taken for granted as a feature of composition pedagogy” (10). Or, as Kennedy and Howard put it, Bruffee’s principles of collaborative learning have reached “canonical status in writing curricula” (37).

While the value of collaboration may be uncontested in composition research and instruction, the task of designing successful collaborative activities remains challenging. Most prominently, it can be difficult to assess whether or not students actually engage in collaborative learning. In fact, there is some evidence that collaboration may be missing from student interaction even when they appear to collaborate. Paretti and McNair’s study of online undergraduates, for example, found that, “the products of the collaboration between the ... students—professional white papers and websites—were successful,” but the students “clearly drew a boundary around work, seeking only to ‘get the job done’ as efficiently as possible, with little attention to the kinds of communicative social interactions needed to facilitate effective collaboration” (348). Most writing instructors have encountered this challenge at one time or another; when we ask students to collaborate, we want them to benefit from sharing and comparing multiple perspectives, but sometimes they prefer to “get the job done” individually. The challenge lies in evaluating not just the products but also the process of interacting in order to empirically examine what students do and do not gain from collaborative activities.

In composition studies, conversations about the process of interacting often begin with student empowerment. In collaborative classrooms, knowledge is “not ‘given’ to [students] directly by the teacher. They [construct] it in the course of doing the task” (Bruffee, *Collaborative Learning* 50). Brunk-Chavez and Miller describe this as “exploratory talk,” when students generate “unexpected, unforeseen, and even conflicting solutions or answers” that the teacher did not anticipate (n.p.). Martorana describes it in terms of “figured worlds,” arguing that collaborative pedagogy in composition classrooms can help students develop “mindfulness of their own figured world(s), respect for and openness to others’ perspectives, and appreciation for the fluidity of identities” (71). Bruffee, Brunk-Chavez and Miller, and Martorana all point to student-generated knowledge as the goal of collaborative learning and point to peer interaction as a catalyst for this process.

Most often, composition scholars examine these processes of interaction in the context of collaborative writing assignments (e.g., Ede and Lunsford; Fontaine and Hunter; Kennedy and Howard; Restaino) or peer review workshops (e.g., Corbett, LaFrance, and Decker; Dean; Wirtz). This article takes a different approach and examines low-stakes, in-class collaborative activities, like small and full group discussion, that are intended to support knowledge construction that students demonstrate in individually-authored essays. I am particularly interested in these low-stakes activities because they are common in first-year composition and they are often the foundation upon which other collaborative activities (like peer review and collaborative writing) are built.

Kipp-Newbold offers an example of such an activity. She uses “choice boards, reflections on partner discussions, and Socratic seminars” to encourage her high school students “to participate in conversations about literature” (75). She explains that the desired outcomes are “listening and responding to others” and “valuing the opinions of others” (75). The goal is to listen to and build upon others’ perspectives to construct more sophisticated understandings of a topic. Similarly, Kendrick describes the work her ninth-grade students do in groups, which “provides ideas and questions that stimulate further thinking, further inquiry, and further creativity” (86). Kendrick involves her students in “progressive discourse” by having students write down questions and then compose answers to their classmates’ queries. In this way, students explicitly engage with their classmates’ perspectives and construct knowledge in response to their peers’ viewpoints.

Specific to college-level writing instruction, Carillo describes the ways her first-year composition students collaborated when “finding, developing, testing, and framing subjects to write about” (65). She found that, “although students still primarily worked individually in that they were responsible for writing their own essays and completing individual presentations, they consistently drew upon the ideas presented by their fellow classmates” (70). Carillo’s students reported that this process was highly beneficial: in reflective cover letters, they “acknowledged other students by name to indicate how others helped them develop their own thinking” (71). Carillo concludes that collaborative discussion in support of individual authoring “promotes critical thinking that leads to more complex and sophisticated thinking and writing” (72). More specifically, she argues that her students “became an intellectual community committed to scholarly inquiry” as they “engage[d], respond[ed], compose[d], and collaborate[d] ... within the generative space where the most complex thinking occurs, thinking alongside others” (76).

Other composition scholarship on low-stakes collaborative activities that support individual authoring tends to focus on online discussion, as hybrid and online writing instructors and researchers work to understand the ways
asynchronous student interaction supports learning. For example, in Brunk-Chavez and Miller's survey of hybrid composition students’ reactions to online collaborative activities, they found that students were resistant to group work but recognized the value of interacting with peers. The students’ negative reactions were typically related to “the enactment of collaborative learning,” such as “poorly constructed groups, uncooperative classmates, and/or unclear assignments” (n.p.). On the other hand, the majority of students “believed that they can and do learn from other students” (n.p.) and placed a high value on being exposed to multiple perspectives. Brunk-Chavez and Miller also found that “while the majority of instructors participating in our study stated that they value collaborative learning, each had a different approach to, and in some cases, a different definition of collaboration” (n.p.). Consequently, Brunk-Chavez and Miller call for more research on how to create spaces that “facilitate and accommodate the strengths of collaborative learning” (n.p.).

This article responds to that call but shifts the focus to face-to-face learning, examining low-stakes, in-class collaborative activities (small and full group discussion) that scaffold toward higher-stakes individual writing projects (in this case, a timed writing exam). Studying students’ experiences with these tasks allows us to examine how Vygotsky’s theory of internalization plays out in the composition classroom, thus providing more empirical insight into students’ collaborative interactions and subsequent knowledge construction.

More specifically, this article reports the findings of a qualitative study that closely examined FYC students’ experiences with an in-class debate and a small group Google document activity that were intended to prepare them for a timed writing exam (an argumentative essay). By conducting interviews and observations alongside an analysis of student writing I am able to foreground student voices and offer a specific discussion of what, exactly, the students gained from talking with their peers, and why those interactions sometimes failed to facilitate collaborative learning. The findings indicate that when the collaborative activities I observed facilitated knowledge construction, they prioritized multiple perspectives and a sense of community. I relate these findings to the Community of Inquiry Framework (Garrison), which maintains that social presence (sense of community) and teaching presence (instructional design and facilitation) support cognitive presence (knowledge construction). Ultimately, I argue that gaining a more precise understanding of students’ experiences with low-stakes collaborative activities can help writing instructors design activities that facilitate knowledge construction. I also offer a replicable method for measuring knowledge construction as a result of student interaction in FYC.

Community of Inquiry Framework

This article assumes that learning is a fundamentally social activity. More specifically, the study applies the well-known Community of Inquiry (Col) Framework for online learning to student interaction and knowledge construction in face-to-face FYC. Garrison explains that a community of inquiry facilitates collaborative-constructivist learning, which builds upon Vygotsky’s theory of internalization and Dewey’s work on practical inquiry. In a community of inquiry, “individual experiences and ideas are recognized and discussed in light of societal knowledge, norms, and values,” such that “independence and collaboration are not contradictory ideas but the essential elements of a unified process” (5). Independence and collaboration are equally important because collaborative-constructivist learning requires a balance of dialogue and reflection, where learners “personally construct meaning and collaboratively confirm knowledge” (5). This “fusion of reflection and discourse,” Garrison argues, “ignites a deep and meaningful educational experience” (23). Students are exposed to multiple perspectives as they talk with their peers and instructor, construct meaning when they individually reflect on and synthesize those perspectives with their prior knowledge, and collaboratively confirm that knowledge when they again enter into dialogue with the course community.

Garrison and other Col researchers define that knowledge construction as “cognitive presence,” which is one of the three elements of a community of inquiry. The other two elements are social presence—how real participants feel to one another—and teaching presence, which includes instructional design, facilitation, and direct instruction (see Figure 1, which visualizes the three presences of the Col framework in a venn diagram). In a functioning community of inquiry, teaching presence and social presence support cognitive presence. In other words, when students experience a sense of community (social presence) and when the course design and instructor feedback guides students toward collaborative learning (teaching presence), then knowledge construction can result from interaction (cognitive presence).
CoI researchers have repeatedly noted that teaching presence is the “building block of a community of inquiry” (Kozan and Richardson 40). Without a clear instructional design, effective facilitation, and direct instruction to guide students towards collaborative learning, neither social presence nor cognitive presence are likely to be achieved. A major goal of teaching presence is to put students in situations where they not only establish a sense of community (social presence), but also leverage that sense of community to directly support learning. As Garrison explains, “social presence does not mean supporting engagement for purely social purposes. ... Social presence in an academic context means creating a climate that supports and encourages probing questions, skepticism and the contribution of explanatory ideas” (37). A true community of inquiry is only possible when social presence directly supports cognitive presence, and this requires a clear teaching presence.

When adequate levels of social and teaching presence exist, students can experience cognitive presence, which involves progressing through four phases: triggering event, exploration, integration, and resolution. As Warner describes it,

Cognitive presence first entails creating a problem or event to be studied that is intentionally puzzling, ambiguous, or even ill-structured. Such problems compel students to actively create their own understanding through three steps: (a) exploration, data gathering, and exchange; (b) integration of the ideas and data into a connected, coherent whole; and (c) resolution where the learning is applied. (3)

Cognitive presence begins with a “triggering event”—the teacher poses an activity or assignment that requires students to engage with multiple perspectives. As students share perspectives, they engage in “exploration.” When
they reflect on and synthesize their classmates’ perspectives with their own understandings of the problem, they experience “integration.” Finally, knowledge construction occurs when students test or apply their new understandings of the concept during “resolution.” In the activities under study in this article, activity instructions and discussion questions constitute the triggering event, exploration and integration occur as students talk with each other and reflect on those conversations, and resolution occurs in the essays students subsequently compose.

Composition scholars have only just begun to explore the Community of Inquiry Framework in the context of writing instruction. Some have investigated social presence (Cunningham; Lomicka and Lord) and teaching presence (Dockter; Grigoryan), and others have recommended that writing instructors account for the three presences when they provide online feedback (Cox et al.) or design technology-mediated courses (Kim; Stewart). Beyond a brief mention in a Writing MOOC study (Comer, Clark, and Canelas), we have not given specific attention to cognitive presence.

In this article, I apply the CoI Framework to face-to-face interaction in first-year composition, questioning the extent to which low-stakes collaborative activities support cognitive presence. More specifically, I describe two activities, a full class debate and a small group Google document activity, both of which took place in class and were intended to support students’ performance on a timed writing exam. The findings suggest that emphasizing multiple perspectives during activity design (teaching presence) and establishing a strong sense of community (social presence) are critical for facilitating knowledge construction (the four phases of cognitive presence).

Methods

This article presents two case studies that are drawn from a larger project. That IRB-approved, grounded theory research (Bryant and Charmaz; Charmaz; Strauss and Corbin) examined eight student discussion activities in four sections of a first-year composition course: one face-to-face, one computer classroom, one hybrid, and one online. The study initially questioned the extent to which delivery format enabled or hindered collaborative learning but found that instructional design was the more important factor. Consequently, I sought models of teaching and learning to explain the findings, ultimately recommending the Community of Inquiry Framework as a heuristic for designing and assessing online (and technology-mediated) FYC (Stewart). In this article, I focus on the ways student interaction did or did not lead to knowledge construction; that is, I focus on cognitive presence. I highlight two of the eight discussion activities—an in-class debate and a Google document activity.

Context for the Study

The courses I observed were offered in the fall of 2014 at a large research institution on the west coast. The courses were randomly selected from a list of courses offered that term and were included in the study when the instructor accepted the invitation to participate. Each course asked students to complete an argumentative essay as a timed writing exam. In the week prior to the exam, students were asked to discuss the readings and essay topics and then create an outline for the essay, which they brought into the exam. The peer interactions in the week leading up to the exam, including the in-class debate and Google document activity featured in this article, were meant to facilitate students’ evolving understandings of the essay topic. The fact that these courses included a timed writing exam is a limitation of the study; these findings are not generalizable to multi-draft writing assignments. However, this context also creates a unique opportunity for examining the ways collaborative learning influences individual authoring—in this case, the particularly high-stakes and isolated task of timed writing. Furthermore, because the students completed an outline that they brought into the exam, I was able to track the evolution of students’ thinking from in-class discussion to outline creation to essay drafting.

The instructors I describe in this article, “Jasmine” and “Marie,” are both Caucasian Americans who, at the time of the study, were pursuing PhDs in English. Both had taught at other institutions during their MA degrees, and both had been teaching at the institution for at least two years. The argumentative essay in Jasmine’s class focused on strategies for delivering secondary education; the essay in Marie’s class focused on copyright in the digital age. All of the students in Jasmine’s and Marie’s courses were invited to participate in the study; two or three students from each course were randomly selected from the list of those who were willing to participate. The students featured in this article can be described as follows:

Table 1. Student Participant Demographic Information

<table>
<thead>
<tr>
<th>Pseudonym</th>
<th>Course</th>
<th>Demographic Information</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


Data Collection and Analysis

Data collection involved three 60-90 minute, semi-structured interviews with each instructor, one 45-60 minute, semi-structured interview with each student, and observations of the eight discussion activities, including in-class observations of the debate and Google document activity. I also collected instructor artifacts (e.g., assignment instructions) and student writing (e.g., outlines, essays). To analyze the interview transcripts and field notes, I created line-by-line and conceptual codes. To analyze student writing, I conducted a textual analysis. All coding and analyses were conducted in Dedoose™, a web-based software application for qualitative research. I maintained a codebook and created memos that reflected on the research process and findings. In adherence to grounded theory, I sought literature to contextualize my findings after the substantive theory emerged from the data. The community of inquiry framework described in the previous section was discovered after data collection and analysis were complete.

The substantive theory that emerged from this grounded theory research was the result of constant comparison analysis. Initial line-by-line coding of the interview transcripts and observation field notes resulted in 362 descriptive codes, which were categorized by merging and deleting redundant codes and then narrowed by creating cluster diagrams to visualize emerging relationships. Over time, three categories of codes emerged: available tools, instructor participation, and student-student interaction. These primary categories and their accompanying subcategories are visualized in the cluster diagram in Figure 2 (created in February 2015).

![Figure 2. Coding cluster created February 4, 2015](created with www.bubbl.us)

A continued investigation into the relationship between these categories revealed that the tools themselves were not making the difference in whether or not the students and instructors reported successful student interaction. In other words, collaborative learning was possible in all delivery formats and in both synchronous and asynchronous interactions. As such, I concluded that delivery format (“available tools”) was not the distinguishing feature that enabled collaborative learning.
When I returned to the literature, I sought models of learning and instructional design that would situate and explain the theory. The Community of Inquiry Framework mapped to my findings, such that “outcomes of interaction” became “cognitive presence,” “instructor participation” became “teaching presence,” and “rapport” became “social presence.” This article specifically focuses on cognitive presence, analyzing the ways in which collaborative activities can result in knowledge construction.

To illustrate this, I translated the interview and field note excerpts associated with the “outcomes of interaction” code into narrative accounts of both “effective” and “ineffective” activities. Then, I analyzed student writing to corroborate the reports of collaborative learning. An activity was deemed “effective” if, (a) the student reported constructing knowledge as a result of interacting with peers, and (b) my observation of student interaction and my analysis of student writing corroborated the student’s report. An activity was deemed “ineffective” if the student did not report that interacting with peers influenced knowledge construction; my triangulation of instructor interviews, field observations, and student writing in these situations was focused on determining what barriers prevented knowledge construction as a result of peer interaction.

**Limitations**

As with any study, this research is limited by the context of the project. To begin, the instructor participants were all graduate students who were relatively new to teaching (approximately 5 years of experience). Future studies might replicate this work with more experienced instructors. The research is also limited by the nature of the curriculum, especially the fact that the argumentative essay was a timed writing exam. Another study might compare timed writing with multi-draft writing that emphasizes collaboration via peer review and revision, or with collaborative writing where students co-author a text. Such comparisons can investigate the extent to which the conditions of a unit’s end product influence students’ ability to integrate others’ ideas into their own.
This study is also limited by the realities of small-scale qualitative research on student learning. The high value that student interviews play in this research accounts for as much context as possible, but in a study like this, it is impossible to fully account for every single factor that influences whether or not students learn as a result of interacting with peers. This problem is exacerbated by the fact that I was only able to observe one group per activity in each classroom, which limits my ability to generalize about the factors I did observe. Future research might compare multiple groups of students in one class and study multiple sections of courses offered in a particular delivery format, and deliberately account for factors like student motivation and group dynamics.

Despite these limitations, studying the timed writing assignment allowed me to investigate students’ evolving understandings of a concept, as well as the extent to which exposure to classmates’ perspectives influenced knowledge construction. This research offers a clear example of knowledge construction as an outcome of low-stakes, collaborative activities, and illustrates the ways activity design can hinder or facilitate collaborative learning.

**Findings**

The findings of this research indicate that instructional design (teaching presence) and rapport (social presence) were contributing factors to students’ reports of knowledge construction as a result of peer interaction (cognitive presence). More specifically, activities that prioritized multiple perspectives and fostered a strong sense of community (case study #1) were more successful than those that did not (case study #2).

**Case Study #1: Debate in the Face-to-Face Classroom**

The face-to-face debate was intended to prepare the students for an argumentative essay that focused on strategies for delivering secondary education. The students compared traditional, formally-structured high schools with unstructured high schools, where learners have considerable choice in the courses they take and the rules that govern their behavior. The debate took place during the second hour of class; the first part of class included a reading quiz and a small group discussion where students were instructed to generate three to five statements that summarized the main points from the readings. When I asked the students about these activities, they said they were warm-ups for the debate and then focused exclusively on the debate when I asked about their interactions with classmates. Consequently, I focus these findings on the debate, relaying the students’ reports of constructing knowledge in response to interacting with peers.

When I interviewed the instructor about what she expected her students to achieve as a result of the debate, Jasmine explained that she wanted “as many people as possible to enter into the discussion,” and she was “trying to get them to consider the counterargument.” I observed Jasmine accomplish this by telling her students, “If you are a fan of a structured [education] go to the left of the room; if you are a fan of non-structured [education], go to the other side. ... Extremes will be against the wall and middle-of-the-roads are in the middle of the room.” Once the students were in place, she divided them in half, saying half of them would argue for unstructured high schools that emphasize student freedom and half would argue for more traditional, structured high schools. However, their assigned side of the debate would be the “opposite of where you put yourself. You have to explore the counterargument.” Jasmine then asked the students to work in their teams to identify talking points in the debate and to elect a representative to give their opening arguments. Jasmine sat outside of the circle that the students formed for the debate, speaking twice to prompt one team to ask a question of the other team when the conversation lullled.

Jasmine’s students reported that the debate was effective because of the requirement to argue for the opposite side. In the language of the Community of Inquiry (CoI) Framework, the activity had an effective “triggering event.” Nikki recalled:

> it was funny, because you were supposed to do structure versus unstructured, and so she made us pick. But then we switched. And we were like, oh, no, what's going on? So it really made us think. Because, you know, instead of arguing for your position, you are arguing for the other one. ... And that was really helpful because while doing your counterargument for your [essay], it'll be a lot stronger.

Nikki and her classmate, Anila, also explained that the multiple perspectives they heard and thought about during the debate influenced their argumentative essays. In CoI terms, they engaged in exploration during the debate and engaged in integration and resolution when they drafted their outlines and essays. Exploration occurred as students verbally contributed to the debate; as Anila noted, the debate gave her the opportunity to “hear, like, a lot more viewpoints that you probably wouldn’t think of in general. ... It's like bouncing ideas off each other.” When it came time to write the essay, she directly incorporated some of those ideas (integration), such that her argument “was a lot of people’s ideas put together.” Finally, Anila moved to resolution when she applied the new knowledge she
constructed in the essay: “the way I’m saying it is my own, [but] what motivated me to say that ... was affected by a lot more people.” Interacting with her classmates and hearing multiple perspectives during the debate prompted Anila to develop a deeper understanding of the topic, which was articulated in her essay.

Nikki more specifically described the ways she engaged in exploration and integration during the debate, ultimately resulting in resolution in her argumentative essay. She explained how, during the debate, her classmates brought up ideas that she “wouldn’t [have thought] of ... as a super important point. But when the debate came, it kind of made me realize, oh, I should take note of this.” For Nikki, the debate not only sparked exploration but also initiated the process of integration as she took notes. Nikki went on to take fairly detailed notes during the debate, which she later used to create her essay outline. As she explained to me in our interview, one of the points on that outline came from something her classmate said: “our society is structured, so formal [structured] education prepares you for reality.” I observed Nikki’s classmate, Hannah, articulate this idea during the debate; she said, “our society and our world is structured ... if you’ve never had structure before, you’re going to flip out when you go into structure. Structured education is preparing you for reality.” Nikki consciously incorporated Hannah’s idea into her own argument, which she constructed during the process of creating an outline and then drafting the essay after the debate was concluded.

Analysis of Nikki’s argumentative essay reveals that she not only incorporated Hannah’s idea (integration) but also built upon and extended that idea (resolution). In the first body paragraph, she wrote, “parents send their children to structured schools to effusively prepare them for their future,” and part of that future means living in a world that “is extremely organized and controlled.” The paragraph evolves to argue that college produces “well-rounded students” in part because structured systems emphasize “all major subjects” that “parallel to society’s increasing knowledge of all subjects.” In the second body paragraph, Nikki focuses on a counterargument: structured education perpetuates the status quo. In the conclusion, she returns to the idea that the structured system acts “as a guide for kids to follow to become productive members of the community,” concluding that if someone wants to “change the way the system is, he or she has to challenge and alter the status quo.” In Nikki’s argumentative essay, she works to stitch together her classmate’s and her own ideas. Hannah’s idea that structured education prepares you for reality remains strong in Nikki’s essay, but she develops and extends this concept into her own argument. Triangulating interviews, observations, and an analysis of student writing thus indicates that Nikki moved through all four stages of cognitive presence. She constructed knowledge as a result of interacting with her classmates.

It is also important to note that this activity facilitated a sense of community (social presence) among students. As Nikki explained, “it’s fun to interact, you know, with the other people.” I asked her if it was important for the activity to be “fun,” and she said, if it is “boring, then ... nobody is going to get motivated to think of better ideas.” She further explained that the whole point of interacting with peers is to get “the juice flowing. Because if somebody says a really good idea, and you’re like, I want to top that. So I’ll think [of] the better one.” Nikki indicates that social presence facilitated deep engagement with the activity and created an opportunity for collaborative learning, which is to say that social presence supported cognitive presence.

The design and facilitation of the activity (teaching presence) was equally important. Jasmine’s emphasis on counterarguments created an effective triggering event and framed the activity as directly related to the argumentative essays. I observed Jasmine verbally tell her students that the goal of this debate was to stimulate their thinking about the argumentative essay topic. This instruction was reinforced on the essay outline that students completed for homework; on the handout that guided students toward creating the outline, there were spaces for them to list arguments and counterarguments. The explicit scaffolding between the in-class activity and the individual writing assignment is an example of teaching presence that supports cognitive presence. In addition to the assignment instructions, Jasmine’s approach to facilitating the debate enacted a positive teaching presence. She physically sat outside of the circle, which highlighted the importance of student-student interaction, and she only spoke to prompt one group to ask a question of another group, thus directly encouraging student-student interaction. In other words, her approach to facilitation enacted a teaching presence that directly supported the development of social presence among the students. Finally, Jasmine emailed the students after the debate was over with some written feedback, and in that feedback she praised their contributions in the course and reminded them that the ideas they generated in class should influence their argumentative essays. Jasmine’s feedback thus enacted a teaching presence in support of both social and cognitive presence. Ultimately, this activity put students in a situation where they were likely to function as a community of inquiry and engage in collaborative-constructivist learning.

Case Study #2: Google Document in the Hybrid Classroom

Like the face-to-face classroom students, the hybrid classroom students engaged in collaborative activities as preparation for a timed writing exam. Instead of structured versus unstructured education, the argumentative essay focused on the pros and cons of copyright law in the digital age. In the face-to-face class session prior to the exam,
the hybrid instructor introduced the students to the argumentative essay assignment and they engaged in the small group activity that is featured in this article. In the week that followed, students completed readings on intellectual property and copyright and contributed to an asynchronous online discussion forum. While the students had access to their classmates’ online posts, they were not required to read or respond to their peers, which made the online activity more of an individual assignment than an interactive one. Consequently, this case study focuses on the hybrid students’ face-to-face, small group interactions.

The students were given time in class to select and discuss one online article from a list of eight, each of which presented a copyright case study. The group I observed responded to “A Snapshot of Facebook’s Copyright Controversy,” which considered whether Facebook should be more stringent on stopping users from distributing images that are not their own. After reading the article, small groups of students were asked to discuss and compose written responses to three discussion questions in a Google document:

1. What issue with copyright or intellectual property is at stake in the article you read?
2. To what extent do you think the controversy is justified?
3. What are some potential solutions to the concern discussed in the article? If the author makes an argument or claim, do you agree with that claim? If so, why?

My observation of and interviews with the study participants, as well as my analysis of their argumentative essays, indicate that the activity did not facilitate collaborative learning.

In an interview, the instructor, Marie, explained that she expected the activity to give students “a couple of different working examples of how copyright was being dealt with,” so that they could put what they knew about copyright “in dialogue with some kind of text” and thus “start to develop their own evolving views about the subject.” In this way, Marie hoped her students would construct new knowledge by integrating their prior knowledge with the article content. Marie also hoped, “that there would be some kind of clashing opinions’ between group members. In this way, Marie hoped her students would construct knowledge as a result of being exposed to others’ perspectives. Marie explained that the requirement to compose written responses in the Google document was meant to highlight the ways students can build upon others’ perspectives to construct knowledge:

The way that the Google Doc was set up ... they could each write their own opinions. ... Multiple people are contributing to the Google doc, and they are kind of trying to find a way to make the pieces work together, but ... they don't feel the need to produce something that is totally coherent.

The Google document was intended to be a flexible space where students could individually contribute responses or could collaboratively compose responses to the discussion questions. In either event, the students were supposed to engage in a verbal, face-to-face interaction about the questions and then produce some kind of written response in the Google document. Because the document was not reviewed or collected by Marie, it was primarily intended to support the students’ verbal discussion. Ultimately, the activity was meant to expose students to multiple perspectives and prepare them for the timed writing exam. As Marie said to her students at the end of class, the Google documents contained “some group opinions about copyright that you can look at” in preparation of the argumentative essay.

I observed Marie introduce this activity in class by projecting written instructions: “Each small group will be responsible for responding to the following questions and recording their responses at the top of their Google Doc.” She also verbally instructed students to skim the article and then discuss it with their peers. As the students worked, Marie remained at the front of the class, giving a verbal announcement halfway through the activity to remind them to record their responses in the Google document. I sat with Madison, Priya, and Lane. My observation of the activity and review of the Google document’s revision history indicates that the perspectives voiced during the in-class discussion influenced the development of each written response. However, my interviews with the students and analysis of their outlines and essays indicate that the activity did not influence the arguments they constructed in their essays.

The students’ interaction is best illustrated in their response to the second discussion question, “To what extent do you think the controversy is justified?” Madison initiated the group’s discussion of this question, and Priya responded by asking if anyone in the group had personal experience with the issue (photography and social media). Lane explained that he did:

Madison: So to what extent is the controversy justified?

Priya: Is anyone a photographer?
Lane: Yeah. And I’d be pissed if someone took my stuff.

Lane establishes that he believes the controversy is justified—as a photographer, he does not want others to be able to share his work on social media without his permission. Madison then begins to complicate the idea by suggesting that the controversy might not be justified. However, her classmates struggle to understand her perspective:

Madison: You could take it either way, because you get to share. The same photos are on Tumbler and Twitter—they get moved around the sites.

Lane: I don’t know what you mean.

Madison: You see quotes and pictures and stuff and they are each taken—they are being moved around through multiple sites.

Lane: So you’re saying these things are getting shared around multiple sites. But it’s not the companies.

Madison: No, the people.

Lane: It’s not the same.

Priya: Yeah, it’s not the same. Some of the quotes and stuff...

Madison: It’s hard to explain.

Lane: It’s not going to be mutually exclusive.

Madison: like the pictures on reddit

Lane: Memes?

Madison: No, pictures.

Lane: I agree that pictures are shared through more than one social media outlet. But where are you going with that?

Madison: I don’t know.

Priya: The article says it’s hard to track down who started it.

Lane: I think it is justified. That’s what I think. There’s so much shared of everything. But you can write whatever you want.

Priya: Someone should start writing the third question now.

As the transcript suggests, Madison struggled to articulate her position. She attempts to explain her meaning by giving different examples—Tumblr, Twitter, Reddit—and Lane and Priya try to understand for a few minutes, culminating in Lane’s comment, “I agree that pictures are shared through more than one social media outlet. But where are you going with that?” to which Madison responds, “I don’t know.” Priya attempts to help Madison, referring back to the article and noting that, “it’s hard to track down who” initially shared the files on social media. However, Lane decides it is time to move on. He reiterates his position—“I think the controversy is justified. That’s what I think.”—and then puts the onus on Madison to complete the task of responding to the question: “you can write whatever you want.” Priya accepts Lane’s signal that it is time to move on by stating, “Someone should start writing the third question now.” She and Lane then turn their attention to the third question while Madison writes a response to the second question.

In the Google document, Madison wrote: “The controversy is justified because there are many copies of photos shared on multiple social media sites, such as facebook [sic], that are not copyrighted. We often don’t know where these pictures or videos came from originally.” In this response, Madison maintained Lane’s perspective that the controversy is justified. She also incorporated Priya’s point that it is difficult to determine where the photos came from originally. While one might argue that Madison constructed new knowledge by integrating multiple perspectives, my
impression, supported by follow up interviews, is that she was including their perspectives for the sake of accomplishing the task they had been assigned. In the language of the Community of Inquiry Framework, the students responded to a triggering event (the discussion question) with some exploration (they shared individual perspectives), and there may have been potential for integration, but that potential did not actualize.

My interpretation was confirmed in the student interviews. As Priya put it, “talking with them and getting to know what they think about things didn’t really influence my [essay].” Or, as Madison stated, “I don’t really think we had any new ideas emerge when we were talking.” Madison believed that the problem was that they “didn’t have a lot of time”:

it was, like, okay, do it in a couple of minutes. So we didn’t get a very good discussion here. It was just like, get it done in class. To be honest, it wasn’t super insightful. If I really thought about it, we could have, like, actually came up with a more meaningful, deep response. But I feel like—we [were] kind of just, like, okay, you do number one, you do number two, you do number three. Kind of just get it done.

As Madison explains, the group adopted a divide-and-conquer strategy to “just get it done.” Instead of working to understand diverse viewpoints, the students worked to quickly record responses to questions because it was assigned. These reports from the interviews were corroborated by my analysis of the students’ outlines and essays; I did not find evidence that any of the ideas from this activity were developed or integrated into their argumentative essays. In CoI terms, the students did not achieve integration or resolution.

The presence of the Google document had a strong effect on these students’ approaches to the activity. Their perception of this document as a concrete deliverable makes sense—the written instructions, Marie’s verbal introduction to the activity, and Marie’s verbal reminder halfway through the activity all emphasized recording their responses in the Google document. In this way, the directive to compose answers eclipsed the goal of facilitating verbal discussion and “clashing opinions.” Instead of constructing knowledge in response to multiple perspectives, the students answered the assigned questions and, as they told me in interviews, never thought about the activity again. Borrowing CoI vocabulary, the teaching presence did not adequately support cognitive presence, nor did it establish an environment where social presence was likely to facilitate cognitive presence.

Discussion

The two case studies presented in this article offer a close look at students’ experiences with low-stakes collaborative activities that are intended to scaffold toward individual writing projects. In the case of the debate, the students directly benefited from interacting with classmates, ultimately constructing knowledge as a result of the experience. In the Google document activity, the students did not construct knowledge as a result of interacting with peers. The first conclusion of this research is that collaborative activities can be an important part of the learning process even when the end-goal is to produce an individually composed argument. This finding simply offers an example of collaborative learning theory in practice.

The second conclusion of this research is that, when knowledge construction resulted from peer interaction, the students engaged in a process of dialogue and reflection that was be deliberately supported by the activity design. The debate required students to think about the topic from a different vantage point and created a high level of rapport that prompted students to listen to and reflect upon others’ viewpoints. The CoI Framework helps us understand this phenomenon: both teaching presence and social presence were explicitly facilitated, and both directly supported cognitive presence. The Google document activity, in contrast, required the students to construct written answers to three discussion questions, which ultimately de-emphasized diverse perspectives and dialogue. For cognitive presence to be achieved in the Google document activity, students needed to understand that the main objective was to exchange viewpoints, not find answers to the questions (which is to say, the teaching presence needed to more directly guide students towards a social presence that supported cognitive presence).

What's interesting about these case studies is that, in theory, the Google document should have promoted collaborative learning. This is precisely the kind of activity Bruffee describes when he explains that a student “may be ready to understand a good deal more as a member of a working group than [she] would be ready to understand ... alone” (Collaborative Learning 37). Furthermore, knowledge construction as a result of peer interaction is what Marie expected when she designed the activity: she wanted her students to articulate “clashing opinions” that would influence their “own evolving views about the subject.” However, the requirement to author responses in the Google document shifted the students’ attention away from collaboration and actually created a more individual than interactive activity. This was especially the case once the students adopted their “divide and conquer” strategy. In other words, the activity fell prey to what Erkens et al. call the “paradox within collaborative learning”: “the assumption that students learn from arguing, criticizing, and conflict versus the necessity of reaching consensus for collaboration to advance” (238). In the Google document activity, Madison, Priya, and Lane initially engaged in some
discussion of conflicting views, but when it became apparent that a resolution was not going to be reached easily, they abandoned the discussion and nominated Madison to complete the task individually.

In response to this tendency for students to favor non-negotiated consensus, composition scholars emphasize dissent—disagreement necessitates the sharing of multiple perspectives (Harris; Trimbur). Or, in the language of CoI, social presence can only support cognitive presence when it involves “probing questions, skepticism and the contribution of explanatory ideas” (Garrison 37). Dissent is precisely what was missing from the Google document activity, and it can be traced to at least two examples of insufficient teaching presence. First, the requirement to author responses to discussion questions in the Google document suggested that the main goal of the activity was consensus, not dissensus. Second, the brief time frame meant that students did not feel they had adequate time to engage in discussion prior to reaching a consensus. The group dynamic exacerbated this problem, highlighting the insufficient social presence among the students. At the beginning of the exchange, Lane self-identified as a photographer, positioning himself as more authoritative on the topic under discussion, which may explain why Madison did not argue more strongly for her perspective. This dynamic may have contributed to the group’s inclination to divide-and-conquer instead of engaging with diverse viewpoints.

While the differences between consensus and dissensus have been well theorized in composition studies, applying this theory in practice remains challenging. Marie understood that dissent was an important aspect of the activity—she wanted students to have “clashing opinions.” She also understood that requiring consensus might hinder the opportunity for collaborative learning—she didn’t want her students to “feel the need to produce something that is totally coherent.” However, she still required the students to record their responses in a Google document, which signaled to the students that they needed to reach a consensus. This is not to say that the Google document itself was the reason the activity failed. Instead, the students needed more direction on how the Google document was meant to support their learning (teaching presence in support of cognitive presence), and they needed more direction on what they were supposed to gain from interacting with peers (social presence in support of cognitive presence). Marie did mention at the end of class that the students could return to the Google documents as they created their outlines and prepared for the exam, but this recommendation was not repeated in the outline instructions nor was it emphasized in the design of the Google document activity. As it was, the presence of the Google document made the students believe that their job was to come up with a single answer to each discussion question, which ultimately did not facilitate an exchange of multiple perspectives in support of knowledge construction.

On the other hand, the in-class debate had high levels of teaching and social presence that directly supported cognitive presence. Social presence was facilitated by the inclusive and performative nature of the debate—the students said this “fun” and “high energy” activity made them want to share and explore ideas. Teaching presence was facilitated by the emphasis on dissenting opinions (counterarguments), which created a strong connection between the collaborative activity and the rhetorical objectives of the argumentative essay. The fact that Jasmine assigned students to represent an opinion that was counter to their own, thus encouraging students to explore the topic without also personally identifying with one position, may have also increased students’ willingness to engage. Ultimately, the activity led the students to construct knowledge as they reflected on, integrated, and extended their classmates’ viewpoints in their argumentative essays.

Conclusion

Empirical research on the goals and outcomes of peer interaction can help us better understand how and why particular activities are or are not successful. The reality is that, while collaborative learning scholarship has robustly theorized the value of collaborative activities that support individual authoring, applying that theory to practice is challenging. This article contributes by presenting student perspectives on two examples of peer interaction, offering insight into how students react to collaborative activities that aim to facilitate knowledge construction. This article also offers the CoI Framework as a way to understand and analyze that knowledge construction and demonstrates a method for tracking the process of collaborative learning. There is considerable potential for continued applications of the CoI Framework to writing instruction. Both the theory and methodology of CoI research can guide our study of collaborative activities that support individual authoring in FYC.

Future research along this line of inquiry is important because a full analysis of what students gain from interacting with peers is not something instructors can accomplish while they are teaching. As Marie explained when I asked her if she felt like her students’ in-class discussions influenced their approach to the argumentative essays, “it’s hard to kind of separate out sometimes, what did they get from collaborating versus what ... are they just kind of bringing to it from their own set of experiences.” Similarly, Jasmine noted that it is “really hard to say” what students gain from interacting with each other. Empirical research on student interaction can distinguish between knowledge that integrates others’ perspectives and that which relies on prior knowledge, and it can triangulate students’ reports of
activity success with observations and an analysis of student writing. Most importantly, this methodology prioritizes student voices, which should be a critical contributor to the best practices we develop and employ.

Works Cited


