

It's Complicated: Instructors' Perception of their Teaching Roles Online

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As a result of the COVID-19 pandemic, many institutions had shifted to primarily online teaching during the 2020-21 academic year. This case study at Brescia University College (London, Canada) investigates the experiences of faculty members who, for the most part, had never taught online prior to March 2020. It explores faculty members' conceptualization of their instructional role when teaching online. Instructors described the role of online teacher as creator and deliverer of content, curriculum designer, assessor, and facilitator of community. The findings confirm Community of Inquiry teaching and social presences but did not find mention of cognitive presence. We also found support for instructor and learner presence. Our findings suggest that the Community of Inquiry framework evolves over time from the pre-active to interactive to post-active phases of teaching.

With the advent of COVID-19, many institutions made an abrupt shift to online teaching with the immediate cancellation of in-person course delivery in mid-March 2020. As the pandemic evolved, many post-secondary institutions mandated online course delivery for the fall and winter semesters of the 2020-21 academic year. Thus, many faculty members, who had never taught online and had no desire to do so, were forced to adapt their teaching to the online environment.

Although an extensive literature discusses instructors' beliefs, concerns, skills, and roles related to online teaching in higher education, it is largely designed to either improve online teaching techniques or to explain the barriers to implementing online teaching (Kebritchi et al., 2017). Faculty members who do not normally teach online courses may have very different experiences, attitudes, and beliefs about online teaching and learning than faculty members who regularly teach online. In this case study, we explore the experiences of instructors at a single institution who, for the most part, had never taught online prior to March 2020, including their conceptualization of their instructional role when teaching online (Garrison et al., 1999; Hung & Chou, 2015) during the pre-active, interactive, and post-active phases of teaching (Laut, 2000)

PERCEPTION OF INSTRUCTIONAL ROLE

In the online teaching and learning literature, a substantial amount of research has been conducted on instructional roles (Valverde-Berrococo et al., 2020). A 2017 review of the literature on the challenges of delivering higher education online found 104 studies, 23 of which considered content design challenges, 45 considered instructor issues, and 11 considered a mix of learner, instructor, and content issues (Kebritchi et al., 2017). Instructors' concerns fell into four themes: the changing roles of instructors, the transition from in-person to online teaching, time management, and teaching style. Content development issues included professional development, use of multi-media, and the relationship between instructional strategies and content. Moreover, scholars have explored multiple frameworks and typologies for instructor roles in higher education, as shown in Table 1.

The instructor roles identified in these studies fall into six broad categories: instructional design, content creation, content expert, technology facilitation, social facilitation, and course management.

Table 1. Summary of Literature on Instructor Roles in Higher Education

Roles/Competencies Identified	Type / Participants / Location	Study
Pedagogical, social, managerial, technical	Theory / North America	Berge (1995, 2008)
Teaching presence, social presence, cognitive presence	Theory / North America	Garrison, et al. (1999)
Process facilitator, advisor/counsellor, researcher, content facilitation, technologies, designer, manager, administrator	Practitioners and Researchers / U.S., U.K., Europe	Goodyear (2001)
Cognitive, affective, managerial	Instructors / Asynchronous online / U.S.	Coppola, et al. (2002)
Administrative manager, instructor/facilitator, instructional designer, trainer, leader/change agent, technology expert, graphic designer, media publisher/editor, technician, support staff, librarian, evaluation specialist, sit facilitator/proctor.	Experts	Williams (2003)
Content expert, instructional designer, materials producer	Mentors/Instructors / Turkey	Aydin (2005)
Professional, pedagogical, social, evaluation, administrator, technologist, advisor, researcher	Experts / U.S., India, Australia, Sri Lanka	Bawane & Spector (2009)
Design/planning, social, instructive, technological, management	Teacher Training Workshop Participants / Spain	Guasch et al. (2010)
Content expert, instructional designer	Instructors / Taiwan	Chang, et al. (2014)
Course designer/organizer, discussion facilitator, social supporter, technology facilitator, and assessment designer.	Scale development / Students in blended and online courses. / Taiwan	Hung & Chow (2015)
Life skill promoter, pedagogue, designer, social, technological, managerial.	Students in asynchronous online learning/ Spain	Gómez-Rey, et al. (2017, 2018)

Note: Adapted from Bawane & Spector (2009) and Baran et al. (2011), incorporating publications post 2011.

COMMUNITY OF INQUIRY FRAMEWORK

The *Community of Inquiry* (Col) framework (Garrison et al., 1999) is one of the most commonly used theoretical frameworks in the online teaching and learning literature (Valverde-Berrocoso et al., 2020). The analysis of the texts identified three main nodes: (a. It conceptualizes the roles and activities that lead to student learning online through three interdependent presences: teaching presence, cognitive presence, and social presence (Garrison et al., 1999). This framework was developed based on Lipman's (2003) conceptualization of a community of inquiry, which describes a shared quest for meaning amongst a community of learners and teachers. This quest involves a structured process that supports dialogue about a particular subject of inquiry. The Col includes both the learner's private world, which is "reflective and meaning focused" and the "shared world (collaborative and knowledge focused)" (Garrison et al., 1999, p. 92) which when combined, can result in deeper learning.

Teaching presence involves the development and organization of a course, facilitation of group learning, and direct instruction which can be performed by any member of a learning community (Garrison et al., 1999). Table 2 summarizes the categories and indicators of teaching presence.

Garrison et al. (1999) developed a model of practical inquiry which forms the basis of cognitive presence, based on Dewey's (1933) concept of inquiry. The practical inquiry model moves from the private, reflective world to the public world of discourse and back; from perception of an idea caused by a triggering event, to internal exploration of the idea, to individual reflection and integration, and, finally to shared discourse, practice, and resolution (Akyol & Garrison, 2011). This cycle of inquiry is designed to foster learners' critical thinking skills and enable them to construct meaning. Table 3 summarizes the categories and indicators of cognitive presence.

Social presence involves the interaction and engagement of participants that allows them to express themselves socially and emotionally and form a social group. In the years since publication, Garrison (2009) refined the definition of social presence to "the ability of participants to identify with the community (e.g., course

of study), communicate purposefully in a trusting environment, and develop inter-personal relationships by way of projecting their individual personalities" (p. 352). Social presence is also temporal, in that it changes and evolves over time in a course (Akyol & Garrison, 2008). Table 4 shows the categories and indicators of social presence.

The combination of these three presences results in the selection of relevant content, the setting of an appropriate climate, and ongoing fruitful discourse about course content (Garrison et al., 1999). Students' perceptions of teaching presence have been shown to predict 51% of the variance in their perceptions of cognitive presence and 52% of the variance in their perceptions of social presence (Garrison et al., 2010), suggesting the relative importance of teaching presence in the Col framework and the interrelationship between the three presences. Moreover, higher perceived teaching presence has been shown to increase learners' sense of classroom community (Shea et al., 2006). Greater levels of instructor visibility in learning activities were correlated to students' greater sense of connectedness and learning. However, it has been suggested that previous research analyzing threaded discussion posts does not reflect the complex set of design and organizational tasks instructors must complete (Shea et al., 2014).

Much of the research into the Col framework has been done from the perspective of the learner. A systematic review of the Col survey included 102 studies, 93 of which involved learner participants, four involved instructor participants, and five involved both learner and instructor participants (Stenbom, 2018). A second review paper evaluating proposed new Col presences included 98 studies, 49 of which were studies with learner participants, while eight included instructor participants, and three included both learners and instructors (Kozan & Caskurlu, 2018). The emphasis on the learner participants in these studies suggests that the instructor perspective of the Col framework may be under-represented in the literature.

There appears to be a disparity between instructors' and students' conceptualization of the role of the instructor. Hung and Chou (2015) found that students in online and blended courses expected their instructors to undertake the follow-

Table 2. Teaching Presence in the Community of Inquiry Framework

Category	Indicators
Design & Organization	Setting curriculum; designing method; establishing time parameters; using medium effectively; establishing netiquette; making macro-level comments on course content
Facilitation	Identifying areas of agreement; seeking consensus & understanding; encouraging, acknowledging, or reinforcing student contributions; setting climate for learning; drawing in participants; assessing efficacy of process
Direct Instruction	Presenting content/questions; focusing the discussion; summarizing discussion; confirming understanding through assessment and feedback; diagnosing misconceptions, injecting knowledge; responding to technical concerns

Note: Adapted from Garrison and Anderson (2003).

Table 3. Cognitive Presence in the Community of Inquiry Framework

Category	Indicators
Triggering	Evocative problem triggering interest; recognizing problem; creates puzzlement; generates student interest
Exploration	Inquiry; identifies divergence; exchanging information; suggesting, brainstorming; making intuitive leaps
Integration	Convergence; synthesis; solutions
Resolution	Apply; test; defend

Note: Adapted from Garrison and Anderson (2003)

Table 4. Social Presence in the Community of Inquiry Framework

Category	Indicators
Affective Expression	Expression of emotions; use of humour; self-disclosure
Open Communication	Continuing a thread; quoting from other's message; referring explicitly to other's message; asking questions; complementing or expressing appreciation; expressing agreement
Group Cohesion	Referring to participants by name; developing trust; uses inclusive pronouns (we, us); uses salutations (e.g., hi all)

Note: Adapted from Garrison and Anderson (2003).

ing roles: course designer and organizer, discussion facilitator, social supporter, technology facilitator, and assessment designer. Students perceived the roles of course designer/organizer to be most important, followed by discussion facilitator and technology facilitator. In contrast, a Taiwanese study of instructors' perceptions of their online teaching role demonstrated that content expertise was believed to be most important by instructors, followed by instructional design (Chang et al., 2014). Wang, Stein, and Shaw (2021) found that students and instructors evaluated teaching presence differently, and rated the importance of teaching presence categories differently. Students were also significantly more likely than instructors to believe that online courses require self-direction and self-teaching (Otter et al., 2013). From a socio-psychological standpoint, the same study indicated that students also believed that their instructors and peers underestimated the disconnection that the individual student experienced in online learning. Conversely, instructors were more likely than students to believe that faculty members are important to the success of an online course. This apparent divergence between instructors' understanding of the role of online teacher and students' expectations of their instructors suggests the need to learn more about the instructor viewpoint, given the relatively sparse research on the instructor perspective.

PROPOSED NEW CATEGORIES AND PRESENCES IN THE COI FRAMEWORK

Since the publication of Garrison, Anderson, and Archer's (1999) paper developing the Col framework, scholars have created a Col measurement tool (Arbaugh et al., 2008; Swan et al., 2008), validated the framework using quantitative methods (Richardson & Swan, 2003). Some researchers proposed changes or additions to the three existing Col presences. For example, in the development of a new teaching presence measurement tool, Wang et al. (2021) proposed the addition of assessment and technological support categories to teaching presence.

Several studies identified gaps in the Col framework (Kozan & Caskurlu, 2018), and recommended new presences to be incorporated into the Col. Initially, Arbaugh (2007) identified *course design and organization* as a new presence separate from teaching presence; however, later research incorporated design and organization into teaching presence (Díaz et al., 2010; Garrison et al., 2010; Swan et al., 2008). Next Coll et al. (2009). Additionally, Richardson et al. (2015, 2016) proposed *instructor presence*, which articulates the observable, immediate functions of the instructor: advocating, facilitating, sense making, organizing, and maintaining. The authors suggested that instructor presence sits between teaching and social presence. Instructor presence is "deeply rooted in activities associated with teaching presence" (Richardson et al., 2016, p. 88). *Emotional presence* involves the outward affective expression as related to the course content, members of the learning community, and the technology used to support learning (Cleveland-Innes & Campbell, 2012). Finally, *learning* (Shea et al., 2010, 2012, 2013; Shea & Bidjerano, 2010, 2012), *learner* (Honig & Salmon, 2021), or *autonomy* (Lam, 2015) presence all attempt to capture the role of the learner by reflecting the agency and metacognitive competency of students as they learn.

The original Col model incorporated the expression of emotion into social presence (Garrison et al., 1999); however, some researchers have proposed treating *emotional presence* as a separate presence (Cleveland-Innes & Campbell, 2012; Garrison et

al., 2010). In the 2012 study, the authors propose six components of emotional presence. Four of the six components – expressing emotion with other students, instructor acknowledgement and demonstration of emotion, and the acceptability expressing emotion – clustered together as a single emotional presence component in the Col framework.

Learner or learning presence has been proposed in several different forms. Learning presence as conceived by Shea et al. (2012, 2013; 2010, 2012) was defined as student self-efficacy, self-regulation, including self-knowledge, goal setting, active management of the learning process, and the use of appropriate learning strategies. Garrison and Akyol (2013) argued that learner metacognition is implicit in the original model and that co-regulation or mutual support between learners is also a factor of learning presence. Shea et al. (2014) responded that the existing Col model conflates the roles of learner and teacher which should be separated.

learners participate in higher education for a variety of reasons, one of which is to accumulate credits toward valuable college credentials. To be successful in these pursuits, learners must participate in online environments in ways that vary definitively from those of instructors. (Shea et al., 2014, p. 10)

Lam (2015) identified a similar concept, *autonomy presence*, in which students' self-directed learning occurs without direction or facilitation of instructor. This presence emerges from intrinsic motivation or interest in the subject matter and not from extrinsic concerns.

Alternatively, Honig and Salmon (2021) defined *learner presence* as "an emergent construct involving thoughts and actions initiated by students in response to a particular learning environment" (p. 100). Their study used students' descriptions of their online learning experience to identify three factors of learner presence: learner intentions, learner metacognition, and peer monitoring. They argued that learner intentions frame and shape the learner's metacognition, peer monitoring activities, and outcomes. Learner presence supported and was supported by teaching presence, social presence, and cognitive presence. In this conceptualization, learner presence represented the agency and point of view of the individual learner at the centre of teaching, social, and cognitive presences.

PHASES OF TEACHING

Education scholars have long advocated for a three-phase conceptualization of teaching activities: pre-active, interactive, and post-active (Laut, 2000; Yinger, 1979). The pre-active phase involves setting learning outcomes and selecting content; the interactive phase entails the interaction of teachers and students in the learning process; and the post-active phase involves instructor reflection on their teaching experiences (Laut, 2000). Yinger (1979) characterized the pre-active phase as "empty classroom" time (p. 163), during which teachers plan instructional activities. These empty classroom activities are not visible to learners during the interactive phase of teaching; yet these activities are essential work undertaken by instructors to ensure the effectiveness of the classroom experience. The pre- and post-active phases of teaching are largely absent from the literature because Col research generally focuses on the learner perspective.

The Col framework does include setting curriculum and designing method as indicators of course design and organization; however, it has been criticized for focusing too much on the interactive phase of teaching presence and failing to acknowledge the complex and myriad instructor administrative and organizational tasks that occur outside of the interactive teaching phase (Shea et al., 2010). In addition to the interactive phase of teaching, we submit that the Col plays a role in the pre-active and post-active phases. However, Garrison and Anderson's (2003) indicators of the three presences focus primarily on the interactive teaching phase, as does the Col survey (Arbaugh et al., 2008). This suggests that there is an opportunity to consider instructors' conceptualization of their roles during the pre-active and post-active phases of teaching.

RESEARCH OBJECTIVES AND RESEARCH QUESTIONS

Our review of the literature suggested the following research objective: to explore instructors' conceptualization of the role of online instructor. We seek to answer three questions:

1. How do instructors conceptualize the role of online instructors?
2. How, if at all, do the pre-active, interactive, and post-active phases of teaching influence instructors' conceptualization of their roles?
3. How does this conceptualization fit with or diverge from the Community of Inquiry model?

METHODS

We conducted a case study of Brescia University College (Brescia) an institution which has a long history of valuing teaching and providing extensive support to faculty members who wish to develop their teaching competency. We believe that a case study is appropriate in this situation because institutional culture may influence instructors' beliefs about effective teaching (Shreaves et al., 2020). As such, although our findings may be helpful to other institutions of higher education as they transition to online learning, they may not be widely generalizable to all institutions of higher education. This study was approved by Brescia's Research Ethics Board and funded by a small internal research grant.

Study Context

Given the distinctiveness of the site of our case study, we provide a description of the study context. Brescia is a women's university college affiliated with a large research-intensive university (the constituent university) in Canada. Brescia was founded in 1919 by a teaching order of women religious, and, although the Sisters no longer participate in the day-to-day operation of Brescia, it remains Catholic.

Brescia is publicly funded, and as such, students of all religious, national, and ethnic backgrounds attend the school. Male students from the constituent university may take courses at Brescia toward their degree but may not graduate with a degree from Brescia. During the 2020/21 academic year, Brescia reported enrollments of 1253 undergraduate and 31 graduate students. The average undergraduate class size was 33 students (M. Molnar, Acting Registrar, Personal communication, May 17, 2021). In 2020/21, 87% of Brescia's students were full-time, taking

3.5 courses or more per semester; full-time students took an average of 4.6 courses per term and part-time students took an average of 1.8 courses per term.

At the time of the study, Brescia was primarily a liberal arts college comprising four academic schools: the School of Foods and Nutrition, the School of Behavioural and Social Sciences, the School of Arts and Humanities, and the School of Leadership and Social Change. Brescia employed 109 instructors: 65% of whom were contract and 35% were full-time faculty; 69% of faculty identified as female, and 31% identified as male. (M. Jean, Brescia Faculty Association, personal communication, June 10, 2021).

In support of these instructors, Brescia delivered multiple teaching and learning training and development activities. It implemented course level learning outcomes in 2009 and institutional learning outcomes in 2014. *The Brescia Competencies* reflected the outcomes of a university education and the values of Brescia's Ursuline heritage: communication, critical thinking, inquiry and analysis, complex problem solving, self-awareness and development, social engagement, and valuing (*Competency Based Learning*, n.d.) The institution supported communities of practice in teaching and in the Scholarship of Teaching and Learning, as well as regular teaching and learning workshops on a variety of topics including student mental health, inclusion and diversity, and feminist pedagogy. The Advanced Learning and Teaching Centre (ALT Centre) was established in 2015 and is staffed by a faculty director and an associate director.

Prior to 2019/20 academic year, Brescia offered only in-person learning. During the 2019/20 academic year, the institution pivoted to online learning for the last three weeks of the winter semester and for final exams. An e-learning instructional designer was hired to support faculty transitioning to online learning. In 2020/21, a blend of in-person, hybrid, and online courses were offered in the fall semester, although by late October, virtually all courses had pivoted to online learning. Administration decided that all online courses would be asynchronous to avoid putting too much pressure on institutional technology infrastructure, and that asynchronous classes would have no class times scheduled, although exceptions were made enabling a few instructors to offer synchronous courses.

In June and July 2020, the ALT Centre staff offered a four-week course for instructors called "Learning to Teach Online", twice synchronously and once in a self-paced, asynchronous format. Sixty-nine instructors enrolled and 29 completed the program, equally split between full-time and contract faculty members (H. Campbell, Associate Director ALT Centre, personal communication, August 4, 2021). The Centre also provided a two-hour crash course and additional one-on-one consultations.

During this course, instructors were advised to use backward design, choosing content, learning activities, and assessments that were aligned with the course learning outcomes. Instructors were also encouraged to chunk lectures into five- to six-minute videos, to use multiple media, to reduce the amount of content delivered each week, and to ensure that the instructor was visible to the students. Instructors were introduced to the Col framework and encouraged to foster connections between students and their peers and between students and their instructors. Moreover, weekly forum postings were promoted as one method to engage students with course content in an asynchronous learning environment. Instructors learned to set up a student-friendly course site, record and edit video lectures, and to use additional

learning tools such as VoiceThread, Zoom, ScreenCastOMatic, and LucidChart.

As full-time faculty members, both authors completed the ALT Centre online training course, and participate in the Scholarship of Teaching and Learning and in the teaching communities of practice. During the fall semester of the 2020/21 academic year, we both taught a full course load, one of us taught exclusively online, while the other taught a mix of online and hybrid courses. Neither of us had experience teaching online prior to March 2020; one of us had experience as an online learner, having previously taken four doctoral-level courses online.

Participation Criteria

As the purpose of the study was to explore the experiences of instructors teaching online, we recruited participants who taught at least one 0.5 credit course either fully online or in a hybrid of online and in person in the 2020 Fall Semester (September to December) at the college. To be eligible for the study, at least 60% of the teaching in the course must have occurred in the online context (either synchronous or asynchronous instruction).

Data Collection

Our data were gathered from August 2020 to January 2021, prior to the availability of COVID-19 protective vaccines. We decided that collecting data through an online survey would ensure the safety of our participants and require less time than an interview, thereby potentially increasing the size of our sample.

Data were collected using Qualtrics, an online survey software, in three phases: the pre-active or planning phase, the interactive or instructional phase, and the post-active or reflexive phase (Laut, 2000). In August 2020, we collected pre-active data to assess instructors' approach to planning a course and their conception of their teaching role using open-ended and Likert-type scaled questions. In early November 2020, we collected instructors' experiences at the mid-point of the 12-week term using open-ended questions. Finally, in January 2021, we collected instructors' reflections on their experiences after the completion of the term using open-ended and scaled questions. Each of these stages emphasizes different teaching skills, which may result in emphasis on different aspect of the Col model. Appendix A contains the open-ended questions from each wave of the survey. We chose not to specifically reference the Col or the three categories that comprise the Col in survey questions to avoid biasing participants' answers toward the framework.

Data Analysis

We chose to use phrases within each question response as our coding unit because participants often strung several phrases together separated by semi-colons or commas in their responses. We used both inductive and deductive coding. The codebook was initially developed using a priori codes (Saldaña, 2016) of the existing Col theoretical presences and categories using an existing survey instrument (Arbaugh et al., 2008). We created emergent, inductive codes (Miles et al., 2020) that represented instructors' conceptions of their role that did not fit the Col framework.

We conducted three rounds of coding. In the first round, the two principal investigators and a research assistant individually coded the open-ended survey responses. In the second round of coding, we conducted negotiated coding, where we discussed the coding to arrive at a consensus which aligned codes (Creswell,

2014; Garrison et al., 2006). As the second round of coding commenced, we quickly recognized that the Col indicators drawn from the Arbaugh et al. (2008) survey instrument were phrased from the student perspective, which made coding of instructors' comments challenging. Moreover, the codes were designed with the intent to evaluate asynchronous forum or threaded postings during the interactive phase of teaching. The established Col survey instrument (Arbaugh et al., 2008) did not adequately represent instructors' conceptualization of their roles during the pre- and post-active stages of teaching. We then adopted indicators suggested by Garrison and Anderson (2003). Over time, we added concrete examples to the indicators of the various categories to reflect the instructor's viewpoint. See Appendix B for the final codebook.

In the third round of coding, the two principal investigators reviewed the existing coding and made corrections to reflect the final codebook and revised coding where necessary. We then conducted a final reliability check by reviewing the data assigned to each category-level code to ensure that it fit the indicators of that code. At the end of the reliability check, we agreed on 100% of the coded items.

Participants

The following tables provide a profile of our participants to provide context for the reader. A total of 32 unique individuals participated in the study, as illustrated in Table 5:

Table 5. Participants by Wave

	<i>n</i>	Did not Participate in Previous Wave	Participated in Previous Wave
Wave 1 Pre-Active	24	24	n/a
Wave 2 Interactive	16	3	13
Wave 3 Post-Active	16	5	11

In total, Brescia employed 109 faculty members, and 29.4% (32) participated in the study, Table 6, below describes participants' discipline, employment status, gender, course load, and experience teaching online.

Both full-time (40.6%) and contract faculty members (59.4%) participated in the study. A typical teaching load for full-time faculty would be two or three courses per term (Brescia University College & Brescia Faculty Association, 2021). Seventy-two percent of participants in this study reported being scheduled to teach one or two courses online in the fall semester of 2020. More than two thirds of instructors had no online teaching experience prior to the shift to online teaching in March 2020 as a public health measure to reduce the transmission of COVID.

To provide a context for this study, in August 2020 we asked faculty to reflect on the most difficult and most rewarding aspects of teaching online during the emergency shift in March 2020. Our data reveal a perceived bias against teaching online even before instructors began the 2020-21 academic year (see Table 7).

Instructors' responses showed that the experience was less than positive for most respondents with 21 difficulties and 8 rewards mentioned. According to Sheila, "There were no rewarding aspects of that period. It was very stressful. It took a lot of time, and I am not sure any students even looked at the information provided." Raina identified "boredom" as the most difficult issue, while three respondents pointed to lack of connection and closure. The positive aspects were fewer; for three participants,

Table 6. Descriptive Characteristics of Participants

	Participants (N=32)	
	N	%
<i>School</i>		
Art and Humanities	12	37.5
Foods and Nutrition	3	9.4
Behavioural and Social Sciences	17	53.1
Leadership and Social Change	0	0.0
<i>Employment Status</i>		
Full-time	13	40.6
Contract	19	59.4
<i>Gender</i>		
Female	23	71.9
Male	9	28.1
Other	0	0.0
<i># Online Courses Fall 2020</i>		
1 – 2	23	71.9
3 – 5	8	25.0
6 or more	1	3.1

Table 7. Responses to Difficulties and Rewards of Teaching online in March 2020 (n=17)

Difficulties	Answers	Rewards	Answers
Disconnection / Disengagement	7	Completing the course	3
Assessment	6	Connection	2
Stress	4	Protection from COVID	2
Time / Effort	2	Design & Organization	1
Design & Organization	1	Total Rewards	8
Student Response	1	None (explicitly stated)	4
Total	21	Total	12

the most rewarding element was “getting the students across the finish line”, “completing the semester” or “that so many of [their] students finished the class with good standing.” Four participants explicitly noted that there were no rewarding aspects of the emergency shift. Thus, some instructors may have held negative beliefs about online teaching and learning before they planned for the Fall 2020 semester.

FINDINGS

Throughout the findings section we provide frequency tables showing the Col presences we identified in our analysis which provide an overview of our qualitative interpretation of the data (Gerbic & Stacey, 2005) and an “aide to understanding patterns” in our data (Garrison et al., 2006, p. 4). When referring to participants, we use web-generated first names to protect participants’ identities as approved by Brescia’s Research Ethics Board.

It’s All About Teaching

Teaching presence was by far the most frequently mentioned Col presence, with design and organization being the most frequently mentioned category. During the pre-active phase of instruction, respondents were keenly aware of their role in “instructional orchestration” (Shea et al., 2014, p. 10), or the instructor’s responsibility in design and organization. The pre-active period involves

the setting curriculum and assessments, design of material to meet learning outcomes, and scaffolding of student workload.

Table 8. Teaching Presence Category Frequency

Category	Pre-Active n = 24 # Mentions Questions 1, 2	Interactive n = 16 # Mentions Questions 1, 2, 3	Post-Active n = 16 # Mentions Questions 1, 2	Total Mentions
Design & Organization	34	23	31	88
Facilitation	22	16	4	42
Direct Instruction	16	14	6	36

Respondents underlined several difficulties in designing and organizing their courses for the online environment, including concerns surrounding setting and administering “alternative formers [forms] for testing”, methods of delivering information, and engaging with students remotely. Two instructors specifically referred to the design challenge of organizing course material in “chunks that can be managed in about an hour at a time” and the need “to figure out how the heck to deliver content in ‘chunks’ of no more than 20 minutes.” By organizing material effectively, instructors could scaffold their courses to prepare the learner for more self-directed work. While most respondents spoke to their concerns in teaching online, as Simon pragmatically noted, “I am a resource. My task is to translate my past experience as a professional working directly in the field, carrying out the activities I am trying to teach. In addition to technical content, I want to teach both critical thinking about the issues and self-exploration.”

In the interactive phase, instructors’ responses were generally positive. We noted four responses of classes “working well” or “running well”. Alexis referenced “being able to try new things due to online platform.” In reflecting on this teaching phase, participants found that their pre-active planning worked out: the approach to teaching through “consumable bites” in video-format allowed instructors to enrich their content. Kamila noted that “by lecturing over my notes and/or a copy of the text [...] ... students are actually getting something a bit superior to what I sometimes do in a live class.” However, some responses were more mitigated as instructors mentioned the time commitment required to adapt courses for the online environment. Vita wrote that the “course seems to be running well, but it is so much work!”

The responses collected during the post-active phase echoed Vita’s concerns regarding workload, or the time required to effectively design and organize an online course. Indeed, Sarah noted,

It is DIFFERENT from face-to-face learning and teaching! I have learned not to try to take a course I designed for traditional face-to-face learning and just dump it into a learning management system and call it an online course. An online course needs to be developed from the ground up. This doesn’t mean that I can’t reuse content or assessments or grading rubrics that I’ve used for my face-to-face class but it does mean that I need to think about what makes pedagogical sense for the online mode of delivery first.

Ultimately, instructors recognized their successes in designing and organizing online courses but were also cognizant of the increased demands placed on their time. Students were more likely to reach out for help via email or forums; casual exchanges that normally took place after class were now limited to formal

communication, the management of which was time-consuming. To better handle online teaching, Casper wrote, "I think it is a good idea to pare back material compared to a[n] in-person class." Oliver underlined the inherent risk of asynchronous, online teaching is that he

slip[ped] into the over-creation of content, so that one ends up posting more content for students to wade through than they would have to deal with in an in-person class. I also found myself more inclined to post links to optional resources (e.g., multiple film adaptations of a literary work we were studying).

Without face-to-face contact, instructors found it difficult to gauge how long it took students to integrate knowledge and move through the modules, which led them to creating and posting too much material. Gabriela concluded, "I learned that the methods instructors were encouraged to use to keep students engaged, while well-meaning, ended up overwhelming students." We found that, upon reflection, instructors were sensitive to over-creating material and assessments, which burdened both instructor and student.

Although respondents mentioned design and organization twice as frequently as the other teaching presence categories, facilitation and direct instruction were also extensively represented in our data. Through the three phases of our study, instructors repeatedly highlighted their teaching role as "guide", "coach", and "facilitator." To facilitate courses effectively, respondents sought to build "connection[s] and community" by being "a link between the students and the material." Despite their efforts, in the interactive and post-active phases, some instructors noted the difficulty "facilitat[ing] meaningful online discussions" and "gauging student engagement/participation." Wahid noted that

A second great challenge is that as an instructor I feel out of synch with my students. For example, I reread a novel and record lectures, etc. on it ahead of time, but then students do not reach that point until a number of weeks later. In discussion I am prone to forget that they've not reached that point yet.

However, Alexis observed positively that facilitating an online course freed her from "managing the distracted behaviours that happen in class (social media use, socializing, talking to neighbours)."

In the pre-active phase of our survey, most instructors did not foresee major differences between in-person and online direct instruction. As Vita summarized, "Similar to in person teaching, in online courses I work on building connections for my students." The pre-active data revealed that faculty defined the teacher's role as "primarily content delivery", a "disseminator of information", a "resource" whose "task it to translate [their] past experience as a professional working directly in the field", and as a "translat[or]" of "hard to understand concepts". In the interactive phase, instructors evoked their difficulties in diagnosing misconceptions and confirming students' understanding of course material due to a lack of feedback. As Wahid wrote, "I find that students are just not asking questions as they normally would in class. Missing is that non-verbal feedback from students when I see their bewildered faces and can ask, 'okay, what are you not understanding?'" Conversely, Catherine was receiving feedback from her students albeit asynchronously – "I like the fact that

there is a significant number of students who will ask for help via email if they do not understand things."

Finally, in the post-active phase, our data revealed only four mentions of direct instruction. The four coded responses were unanimous: "everything takes a lot more time to explain and complete." This increased demand on time required instructors to focus on engagement and independent learning activities. As Oliver noted, "I think scaling back on the amount of content I post would be beneficial." Similarly, Rosemarie stated that she would "refresh my lecture approach (fewer slides, more engagement) and incorporate more independent activities." For Wahid, focussing on the forums would allow him "to be explicit about what will be covered [in Forum discussions] and what [will be] covered in lecture clips."

Hung and Chou (2015) found that students value the role of course designer as most important in the online space; ultimately, our data suggest the same. Our respondents were particularly aware of the importance of curriculum design when mounting a successful online course. Material cannot be created and curated in the same manner as for the in-person classroom. Intentionality matters in online teaching: Brescia's instructors underlined the need to condense material for accessibility and ease of integration, to position themselves as guides or resources who build connections, and to manage the time constraints online learning places on both the teacher and the student.

There's More to It: The Complexity of Online Teaching

In addition to the teaching presence indicators developed by Garrison and Anderson (2003), we noticed several emergent indicators. Table 9 summarizes the frequency of mentions for each emergent code. As Shea et al. (2014) have suggested, we found that the role of instructor is far more complex than the teaching presence categories and indicators would suggest.

Table 9. Teaching Presence Emerging Codes Frequency

Indicator	Pre-Active n = 24 # Mentions	Interactive n = 16 # Mentions	Post-Active n = 16 # Mentions	Total Mentions
Content Creation	10	11	7	28
Communications/ Trouble Shooting	3	9	7	19
Administration	3	7	8	18
Instructor Visibility	3	2	4	9
Academic Integrity	4	3	0	7

Instructors placed the most emphasis on content creation, especially during the pre-active and interactive phases of teaching. This emphasis may be related to instructors' conceptualization of themselves as subject-matter experts who transmit their knowledge to students. For example, in the pre-active phase, Casper described their role as "deliver[ing] information, assign[ing] marks and troubleshoot[ing] problems" and Oliver said, "I still see the instructor's role as primarily content delivery but online requires, I think, more of a coordinating role, as well, as students are basically required by the format to engage more actively." During the interactive phase of teaching, instructors indicated that recording lectures was highly time consuming and complex; for example, "preparing video lectures – they take a long time getting them right, and youtube subtitles are a lot of effort" and "It takes A LOT of

extra time to create content online. I sometimes struggle with creativity to keep students engaged”.

In general, instructors in the interactive phase focused on how they could improve their online teaching effectiveness, including refreshing their approach to lectures, making a more engaging or shorter instructional videos. Oliver also reported, “I am probably adding more new and interesting (to me) information to classes than I have done in a long time”. Wahid stated that he “like[d] putting the material together”.

Administration and communications/troubleshooting were frequently mentioned in the interactive and post-active phases of teaching. Administration referred to the online learning infrastructure including the learning management system and to administrative policies related to online learning. As noted earlier, administration determined that online classes would be scheduled asynchronously, to accommodate international students. Most instructors, however, wished for synchronous classes that enabled more interaction with students. Vita noted,

I really like zoom office hours. It is great to see students and help them with their questions. Although there is a noticeable decrease in the number of students that come to my office hours. As well, there is much less of a relationship with students when they do come to office hours compared to previous years.

Gabriela remarked, “I wish we had a synchronous time slot. I would not use it for a lecture, but I’d have it as a question period. The students are starved for contact”. Overall, it seems that instructors missed the classroom experience offered at Brescia. Alternatively, Jacob noted during the post-active phase, “To my surprise, I think I would stay with the asynchro approach and resist the synchro (I have both types)”.

Communications/troubleshooting involved the clarification of learning activities, responding to student emails, and reminding students of due dates. During the interactive phase of teaching, instructors remarked on the increase in electronic communication from students, “endless emails and zoom requests no matter the day of the week or time of day” and the need to set “personal boundaries that enable me to ignore student emails on weekends and in the evenings when I should be taking a break from work”. In the post-active phase, Jacob also indicated that communications and troubleshooting was time-consuming: “The administration of a course requires a great deal of time – things that were simply conveyed to students when doing in-person now require a great deal of time writing emails and posting announcements”. Oliver noted that the inability of learners to self-regulate required the instructor to communicate more frequently:

Students still need a lot of handholding, reminding, and reassurance; I frequently get emails asking about very basic stuff that has been clearly and repeatedly covered; despite making significantly greater efforts this term to really spell out where to find things, some students still seem to struggle with the basis [basics] ... One must conclude that ... many students simply do not read [announcements or emails], or do not read them carefully.

We take up the question of instructors’ perceptions of students’ need for support and lack of self-regulation in the section entitled the Missing Learner.

Given the emphasis placed on instructor visibility in Brescia’s teaching online course, it is unsurprising that during the pre-active

phase, instructors focussed on ensuring that they were visible to learners. Gabriela put it, “I need to be present on the website - in videos, text, and interacting in the discussion boards, as much as possible”. However, she questioned “How to find the time to be as present a possible on the site without sacrificing other aspects of my job?” In the post-active phase, Casper noted that “I would stop including participation activities requiring comments from myself;” a comment consistent with previously noted concerns about the increased teaching workload related to online education.

Finally, several instructors noted concerns about academic integrity during the pre-active and interactive phases of teaching. During the pre-active phase, Oliver noted, “I am looking for ways to avoid the standard test/exam, as I don’t think there is a reliable way to run those online” while Kamila stated that “knowing that my exams/notes are probably uploaded now to the cheating sites” was also a concern. During the interactive phase, Catherine “wonder[ed] if all the exercises submitted are actually their [students’] work”. The comments in this section suggest that although teaching presence does include design and organization, it appears to gloss over several elements of teaching that instructors appear to value highly, including content creation.

Cognitive Presence and Cognitive Load

Cognitive presence involves the collaborative construction of meaning through individual reflection and collaborative discussion and analysis of course concepts. The Col framework articulates four stages: Triggering event, exploration, integration, and resolution. However, we found two emerging codes in our data: cognitive load and connecting learners with the material.

Cognitive Presence

The existing categories of cognitive presence were rarely mentioned by instructors when compared to the frequent mentions of teaching presence categories (see Table 10 for details). Instructors’ understanding and engagement in each stage of cognitive presence was under-developed. For example, references to resolution were focused on the application of skills; the comment about integration noted that students were unable to solve problems because they were too focused on getting quizzes “perfect”.

Table 10. Cognitive Presence Category Frequency

	Pre-active n = 24 # Mentions Questions 1, 2	Interactive n = 16 # Mentions Questions 1, 2, 3	Post-Active n = 16 # Mentions Questions 1, 2
<i>Existing Categories</i>			
Triggering Event	0	0	0
Exploration	1	0	0
Integration	0	1	0
Resolution	3	0	0
<i>Emerging Codes</i>			
Cognitive Load	6	4	4
Connecting to Material	4	2	2

Instructors placed a greater emphasis on ensuring that learners experienced an appropriate cognitive load, likely reflecting the guidance they received from the previously mentioned Learning to Teaching Online course. In the pre-active phase, Gabriela asked, “How much content is too much content?” and Liz noted that she

considered “the cognitive demands of learning online -- and the fact that students will be dealing with a ‘new’ learning experience (in numerous courses)”. During the interactive and post-active phases, instructors reflected on the challenges students had with the amount of independent learning required and the need to reduce students’ cognitive load and to help them connect with concepts fundamental to the discipline.

Although Garrison and Anderson (2003) categorized connection as an aspect of social presence, which we discuss in the following section, we did observe some participants also using the term connection with respect to course content. During the pre-active phase, Vita noted her desire to connect students not only with their peers and the instructor, but with the course material, “Similar to in person teaching, in online courses I work on building connections for my students - connecting them *with the material* [emphasis added], connecting them with each other, making them feel connected to me.” In the post-active phase, Oliver stated that the best ways to engage students with content: “I have found that requiring students to earn a significant chunk of their grade by participating in the Forums leads to robust and useful engagement, often in fact proving a viable substitute for the posting of prof-generated content.” However, instructors placed a greater emphasis on social connection between instructor and learner and between learners, as we will see in the following analysis.

Social Presence and Connection

Garrison (2009) revisited the conceptualization of social presence as “the original definition was largely a socio-emotional construct and did not reflect the complexity of this concept in establishing a purposeful educational community.” (p. 52) We found that the updated categories were still largely absent from our data (see Table 11).

Table 11. Social Presence Category Frequency

Category	Pre-active n = 24 # Mentions Questions 1, 2	Interactive n = 16 # Mentions Questions 1, 2, 3	Wave 3 n = 16 # Mentions Questions 1, 2
Affective Expression	0	1	0
Group Cohesion	1	1	0
Open Communication	0	6	0

However, we noted a significant emergent theme that we submit as a new indicator in social presence: connection. The overlap between teaching presence and social presence is clear. Indeed, Shea et al. (2006) argue that connectedness is a consequence of teaching presence: “goal-directed collaborative interaction known to support a sense of connectedness and active learning can be effectively orchestrated by the three elements of teaching presence.” (p. 177) In our data, instructors emphasized their role in creating an online community and in facilitating open communication.

In the pre-active phase, instructors used nouns such as “glue” and “link” to describe their role. As previously noted, Vita highlights the parallels between her past and current roles: “Similar to in person teaching, in online courses I work on building connections with my students – connecting them with the material, connecting them with each other, making them feel connected to me.” As Vita continued, the role of link or glue might require

a more pastoral role as they are “doing less ‘teaching’ and more supporting.” Instructors cited the need to generate interest and engagement 11 times in response to the questions “How would you describe your role as an instructor when you teach online?” and “What aspects of teaching and learning are you considering when you design your online course?”. We argue that student interest and engagement are fundamental elements to fostering social presence from the instructor’s perspective.

During the interactive phase, instructors reported positive social interactions with students. To reinforce their role as the link or glue in creating a sense of group or community, instructors employed various strategies including forums for reflection, for discussion, and for fun; one-on-one appointments and synchronous sessions; and Zoom office hours. By engaging and interacting with student through these modalities, instructors reported feeling connected to their students; Daria summed up the general experience of respondents during the interactive phrase, noting, “The engagement that I have had with students has been excellent and very positive.”

Finally, during the post-active phase, our data show that instructors continued to value connection as an important element of social presence. While reflecting on their experience in Fall term, instructors stated that they would continue “creat[ing] opportunities for students to connect socially”, proposing “social connection activities”, and “having more engaging and interactive activities.” As a caveat, two instructors noted that in trying to generate engagement and connection, they created too much content and overwhelmed themselves and their students. Despite these few references to feeling overwhelmed, instructors placed consistent emphasis on the importance of social connectedness throughout the three phrases of our study.

Emotional Presence

Our data support separating emotional presence from social presence as proposed by Cleveland-Innes and Campbell (2012) and Garrison, et al. (2010). In the original Col framework, social presence included an affective expression indicator that encapsulated student emotions. Affective expression is a communal practice as “social presence is defined as the degree to which learners feel socially and emotionally connected with others in an online environment.” (Cleveland-Innes & Campbell, 2012, p. 272). However, the original Col and its subsequent revisions all insisted on the collaborative or collective emotional experience of learners, neglecting private, individual affective expression that must naturally occur in an online environment. As Jiang and Koo (2020) contend, “While the physical medium is missing in the virtual space, a stronger focus on emotional support and more efforts to build strong ties with learners become critically needed to compensate for the loss” (p. 104). Table 12 summarizes our results.

Table 12. Emotional Presence

Category	Pre-active n = 24 # Mentions Questions 1, 2	Interactive n = 16 # Mentions Questions 1, 2, 3	Wave 3 n = 16 # Mentions Questions 1, 2
Emotional Presence	4	2	2

In the pre-active phase of our study, participants recognized their role in providing emotional support to students due to the “difficult circumstances” the community was facing. Instructors repeatedly referred to their duty to “engage” students and to

“encourage them to interact with each other in a meaningful way.” They worried about the general feeling of disconnection that students and instructors might feel. Laila noted that teaching and learning online “lacks of [sic] interaction,” while Vita noted that they imagined that the most difficult element of teaching online would be “keeping students engaged” and “think[ing] of new ways to stem off their boredom.”

During the interactive phase, respondents with smaller classes reported feeling connected with their students. Simon noted that “student engagement is high”, while Wahid celebrated “a broader participation than is often the case in class.” However, Sarah reported feeling “somewhat disconnected from the students” and Gabriela noted that “students are starved for contact.” The pre-active concern about stemming off boredom proved to be a real challenge during course delivery, but not just for students. As Vita wrote, “It is also very hard to maintain my own motivation without the ‘give and take’ from students that normally happens in in-person classes.” She continued “there is much less of a relationship with students... compared to previous years.” Some instructors struggled to assess their students’ engagement, motivation, and understanding. Mid-way through the term, Vita remarked, “Online teaching seems to be such a guessing game of what students need/want.”

Ultimately, the feeling of disconnection dominated responses submitted during the post-active phase. Three respondents noted their intention to continue creating opportunities through which students could connect with each other and with their instructor as “connection with the students is vitally important.” For some instructors, teaching online was emotionally taxing. Tom commented that he had “difficulty gauging student engagement/participation”. For Alexis, this disconnection affected their sense of community and emotional well-being: “My teaching is negatively impacted online as my energy, enthusiasm, connection to students is significantly impaired by the online platform.” Without the communal experience of a synchronous online or in-person class, some instructors struggled to create meaningful socio-emotional relationships with their students, thus feeling “out of synch” or as if they were teaching “into a vacuum.”

The original Col framework overlooked the integral symbiotic socio-emotional relationship that must develop between students and instructors for online teaching and learning to be a positive experience. Our data highlight the importance of the instructor’s role in creating the energy and connectedness required for students to succeed in the virtual classroom. Likewise, they also reveal the necessity of learner presence in the online educational space.

The Missing Learner

As noted previously, the learner’s role is implied, but not specific in the Col framework. Yet, as some researchers argue, the learner has a distinctive role that cannot be performed by the instructor (Shea et al., 2006). Our data did support the concept of a distinctive learner presence. We defined this category as any comment that indicated that the student directed, controlled, or self-regulated with respect to learning, or where the instructor gave accountability for learning to the student. We also included explicit indicators where students were represented as being unable to self-regulate. Table 13 summarizes the frequency of mentions of self-directed learning.

Table 13. Self-Directed Learning

Category	Pre-active n = 24 # Mentions	Interactive n = 16 # Mentions Questions 1, 2, 3	Wave 3 n = 16 # Mentions Questions 1, 2
Self-Directed Learning	4	7	7

During the pre-active phase, some instructors anticipated the need to support students in becoming self-directed learners or setting objectives for students to become self-directed learners. For example, Raina noted that they wanted to “inspir[e] my students to become self-directed learners. Sheila noted, “I need to point the student to resources as much as possible, rather than reinvent the wheel.” Moreover, online learning was believed to require greater student self-direction, as Gabriela indicated that “online, much more of the learning is directed by the students themselves.”

During the interactive phase of teaching, instructors began to note concerns about student self-regulation: “Poorer performing students ‘blame’ [the] professor at the best of times and with online, they seem to take even less personal accountability.” They also noticed a decline in student engagement over the term, “I am noticing a drop in participation as the term progresses—fewer records of students accessing resources”. Oliver wrote that learners were unable to manage expectations, “it is dispiriting to see even basic student expectations not met (e.g., minimum of 2 non-substantive forums comments a week is hardly burdensome, yet many students don’t manage it)”. This inability required instructors to “keep track of their [students’] due dates, tasks etc. because online learning requires a different set of skills for them and they are [young] and not use[d] to taking such accountability.” In contrast, Catherine noted that “I like the fact that there [are] a significant number of students who will ask for help via email if they do not understand things, high achieving students are extremely engaged”. High achieving students may have better self-regulation skills, which can offset the demands of online learning on undergraduate students.

During the post-active phase, instructors reflected upon student self-regulation. Alexis noted that “students have the same challenges online that they do in the classroom - following directions, READING instructions, and attempting to problem solve first before firing off an email because it is easier than thinking it through first”. In contrast, Jacob believed “that there is a distinct advantage teaching online - I find student seem comfortable learning when they wish to learn and not to learn when classes dictate”.

DISCUSSION AND CONCLUSIONS

We began this study with three questions in mind:

1. How do instructors conceptualize the role of online instructor?
2. How, if at all, do the pre-active, interactive, and post-active phases of teaching influence instructors’ conceptualization of their roles?
3. How does this conceptualization fit with or diverge from the Community of Inquiry model?

In what follows, we discuss our findings and how they expand our understanding of online teaching and learning. Our data suggest that instructors appear to focus on course content and on teaching presence when planning, delivering, and reflecting on courses taught online. They also suggest that there may be far more to

teaching presence than the original CoI model identifies. Teaching presence received greater instructor attention than did either social presence or cognitive presence. Moreover, our data indicate that *empty classroom* time (Yinger, 1979) and additional considerations may be at play in the pre- and post-active phases as compared to the interactive phase of teaching.

How Do Instructors Conceptualize the Role of Online Instructor?

Instructors conceptualize their role as “all about teaching”. They discussed the process of designing, creating, and delivering course content, and evaluating students’ learning. They also placed emphasis on the creation of content for online learning, which is understated in the CoI. Many studies of CoI are conducted among master’s student populations in which students often have already developed an understanding of the culture, methods, assumptions, and foundational concepts of the discipline. It may be that to inculcate the culture, methods, assumptions, and foundational concepts in undergraduate students, instructors need to focus more on content delivery (e.g., lectures, notes, videos, etc.) than do instructors of graduate students. The instructors studied tended to view themselves as subject matter or disciplinary experts, and that their task was to pass on disciplinary knowledge and professional expertise.

Instructors also articulated the empty classroom activities that support the classroom experience, including answering emails, meeting with students out of class, setting up the learning management system, planning lessons, and completing administrative tasks. While not visible to students, these tasks take time and are essential to the smooth operation of a class. These activities are not recognized in the CoI, possibly because they occur outside of the class-based interaction between students and instructor.

How do the phases of teaching influence instructors’ conceptualization of their roles?

In general, we found that instructors have different perspectives of the role of instructor at different points in time: pre-active, interactive, and post-active. During the pre-active phase, instructors saw their role as primarily curriculum designer and content creator, and to a lesser extent, facilitating a sense of belonging and community. During the interactive phase, instructors were more focused on managing assessment, adjusting curriculum, and supporting students. Finally, in the post-active phase instructors were reflexive, considering positive and negative experiences and identifying their own learning about their teaching practice.

How does this conceptualization fit with or diverge from the Community of Inquiry model?

Our data supported the existence of teaching presence, as noted above, and social presence. Although instructors most frequently articulated various dimensions of teaching presence, many also noted social presence, emphasizing the importance of community or a sense of belonging in their classrooms. This emphasis on community may be related to Brescia’s focus on community, on its small size, and on its relatively small class sizes. Yet many instructors reported a profound sense of isolation from their students. This sense of isolation may have been made worse by teaching one’s entire course load online, and by periods of social distancing and lock-down that everyone experienced during this time.

We were surprised at the relatively infrequent mentions of cognitive presence by instructors. This relative absence of cognitive presence may be explained by three factors. First, our questions focused on design at the course level. It is possible that instructors address the elements of cognitive presence when doing lesson planning. Alternatively, instructors may implicitly think about cognitive presence in the context of their discipline, and so did not explicitly discuss cognitive presence. Finally, the CoI model was only recently introduced at Brescia during the transition to online teaching. It is possible that instructors have not yet incorporated the model into their course design.

Moreover, we also found support for *instructor and learner* presence. Instructors tended to frame their role as distinct from students’ role: instructors set the curriculum, deliver content, assess student performance, and provide feedback. They also identified a significant number of non-classroom activities not reflected in the CoI that instructors must undertake as part of their role. Instructors saw the student role as completing the learning tasks, participating in learning activities, connecting with their instructor and peers, studying, and completing assessments. While students may occasionally perform facilitation or direct instruction, instructors generally viewed teaching presence as the purview of instructors, not of students. This seems to support Shea et al.’s (2014) assertion that there are aspects of the learner’s role that cannot be performed by the instructor. We believe that the inverse is also true, that there are aspects of the instructor’s role that a learner cannot perform. We found that instructor presence was distinct from learner presence. Thus, it is logical that there may be a divergence between what students and instructors believe to be important in teaching and in learning as the student sees only the elements of teaching that happen in the classroom, while the instructor is keenly aware of the empty classroom time required to successfully stage a course.

We found less support for *emotional* presence, with relatively few mentions. While the CoI does stress the interaction between public and private worlds (Garrison et al., 1999), Cleveland-Innes and Campbell (2012) defined emotional presence as the *outward* or public expression of emotion. It is possible that much of the emotion experienced by members of each learning community remained private. Instructors did mention one aspect of emotional presence, the stress caused by the cognitive load experienced by both faculty members and students.

Cognitive Load Was Greater Than Instructors Expected

Despite the relative absence of cognitive presence, we noticed several comments regarding the cognitive load that students and instructors experienced when their entire course load shifted online. Full-time students typically take four or five courses per semester, and it is unusual that students would be taking their entire course load online. Threaded posts for five courses at a time seemed to overwhelm students, prompting the reflection from Gabriela: “I think both instructors and students were not prepared for the reality of multiple online courses simultaneously.” Instructors also commonly commented on an increased workload related to teaching online.

Brescia’s experience may be different than other institutions offering online education. For comparison, 7.4% Athabasca University’s undergraduate student population are enrolled full-time (personal communication, C.Tse, April 13, 2022); in contrast, 86%

of Brescia's undergraduate population were enrolled full-time (personal communication, M. Molnar, May 24, 2022). Athabasca University was Canada's first online university; now, it primarily offers asynchronous, self-paced distance study courses to over 35,000 students. The average Athabasca undergraduate student takes 2.2 courses simultaneously; in comparison, the average Brescia undergraduate was taking 4.2 courses per term (full-time and part-time). Brescia's courses were not self-paced, so students had to juggle multiple deadlines for postings and other learning activities, which increased students' need for guidance and support. As the COVID era was distinctive in so many ways, it is possible that instructors' experience of their own and students' cognitive load was an extreme. As we return to a more normal learning experience, with most classes in person and only one or two online, concerns about cognitive load may become less pronounced.

STRENGTHS, LIMITATIONS, AND FUTURE RESEARCH

The strengths of this study were the participation of different types of instructors (contract/adjunct, tenure-stream, and tenured) and the variety of disciplines represented by the respondents. By surveying instructors at three points in time, we were able to capture a complete picture of the experiences faced by faculty during an unprecedented time in their careers. The temporal phases of teaching revealed the evolution of teaching and instructor presences during the preparation, delivery, and evaluation of a course, leading to a more robust and dynamic framework.

Trustworthiness, or reliability, was strengthened through multiple rounds of coding tracked using NVivo. Our analysis was collaborative and dynamic, as we revised and refined our inductive codes with each round. These constant checks of meaning and interpretation led us to stable definitions of all our indicators and to complete agreement on the final coded data.

The limitations of this study are related to design. When designing our study, we chose to concentrate our efforts on instructor perceptions of teaching online. This decision required us to refine the Col framework's language to better reflect the instructor's perspective instead of surveying students as is generally done. Although our aim was to capture instructor roles and experiences, in future research, we would like to explore the student's experience in parallel to the instructor's, especially during the pre-active, interactive, and post-active phases of learning. Previous studies that used transcript analysis of discussion forum postings by students and instructor captured the social and cognitive interactions that occurred. Our present study did not capture the interactions between students, students and their instructors, and students and the material that might demonstrate social and cognitive interactions.

When designing our survey, we chose not to prompt respondents at the class- or lesson-level, rather, they were asked to consider their experiences teaching at the course-level. Our survey design encouraged instructors to reflect on and analyze their experiences in designing and organizing courses for the online environment. Future studies on instructor roles in the Col framework could explore whether instructors consider teaching, cognitive, social, and emotional presences during lesson planning or through observational studies of classes, both in-person and online.

The nature and context of this study would be hard to replicate as most faculty now have experience teaching online after

having worked through two years of the Covid-19 pandemic. Future research should explore how the Col framework might work in non-emergent situations, such as course redesign, experiential learning, and in-person teaching. Further exploration of the differences between the perceptions of learners and instructors may also help instructors to better plan and deliver their online instruction as well as address student expectations of their learning experiences. As we move to a post pandemic world, Brescia is less likely to offer as many online courses going forward. Ultimately, as we reflected on our experience researching the Col at Brescia, we were left wondering why the framework has not yet been applied to in-person teaching and learning.

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REFERENCES

- Akyol, Z., & Garrison, D. R. (2008). The development of a community of inquiry over time in an online course: Understanding the progression and integration of social, cognitive and teaching presence. *Journal of Asynchronous Learning Networks*, 12(3), 3–22.
- Akyol, Z., & Garrison, D. R. (2011). Understanding cognitive presence in an online and blended community of inquiry: Assessing outcomes and processes for deep approaches to learning. *British Journal of Educational Technology*, 42(2), 233–250. <https://doi.org/10.1111/j.1467-8535.2009.01029.x>
- Arbaugh, J. B. (2007). An empirical verification of the community of inquiry framework. *Online Learning*, 11(1), Article 1. <https://doi.org/10.24059/olj.v11i1.1738>
- Arbaugh, J. B., Cleveland-Innes, M., Diaz, S. R., Garrison, D. R., Ice, P., Richardson, J. C., & Swan, K. P. (2008). Developing a community of inquiry instrument: Testing a measure of the Community of Inquiry framework using a multi-institutional sample. *The Internet and Higher Education*, 11(3–4), 133–136. <https://doi.org/10.1016/j.iheduc.2008.06.003>
- Aydin, C. H. (2005). Turkish mentors' perception of roles, competencies and resources for online teaching. *Turkish Online Journal of Distance Education*, 6(3), 58–80.
- Baran, E., Correia, A.-P., & Thompson, A. (2011). Transforming online teaching practice: Critical analysis of the literature on the roles and competencies of online teachers. *Distance Education*, 32(3), 421–439. <https://doi.org/10.1080/01587919.2011.610293>
- Bawane, J., & Spector, J. M. (2009). Prioritization of online instructor roles: Implications for competency-based teacher education programs. *Distance Education*, 30(3), 383–397. <https://doi.org/10.1080/01587910903236536>
- Berge, Z. L. (1995). The role of the online instructor/facilitator. *Educational Technology*, 35(1), 22–30.
- Berge, Z. L. (2008). Changing instructor's roles in virtual worlds. *Quarterly Review of Distance Education*, 9(4), 407–414.
- Brescia University College & Brescia Faculty Association. (2021). *Collective agreement between Brescia University College and Brescia Faculty Association. July 1, 2021 to June 30, 2025.*
- Chang, C., Shen, H.-Y., & Zhi-Feng, L. (2014). University faculty's perspectives on the roles of e-instructors and their online instruction practice. *International Review of Research in Open*

- and Distance Learning, 15(3). <https://doi.org/10.19173/IR-RODL.V15I3.1654>
- Cleveland-Innes, M., & Campbell, P. (2012). Emotional presence, learning, and the online learning environment. *The International Review of Research in Open and Distributed Learning*, 13(4), 269–292.
- Coll, C., Engel, A., & Bustos, A. (2009). Distributed teaching presence and participants' activity profiles: A theoretical approach to the structural analysis of asynchronous learning networks. *European Journal of Education*, 44(4), 521–538. <https://doi.org/10.1111/j.1465-3435.2009.01406.x>
- Competency based learning. (n.d.). Brescia University College. Retrieved November 2, 2022, from https://brescia.uwo.ca/about/competency_based_learning/index.php
- Coppola, N.W., Hiltz, S. R., & Rotter, N. G. (2002). Becoming a virtual professor: Pedagogical roles and asynchronous learning networks. *Journal of Management Information Systems*, 18(4), 169–189. <https://doi.org/10.1080/07421222.2002.11045703>
- Creswell, J.W. (2014). *Research design: Qualitative, quantitative, and mixed methods approaches* (4th ed.). SAGE Publications.
- Dewey, J. (1933). *The collected works of John Dewey, 1882-1953* (2nd Release Revised Edition). Past Matters: Full Text Humanities. http://pm.nlx.com.proxy1.lib.uwo.ca/xtf/view?docId=dewey_ii/dewey_ii.28.xml;query=how%20we%20think;brand=default;hit.rank=1#rank1
- Díaz, S. R., Swan, K., Ice, P., & Kupczynski, L. (2010). Student ratings of the importance of survey items, multiplicative factor analysis, and the validity of the community of inquiry survey. *The Internet and Higher Education*, 13(1), 22–30. <https://doi.org/10.1016/j.iheduc.2009.11.004>
- Engel, A., Coll, C., & Bustos, A. (2013). Distributed teaching presence and communicative patterns in asynchronous learning: Name versus reply networks. *Computers & Education*, 60(1), 184–196. <https://doi.org/10.1016/j.compedu.2012.06.011>
- Garrison, D. R. (2009). Communities of Inquiry in online learning. In P. L. Rogers, G. A. Berg, J. V. Boettcher, C. Howard, L. Justice, & K. D. Schenk (Eds.), *Encyclopedia of Distance Learning* (2nd ed., pp. 352–355). IGI Global. <https://doi.org/10.4018/978-1-60566-198-8.ch052>
- Garrison, D. R., & Akyol, Z. (2013). Toward the development of a metacognition construct for communities of inquiry. *The Internet and Higher Education*, 17, 84–89. <https://doi.org/10.1016/j.iheduc.2012.11.005>
- Garrison, D. R., & Anderson, T. (2003). *E-learning in the 21st century: A framework for research and practice*. Taylor & Francis Group. <http://ebookcentral.proquest.com/lib/west/detail.action?docID=171069>
- Garrison, D. R., Anderson, T., & Archer, W. (1999). Critical inquiry in a text-based environment: Computer conferencing in higher education. *The Internet and Higher Education*, 2(2), 87–105. [https://doi.org/10.1016/S1096-7516\(00\)00016-6](https://doi.org/10.1016/S1096-7516(00)00016-6)
- Garrison, D. R., Anderson, T., & Archer, W. (2001). Critical thinking, cognitive presence, and computer conferencing in distance education. *American Journal of Distance Education*, 15(1), 7–23. <https://doi.org/10.1080/08923640109527071>
- Garrison, D. R., Cleveland-Innes, M., & Fung, T. S. (2010). Exploring causal relationships among teaching, cognitive and social presence: Student perceptions of the community of inquiry framework. *Special Issue on the Community of Inquiry Framework: Ten Years Later*, 13(1), 31–36. <https://doi.org/10.1016/j.iheduc.2009.10.002>
- Garrison, D. R., Cleveland-Innes, M., Koole, M., & Kappelman, J. (2006). Revisiting methodological issues in transcript analysis: Negotiated coding and reliability. *The Internet and Higher Education*, 9(1), 1–8. <https://doi.org/10.1016/j.iheduc.2005.11.001>
- Gerbic, P., & Stacey, E. (2005). A purposive approach to content analysis: Designing analytical frameworks. *The Internet and Higher Education*, 8(1), 45–59. <https://doi.org/10.1016/j.iheduc.2004.12.003>
- Gómez-Rey, P., Barbera, E., & Fernández-Navarro, F. (2017). Student voices on the roles of instructors in asynchronous learning environments in the 21st century. *International Review of Research in Open and Distributed Learning*, 18(2), 234–251. <https://doi.org/10.19173/irrodl.v18i2.2891>
- Gómez-Rey, P., Barbera, E., & Fernández-Navarro, F. (2018). Students' perceptions about online teaching effectiveness: A bottom-up approach for identifying online instructors' roles. *Australasian Journal of Educational Technology*, 34(1).
- Goodyear, P., Salmon, G., Spector, J. M., Steeples, C., & Tickner, S. (2001). Competences for online teaching: A special report. *Educational Technology Research and Development*, 49(1), 65–72. <https://doi.org/10.1007/BF02504508>
- Guasch, T., Alvarez, I., & Espasa, A. (2010). University teacher competencies in a virtual teaching/learning environment: Analysis of a teacher training experience. *Teaching and Teacher Education*, 26(2), 199–206. <https://doi.org/10.1016/j.tate.2009.02.018>
- Honig, C. A., & Salmon, D. (2021). Learner presence matters: A learner-centered exploration into the community of inquiry framework. *Online Learning*, 25(2). <https://doi.org/10.24059/olj.v25i2.2237>
- Hung, M.-L., & Chou, C. (2015). Students' perceptions of instructors' roles in blended and online learning environments: A comparative study. *Computers & Education*, 81, 315–325. <https://doi.org/10.1016/j.compedu.2014.10.022>
- Jiang, M., & Koo, K. (2020). Emotional presence in building an online learning community among non-traditional graduate students. *Online Learning*, 24(4). <https://doi.org/10.24059/olj.v24i4.2307>
- Kebritchi, M., Lipschuetz, A., & Santiago, L. (2017). Issues and challenges for teaching successful online courses in higher education: A literature review. *Journal of Educational Technology Systems*, 46(1), 4–29. <https://doi.org/10.1177/0047239516661713>
- Kozan, K., & Caskurlu, S. (2018). On the nth presence for the community of inquiry framework. *Computers & Education*, 122, 104–118. <https://doi.org/10.1016/j.compedu.2018.03.010>
- Lam, J.Y.C. (2015). Autonomy presence in the extended community of inquiry. *International Journal of Continuing Education and Life-Long Learning*, 8(1), 39–61.
- Laut, J. (2000). *Identification of critical teaching abilities* (p. 25). U.S. Department of Education. <https://eric.ed.gov/?id=ED446115>
- Lipman, M. (2003). *Thinking in education* (2nd ed.). Cambridge University Press.

- Miles, M. B., Huberman, A. M., & Saldaña, J. (2020). *Qualitative data analysis: A methods sourcebook* (Fourth edition). SAGE.
- Otter, R. R., Seipel, S., Graeff, T., Alexander, B., Boraiko, C., Gray, J., Petersen, K., & Sadler, K. (2013). Comparing student and faculty perceptions of online and traditional courses. *The Internet and Higher Education, 19*, 27–35.
- Richardson, J. C., Besser, E., Koehler, A., Lim, J., & Strait, M. (2016). Instructors' perceptions of instructor presence in online learning environments. *International Review of Research in Open and Distributed Learning, 17*(4). <http://www.proquest.com/docview/1829492840/abstract/5D-C35A0BB3E04D6FPQ/1>
- Richardson, J. C., Koehler, A. A., Besser, E. D., Caskurlu, S., Lim, J., & Mueller, C. M. (2015). Conceptualizing and investigating instructor presence in online learning environments. *The International Review of Research in Open and Distributed Learning, 16*(3). <https://doi.org/10.19173/irrodl.v16i3.2123>
- Richardson, J. C., & Swan, K. (2003). Examining social presence in online courses in relation to students' perceived learning and satisfaction. *Journal of Asynchronous Learning Networks, 7*(1), Article 1. <https://doi.org/10.24059/olj.v7i1.1864>
- Saldaña, J. (2016). *The coding manual for qualitative researchers* (3rd ed.). SAGE.
- Shea, P., & Bidjerano, T. (2010). Learning presence: Towards a theory of self-efficacy, self-regulation, and the development of a communities of inquiry in online and blended learning environments. *Computers & Education, 55*(4), 1721–1731. <https://doi.org/10.1016/j.compedu.2010.07.017>
- Shea, P., & Bidjerano, T. (2012). Learning presence as a moderator in the community of inquiry model. *Computers & Education, 59*(2), 316–326. <https://doi.org/10.1016/j.compedu.2012.01.011>
- Shea, P., Hayes, S., Smith, S. U., Vickers, J., Bidjerano, T., Gozza-Cohen, M., Jian, S.-B., Pickett, A., Wilde, J., & Tseng, C.-H. (2013). Online learner self-regulation: Learning presence viewed through quantitative content- and social network analysis. *The International Review of Research in Open and Distributed Learning, 14*(3), 427–461. <https://doi.org/10.19173/irrodl.v14i3.1466>
- Shea, P., Hayes, S., Smith, S. U., Vickers, J., Bidjerano, T., Pickett, A., Gozza-Cohen, M., Wilde, J., & Jian, S. (2012). Learning presence: Additional research on a new conceptual element within the community of inquiry (CoI) framework. *Special Issue of the American Educational Research Association's Online Teaching and Learning Special Interest Group, 15*(2), 89–95. <https://doi.org/10.1016/j.iheduc.2011.08.002>
- Shea, P., Hayes, S., Uzuner-Smith, S., Gozza-Cohen, M., Vickers, J., & Bidjerano, T. (2014). Reconceptualizing the community of inquiry framework: An exploratory analysis. *The Internet and Higher Education, 23*, 9–17.
- Shea, P., Hayes, S., & Vickers, J. (2010). Online instructional effort measured through the lens of teaching presence in the community of inquiry framework: A re-examination of measures and approach. *International Review of Research in Open and Distributed Learning, 11*(3), 127–154. Érudit. <https://doi.org/10.19173/irrodl.v11i3.915>
- Shea, P., Li, C. S., & Pickett, A. (2006). A study of teaching presence and student sense of learning community in fully online and web-enhanced college courses. *The Internet and Higher Education, 9*(3), 175–190. <https://doi.org/10.1016/j.iheduc.2006.06.005>
- Shreaves, D. L., Ching, Y.-H., Uribe-Florez, L., & Trespalacios, J. (2020). Faculty perceptions of online teaching at a mid-sized liberal arts university. *Online Learning Journal (OLJ), 24*(3), 106–127. Gale Academic OneFile.
- Stenbom, S. (2018). A systematic review of the community of inquiry survey. *The Internet and Higher Education, 39*, 22–32. <https://doi.org/10.1016/j.iheduc.2018.06.001>
- Swan, K. P., Richardson, J. C., Ice, P., Garrison, D. R., & Cleveland-Innes, M. (2008). Validating a measurement tool of presence in online Communities of Inquiry. *E-Mentor, 24*(2), 1–12.
- Valverde-Berrocoso, J., Garrido-Arroyo, M. del C., Burgos-Videla, C., & Morales-Cevallos, M. B. (2020). Trends in educational research about e-learning: A systematic literature review (2009–2018). *Sustainability, 12*(12), Article 12. <https://doi.org/10.3390/su12125153>
- Wang, Y., Stein, D., & Shen, S. (2021). Students' and teachers' perceived teaching presence in online courses. *Distance Education, 42*(3), 373–390. <https://doi.org/10.1080/01587919.2021.1956304>
- Wang, Y., Zhao, L., Shen, S., & Chen, W. (2021). Constructing a teaching presence measurement framework based on the Community of Inquiry theory. *Frontiers in Psychology, 12*. <https://doi.org/10.3389/fpsyg.2021.694386>
- Williams, P. E. (2003). Roles and competencies for distance education programs in higher education institutions. *American Journal of Distance Education, 17*(1), 45–57. https://doi.org/10.1207/S15389286AJDE1701_4
- Yinger, R. (1979). Routines in teacher planning. *Theory Into Practice, 18*(3), 163–169. <https://doi.org/10.1080/00405847909542827>

APPENDIX A

OPEN-ENDED QUESTIONS FROM WAVE 1, 2, AND 3 SURVEYS

Wave 1 Planning or Pre-Active Phase (August 2020)

1. As you plan for your fall online courses, please share with us your opinions and experiences. How would you describe your role as an instructor when you teach online?
2. What aspects of teaching and learning are you considering when you design your online course?
3. How do you feel about teaching online for the fall semester 2020/21?
4. Thinking back to the emergency shift to teaching online in March 2020, what were the most difficult and the most rewarding aspects of teaching online?
5. As you plan for your fall online courses, what groups, people, activities, resources, or materials are available to you to support the development of your online courses? How, if at all, have these resources helped you?

Wave 2 Instruction or Interactive Phase (November 2020)

1. In this section, we ask you to describe your experiences and feelings about online teaching and learning. Now that you have completed the first half of the fall semester, what is working or not working in your online teaching?
2. Reflecting on your experience this fall, what roles, tasks, or functions do you find the most challenging when teaching online?
3. Reflecting on your experience this fall, what roles, tasks, or functions do you find the most rewarding when teaching online?
4. Reflecting on your experience this fall, how do you feel about teaching online?
5. Since the start of the semester, what groups, people, activities, or pedagogical resources have you relied on to support your teaching?

Wave 3 Reflexive or Post-Active Phase (January 2021)

1. Reflecting on your teaching experiences during the fall semester, what if anything, have you learned about teaching and learning online?
2. Reflecting on your teaching experiences this past fall, what would you start, stop, and continue doing in your online teaching practice?
3. What role, if any, did the Brescia Community play in your experiences of online teaching and learning?

APPENDIX B CODEBOOK

Teaching Presence	Design and Organization	Setting curriculum; Learning outcomes; Setting assessments; Grading demands/burden
		Designing method; "How" statements (ex. how to keep students on track/engaged, how to deliver information)
		Establishing time parameters; Task manager
		Using medium effectively
		Establishing netiquette
		Making macro-level comments about course content
		Methods of delivering content
	Facilitation	Identifying areas of agreement and disagreement on course topics
		Seeking to reach consensus/understanding
		Encouraging, acknowledging, or reinforcing student contributions; "Helping students to ... (navigate/learn)"
		Facilitator; Setting climate for learning/classroom management; Creating community of learners (action driven), offering opportunities to collaborate/cooperate; Guide/guidance and/or guide to material; Nexus
		Drawing in participants, prompting discussion
		Assessing the efficacy of the process; Feedback from students about course; Assessing metrics
		Structure/"Maintaining"
	Direct Instruction	Presenting/delivering content/questions
		Focuses discussion on specific issues
		Summarizes discussion
		Confirm understanding through assessment and explanatory feedback
		Diagnose misconceptions
		Inject knowledge from diverse sources; Role modelling
		Responding to technical concerns

Social Presence	Affective Expression	Expression of emotions
		Use of humour
		Self-disclosure
	Open Communication	Continuing a thread
		Quoting from others' messages
		Referring explicitly to others' messages
		Asking questions
		Complementing, expressing appreciation
		Expressing agreement
	Group Cohesion	Vocatives (referring to participants by name)
		Developing trust
		Social aspect of course
		Refers to the group using pronouns (we, us, our, group)
		Salutations (Communication that serves a purpose, e.g., "Hi all", etc.)
	Cognitive Presence	Triggering Event
Recognized problem		
Creates puzzlement		
Student interest; Activities/discussions that generate interest		
Exploration		Inquisitive: Divergences
		Information exchange
		Suggestions, brainstorming, intuitive leaps
Integration		Convergence
		Synthesis
		Solutions
Resolution		Apply; Applying course concepts directly to real life experiences/situations
		Test
		Defend

Emerging Codes	Academic Integrity	Cheating, plagiarism; Protecting intellectual property; Academic integrity; Surveillance; Minimizing risk
	Administration	Online learning infrastructure (e.g., course site, Zoom); Organizing LMS; Administrative policies (e.g., class timetable, asynchronous only)
	Communication and Troubleshooting	Coordinating/clarifying activities; Pointing students in the right direction; Troubleshooting non-technical issues, responding to student problems (proactive or in the moment); Responding to student emails, handling information requests, etc.; References to volume of emails, messages, announcements, etc.
	Connect	Connection to the instructor/material; Instructor as a link; Instructor-Student relationship; Give and take (reciprocity); Interaction; Student engagement (interest)/connection with material/course concepts; Student to student engagement; Helping students to interact with each other
	Content Creation	Creating audio and/or video material, slides, documents; Chunking; Adapting existing material; does not include Forum posts
	Disconnect	Vacuum; Blank screen; Instructor's perception of disconnect; Lack of reciprocity or communication
	Instructor Visibility	Being present and visible (using tools like Zoom, LMS, Forums, office hours, etc.); Being available to students
	Psychological Support	Support, Encourage, Coach, Motivate; Emotional Support, pastoral care, individual care; Non-Academic support, motivation
	Self-Directed Learning	Learning directed by students, driven by students, controlled by students; Self-regulation, self-direction; Encouraging students to be independent, to self-direct; + antonyms (not able to self-directed or self-regulate); Accountability; Proactive help seeking
	Student Cognitive Load	Overwhelmed (by work, by material, by number of courses); Simplicity or difficulty of material; Content load (too much/too little); Time spent on course work (too much/too little); Workload