# "I Sing the Body Electric": Embodiment in the Community of Inquiry Framework

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**Abstract**
Even prior to the COVID-19 pandemic, more K-12 teachers in the United States were teaching online than ever before, particularly in rural and economically distressed communities (US Department of Education, 2011), and since March 2020, nearly every teacher has become, at least for a little while, a virtual teacher. The purpose of this study was to better understand the embodied experiences of women "sojourner" teachers—that is, teachers who move among online, face-to-face, and hybrid teaching spaces (Howell, 2020). Working from a feminist poststructuralist perspective, I gathered qualitative data from four sojourner teachers in the Midwestern and Mid-Atlantic United States. These data revealed participants' complex relationships with their bodies while teaching online and how their bodies fit into their perceptions of what it means to be a good virtual teacher. I argue that the current domains of the Community of Inquiry (CoI) framework (Garrison et al., 2000) are limited and would benefit from the explicit inclusion of embodiment to facilitate discussion about the interplay of physical and intellectual labor and, potentially, the real effects embodied identities have on teachers' experiences in virtual classrooms.

*Keywords*: Community of Inquiry, embodiment, online education, social presence, teaching presence, cognitive presence

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More teachers at all levels are teaching online than ever before. According to the National Center for Education Statistics (U. S. Department of Education, 2021), nearly 60% of U.S. college students were enrolled in at least some distance courses in 2021, and at the PK-12 level, enrollment at virtual schools—particularly virtual charter schools—has been growing more than any other type of public school even though virtual charter students' proficiency rates are "significantly lower" than other school types (U. S. Government Accountability Office, 2022, "What GAO Found"). The continued growth in distance education underscores the importance of understanding distance teachers' and students' experiences and developing from them a cogent framework for online teaching and learning.

The purposes of this article are, first, to share the embodied experiences of women (who make up an overwhelming majority of the U.S. PK-12 teaching workforce yet still experience significant gender bias) who move among online, face-to-face, and hybrid teaching spaces. In other words, I was interested in *sojourner teachers* (Howell, 2020), a term intended to reflect the uniquely flexible and fluid work of many contemporary teachers, and how they live in and experience their unique classroom contexts through their bodies. Unlike many PK-16 instructors forced into online and hybrid classroom by COVID-19 in 2020-2021, the participants in this study were deliberately working as sojourner teachers, making their experiences distinct from those of teachers who abruptly shifted to emergency remote instruction with little preparation or choice. Second, through my analysis of these teachers' experiences, I recognized a gap in the much-embraced Community of Inquiry (CoI) framework (Rourke et al., 1999; Garrison et al., 2000; Garrison et al., 2001; Anderson et al., 2001; Rourke et al., 2001) and now seek to address that gap.

I begin by synthesizing the existing literature related to teachers' embodied experiences, narrowing toward scholars' understanding of teacher embodiment in virtual PK-12 classrooms. Then, I describe the two theoretical lenses through which I viewed this project, *embodiment* and *poststructural feminism*, as well as the Community of Inquiry framework. Next, I describe the present study and report tellings relevant to the CoI framework. Finally, I argue that the current domains of the Community of Inquiry (CoI) framework are limited and exclude embodiment as an integral part of meaningful educational experiences, sublimating serious discussion about the interplay of physical and intellectual labor and, potentially, the real effects embodied identities (including gender and race) have on teachers' experiences in virtual classrooms. I conclude by proposing an expanded view of the framework and continued study of teachers' embodied experiences in online settings.

# Literature Review

"Our bodies," Grumet (2003) writes, "give us away" (p. 257). Teachers' bodies, like written or spoken language, act as texts to be read in classroom contexts, "moving, speaking, and interacting in particular ways [to] produce social spaces" (Jones & Hughes-Decatur, 2012, p. 52). Atkinson (2008) describes the idealized contemporary teacher as motherly but not sexual, smart but nonthreatening. She—because, like 80% of U.S. PK-12 teachers (U.S. Bureau of Labor Statistics, 2023), the ideal teacher is a woman—is ready to "reproduce citizens for a democratic society, men and women for a patriarchal heterosexual culture, and differently skilled laborers for a capitalist economy" (Atkinson, 2008, p. 109). Students, colleagues, and administrators often stereotype and marginalize teachers with bodies that communicate something other than

this idealized teacher subjectivity. Small teachers lack authority (Ingalls, 2006), fat teachers are lazy (Garrett & Wrench, 2012), pregnant teachers are inappropriately sexual (Spangler Gerald, 2003), Black teachers are angry (Lewis, 2016), and sick (DiPalma, 2003; Price Herndl, 2003) and disabled (Radtke & Skouge, 2003) teachers rely too much on others.

Students are highly attentive to teachers' appearance and actions. Uitto and Syrjälä (2008) describe how students infer teachers' approval and disapproval from their bodily cues alone; one participant in their study of 49 college students reported that she knew her high school math teacher did not believe math was for girls just based on his facial expressions. Mallozzi (2014) and Atkinson (2008) both focus on teacher dress. In Mallozzi's (2014) study, working practitioners (including Mallozzi herself) described how their clothes, hairstyle, and accessories communicated attributes like marital status and sexual orientation and how they manipulated their appearance to hide those attributes. Atkinson's (2008) participants were all preservice teachers; they identified several teacher types based on appearance (apple jumper teachers, teacher babes, and bland uniformer teachers) and debated the affordances and constraints each type provides while speculating about which type they might become.

Body-centered issues do not simply evaporate in virtual settings. Brophy (2010) rejects the idea that online settings are disembodied "cyberutopia[s]" (p. 930). Although they might allow greater fluidity in how users present their gender, sexuality, race, and socioeconomic status, they may also result in the reification of stereotypes and increased marginalization when users occupying privileged identities assume other users are just like them—that is, when marginalized identities are successfully masked. But often marginalized identities are not masked; in these instances, bias is often obvious. In their study of 14 online sections of an introductory political science course at a large state institution, Chávez and Mitchell (2020) illustrate Brophy's (2010) assertions. Even though the only difference among the course sections was the instructor's name and appearance in a welcoming video, the researchers found that women and people of color all received lower scores than White men on ordinal course evaluations; for female instructors, this difference was statistically significant.

Yet scholars are divided in their acknowledgement of whether embodiment even exists in online contexts. Dreyfus (2009), for example, is implacably pessimistic about online education because he views virtual experiences as totally disembodied. Dreyfus rejects online education because the intercorporeal actions he sees as foundational to learning cannot be experienced online, even with advanced video, audio, and haptic technologies. Ess (2003) and Cunningham (2014) are more optimistic, both conceding that blended or hybrid teaching and learning can work, although supports might be needed to stimulate the creation of social presence in classes with a mix of virtual and face-to-face students.

Very little empirical research exists on teachers' embodied experiences in online classrooms. Some exists incidentally: in their study of an online Master's of Nursing Science program, Lindsay et al. (2009) did not aim to address embodiment and were surprised when embodiment emerged as a theme in their data. Faculty in particular reported the physical demands of teaching online (e.g., tendonitis, eye strain, fatigue) as well as the challenge of "being present to an absence" when teaching remote students (p. 184). "Technology at a distance might seem disembodied, but it is not," Lindsay et al. opined (p. 184).

Bolldén (2016), in contrast, remains one of the only studies in which the researcher explicitly aims to investigate teachers' embodiment in virtual settings. Most interesting in Bolldén's findings is her characterization of teacher embodiment as "multiple" and "manifold" (p. 13). In addition to using Second Life avatars (which they sometimes struggled to control), the college-level instructors in Bolldén's study reported that they demonstrated their embodied-ness via their profile pictures on their course platform and by participating in live discussions, not to add substantive content but simply to show that they were there.

Notably, the existing literature on teachers' embodied experiences in virtual settings focuses exclusively on higher education contexts. This study helps address that gap by focusing on the experiences of PK-12 teachers.

# Essential Frameworks

## Embodiment

Embodiment means "having, being in, or being associated with a body" (Smith, 2017, p. 1). While this understanding of what it means to be human may seem too obvious to be debatable, this embodied perspective contrasts sharply with more prevalent dualist understandings of soul/body or mind/body binaries. The distinction between the mind and body in Western philosophical traditions began more than two millennia ago in Plato's writing and has been taken up by numerous scholars since then, including, notably, philosopher and mathematician Rene Descartes, who shifted thinking from the soul/body to the mind/body. The Cartesian understanding of the body as a simple "machine" (Broadie, 2001, p. 297) acting as "the mind's unproblematic instrument" (Michel, 2015, p. S41) persists in much popular thinking today.

In the mid-20th century, however, French phenomenologist Maurice Merleau-Ponty challenged this dualism. Merleau-Ponty (2005) writes that the body is "not an object for an 'I think'" but "a grouping of lived-through meanings" (p. 177). Merleau-Ponty's notion of consciousness is not separate from nor does it exist despite humans' embodied experiences; consciousness is instead the experience itself of knowing the world from the body. Although some philosophers have criticized Merleau-Ponty's understanding of Descartes as too simplistic (see, for instance, Hudac, 1991), Merleau-Ponty's work is useful for precisely this reason: His simple understanding of the mind/body hierarchy reflects the resulting popular discourse about the body after centuries of dualist thinking.

Embodiment is particularly relevant to women and people of color. Women's bodies have long been "a metaphor for the corporeal…representing nature, emotionality, irrationality and sensuality" in contrast with "the masterful, masculine will, the locus of social power, rationality and self-control" (Davis, 1997, p. 5). The disassociation of women's bodies with rationality is especially frustrating in U.S. PK-12 classrooms, domains managed overwhelmingly by women. Bodies of color are similarly situated in contemporary discourse (Trinh, 1989; Almeida, 2015); for instance, White academics in the U.S. regularly dismiss female Black, Indigenous, and scholars of color as "experiential/emotional" rather than theoretical writers (Almeida, 2015, p. 80).

## Feminist Poststructuralism

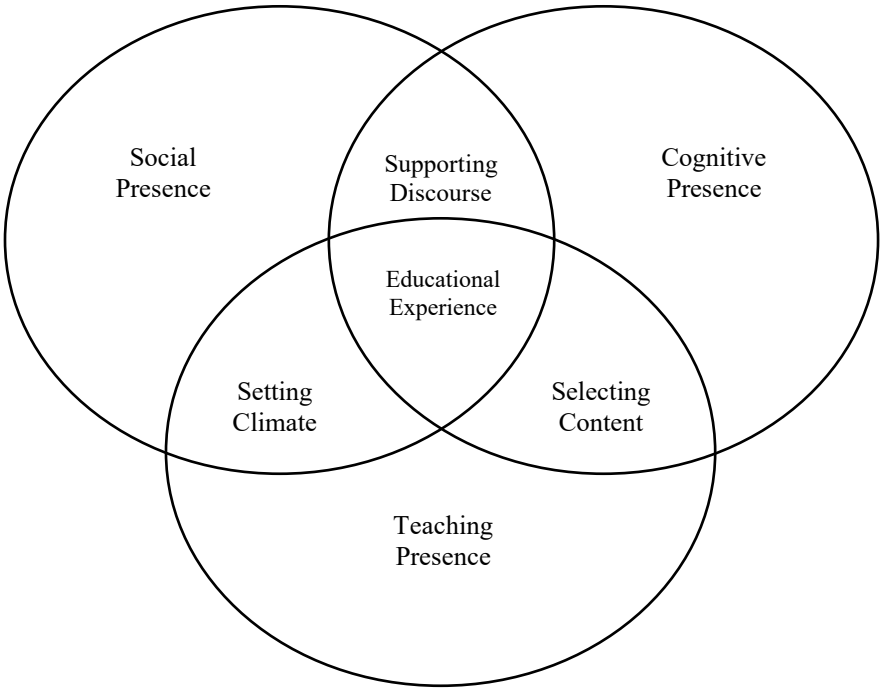
Feminist poststructuralism is also foundational to this study. Although poststructuralism can take many forms and many poststructuralist scholars resist efforts to define their work, most share the understanding that meaning exists in constantly shifting sign systems and, in particular, language. When humans use language, they create *discourses* (Baxter, 2003). Fairclough (2013) describes discourses as "social interactions" (p. 20); these interactions always occur within a specific context in which interlocutors occupy multiple *subjectivities*. According to Weedon (1987), subjectivities are "the conscious and unconscious thoughts and emotions of the individual, her sense of herself and her ways of understanding her relations to the world" (p. 32). Subjectivities are multiple, "precarious, contradictory" (p. 33), and shaped by one's relation to systems of power, unlike the more fixed and freely constructed notion of *identity*. Feminist poststructuralist analysis, then, relies on careful attention to linguistic structures and the contexts in which language is used and requires the researcher to recognize that meanings are multiple and fluid.

## Community of Inquiry

The CoI framework was created by Garrison et al. (2000). In their original work, Garrison and his colleagues sought to "investigate the features of the written language used...that seem to promote the achievement of critical thinking" (p. 91) in text-based, computer-mediated communication in asynchronous online courses. Calling back to Dewey's (1897) observation that education is part psychological and part sociological, Garrison et al. speculate that a community of inquiry, while perhaps not absolutely necessary, is a valuable context in which to create an educational experience. Their CoI model (Figure 1) has three distinct domains or presences: cognitive presence, social presence, and teaching presence.

**Figure 1**

*The Community of Inquiry Framework*



*Cognitive presence* refers to "the extent to which the participants in any particular configuration of a community of inquiry are able to construct meaning through sustained communication" (Garrison et al., 2000, p. 89). A class that creates cognitive presence gives students opportunities to encounter new, unexpected ideas; to ask questions; to make connections; and to make inferences based on evidence. And without careful planning, this sort of critical-thinking-supporting, interactive classroom can be challenging to facilitate online. Indicators of cognitive presence include some sort of "triggering event"—that is, when a student feels puzzled or recognizes a problem—followed by exploration, integration, and resolution (when students apply new ideas to solve problems).

Such a community, Garrison et al. (2000) asserted, is "nurtured within the broader social-emotional environment of the communicative transaction" (p. 94). They hypothesize that people must feel comfortable relating to one another before the level of genuine interactivity, receptiveness to new ideas, and willingness to engage in productive dialogue necessary for critical thinking can occur. Thus, their second domain or presence of interest is *social presence*, which they define as "the ability of participants in a community of inquiry to project themselves socially and emotionally as 'real people' through the medium of communication being used" (p. 95). In other words, to take the sorts of intellectual risks required for critical thinking, students have to see their instructor and their peers as real people with whom they are sharing an experience.

The final presence binds together cognitive and social presences. Garrison et al. (2000) call this domain *teaching presence*. This work is wide-ranging and includes selecting appropriate texts and other curricular materials, structuring that content, designing appropriate assessments, and selecting or designing appropriate instructional methods, all while communicating, modeling, and negotiating course norms and expectations.

In their initial article, Garrison et al. (2000) proposed using this framework as a coding scheme to analyze computer-mediated communication such as discussion threads, and while many scholars have used it in this way, scholars have used the framework in broader ways as well. Arbaugh and several others (including Garrison) (2008) created a survey to operationalize the three presences, and other scholars have used that survey to study the effects of the presence (or absence) of the three presences. Garrison et al. (2007) have explicitly invited questioning and further study of the framework and quite openly acknowledge that it is a work in progress. Scholars such as Xin (2012) and Annand (2019) have taken up this invitation, questioning CoI's generality, simplicity, and purported foundational paradigms.

Scholars also note a lack evidence showing a statistically significant link between CoI's three presences and student achievement (see, for example, Rourke and Kanuka's [2009] review of the CoI literature or Maddrell et al.'s [2017] investigation of the relationship between social presence and student learning). However, some studies suggest that in courses with strong evidence of the three presences, students reported feeling like they learned more and had more positive attitudes toward the course; Cheung et al. (2018) found this to be the case in racially and ethnically diverse science classrooms. Why do these perceptions matter if course grades stayed the same? Students who feel more favorably about content and feel as if they are learning are

more apt to persist, an especially important outcome in subjects students perceive as challenging, like math and science.

In addition to filling contextual and methodological gaps in the existing CoI literature (Olpak, 2022), the present study responds to Garrison et al.'s (2007) invitation to question the CoI framework, through the lenses of embodiment and feminist poststructuralism.

### Research Questions

In this study, I initially asked:

- How do female sojourner teachers experience embodiment?

In this article, I explore a sub-question generated as a result of my initial analysis and finding that embodiment remains largely unexplored within the existing CoI literature:

- Do female sojourner teachers' embodied experiences align with the Community of Inquiry framework, and if so, how?

## Method

As the previous sections show, the topic of this project was (and remains) understudied. When I undertook this investigation during the 2016-2017 academic year, my first goal was simply to make this part of the world visible by documenting and interpreting (together with participants) the unique experiences of female PK-12 sojourner teachers. The fundamental nature of my primary research question along with the lack of previous literature made a qualitative approach most appropriate for my study.

### Participants

After securing approval from my Institutional Review Board, I solicited participants from two U. S. states, one in the Mid-Atlantic region and one in the Midwest. In the Mid-Atlantic state, all virtual PK-12 programs were managed by the state's Department of Education, including an in-house Spanish program, offering middle and high school language courses from certified Spanish teachers to school districts around the state who were consistently unable to hire and retain certified world language teachers. These teachers were employed by the state's Department of Education and engaged in a mix of synchronous and asynchronous instruction for 6-8 classes capped at 15 students. Most of the state's virtual programs were administered at students' local schools under the supervision of non-teaching staff member (such as a librarian). I used publicly available information as well as personal introductions to connect with and invite the eight virtual teachers working for the program. Four initially agreed to participate in this study; two dropped out due to a lack of time to complete the study.

In contrast, the Midwestern state's virtual programs were highly decentralized and mostly managed by the educational management organization K12, Inc. When I began this study, the state had five virtual charter schools, one overseen by a local school district and the other four managed by K12, Inc. Another (also managed by K12, Inc.) opened during recruitment. The schools did not have enrollment caps; as a result, some enrolled as many as 5,000 students. Most were rated F (failing) by the state's accrediting agency. For each school, I first attempted to

contact administrators via email, chat, phone, and, for at least one school, by visiting their physical headquarters. If that was not successful, I contacted any teachers with an email or "contact me" button publicly displayed on the school's website. Ultimately, I was able to make contact with the principal at the single school overseen by a local school district; he referred me to one eligible participant (Emma). Of the remaining five schools, four did not respond to emails, chats, calls, or visits and did not provide faculty rosters online. At the last school, administrators did not respond, but a spreadsheet with faculty names and emails was available online, which I used for recruitment. Three teachers responded to my recruitment email. Two were unable to finish the study due to personal and professional time constraints.

Ultimately, four teachers completed the study:

- **Claire**, a White, cisgender English-as-a-new-language and Spanish teacher in her early 40s with more than a decade of experience in a large Mid-Atlantic metro area and remote, rural Mid-Atlantic area. At the time of this study, Claire taught middle school students from her home through a virtual Spanish program managed by the Department of Education of a Mid-Atlantic state. Claire's students participated at their home schools in supervised computer lab settings where they worked asynchronously approximately three days per week and met with Claire synchronously two days per week.

- **Regina**, a White, cisgender Spanish teacher in her early 50s with two decades of experience, including several years outside of the profession working as an anthropologist, and experiences in rural schools in New England and the Mid-Atlantic. Regina worked from her home, teaching high school Spanish through the same virtual program as Claire with the same ratio of asynchronous and synchronous work.

- **Emma**, a White, cisgender math teacher in her 20s in her fourth year of teaching at a virtual charter school managed by and physically headquartered in a large urban high school in the Midwestern state. Working on-site from midday until early evening, Emma taught virtual classes as well as in-person classes through the school's extended day program. She also offered drop-in virtual and in-person tutoring for students.

- **Tilly**, a White, cisgender special education teacher with two decades of experience in suburban regions in the Mid-Atlantic and Midwest. Tilly taught from home through a virtual charter school run by K12, Inc. in partnership with a local school district (a requirement of the state's charter school regulations at the time of this study). At the start of this project, her caseload included more 100 high school students from throughout the state. Midway through data collection, another special education teacher at her school resigned, and Tilly also had to also absorb her caseload of 109 students until the position was filled. The majority of her interactions with students were asynchronous.

## Data Collection

With each participant, I conducted a one- to two-hour semi-structured initial interview in person or via Skype (for interview protocol, see Appendix A). The initial interview was followed by a sequence of journaling activities, conducted exclusively via email, in which participants created and probed metaphors capturing aspects of their face-to-face, online, and hybrid teaching experiences (for a complete description of email prompts, see Appendix B). I adapted Gordon's (1972) synectics protocol for the email sequence. Synectics, a strategy originally designed by Gordon to cultivate creativity among advertising executives, is also often used as an instructional strategy to help students make connections among seemingly disparate concepts. The protocol relies on a structured sequences of invitations to create metaphors and through these metaphors "mak[e] the familiar strange" and "mak[e] the strange familiar" (Gordon, 1972, p. 296). Each participant and I spent about five months on this stage, exchanging at least a dozen emails. Data generation concluded with a final one- to two-hour semi-structured interview (see Appendix C for the final interview protocol).

## Data Analysis

I began analyzing data after the first interview and continued iteratively throughout data generation. I used elements of Carspecken's (1996) steps for critical qualitative inquiry and relied on Jackson and Mazzei's (2012) thinking with theory approach. Specifically, I engaged in low- and higher-level coding (Carspecken, 1996), first looking for codes related to embodiment, then developing codes based on the data themselves, and then, after writing up my initial findings, returning to the data to code with the CoI in mind. Throughout data analysis, I looked for examples of what Jackson and Mazzei (2012) call "irruptions" (p. 8) and used Carspecken's (1996) meaning field analysis and reconstructive horizon analysis at these points to help me understand the possible meanings in what participants said and wrote. I also used Fairclough's (2013) ten main questions for discourse analysis during this stage.

## Researcher Positionality

My professional background and experiences undoubtedly influenced this research (St. Louis & Calabrese Barton, 2002). I am a straight, White, cisgender woman. I look like a typical U.S. teacher and like my participants, a position that likely resulted in unearned trust from them. I also came to this project with a largely positive view of online teaching and learning. I had had rich, rewarding experiences teaching online and many opportunities to support other teachers' online teaching practices. Unlike many PK-12 teachers, I held a full-time online teaching position nearly a decade prior to the COVID-19 pandemic. I shared my prior experiences with my participants in order to gain their trust and to demonstrate that I was interested in their stories. But this strategy carried risk; participants might have assumed I knew things about their experiences that were, in fact, unique to them as individuals and not common to all sojourner teachers.

## Trustworthiness

Like most qualitative researchers, I aimed to engage in trustworthy research that might yield understandings transferable to other, similar contexts. Before and during the research, I engaged in reflexive writing about my positionality. I kept a detailed audit trail (Creswell & Miller, 2000). Peer debriefers (Creswell, 2014) provided essential feedback when I created by interview protocols. I translated my recordings, transcripts, and notes into a thick record

(Carspecken, 1996), and I engaged in member checking and searched for disconfirming evidence to reduce the risk of confirmation bias (Creswell & Miller, 2000).

### Limitations

The primary limitation in this study is its homogeneous sample. This study reflects the experiences only of the typical U.S. teacher: White, cisgender, middle-class women, omitting the experiences of the many teachers who do not embody this norm. Although I briefly describe the frustrating process of recruitment for this study in this article that undoubtedly contributed to this homogeneity, in Howell (2019), I offer a fuller critique of the challenges such educational settings present to researchers.

## Tellings

In this section, I showcase excerpts from participants' interviews and email exchanges, organized by the three presences in the CoI framework: social presence, teaching presence, and cognitive presence.

### Social Presence

Unsurprisingly, all participants described how their bodies contributed to significant moments of social presence in their virtual classrooms—that is, when they and students began to recognize one another as human beings. Claire described the abrupt and unplanned way her body humanized her to her students and a colleague when synchronously teaching while pregnant with her first child. In the following exchange, she described her earliest scheduled class meeting during the year of her first pregnancy:

> CLAIRE: So honestly I don't even remember teaching during that period but I know I did.
> CRYSTAL: Yeah.
> CLAIRE: But I don't remember doing it so I was absolutely on autopilot. I couldn't take time off because I had to save all that for maternity leave.
> CRYSTAL: Oh for maternity leave sure.
> CLAIRE: Right so I wasn't able to take days and time off. I really don't I mean clearly I taught whatever I was supposed to be teaching cause I was still working. (laughs) But I you know definitely not the most engaged and best teacher cause I was not feeling well and wasn't you know wasn't my chipper self. In fact I hadn't told my bosses I was pregnant yet but this one class I had to call really early in the morning at like 7:15. Their class was actually before their school started…I had to call in there really early every day and I wasn't even on the clock yet. So I would call them and then eat breakfast and do whatever and then get on the clock.
> CRYSTAL: Uh huh.
> CLAIRE: So I kept calling them and I would be like "Oh let me call you guys back. I don't feel good." And I would hang up the phone and have to go be sick come back and call them back. And then finally after probably a month of this—the facilitator who was my only male facilitator at the time maybe it was two but anyway he was like "Are you pregnant or something?"
> CRYSTAL: (laughs)
> CLAIRE: Yup!

When recalling how she intentionally created connections, Claire described her embodied experiences in virtual teaching as highly gendered; even online, she said, "teaching high school boys [didn't] let [her] forget" she was a woman. She explained how gendered expectations affected her appearance in our first interview:

> CLAIRE: …yes I do put on lipstick every day cause otherwise I look like a ghost on the video cause I'm just like totally washed out.
> CRYSTAL: Mmhm.
> CLAIRE: That would be one of the few things where like my embodiment is certainly feminine because I have to wear lipstick every day. But otherwise no I mean I don't think of you know—and that's more I don't know that I'm trying to look like pretty or beautiful? I don't think that's it cause like I don't—every day I don't really care about but I think it's more like just because I'm speaking so much?
> CRYSTAL: Mmhm.
> CLAIRE: Like I want to bring attention to my—I don't want to bring attention—to like visually kind of separate my mouth from all of this very light colored background.
> CRYSTAL: (laughs)
> CLAIRE: And light colored you know skin and that like I'm just sort of like part of the wall. But when I'm wearing it it stands out more and so students kind of can see. Or maybe I am vain and I just want to look better.

Claire's reasons for caring about her appearance are complex, having to do with the performance of femininity/beauty ("I do put on lipstick every day cause otherwise I look like a ghost," pointing toward the domain of social presence) as well as practical concerns ("to like visually kind of separate my mouth from all of this very light colored background," pointing toward teaching presence).

Tilly similarly relied on "look[ing] ok" to connote professionalism and establish social presence when teaching online. In our first interview, Tilly described how important her appearance was when she had been working in a brick-and-mortar setting. When teaching online, she wrote in a subsequent email,

> I still get up, shower, do my hair but only eye makeup. I like to use my video camera so I need to look ok. I do not worry about how I dress though, usually sweats and a sweat shirt. ( I do dress normally if I have to go out after school). We do have to dress for face-to-face things with the kids and families. That gets tricky because you have to wear real clothes and look professional. The face-to-face meetings (field trips, testing) are fun because you get to meet kids and families. At these you need to present yourself well.

Maintaining a "normal" teacher look when she was on camera and when she met students and their families face-to-face was an important part of Tilly's efforts to connect with students. This effort was just one step she took to prevent "fall[ing] apart":

> TILLY: I think even though the roles are different you know. Like teacher—virtually your role is different and like this year my role is even more different than it was in the

> past three years? But I feel—yeah you're still all connected you're still all—it's still all like this one body one mind one thing you know what I mean?
> CRYSTAL: Yeah.
> TILLY: But I think in the virtual setting you have to make yourself that way. You have to train yourself to be that way because I mean I see virtual teachers that can so disconnect you know what I mean?
> CRYSTAL: Mmhm.
> TILLY: Like they're teaching virtually but they're not as connected as what they need to be? Because you know it's not—they don't have that I guess that virtual mentality? Or they don't know how to connect it all together to do it virtually.

When I asked Tilly what happened when teachers did not cultivate a "virtual mentality," she replied:

> TILLY: …I think what falls apart is that face-to-face connection.
> CRYSTAL: Mmhm.
> TILLY: Like I think you know even though there's kids in your classroom you're not really seeing them as kids because you can't put a face with that? And so and I think that's hard. I mean I know we had a virtual teacher leave this year because she's like "I can't stand that I don't know what my kids look like." You know? And like yesterday the little girl one of the little girls that I tested yesterday her teacher's like "Oh my gosh you're testing her? Can you send me a picture?" So you know—and a lot of times when you test you'll take pictures with your kids and send them to other teachers that kind of thing.
> CRYSTAL: Mmhm.
> TILLY: So I sent her a picture and she texts back she goes "she's as beautiful as her voice online."
> CRYSTAL: Aww.
> TILLY: You know? So I'm showing the little girl the messages back from her teacher and stuff. You know? So I think that's where a lot of virtual teachers that disconnect come from. Like they're you know they don't—that whole face-to-face and oh my gosh there is really a kid on the other side of that computer.

In Tilly's telling, establishing social presence explicitly requires an embodied orientation: The teacher must be aware of her own embodied presentation to students and must actively seek out opportunities to envision her students as embodied in order to cultivate a sense of one another as real people.

**Teaching Presence**

All participants also described embodied aspects of their virtual teaching practice that were integral to developing teaching presence. Claire, for instance, wrote in an early email exchange about the importance of her body and voice in direct instruction online:

> In my virtual teaching, I find myself using my voice and hands more than my body for some aspects, so my voice and hands kind of are my body (so to speak). I still gesture of course to support meaning in Spanish, but the ability to clearly explain something in

> English when we have a technology issue or new tech tool is paramount. I will model with a visual screen share and pointer/mouse cursor, but mainly I use my voice to guide students through steps where they are looking at the screen (not at a video of me). Unlike the classroom, I cannot bend over and see their issue, nor can I take their mouse and solve it, so I instead have to explain myself or steps in a process with extreme detail so that students can follow along independently. I also then need them to clearly explain issues that arise on their screens, since again I cannot bend over their shoulders and see it myself.
>
> …I continue to use voice, with more facial expressions, and more use of hands (with some use of my lower body, but minimally) because it is effective for conveying meaning when the students are faced with immersive language. Just as I would in the face-to-face classroom, I tend to exaggerate hand movements or facial expressions some to support understanding, but keep it naturally tied to the level of learner, other visual support, and meaning. I also repeat movements/words to highlight their use, like any language teacher would. I am also in the unique position as a virtual teacher that I can still write something down or drawing it on the "board" by hand since I have a writing tablet. So the mouse and stylus really are extensions of my hands since I can instantly and seamlessly pick them up and point out, draw, or write anything that needs clarification during a lesson.

Claire's conception of her body was expansive when she described teaching online, extending past her fingertips to encompass tools such as her mouse and stylus. Her exaggerated body language and use of these tools was clearly the result of both premeditation and instructional decisions made in the moment.

Regina, too, expressed the importance (and hard work) of using her body during online instruction:

> REGINA: I feel as if it has to be really scripted and it's much more work.
> CRYSTAL: Mmhm.
> REGINA: But and a lot of the reason that it's work is because students and learners I mean excuse me learners and teachers alike are new to this process. It's kind of like you know the way that people talk face-to-face versus talk on the telephone is—we had to learn how to do that you know?
> CRYSTAL: Yeah.
> REGINA: And yeah but I do feel—and I would say that there is that feeling of isolation that you get when you're teaching online? Is because you're separating your mind from your body. There is a disembodiment that you have to figure out how to you know you have to figure out how to bring those two back into line together if that makes sense?
> CRYSTAL: Mmhm.
> REGINA: I mean it's very noticeable because of the fact that if you're a teacher and particularly if you like middle school and high school you get a lot of energy from your students and it's just something that happens. You can't predict you can't script it or anything. My husband and I would often talk about this feeling that we had that we couldn't really plan what we were gonna do in a training or a lesson until we saw the students—you know? I would say "Well I'll just have to look at them." (both laugh)

Like Claire, Regina described the successful use of her body during online instruction as relying on careful preparation as well as cues emerging from her interactions with students.

Emma differently highlighted the importance of embodiment in creating teaching presence when she wrote in an email how difficult it was to find ways to use her body online due to few live video chats:

> In an online setting, I have not found a way to use my physical body. As a result, words become exponentially more important because they are really the only way I can communicate with students. Tone also becomes more important. I have to read emails and messages carefully to make sure that I am not coming across as too harsh or too lenient. I can't rely on subtle nonverbal communication like facial expressions to convey what I need to say. It's hard to establish the same relationship with a student over the phone or through email that I could establish with a traditional student.

She made up for this lack of opportunities by more explicitly cultivating emotional connections. She described the significance of these feelings in our later interview when describing how she helped students having difficulty managing her course:

> EMMA: …it makes it much more challenging sometimes to say you know "Ok you're telling me you watched this video. Well what did you know what did they saw about this example problem?" [as if student replying] "Well I don't remember." "Well did you—" and then it's "Well did you take notes?" "No." "Ok well there we go." And so it takes a lot more to get to the heart of the problem.
> CRYSTAL: Yeah.
> EMMA: And it requires some trust and openness I think between the teacher and the student…one of the things I love the most about this job and that I tell people—both actually both parts even though I sometimes I don't even meet my Succeed Virtual kids in person until I go to graduation and they're there and I'm like "Oh hey! That's the face I've been talking to."
> CRYSTAL: (laughs) Yeah.
> EMMA: …I'm getting to build relationships with them. Sometimes even deeper than they would have then I would be able to in a traditional setting.

While she insisted she struggled to use her body in her online courses, Emma clearly relied on affect not only to create connections with her students but also to facilitate the complex organization and instructional work of establishing teaching presence.

**Cognitive Presence**

Although dualist notions of the mind/body split might suggest that embodiment is least connected to cognitive presence, participants' descriptions of their embodied experiences also encompassed this domain. In an email exchange, for example, Regina compared her teaching practice to a performance including scripted and improvisational elements. Here, she expanded on how this related to her online teaching specifically:

> The struggle with online teaching is to get students to respond spontaneously (as in an improvisational interaction) to your prompts. To elicit this, I have to have multiple scripts already thought through—almost like an algorithm "If student doesn't respond, then bring out example A. If response to A, move to question 1. If no response to A, move to yes/no question B." etc. The algorithm is probably something I used subconsciously in ftf teaching but now there is a metacognitive element to it. I have to be thinking about thinking (my own and my students') all the time.

Creating opportunities for metacognition was clearly at the fore of Regina's practice. In our later interview, she revisited how she helped students think about their own learning:

> REGINA: I do use my brain to sort of try to get into the perspective of the student and what the student response or lack of response might mean and you know I use my voice to set a tone the same exact way. Body is obviously a little different because I don't—I mean with the exception of video which helps I really don't have a lot of access to gestures touch even you know just the presence the physical presence—
> CRYSTAL: Mmhm.
> REGINA: In the classroom can sometimes convey a lot of meaning or at least help students chill out. (laughs) So I think that's why you know I was talking about improvisation in the classroom because I have—you have many more [inaudible, 20:22.] tools to work with. Rather than you know tools that are just extensions of your brain you know? Which is what you have in an online environment. You still have tools but they're really extensions of your thinking as opposed to you know your body language or what you're able to do with your body if that makes sense.
> CRYSTAL: Oh that—[as if thinking out loud] yeah it does and I hadn't thought of it that way yeah. So many of the virtual tools or the online tools are extensions of your thinking yeah.
> REGINA: Yeah they really are another piece of your mind or your brain and in a way that's why it's harder for students because you're asking them to both learn to use those tools—
> CRYSTAL: Mmhm.
> REGINA: And use their minds which you know they're in various and sundry states of brain development. (laughs)
> CRYSTAL: Yeah. (laughs)
> REGINA: And you know a lot of times they use their bodies to convey meaning like a shrug or a confused look or a raised eyebrow or a smile or even just like a slouching in the chair or a glazed over look or you know there's just so much meaning that they use their bodies for and you're asking them to do something that you do in your working environment all the time and they really don't do that in their learning environment all the time so they have a lot less practice. They do it in a social environment you know you often hear kids being talked about as natives to technology land?
> CRYSTAL: Mmhm.
> REGINA: But I don't really believe that. I think they're natives to social technology land which is a completely different land than learning technology. (laughs)

Using her own body and considering the embodied needs of her students is integral to her efforts to help them engage in individual and shared metacognition, which Garrison (2022) has noted is essential within the CoI framework.

# Discussion

In the present understanding of CoI (Figure 1), issues of embodiment are largely ignored, yet this study (albeit narrow in scope) demonstrates how embodiment is interwoven in social, teaching, and cognitive presences. Embodiment is integral to being human, and therefore researchers ought to consider it when investigating human activities, including teaching.

Like Atkinson (2008), I found that my participants had very specific ideas about the appearance, actions, and affect of an ideal teacher, all of which relied on their bodies and their ability to emotionally connect with their students—and thus clearly related to their social presence. As Brophy (2010) speculated, the fact that participants' interactions with students happened online did not eliminate gendered expectations or yield some sort of hyper-egalitarian classroom: Claire, Regina, Tilly, and Emma all described, at times, how they engaged in the same traditional performance of femininity expected of face-to-face teachers. This finding alone makes clear the importance of explicitly and consistently thinking about embodiment as an aspect of social presence.

But embodiment is not limited to social presence: Such a conceptualization would conform to outdated, dualist ideas about the relationship between body, mind, emotions, and sel(ves). Claire, Regina, Tilly, and Emma described embodied experiences clearly related to teaching and cognitive presences as well, and these experiences were often quite complex. Claire's expansive sense of her body and how it extended to encompass tools like her mouse and stylus, for instance, echo Bolldén's (2016) descriptions of her participants as having multiple or multilayered bodies and point toward entanglements between the body and the more technical aspects of planning for and delivering instruction. Likewise, Regina's description of the ways she and her students must parse the available uses of their bodies and how these uses are different from those available to them in physical classrooms point toward significant cognitive and metacognitive demands.

Scholars' failure to consider how embodiment fits into the CoI framework sublimates serious discussions about the interplay of physical and intellectual labor and, potentially, the real effects embodied identities such as gender and race have on students' and teachers' experiences in virtual classrooms. Moreover, such a conceptualization reifies patriarchal discourses about women, who, as I note earlier in this article, make up the overwhelming majority of the American teaching force (U.S. Bureau of Labor Statistics, 2023), casting their bodies as separate from the intellectual and executive work of teaching reflected in the domains of cognitive and teaching presence, respectively. Bell hooks (1994) describes the dangers of imagining teachers as disembodied and the need for re-embodiment:

> The arrangement of the body we are talking about deemphasizes the reality that professors are in the classroom to offer something of our selves to the students. The erasure of the body encourages us to think that we are listening to neutral, objective facts, facts that are not particular to who is sharing the information. We are invited to teach

> information as though it does not emerge from bodies. Significantly, those of us who are trying to critique biases in the classroom have been compelled to return to the body to speak about ourselves as subjects in history. We are all subjects in history. We must return ourselves to a state of embodiment in order to deconstruct the way power has been traditionally orchestrated in the classroom, denying subjectivity to some groups and according it to others. By recognizing subjectivity and the limits of identity, we disrupt that objectification that is so necessary in a culture of domination. (p. 139)

Without considering embodiment as a foundational aspect of teaching and learning online, my participants' gendered experiences would have been too easily missed, an elision that benefits only the maintenance of a patriarchal status quo. Although not reflected in this study, I suspect teachers in different kinds of othered bodies (e.g., Black, Indigenous, or bodies of color; queer bodies; disabled bodies) are likewise made ignorable by a presumption of disembodiment in virtual classrooms (a presumption made evident explicitly in the work of scholars such as Dreyfus [2009] and implicitly through researchers' failure to even speculate about students' and teachers' embodied experiences in these settings), an ignorance that serves racist, heteronormative, and ableist systems of power, not the students and teachers living and learning within those systems.

# Directions for Future Research

As I note when describing my research method, the most significant limitation in this study is the homogeneity of the participants and my inability to solicit more (and more diverse) participants. In future studies, it is critical that researchers recruit and center the embodied experiences of teachers from historically marginalized communities, including teachers of color, teachers with disabilities, gender-nonconforming or nonbinary teachers, and others. Future studies should also examine the experiences of male teachers, who represent a minority of the U.S. PK-12 teacher workforce. Such studies along with the present study might inform the development of a survey or other instrument suitable for gathering data from the broader population of sojourner teachers. Finally, while this study focused exclusively on teachers' embodied experiences, future studies focused on students' embodied experiences would also be valuable.

## Implications for Practice

The most immediate practical implications of this study relate to teacher education. All participants expressed excitement that their experiences were being studied and reflected on their role as explorers in a new teaching frontier. They had not been prepared to be sojourner teachers nor guided to consider how their bodies fit into their unique teaching positions. Recent research suggests teacher preparation remains limited in this regard. National surveys of teacher education programs have revealed that only a small fraction of teacher education programs provide virtual field experiences: 1.3% according to Kennedy and Archambault (2015), 4.15% according to Archambault et al. (2016), and 2.8% according to Graziano and Bryans-Bongey (2018). If teacher educators expect PK-12 virtual instruction to be successful, teachers must have intentional, high-quality virtual field experiences, shaped by frameworks like CoI.

## Conclusion

Understanding teachers' experiences more fully requires acknowledging how their embodied understandings of themselves, others, and the world around them are threaded throughout the domains of social, teaching, and cognitive presence. I conclude this article with the hope that by re-embodying sojourner teachers, researchers can elucidate and then work to deconstruct harmful discourses that marginalize those teachers outside the discursive ideal.

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## Appendix A

Initial Interview Protocol

**Lead-off Question:**

When someone asks what you do, what do you say?

**Possible Follow-up Questions:**

1. What does a teacher look like? Sound like? Move like? Do? How do you know?
2. Tell me about how you first became a teacher. What did you do to prepare? You can talk about formal things like earning a degree or certificate or applying for jobs, but you can also talk about less formal steps like buying or collecting supplies for your classroom, building a professional wardrobe, or even learning who was in charge of the coffee maker at your school.
3. Are there specific moments when you began to think of yourself as a teacher? Can you describe some of them? Make sure to include sensory feelings in your description.
4. How would you describe yourself as a teacher—for example, as fun, demanding, caring, etc.? As a guide? Facilitator? As someone who listens? Who performs? Why?
5. Tell me about a time when you felt like the best teacher you've ever been. What happened? What were you doing, thinking, and feeling (emotionally and physically)?
6. Tell me about a time when you felt like the worst teacher you've ever been. What happened? What were you doing, thinking, and feeling (emotionally and physically)?
7. How were you like that teacher you described at the beginning of our conversation? How were you different from him/her?
8. What does an online teacher look like? Sound like? Move like? Do? How do you know?
9. Tell me about how you became an online teacher. What did you do to prepare? How was this preparation similar to or different from your earlier teacher preparation?
10. How would you describe yourself as an online teacher—fun, demanding, caring, etc.?

    a. (if the same as face to face description[s]) Are there any words that you might use to describe yourself in online settings that you wouldn't use to describe yourself in your face to face classroom or vice versa? If so, what are they? Why do you think that you don't have these specific qualities in both settings?
    b. (if different from face to face description[s]) These aren't the same words that you use to describe yourself in your face to face classroom. Why do you think that you use these different descriptions for these different kinds of teaching?

11. Tell me about a time when you felt like the best teacher you've ever been in an online setting. What happened? What were you doing, thinking, and feeling (emotionally and physically)?
12. Tell me about a time when you felt like the worst teacher you've ever been in an online setting. What happened? What were you doing, thinking, and feeling (emotionally and physically)?
13. Are there any other things that you would like to tell me about today that we haven't talked about yet?

## Appendix B
## Synectics Email Exchange Protocol

**Email One Purpose:** To establish a working definition of embodiment in approachable language and invite the participant to consider how she is embodied.

**Common Prompt:**
Our job during the next part of the project is to explore how you understand what you do, particularly as it relates to embodiment. Embodiment is the idea that our minds, our intellectual activities, and our emotions aren't separate from our physical bodies. Teaching in particular is an activity that is both intellectual and physical. As teachers, we engage in hard intellectual work every day: we're working with our students on content, and we're doing the reflection and professional development that we know we have to do to be better at our job. But our work is physical, too: we manage our classrooms, we offer comfort, and we demonstrate to students and colleagues how we're feeling with our bodies. And lots of research tells us that parents, our colleagues and administrators, community members, and our students in particular read our bodies. They pay attention to what we wear, how we move, our posture, our gender, our race—they notice a lot.

When I was getting ready to start this project, I was reading the book *The Teacher's Body: Embodiment, Authority, and Identity in the Academy* (edited by Diane P. Freedman and Martha Stoddard Holmes), and this quote stuck out to me: "Every teacher, even the distance-learning teacher, has a body (virtual or imagined though it may be) and needs to negotiate its place in the classroom, possibly transforming what cannot be made invisible into a sign of authority or, if she is particularly courageous, an acknowledged element of the learning process" (pp. 13-14). I thought a lot about my body in my brick-and-mortar classroom. I dressed my body in a way that I thought was modest and professional, I consciously used "appropriate" touch like high fives and side-to-side hugs, I redirected students who were off-task by simply standing next to their desk—but I didn't think too much about my body when I started teaching virtually. So the quote above really stood out to me. I didn't think of myself as embodied at all when I taught online, but I was. I still had a body, obviously. I just didn't use it in the same ways that I had when I taught face to face, and I didn't think of it as integral to my teaching practice.

So that's what I'd like for us to think about together: how are you embodied in your classroom? We're going to use metaphors to help us think as we go along, but please don't get antsy about them! :-) We'll use a specific sequence of brainstorming and questions to help us get to some good metaphors—you won't just have to come up with them off the top of your head. I would like to start, though, by asking if you've ever thought about the place of your body in your classroom. You can talk about your brick-and-mortar classroom and/or your virtual classroom (just please indicate which one you're talking about when). Aim to write a couple of paragraphs, but if you write more, hooray!

**Email Two Purpose:** To record a working definition of metaphor and to invite the participant to create a metaphor to describe her face-to-face or online teaching experiences.

**Common Prompt:**
Besides thinking more about [reference to previous email], I would also love for us to start thinking about metaphors that we might use to talk about teaching. A metaphor is another way of talking about an object by comparing it to something else, so I might say something like, "A brick-and-mortar school is like a beehive because everyone there is very busy all the time, and it is the center of the bees' community." I could then go on to talk about other ways that a brick-and-mortar school is like a beehive and maybe how they're different, too. What would you compare teaching in a brick-and-mortar school to? If you want to suggest a couple of things, that's okay, too. I know that it might be hard to come up with just one metaphor that works exactly right.

**Email Three Purpose:** To unpack and expand the metaphor created by the participant.

**Example Questioning Language:**
"After reading and rereading your description several times, I kept coming back to the idea of teachers' full selves (mind, experiences, body) as a component (the cathode ray tub, the plasma, the liquid crystals) in a larger machine. If we were to expand the metaphor, what would machine (the tv) be in relation to teaching and education? Who would have control of the machine--who could turn it on and off? Are the students passive or active consumers of what is being displayed--that is, are they watching by choice or because they are compelled to? Is there any sort of commercial element, as there typically is with actual television programming?" (To Regina)

**Email Four Purpose:** To invite the participant to create a metaphor to describe her teaching experiences in the remaining context (face-to-face or online).

**Example Prompts:**
"On that note, I read your tv metaphor as applicable to both online and ftf teaching. Is that right? If so, are there other metaphors that might work for online teaching but not ftf and vice versa? Or do you think that any metaphor you might use for teaching would be equally applicable in both settings? In your next response, could you spend some time thinking about a metaphor that only applies to your ftf teaching. Then let's see if it also fits your online teaching." (To Regina)

**Email Five Purpose:** To unpack and expand the metaphor created by the participant. At this point, each series of emails had progressed differently, meaning the questioning language used in this step is less uniform that that used in earlier emails.

**Example Questioning Language:**
"Thinking about how best to move forward: our conversation has moved differently than some of the others. With some participants, I've had clearly delineated exchanges about metaphors that apply to their ftf experiences and online experiences. We've talked about those two settings together for the most part. I feel like we are at a good place to talk on the phone or online again, but I also want to make sure you're ready to move on to that step. What do you think?" (To Regina)

**Email Six Purposes:** To share my metaphor of the sojourner teacher and invite the participant to create a metaphor to describe her experience as both a face-to-face and online teacher and to invite the participant to begin thinking about how her metaphors have affected her perception of her professional practice.

**Common Prompt:**
I've also been working on creating metaphors during this project. One of the ways that I've conceptualized teaching online and face-to-face is using the idea of a professional knowledge landscape (I've adopted this metaphor from researchers named Connelly and Clandinin—I can send you more info on them if you'd like to read more). I've imagined teaching as a literal landscape, captured in a map. Teachers like you (and me) who move back and forth between face-to-face teaching contexts and virtual contexts don't just stay in one place on the map. They move all over, often via previously uncharted paths. They may stay in one place for a while, but not forever. As a result of this map/landscape metaphor, I've been using the term "sojourner teacher" to describe a teacher who moves or has moved between face-to-face and online teaching. This is the overarching metaphor I've created to encompass my experiences teaching both in face-to-face and online classrooms. Is there a metaphor that you might use that connects both kinds of teaching experiences? I would like for you to think about what that metaphor might be, and during our last interview, we can talk about it.

## Appendix C
## Final Interview Protocol

**Lead-off Question:**
We've been talking together about several metaphors you've created to describe your experiences teaching face-to-face and online. When we last emailed, I asked you to think about a metaphor that might capture both of those experiences. Tell me about what you've been thinking about.

**Possible Follow-up Questions:**

1. Did making metaphors help you think about your face-to-face and online teaching experiences new ways? Could you describe your process for creating metaphors and how they helped you see things differently, if that's the case?
2. Now that we're at the end of our exchanges, I would like to revisit explicitly the idea of embodiment. Do you consider your teaching knowledge "embodied"? Do you feel embodied in the same ways when you're teaching face-to-face and when you're teaching online?
3. Do you think your gender affects how experience embodiment? If so, how? Could you describe a time when you've been aware that you were teaching with or through a woman's body?
4. Did any of your metaphors help you think about how your teaching practice is embodied?
5. Why did you decide to participate in this project? What were you hoping that you would learn about yourself or about teaching? What did you learn?
6. Would you be interested in reading the metaphors created by other participants or potentially talking with other participants about their metaphors?
7. Are there any other things that you would like to tell me about today that we haven't talked about yet?