Chapter 2. Methodology

This book presents interview and course observation data collected from four universities in the United States in fall 2019. We observed nine courses, interviewed nine instructors, and interviewed 20 students. Our data collection and analyses were guided by research questions that correspond to the three components of the Community of Inquiry (CoI) framework:

- Cognitive Presence: What learning do students and instructors anticipate from peer review? Is there evidence of students experiencing collaborative learning as a result of peer review? (To address this component, we collected and analyzed information from instructor and student interviews, observational notes, and student artifacts.)
- Social Presence: To what extent do students and instructors believe that interacting with peers during peer review supports learning? (To address this component, we collected and analyzed information from student interviews and observational notes.)
- 3. Teaching Presence: To what extent do instructors' efforts to design and facilitate peer-review workshops contribute to the writing course functioning as a community of inquiry? To what extent does the peer-review workshop design create spaces for students to achieve the intended learning goals? (To address this component, we collected and analyzed information from instructor and student interviews, observational notes, and instructional materials.)

The research questions and overall study design were informed by a previous survey and interview project that took place in 2017–2018 and included student surveys (n=669) as well as student and instructor interviews (n=81). In that initial study (see Stewart et al., 2022), we discovered that many students pointed to peer-review workshops as a place where they experienced *cognitive*, *social*, and *teaching presence*. This observation led us to focus our current project on investigating peer review as a community of inquiry.

Participant Recruitment and Selection

Near the beginning of the fall 2019 semester, we emailed all of the instructors teaching a hybrid or online first-year writing (FYW) course at our four institutions, inviting them to participate in our research. Each of us was assigned to communicate with faculty at an institution that wasn't our own, and we communicated through our university email to contact potential participants.

Instructors were asked to complete a brief eligibility survey and consent

form, indicating whether their course included a peer review assignment for a research project and providing information about their course schedule (see Appendix A and Appendix B). From the pool of interested and eligible instructors, we randomly selected online instructors, and we selected hybrid instructors based on their schedule (this selection criterion was for the purpose of our observation, since two of us traveled to observe hybrid courses, so the course meeting times needed to match with our availability). While we initially intended to include two instructors/courses from each institution, participant availability resulted in an uneven distribution: one online instructor from Institution A, two online instructors from Institution B, one online and one hybrid instructor from Institution C, and four hybrid instructors from Institution D. In most cases, we recruited between two and four student participants per course; however, we recruited only one student from one of the courses at Institution B, and we recruited zero students from the course at Institution A. Despite this uneven participation, and in an attempt to showcase the diversity of course design strategies we observed, we include all of the participants in our interview and instructional material datasets. When it came to selecting case studies (see following), we focused on courses with both instructor and student participants. Worth noting is that none of the courses we observed were taught by us, the researchers involved in this study.

Approximately two weeks before the scheduled observation, we used Qualtrics to contact the students enrolled in those courses (via their university email addresses) and invite them to participate in the study. The Qualtrics-generated email included an embedded video that explained the study and a link to the survey consent form (see Appendix C and Appendix D). The consent form offered students the options of being observed and interviewed or being observed only. Comparing the list of potential student participants with the list of peer review groups provided by each instructor, we selected one group from each class that included students who had all consented to both observations and interviews. To be eligible to participate, students must have been enrolled in a hybrid or online course that we were observing, part of a peer review group with other students who had consented to being observed, and over the age of 18.

Data Collection

The course observations took place during the week in which students participated in peer review for their research papers—roughly week 11 or 12 in a 15-week course. The observations included audio recording face-to-face sessions, screen capturing synchronous video chats, and screen capturing asynchronous peer-review workshops. We also took field notes (see Appendix E) and collected instructional artifacts related to the peer review activity (e.g., assignment instructions and peer review rubrics) as well as the participating students' drafts and peer

feedback. When our own institution was part of the study, a separate researcher gathered that data and interacted with participants to maintain confidentiality and avoid issues of validity.

We scheduled two interviews with each of the instructors (see Appendix F): one in the week prior to the peer review activity and one in the week after the observation. These semi-structured, 45-to-60-minute interviews were audio recorded and transcribed after the semester was completed.

At the conclusion of each peer workshop observation, we scheduled interviews with the students we observed (see Appendix G). Students were interviewed in person or via videoconference within one week of the observation. During these interviews we also asked students for any additional materials and for permission to use screenshots of their work. These semi-structured, 30-to-45-minute interviews were also audio recorded and transcribed after the semester was completed.

Compensation

Each of the instructors and students who participated received a gift card. Students who were selected as case study participants were also entered into a drawing for an additional gift card (one drawing per institution). These incentives were funded by a 2017–2018 Conference on College Composition and Communication Emergent Researcher Award.

Research Sites

This study includes undergraduate students who were enrolled in online or hybrid FYW classes at one of four universities in the United States. Institution A is a four-year mid-Atlantic public university with over 12,000 undergraduate and graduate students at the time of this writing. Twenty-one percent of the students at this institution report as minorities and 5% as international. The average household income is \$80,500. Institution B is a regional campus of a large, Midwestern university with an eight-campus system; it has an enrollment of about 5,000 students. Fourteen percent of the student body is characterized as minorities or international, and the average household income is \$60,000. Institution C is a large, public research university in a metropolitan area of the Rocky Mountain region with over 32,000 students who have a median household income of \$70,000; 28% of students are labeled as minorities and 5% as international. Institution D is a public research university on the East Coast with over 40,000 students with a median household income of \$90,000. Forty-three percent of undergraduates identify as minorities and 5% as international.

Institutions A, B, and C require a two-course writing sequence in which students are expected to take the first course in their first semester and the second course in their second or third semester, and the courses aren't themed. Institution A's first course focuses on responding to the rhetorical situation in a variety of genres; Institution B focuses more broadly on the writing process; and Institution C emphasizes reading and writing practices for participating in academic conversations. The second course at Institution A focuses on research writing, Institution B's second course emphasizes both argument and research writing, and Institution C's course focuses on developing information literacy and constructing academic arguments. Unlike the other institutions, at Institution D, students take one writing course in their first year. The course focuses on rhetorical theory, inquiry, revision, reflection, research, and critical reading; the course isn't themed.

A variety of writing courses are represented in this study, including hybrid and online first-, second-, or third-semester writing taught by graduate students, part- and full-time lecturers, and tenure-track faculty. Throughout the manuscript, we use the term "first-year writing" or "FYW" to refer to all of the courses in this study. (Some scholarship might also use the term "first-year composition" or "FYC," which we're also including in our use of FYW.) While the diversity of contexts poses challenges, we also see it as a strength, given our project's goals of developing a heuristic that can be applied widely.

Participant Demographics

Following is self-reported demographic information for the participants, all of whom chose their own pseudonyms. In total, our study included nine instructors—seven who used she/her pronouns, one who used he/him pronouns, and one who used "no specific pronouns." One instructor was from institution A, two instructors were from institution B, two were from institution C, and four were from institution D. Six instructors had fewer than six years of experience teaching overall, and three had more than ten years' teaching experience. Seven instructors had one-to-two years of experience teaching hybrid or online classes, and two instructors had six-to-eight years of experience teaching hybrid or online classes. Six instructor participants were graduate students, two were lecturers, and one was an associate professor. Three of our instructor participants were born outside of the United States.

Our study also included twenty student participants—ten used she/her pronouns, ten used he/him pronouns, and zero identified as non-binary. No students participated from institution A, five were from institution B, five were from institution C, and ten were from institution D. Three students were high school seniors taking FYW through a dual-college-credit program (aged 18 or older), ten were first-year students, two were sophomores, one was a junior, three were seniors, and one was unsure of his standing but offered that he had 40 credit hours and was returning to college after several years.

Table 2.1 presents demographic information for each participant, including their institution, chosen pseudonym, self-reported pronouns and racial/ethnic identity, instructor or student role, teaching experience (when applicable), course modality, and job title or class standing and major.

Table 2.1. Self-Reported Participant Demographic Information

Institution	Participant Pseudonym, Pronouns, and Racial/Ethnic Identity	Role	Experience Teaching or Student in Instructor's Class	Course Modal- ity (H = hybrid, OL = online)	Title or Standing and Major
A	Joy (she/her) White	Instructor	6 years total, 2 years H/ OL	OL	Graduate student teacher
В	Sofia (she/her) White	Instructor	14 years total, 6 years H/OL	OL	Associate professor
	Courtney (she/ her) White	Student	Sofia's class	OL	Sophomore, nursing
	Ada (she/her) White	Student	Sofia's class	OL	High school senior
	Joel (he/him) White	Student	Sofia's class	OL	High school senior
	Emily (she/her) White	Student	Sofia's class	OL	High school senior
В	Allison (she/ her) White	Instructor	2 years total, 1 year H/OL	OL	Graduate student teacher
	Jordan (she/ her) African American	Student	Allison's class	OL	Senior, hospitality management
С	Jamie (she/her) White	Instructor	2 years total,1 year H/OL	OL	Graduate student teacher
	Gordon (he/ him) White	Student	Jamie's class	OL	Senior (5th year), pre-engineering
	Peter (he/him) White	Student	Jamie's class	OL	Unsure (40 credits), mechanical engineering
С	Sarah (she/her) White	Instructor	1 year total, 1 year H/OL	Н	Graduate student teacher
	Jake (he/him) White	Student	Sarah's class	Н	Senior, biomedi- cal engineering
	Jane (she/her) White	Student	Sarah's class	Н	First-year, graphic design
	John (he/him) White	Student	Sarah's class	Н	First-year, psychology and criminology

Institution	Participant Pseudonym, Pronouns, and Racial/Ethnic Identity	Role	Experience Teaching or Student in Instructor's Class	Course Modal- ity (H = hybrid, OL = online)	Title or Standing and Major
D	Betsy (she/her) White	Instructor	17 years total, 1.5 years H/OL	Н	Senior lecturer
	Sam (she/her) Middle Eastern	Student	Betsy's class	Н	Junior, gov- ernment and journalism
	Isaiah (he/ him) African American and Hispanic	Student	Betsy's class	Н	First-year, criminology and criminal justice
D	Percy (no specific pro- nouns) White	Instructor	10 years total, 8 years H/OL	Н	Lecturer
	Steven (he/ him) Korean	Student	Percy's class	Н	First-year, finance and information systems
	JD (he/him) White	Student	Percy's class	Н	First-year, civil engineering
D	Jeffery (he/ him) White	Instructor	5 years total, 2 years H/ OL	Н	Graduate student teacher
	Brooke (she/ her) White	Student	Jeffery's class	Н	First-year, undecided
	Hannah (she/ her) White	Student	Jeffery's class	Н	First-year, chemical engineering
	Daniel (he/ him) Asian	Student	Jeffery's class	Н	First-year, aero- space engineering
D	Quinn (she/ her) Iranian and White	Instructor	4 years total, 2 years H/ OL	Н	Graduate student teacher
	Geoff (he/him) Asian	Student	Quinn's class	Н	First-year, business
	Catherine (she/ her) White	Student	Quinn's class	Н	First-year, marketing
	Snow (she/her) Chinese	Student	Quinn's class	Н	Sophomore, computer science and economics

Case Studies: Instructors, Students, and Assignments

In addition to analyzing interviews and materials from our full dataset, in our chapters we draw on foundational writing studies scholarship that includes case study methodology (Hillocks, 1986; Yancy, 1998). Our cognitive presence, social presence, and teaching presence chapters each include case studies of three instructors and their students, who were also included in Table 2.1. We realized early on in our analysis that we wanted to delve further into particular course sections that would provide examples and nuance related to each aspect of the CoI framework. Our selection criteria prioritized instructors from different institutions whose courses were in differing modalities and whose peer review designs, accompanying materials, and student interviews were robust and varied: these instructors were Sofia (Institution B), Sarah (Institution C), and Quinn (Institution D).

Sofia

An associate professor, Sofia was a White, Eastern European woman (she/her) who had been teaching first-year writing for 15 years at the time of this study and had been teaching the course asynchronously online for six years. Her class included both traditionally enrolled college students as well as a substantial number of dual credit high school students, which influenced the types of interactions that occurred during peer review. The four of Sofia's students who participated in the study were all from towns near the campus where Sofia taught: Courtney (she/her) was a White sophomore in the university's nursing program, while Ada (she/her), Emily (she/her), and Joel (he/him) were White high school students in the dual enrollment program.

In Sofia's class, the third and final writing project involved composing a short research paper, in which students responded to one of three prompts about college education that were based on class readings. The research paper was required to be 2,000-2,300 words in length and use four to five sources. After producing an outline for instructor feedback in week 12, students composed a draft in week 14 in order to receive feedback from classmates and the instructor before revising the text for final submission in week 16. Our observation took place during the second peer review of the semester and only peer review for this assignment.

Sarah

At the time of the observation, Sarah (she/her) was a graduate student in an MA program who had been teaching for two semesters. Identifying as a White woman, Sarah had grown up in the region where she was attending graduate school. She structured her hybrid course so that all assignments were submitted online and all peer review and individual instructor conferences were conducted face-to-face. Three of Sarah's students agreed to be observed and to participate in a follow-up interview: Jake (he/him) was a fifth-year biomedical engineering student from the Rocky Mountain region with substantial experience with peer review and research writing. Jane (she/her), also from the Rocky Mountain region, was a first-year graphic design student. John (he/him) was a first-year psychology and criminology student from the East Coast. Each of these three students identified as White.

Sarah's students were composing a research essay on any topic of their choosing and at the time of our observation and interview had already completed a topic proposal and annotated bibliography related to their research. The day of the class observation, students were assigned to have a first draft of their research text ready for peer review. This would be their third peer-review workshop of the semester. Following the peer-review workshop, students would receive additional feedback from Sarah and submit a final draft.

Quinn

At the time of the observation, Quinn (she/her), a White woman raised in the Middle East, was a doctoral student studying at a large, public, Research 1 (R1) university in the Northeast. Quinn had been teaching FYW for four years and had been teaching in the hybrid format for two-and-a-half years. This case study included three of Quinn's students: Catherine (she/her) was a White, first-year marketing major, and Geoff (he/him) was an Asian, first-year business major; both Catherine and Geoff grew up within half an hour of the university. Snow (she/her) was an Asian, second-year computer science major and an international student from China.

The peer-review workshop we observed supported an eight-to-ten-page research paper; students selected their own topic—something from current events that was contestable—and applied a stasis-theory style of questioning to develop their arguments. Students completed smaller assignments (an inquiry paper and an argument paper) that prepared them for the project. The peer-review workshop included two synchronous sessions: one took place in the physical classroom and one took place virtually.

Coding and Analysis

While our data and analyses are somewhat different for each chapter, our coding of the data generally followed a similar procedure. To begin, we individually identified initial coding categories among a representative dataset before collaboratively drafting a codebook that we used to code each dataset (e.g., interviews or artifacts) during a second pass of thematic coding (as per Vaughn & Turner, 2016). During this round of coding, two researchers were assigned to code each dataset in Dedoose, a cloud-based qualitative coding application, and discussed differences in coding, coming to an agreement on a single code for each instance. Worth noting is that we were more concerned with the accuracy (i.e., validity) of our coding than with the consistency (i.e., reliability) of our

coding, which was achievable via negotiating all codes. This approach follows Peter Smagorinsky's (2008) recommendations for collaborative coding, which involve reaching "agreement on each code through collaborative discussion rather than independent corroboration" (p. 401), valuing collaborative discussion (as opposed to strictly calculated inter-rater reliability), and providing "a means through which levels of expertise may emerge through the process of discussion in relation to data" (p. 402). We found that our discussions of the data were particularly rich, given our varying backgrounds and experiences with empirical research.

Within each chapter, we provide more detail about our coding and analysis of the data. Here, we provide a brief overview of our data, coding, and analysis choices. Table 2.2 shows which datasets we analyzed for each chapter.

Dataset	Chapter				
	Cognitive Presence	Social Presence	Teaching Presence		
Instructor interviews	X		X		
Student interviews	X	X	X		
Observational notes	X	X	X		
Instructional materials (e.g., rubrics, worksheets)			X		
Student artifacts (e.g., essay drafts, feedback)	X				

Table 2.2. Datasets and Chapters

We analyzed student interviews and observational notes for all three analysis chapters; the cognitive presence chapter additionally reports on instructor interviews and student artifacts, and the teaching presence chapter reports on instructor interviews and instructional materials.

Cognitive Presence Analysis

Our data analysis for the *cognitive presence* chapter involved two stages. First, we qualitatively coded student and instructor interview data to identify the participants' perceived goals of peer review. Second, we examined student artifacts (first drafts, peer feedback, revised drafts) for evidence of students experiencing the four phases of practical inquiry (triggering event, exploration, integration, and resolution).

We first uploaded all student and instructor interview transcripts to Dedoose and coded the responses, focusing on the interview questions that asked participants about the purpose of peer review (sources of the data are indicated in parentheses):

- How are you measuring students' achievement of the goal? (Instructor interview 1)
- What do you feel is the purpose of peer review? (Instructor interview 1)
- Do you feel like there's anything unique about peer review in an online/ hybrid course? (Instructor interview 1)
- How did the peer review for that assignment go? (Instructor interview 2)
- What would you say your students gained from this workshop? (Instructor interview 2)
- What was your experience like in the workshop? (Student interview)
- How do you feel about giving feedback to your peers? How do you feel about receiving feedback? (Student interview)
- Did you use the peer comments as you were revising? (Student interview)
- Would you say that you feel more confident about your writing as a result of peer review? (Student interview)
- Would you want to have peer review the next time you are writing an essay/paper/document? (Student interview)

As described previously, we first individually coded the interviews and then collaboratively negotiated all disagreements. While the purpose of this process was to achieve agreement on codes rather than to achieve inter-rater reliability, we still calculated overall code count agreement and excerpt agreement. For code counts, we calculated the total number of agreements out of the total number of codes as used by two researchers. For example, if one researcher coded an excerpt as "Application of Feedback > Yes" and "Assessment of PR WS > Unsuccessful," that was counted as four code applications. If, on the same excerpt, the second researcher coded only "Application of Feedback > Yes," we had a total of six codes and an agreement of four out of six. For excerpt agreement, we calculated our perfect agreement out of the total number of excerpts. The previous example would count as one excerpt with an agreement of zero out of one. Prior to the collaborative second-pass coding, our overall applied code count agreement was 60 percent (.599) and our excerpt agreement was 37 percent (.369). After the collaborative second-pass coding, our agreement was 100 percent (because we negotiated all codes until we reached consensus).

While we identified seven parent codes among the interview transcripts, Chapter 3 focuses on one code most aligned with *cognitive presence* and with the potential to provide evidence of *resolution: purpose of peer review/gained from peer review*. What we include here is our final codebook after many revisions, discussions, and iterations. In total, we identified eight child codes associated with that parent code, which are listed along with definitions in Table 2.3: *gain fresh perspective*, *learn from seeing peers' writing, improve text, earn higher grade*, *learn writing process, build community, meaning-level concerns*, and *surface-level concerns*.

Parent Code		Child Code		
Name	Definition	Name	Definition	
Purpose of peer review/Gained from peer review	Participant answered or discussed their belief about a goal of peer review or what they gained from participating in the activity.	Gain fresh perspective	Participant mentioned a fresh perspective or considering other ideas they wouldn't have on their own.	
		Learn from seeing peers' writing	Participant mentioned seeing/reading their classmates' writing/ essays.	
		Improve text	Participant mentioned writing a better essay/ product.	
		Earn higher grade	Participant stated that the goal of peer review is to help them earn a higher grade on their final project.	
		Learn writing process	Participant mentioned learning writing strategies related to the writing process.	
		Build community	Participant stated that the goal of peer review is to develop commu- nity among classmates.	
		Meaning-level concerns	Participant mentioned concepts such as ideas, argument, organization, structure, paragraph focus, transitions, and/or a non-specific reference such as revision.	
		Surface-level concerns	Participant mentioned concepts such as citations, grammar, style, sentence-level wording, and/or a non-specific reference such as editing.	

To examine peer feedback and whether student authors incorporated that feedback, we further analyzed three case studies. We identified student suggestions made asynchronously by writing on fellow students' texts using track changes and/or marginal comments (for Sofia's and Quinn's students) or synchronously and verbally in a transcript of an in-person workshop (for Sarah's students). We grouped those suggestions into two categories: *meaning-level feedback* and *surface-level feedback*. We further categorized the meaning-level suggestions into six subgroups that described the nature of the suggestion: *explain/extend*, *overall argument/point*, *praise*, *paragraph focus/organization*, and *source integration*. We organized the surface-level suggestions into five subgroups: *word choice/phrasing*, *spelling*, *punctuation/capitalization*, *praise*, and *citation/sources*.

Our final step was to examine student revisions. We used the Compare Documents tool in Microsoft Word to examine revisions students made between the drafts they submitted for peer review and their final drafts of their projects. We looked at these revisions alongside the meaning- and surface-level feedback the author had received from peers. When we identified a correlation between the feedback and the revision, we concluded that the feedback functioned as a *triggering event* that prompted sufficient *exploration* and *integration* to culminate in *resolution*.

Social Presence Analysis

To qualitatively examine the concept of social presence, we coded student interviews. Unlike our analysis of the data for the *cognitive presence* chapter, which was purely open/descriptive, our analysis of the social presence data was guided by a pre-existing list of categories that we developed in an earlier study: social learning, social perceptions, social comfort, and attitudes (Stewart et al., 2021). We divided the 20 student interviews among the four of us and engaged in open coding to create child codes for each pre-established category. After meeting to negotiate child codes, we each coded five different student interviews to test the codebook before coding the entire dataset in Dedoose. The first three authors coded the entire dataset in three groups of two such that each student interview was assigned two coders. Each pair then met to negotiate and finalize codes. In total, we coded 233 excerpts related to social presence that included 866 total codes; we negotiated 46 percent of those codes. When negotiating, we found that any disagreements related to social perceptions and social learning were easily resolved by adding information to existing codes or choosing not to code excerpts that didn't relate directly to social presence or to the observed peer-review workshop. Ultimately, we chose not to report on codes related to social comfort or attitudes because those concepts became increasingly complicated and ill-defined as we negotiated. As with all coding and negotiating in each of these chapters, our goal wasn't to achieve inter-rater reliability but to obtain an agreed-upon code count.

After determining that we were unable to measure social comfort or attitudes qualitatively, we coded and negotiated again, ultimately producing six child codes for social perceptions—physically together, virtually together, familiarity with peers' topics, does not want or need to know peers, wants to know peers, and lack of interaction—and four child codes for social learning—students believed they experienced social learning, social learning hindered because better with non-classmates, social learning hindered because feedback unhelpful, and social learning hindered because workshop was perfunctory. These codes are listed along with definitions in Table 2.4.

Table 2.4. Social Presence Codes and Definitions

Parent Code		Child Code		
Name	Definition	Name	Definition	
Social learning	- · · · · · · · · · · · · · · · · · · ·	Students believe they experi- enced social learning in class	Participant stated outright that interacting with peers in their specific class helped them learn.	
	improved their writing and/or helped them develop as a writer.	Students perceive social learning as	Feedback unhelpful—Partici- pant mentioned that feedback was lacking or unhelpful.	
		hindered	Workshop was perfunctory—Participant mentioned participation in the peer workshop was merely for points or a grade.	
			Better with non-classmates— Participant mentioned that they sought feedback from someone outside of their classmates.	
Social perceptions	Participant indicated "feeling real" or having a "social perception" of classmates.	Social perceptions of peers	Familiarity with peers' topics—Participant indicated having a sense of who peers were because of essay topics or discussions (e.g., same groups or discussion forums).	
			Virtually together—Participant pointed to tools or activities that facilitated online interaction (e.g., worksheet, Google Doc, discussion forums).	
			Physically together—Participant indicated knowing peers because they were in the same physical space.	

Parent Code		Child Code		
Name	Definition	Name	Definition	
		No social perception of peers	Lack of interaction—Participant said that they do not interact with their peers in their class.	
			Doesn't want or need to know peers—Participant indicated cognitive dissonance with the word "relationship" and/ or that they did not need to know or want to know their classmates in order to participate/learn.	
			Want to know peers—Participant said they did not know their peers as individuals but would have liked to know them.	

Teaching Presence Analysis

To analyze data in relation to *teaching presence*, we first collaboratively created descriptive codes for the instructor and student interviews that described the interactions and materials affiliated with pre-workshop, during-workshop, and post-workshop activities. We list and define these codes in Table 2.5. Each transcript was coded twice before we negotiated disagreements; in total, we negotiated 44 percent of codes. Agreement after negotiation was 100 percent. This process enabled us to create an overview of how each workshop used asynchronous and synchronous activities (see Figure 5.2 in Chapter 5) and to then categorize those activities according to the three elements of *teaching presence*: *instructional design*, *direct instruction*, and *discourse facilitation* (see Figure 5.3 in Chapter 5).

After establishing this broad view of the course/activity designs represented in our full dataset, we turned our attention to the specific case studies. Our goal was to question whether our participants' instructional design, direct instruction, and discourse facilitation were creating intentional and explicit opportunities for students to engage social and cognitive presence. We drew on our findings from the cognitive presence chapter to question whether the top three intended goals for peer review (gain fresh perspective, learn from seeing peers' writing, improve text) were apparent in the instructional design choices and direct instruction behaviors. We drew on findings from the social presence chapter to question if and how the instructor guided students towards developing social perceptions of their peers or engaging in social learning during discourse facilitation.

Table 2.5. Teaching Presence Instructional Design Codes and Definitions

Activity	Activity Definition	Code	Code Definition
Asynchronous pre-workshop	Whole-class or group activities happening before the peer work- shop that do not occur at the same time.	Email/ announce- ment	Instructor and/or students communicate via email or via announcements before the peer workshop about peer workshop expectations.
		Discussion forum	Students (and/or instructor) communicate on a discussion forum before the peer workshop about peer workshop expectations.
		Modeling/ practice	Instructor asynchronously guides students in how to conduct a peer-review workshop as a class by modeling and/or practicing peer review techniques.
		Readings	Instructor provides readings about peer review to help introduce students to the concept before the workshop.
		Rubric	Instructor provides a rubric to students before the peer workshop to detail expectations.
		Worksheet/ template	Instructor provides a worksheet or template with questions that students will answer during the peer-review workshop.
		Video	Instructor provides a video lecture about peer review prior to the workshop.
		Instructor feedback on draft	Instructor provides asynchronous feedback to the draft (i.e., written comments) before the peer-review workshop.
Synchronous pre-workshop	Simultaneous whole-class or group activities occurring before the peer workshop.	Discussion	Instructor and students discuss peer review (i.e., concept and expectations) synchronously as a class before the workshop.
		Modeling/ practice	Instructor synchronously guides students in how to conduct a peer-review workshop as a class by modeling and/or practicing peer review techniques.

Activity	Activity Definition	Code	Code Definition
		Instructor feedback on draft	Instructor provides synchronous feedback to the draft (i.e., written comments) before the peer-review workshop.
Asynchronous workshop	Peer workshop that does not include simul- taneous or real-time interaction.	Discussion forum	Peer workshop occurs asynchro- nously where students exchange essays and provide feedback on a discussion forum.
		Email	Peer workshop occurs asynchro- nously where students exchange essays and provide feedback via email.
		Google Docs	Peer workshop occurs asynchro- nously where students exchange essays and provide feedback using Google Docs.
		LMS* assigned	Peer workshop occurs asynchro- nously where students exchange essays and provide feedback using the LMS*, which also assigns groups automatically.
		Rubric	Peer workshop occurs asynchro- nously where students exchange essays and provide feedback using a rubric.
		Marginal comments	Peer workshop occurs asynchro- nously where students exchange essays and provide feedback by including marginal comments.
		Instructions	Students receive asynchronous instructions or directions about the peer workshop process and expectations (e.g., bulleted list of tasks at the top of a Google Doc).
		Instructor intervention	During asynchronous peer workshop, the instructor provides feedback to students either 1:1 or 1:many (e.g., provides feedback on peer review discussion forum).
		Instructor feedback on draft	Instructor provides asynchronous feedback to the draft (i.e., written comments) during the workshop.

Activity	Activity Definition	Code	Code Definition
Synchronous workshop	Peer workshop that includes simulta- neous or real-time interaction.	F2F**	Peer workshop occurs synchro- nously where students exchange printed essays and provide feed- back in handwriting.
		Google Docs	Peer workshop occurs synchronously where students exchange essays and provide feedback using Google Docs.
		Worksheet	Peer workshop occurs synchronously where students exchange essays and provide feedback by filling out a form given by the instructor.
		Instructions	Students receive instructions or directions about their synchronous peer workshop process and expectations (e.g., bulleted list of tasks at the top of a Google Doc).
		Marginal comments	Peer workshop occurs asynchro- nously where students exchange essays and provide feedback by including marginal comments.
		Instructor intervention	During synchronous peer workshop, the instructor provides feedback to students either 1:1 or 1:many (e.g., walks around the room, visiting each group to talk).
		Instructor feedback on draft	Instructor provides asynchronous feedback to the draft (i.e., written comments) during the peer-review workshop.
Asyn- chronous- post-workshop	Asynchronous activities occurring after the peer workshop.	Instructor feedback on peer review	Instructor provides feedback or a grade/score post-workshop either 1:1 or 1:many (e.g., sends a recap email or announcement about the peer-review workshop).
		Instructor feedback on draft	Instructor provides asynchronous feedback to the draft (i.e., written comments) after the peer-review workshop.
Synchronous post-workshop	Simultaneous whole-class or group activities occur- ring after the peer workshop.	F2F** class discussion	Whole class discusses or debriefs about the peer workshop after it has taken place face-to-face during a physical class.

Limitations

We attempted to control for potential negative effects on validity by ensuring confidentiality via pseudonyms and anonymizing data. However, we also recognize the potential influence of social desirability, considering that participants speaking with writing studies researchers might have felt that, for us, a "correct" response would be that peer review is important or useful or that a peer workshop we observed was successful. In addition, even though we collected our data from participants at four different institutions across the United States, we acknowledge that a limitation of our data is that we could have included a larger variety of institutions (e.g., two-year colleges, historically black colleges and universities (HBCUs), Hispanic-serving institutions (HSIs),

^{*}learning management system

^{**}face-to-face

tribal colleges and universities). Our participant population also skews White and woman-identifying.

Data collection for this project took place prior to the COVID-19 pandemic and subsequent proliferation of emergency remote teaching; it also occurred before generative AI tools like ChatGPT were readily available. While these conditions aren't necessarily limitations, they are important to consider when reading our findings and applying them to future research and/or teaching.