Innovating Together:

Employing a Faculty Learning Community to Support Blended Learning

by

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ABSTRACT

As higher education embraces innovative educational models, support for the faculty members who must carry them out remains a vital ingredient for success. Despite this need, many institutions adopt innovations such as blended learning for all of the benefits afforded, with minimal consideration to meaningfully equip professors teaching these courses. “Faculty Learning Communities” (FLC’s) provide a powerful model of supporting and equipping faculty in their teaching practice. Nevertheless, ongoing and collaborative faculty development was historically unavailable to professors teaching undergraduate blended courses at Lancaster Bible College. Thus, the purpose of this qualitative action research study was to examine the ways that faculty perceived an FLC during the design and facilitation of a blended course. The Community of Inquiry (CoI) framework guided the design and facilitation of the FLC in fall 2018, as well as providing insight into measuring how learning communities formed during the FLC and while participants taught their courses. This FLC model blended learning for participants by occurring four times on campus, with online sessions following each in-person meeting. The faculty developer provided resources and support as faculty collaborated in designing their blended courses for the spring 2019 semester. Faculty perceptions of support were gathered in a focus group at the end of fall semester. During the spring 2019 semester, the faculty developer observed both on-campus and online sessions of the blended courses and led a second focus group about faculty perceptions of effectiveness and support. Qualitative data sets included video recordings of the FLC, focus groups, and class observations, field notes, and screenshots of online environments during the FLC and courses. Findings demonstrated substantial evidence of CoI measures of social

presence, cognitive presence, and teaching presence were present in both the FLC and participants' courses. These results affirmed the CoI framework provided a meaningful platform for faculty development. Additionally, participants perceived the FLC as supportive for their blended teaching practices, making direct mentions of support and indicating belief that broader institutional change be implemented toward this end to enhance faculty development opportunities. Limitations and implications of the study, as well as desired future research were explored.

DEDICATION

To my incredible wife, Chrissy. You have selflessly poured into our family during these past three years to ensure our little ones did not miss their daddy as much as they might have. I have said it many times to many people, but I never could have completed my learning here without you. Your unconditional support and love during this challenging time inspired me to work hard and finish well, and I am forever grateful – you finally get your husband back! 143.

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conversations along the way were an ongoing source of inspiration and learning that has deeply shaped my own growth as a professor and faculty developer.

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Chapter 1

National Context

"Education does not stand alone, and it cannot be designed as if it did. It exists in a culture" (Bruner 1996, p. 28)

The blended delivery of courses continues to increase in popularity among institutions of higher education (Wong, Tatnall, & Burgess, 2013). Although early definitions of the practice were satisfied with the addition of some online component to a face-to-face course, this project defines blended learning as a combination of online and face-to-face components which leverages the strengths of both modalities and centers around student learning rather than content delivery (Garrison & Kanuka, 2004; Rovai & Jordan, 2004; Vaughan, 2007). This approach maintains broad appeal due to meeting the needs of reducing seat time and improving time on task (Morrison, 2013). However, novelty and convenience remain far from the most substantial reasons for such a transition. As the landscape of higher education shifts across the country, institutions identify blended learning as a viable and flexible model to meet an ever-changing series of challenges. The Center for Educational Innovation at the University at Buffalo cites outward pressure from "… decreased state funding, tuition increases, technology costs, and depressed economies…" as a key factor in institutional efforts to increase affordability and flexibility for a changing student population (Trends of Online Learning, 2016, p. 1). Perhaps most importantly, these pressures coincide with a desire for education that develops critical thinking skills as opposed to rote knowledge. Placing

instruction or discussions online creates time and space for sustained critical thinking exercises and conversations in the face-to-face setting. This blended approach also allows for continuity and community that extends beyond the scheduled class meetings on campus (Garrison & Kanuka, 2004). Garrison and Kanuka (2004) argued that "…higher education institutions can be transformed in a manner consistent with their values…" to meet the rapidly changing marketplace and invigorate student-centered learning (p. 104). Colleges and universities committed to providing the best education possible find blended learning a meaningful pathway to innovation and quality.

Although the concept of blended learning in higher learning is now over four decades old, more recent developments in web-based technology and connectivity, as well as a shift toward student-centered learning, has seen many colleges and universities implement the practice (Dziuban, Hartman, & Moskal, 2004). Administrators have been quick to identify the potential of blended learning to meet challenges of cost and perceived value facing higher education. "…In the last five years more than 70 percent of public institutions have consistently stated that online education is critical to their long-term strategy…" (Trends of Online Learning, 2016, p. 2). These institutions may view online or blended offerings as a measure to offset the substantial downward trend in traditional, on-campus enrollment (Trends of Online Learning, 2016). Furthermore, adopting blended learning practices proves an attractive strategy to minimize institutional operating expenses and advance student outcomes (Dziuban et al., 2004). Blended courses require less classroom space, since they do not meet in person as often. Such courses may also offer sustained conversation both inside and outside the classroom, including more opportunities for personal learning support for students who may need

extra guidance. However, as academia pursues this new methodology, gaps may appear between institutional policy and faculty adoption of the practice.

Research has identified the ways faculty members perceived blended education, and how these perceptions impact successful adoption for an institution (Ocak, 2011; Porter & Graham, 2016; Porter, Graham, Spring, & Welch, 2014; Tshabalala, Ndeya-Ndereya, & Van der Merwe, 2014; Trends of Online Learning, 2016). Faculty predispositions toward blended methodologies truly matter – institutions that implement the practice must realize that this entails asking some faculty members to shift their entire paradigm of teaching. For some this may include a change in educational philosophy, moving from a teacher-centered to a learner-centered approach. Dziuban et al. (2004) explained that faculty members must understand blended learning not as the addition of technology, but as a philosophical shift in the instructional design of their courses. Such a shift requires faculty to move from the "sage on the stage" format to a student-centered approach. Instructional methods aside, blended learning also relies on deeper interaction with students (2004). On a more practical note, faculty members may fear the time commitment needed in transitioning their traditional courses to a new format, as well as the need to learn new technologies well enough to incorporate them into their practice (Benson, Anderson, & Ooms, 2011; Ocak, 2011; Tshabalala et al., 2014). Although administrators may easily point to the value of blended learning, faculty members play a key role in the actual implementation and success of such an initiative (Benson, Anderson, & Ooms, 2011).

Considering the complexity involved in aligning administrative goals with faculty practice, the importance of how an institution adopts blended learning carries substantial

weight. In some situations, adoption of blended learning has resulted in little more than the addition of online activities to the regular practice of a face to face course, with little thought on what integration of both modalities may look like (Ellis, Steed, & Applebee, 2006). Such approaches fail to realize all that blended learning may offer an institution. To recognize the intricate nature of implementing a program which requires substantial faculty buy-in, Bohle Carbonell, Dailey-Hebert, and Gijselaers have proposed a "bottom-up" approach, with an end goal of empowering faculty to effect innovative and meaningful change in their own classrooms (2012, p. 29). Other researchers have focused on delineating stages of adoption for groups of faculty members, often flowing from Rogers' 2003 Diffusion of Innovations theory. Diffusion of Innovations recognizes five stages of adoption to classify faculty, moving across a spectrum which moves from "innovators" to "early adopters", followed by the "early majority" and "late majority", and finally ending with the "laggards" (Robinson, 2009, p. 4). Several institutions and researchers have applied this concept to create faculty development targeted at each stage of adoption (Fetters & Duby, 2011; Porter & Graham, 2016; Porter et al. 2014; Wong et al., 2014). Fetters and Duby (2011) employed Rogers' Diffusion of Innovation to identify key faculty members to lead the implementation of blended learning at Babson College in Massachusetts. These members met criteria of having experience with curriculum design, being willing to take risks in the classroom, and sharing a willingness to experiment with new technologies. Institutions of higher education may easily see the benefits of adopting a blended learning program, but onboarding faculty members with appropriate support seems to be a crucial factor in the success of such an implementation. As Fetters and

Duby (2011) indicate, targeting innovators and early adopters to build organizational capacity for innovation seems to be one effective method.

Local Context

Lancaster Bible College is a private institution in Lancaster, Pennsylvania, with a student body of approximately 2,000 students. Programs include traditional and accelerated undergraduate degrees, graduate degrees, and doctoral degrees ("Why LBC?", 2016). In 2005, the Presidential Leadership Team at Lancaster Bible College decided to begin offering online courses. A small Office of Online Education formed, consisting of a Director, two Instructional Designers, and one quality assurance worker. Rapid growth over the past decade expanded this early offering of an online undergraduate degree to an array of blended graduate and post-graduate programs, as well as several fully online undergraduate degrees. During this time, the small Office of Online Education supported the development of online and blended courses and hosted limited professional development initiatives around faculty member use of the learning management system. As the college continued to grow, additional resources for the Office of Online Education resulted in the hiring of three new instructional designers. These new instructional designers expanded the level of collaboration with faculty members for online and blended course design, and eventually expanded professional development to the realm of effective online pedagogy. This shift into the areas of faculty development and extensive faculty support led to further expansion and renaming of the Office of Online Education, now called the Office of Digital Learning.

Even though the scale and efforts of this office have grown over the years, it remained unable to support all online efforts at the college. Although the fully online

undergraduate programs and blended graduate and doctoral programs receive full support from instructional designers, an instructional technologist, and online resources, undergraduate blended courses are offered no such support. Professors teaching undergraduate courses on campus may choose to teach all three hours of a three-credit course on campus, or two hours on campus and one hour online (typically in class Monday and Wednesday, with Friday's efforts taking place online). This blended approach has not been supported by the Office of Digital Learning due to a lack of staffing and the need to prioritize the fully online and blended graduate programs (graduate courses employ a blended approach program-wide). Although the choice to avoid targeted support toward undergraduate blended courses was recognized as a problem by the Office of Digital Learning, it was deemed acceptable for the time being since only one hour of the course took place online. Priority fell to the fully online and graduate courses (graduate programs take place online for six weeks, with a two-day residency between weeks three and four).

As an instructional designer assigned to undergraduate courses, I have worked one-on-one with faculty members to design fully online courses in a six-week accelerated format as well as the traditional fifteen-week, semester-long timeframe. I also engaged faculty through a podcast, newsletter articles, ongoing instructional support, and workshops. These responsibilities reflected the shift into professional development of the Office of Digital Learning over the past three years since my hiring. Furthermore, beginning in the 2017-2018 academic year, I began serving as the part-time Coordinator of the Office of Teaching Effectiveness, expanding my influence and position as leading professional development at the institution. I have also been serving as an Assistant

Professor, teaching undergraduate education courses on campus and supervising student teachers. During the 2018-2019 academic year, my roles were officially distinguished as 75% instructional designer and 25% faculty developer, with teaching one or two courses per semester occurring over and above these two responsibilities. This multifaceted role allows me to approach faculty members as a peer, having experienced many of the same challenges as others in teaching online, on campus, or in a blended format. Through these roles, I have been able to establish meaningful relationships with faculty members in nearly all of the academic departments. Although faculty may be assigned to work with me by their department chair to design a new online course, individual faculty members may come at any time to consult for advice in their online, on campus, and blended courses.

In May of 2016, Lancaster Bible College opened a brand new academic building to house most of the academic departments, advertised as the hub for the college's expanding digital learning efforts ("Charles Frey Academic Center", 2016). Since this move, the Provost of the college has issued a directive for online and blended counterparts to be made available in every new major offered on campus (P. Dearborn, personal communication, 2017). Furthermore, conversations with department chairs revealed a desire to better understand how faculty members employ blended undergraduate courses (J. Geist, personal communication, September 22, 2016). The blended option for undergraduate courses increasingly presents a forward-thinking approach to the effective use of limited facilities, as opposed to its previous position as a novelty or personal preference for faculty. Department Chairs find the flexibility of blended learning appealing due to the ability to support students involved in extra-

curricular activities (such as athletics) which may require travel. In addition, faculty development initiatives by the Office of Digital Learning consistently reveal anecdotal evidence that faculty members are interested in offering blended courses, but hesitate due to lack of support.

Previous Cycles of Research

Action research hinges upon cycles of research that inform one another and build evidence identifying the problem and investigating potential solutions. The first cycle of research in this study involved interviewing faculty members to identify why and how they practiced blended learning, as well as what kinds of support they wanted in teaching blended courses moving forward. Particular attention was given to the experience of these innovator professors who were willing to engage in innovation knowing the cost in time and possible repercussions from their own students, yet decided to forge ahead and attempt to teach in this new modality. No prior research had been conducted to examine why professors choose to teach blended courses at the undergraduate level or to investigate what types of support may be most effective. Three professors (two female, one male) with similar teaching experience in the blended format (approximately two years each) were interviewed using semi-structured interviews (see Appendix A). The interview recordings were reviewed and thematic codes were identified.

First Cycle Results

Faculty members reported feeling that blended learning was beneficial to the institution, yet how it was practiced truly mattered. Although the participants clearly indicated an interest in the potential for blended learning, they also expressed concern that the methodology was not executed well at the institution. Faculty members also

reported wanting more support for blended learning practice. The participants indicated a knowledge that a variety of practices do exist, but the time and effort required to find these on their own remained too great to effectively implement change in their own blended courses. Finally, faculty expressed a desire to collaborate with fellow faculty members on course development. Each participant expressed a desire to hear what other practitioners were doing. One professor stated, "I'm sure there are other ways that people are doing things out there that I just don't know about, that haven't occurred to me. I've felt like I've had to just figure out for myself as I go along what would seem to work." From these responses, it appears that blended learning resources, peer-feedback, and collaboration were desired both for support and innovation in blended learning practice.

First Cycle Implications

The overarching implication resulting from this study maintained the need for ongoing, collaborative support for blended learning. Thus, in the future cycles of this study, a faculty learning community (FLC; Carbonell et al., 2012; Furco & Moely, 2012; Owston, Wideman, Murphy, & Lupshenyuk, 2008; Parsons et al., 2016; Wicks et al., 2015; Vaughan & Garrison, 2005) in which faculty members work together to develop courses and share experiences and expertise, seemed like a valuable next step. The next cycle of research employed a suite of resources on designing and facilitating blended courses as an effort to leverage technology to support a broader segment of faculty. Interviews during the first cycle revealed a variety of definitions and practices in blended learning, so this second cycle focused on the extent to which the implementation of blended learning resources (BLR) would affect faculty members understanding of blended pedagogy. Additionally, innovators (as defined by Rogers'

2003 Diffusion of Innovations) prefer the autonomy and self-paced nature of a resource database. In this cycle of the study, a focus group was conducted to ask four purposively sampled participants (identified by diverse levels of experience, gender, and discipline of study) who had each investigated the BLR about their experiences. Additionally, a recent blended course taught by each of the participants acted as an artifact to triangulate against focus group responses.

Second Cycle Results

Upon reviewing the transcript from the focus group, two themes emerged from the recorded codes. The first theme represented an increased understanding of blended learning after faculty members interacted with the BLR. Codes producing this theme included: "Affirmation of current practices," "Increased clarity on blended learning," "Impact on personal teaching practice," and "Connecting to prior understanding" (See Appendix B for a list of primary codes). One faculty member explained how the BLR both affirmed her prior knowledge of blended course design and provided space for reflection on activities chosen for online or on-campus portions: "For me it affirmed the purposes for blended courses…the idea of thinking through things that should be best done online…just focusing on the goals first before worrying about activities or assessment to reach those goals". Here, faculty members expressed more complete understandings that blended learning represents a learning modality interwoven between on campus and online sessions.

The second theme from the focus group illuminated the BLR's impact on faculty knowledge and practice by revealing new areas of desired understanding or blended learning support. Faculty members felt they lacked prior technical, administrative, and

pedagogical support. One participant explained the lack of administrative and pedagogical support evident when the institution adopted blended learning: "…Working through in terms of what is a blended course…was helpful because it primarily for me filled a gap, because when somebody says 'Just do this and it's blended,' um, you know, what am I doing here?". Although this faculty member has practiced blended learning for five years, only recently have resources like the BLR revealed what meaningful blended learning practice looks like.

Each artifact course was reviewed through the University of Central Florida Peer Review rubric, which is available through the creative commons open license. Measured by the peer review rubric, instructor involvement, feedback, and course design each revealed findings congruent with the focus group. Specifically, the first focus group theme relating to how the BLR increased clarity around blended learning aligned with courses that displayed varying levels of effective practice (as measured by the peer review rubric). For example, on the rubric criterion assessing "Learning Activities/Content" out of 40 points, the courses scored 39, 31, 33, and 39. Another criterion addressing blended teaching, "Implementation" (taken out of 35 points), saw scores of 35, 17, 12, and 35. These findings aligned with focus group conversations regarding how the BLR affirmed current practices or increased clarity on effective blended learning. In this case, a lack of clarity or consistency in implementation pointed to the veracity of participant's claims of increasing clarity and understanding on teaching a blended course.

Second Cycle Implications

The need to identify faculty member understanding of blended learning was recognized as a necessary next step toward planning future cycles. This narrow focus produced a meaningful picture of current faculty understanding, namely that practices are inconsistent (some being effective, others not). The focus group conversation also revealed some unexpected insights into concerns about student training and technological training for faculty. A key implication drawn from the second research cycle pointed to the complexity at work in the blended class. Here, faculty members recognized that they had to maintain a level of content, pedagogical, and technological expertise to teach effectively in this modality. Such complexities require more robust supports than offered by a simple set of self-paced resources as offered in the BLR. Thus, it was proposed that future cycles should include a FLC or similar collaborative approach to support members in the nuanced ways required of blended learning practice. Such an approach would also appeal to early adopters (as defined by Rogers' 2003 Diffusion of Innovations), who favor collaborative efforts in innovation due to the more extensive support network involved.

As the second cycle of research revealed, blended learning represents a complex undertaking for the individual practitioner. Thus, the third cycle of research sought to investigate how a FLC might shape perceptions and experiences of blended course quality. Five participants (two men and three women) were purposively sampled by meeting the criteria of experience teaching at least one blended course and availability to participate in the FLC for the Spring 2018 semester. Throughout the semester, the FLC met three times for an hour-long session, with specific activities such as peer review

taking place between sessions. Participants brought one previously taught blended course which they redesigned over the semester with the support of the FLC. The final session of the FLC was a semi-structured focus group which was recorded and transcribed. The blended courses of each participant revised during the FLC acted as qualitative artifacts for analysis and triangulation with the focus group. The raw data was uploaded into MAXQDA 2018 for organization and analysis.

Third Cycle Results

Open coding of the focus group transcript and online courses resulted in two codebooks which were compared to each other. Keeping in mind the intent of investigating how faculty members perceive and experience the quality of blended courses after participating in a FLC, the three resultant themes included: impact on teaching practice, leading a learning community, and identifying course quality. Faculty members identified several ways in which their design improvements reflected new understandings of quality in blended learning. One frequent idea coded across the data was the need to scaffold the student's learning process. One participant expressed course improvements she had made during the FLC to facilitate such a scaffolding: "I've started embedding the videos into a quiz and then just doing like, some checkpoint questions…and then others are like guided practice problems where I kind of walk them through the steps…before they're fully independent to practice what we've talked about" (further examples of scaffolding are provided in Appendix C). The most frequent code occurring for this theme was identified as "Clarity in Blended Learning." Participants resonated with the need to increase clarity in expectations or instructions in the online

classes, since they lack the physical or visual proximity germane to the traditional classroom.

Third Cycle Implications

The FLC approach did seem to play a role in positively impacting faculty member perceptions and experiences of blended course quality. The three identified themes of Impact on Teaching Practice, Leading a Learning Community, and Identifying Course Quality each indicate the possible value of an FLC for supporting innovative practice. However, limited collection of data through only two sources and lacking two participants for the final focus group revealed the need for subsequent study around the use of a FLC to facilitate innovation in teaching and course design. Further FLCs with different participants could potentially yield different results, so this next cycle proposes further investigation into this approach.

After the initial cycles of research, it was clear that faculty members practicing blended learning felt isolated and desired collaboration. Given my position and ability to influence faculty development in this area, this action research study sought to provide that support and collaboration to faculty through a FLC for blended learning. The purpose of this current cycle of research was to investigate whether the creation of a blended FLC will be perceived as a support for creating high quality blended undergraduate courses at Lancaster Bible College, and how the faculty members would incorporate what they learned in the faculty learning community within their blended courses. The questions guiding this study are as follows:

Q1: How did faculty perceive the value of a faculty learning community (FLC) as a support for designing blended courses?

Q2: Which evidences of teaching, social, and cognitive presence did faculty exhibit during a blended faculty learning community (FLC)?

Q3: Which evidence of teaching, social, and cognitive presences did faculty exhibit after participating in a faculty learning community (FLC) within their own blended courses?

Q4: How were faculty perceptions of support during a faculty learning community (FLC) shaped by faculty developer behavior?

Chapter 2

Theoretical Perspective and Related Literature

"There is a deep hunger among faculty members for more meaningful collegial relationships and more 'conversational structures' in our institutions"(Gabelnick, MacGregor, Matthews, & Smith 1990, p. 86)

In this chapter, a theoretical perspective and related literature lay a guiding framework for this study. The first section contains the theoretical perspective guiding this research. The theoretical perspective, Garrison, Anderson, and Archer's (2000) Community of Inquiry, provides a template of engaged and meaningful blended learning environments. A brief discussion of each element of the framework concludes with the methods, which the FLC employed to ensure alignment with Community of Inquiry. Related studies for this theoretical framework then illustrate how other researchers applied the perspective to their contexts, including within an FLC approach. To conclude the section, implications are drawn out from the related literature and Community of Inquiry. In the second section, a broader context is set by investigating why and how institutions of higher education adopt blended learning. Specifically, adoption of blended learning is portrayed as a pedagogical shift as compared to traditional models of teaching in higher education. A brief discussion of organizational change leadership further sets the narrative for the role of the researcher-participant as leader of organizational change within the study. Then, a more focused look into the ways and reasons individual faculty members adopt such an innovation provides a direct correlation to my own local context, where individual faculty members may choose to teach blended courses, but many do not. Uncertainty around both the pedagogical and technological expertise needed to

practice blended learning well leave many faculty members feeling isolated, lending credence to the collaborative approach of a faculty learning community. Concluding the second section, FLCs present a meaningful opportunity for adoption of complex innovations such as blended learning.

Theoretical Perspective

Communities of Inquiry (Garrison, Anderson, & Archer, 2000) provides guidance for this research. Flowing from the related literature, the theory contains ideas valuable to faculty development for blended learning. Community of Inquiry serves two roles for this study. Firstly, the framework contains a powerful explanation of an engaged online, blended, or face-to-face classroom, which may be used as an exemplar and model for faculty members seeking to design and facilitate high quality blended courses. Secondly, the Community of Inquiry serves as an effective method of faculty development. In light of both roles, this research seeks to utilize Community of Inquiry as a framework for developing quality blended courses while modeling its use with faculty members in the development process. Studies regarding both usages of Community of Inquiry will be discussed.

Community of Inquiry

The guiding theoretical framework employed in this research is Garrison, Anderson, and Archer's (2000) Community of Inquiry. Garrison et al.'s (2000) initial efforts sought to describe the core essentials of the effective college classroom learning community. Garrison and Kanuka (2004) explained, "Communities also provide the condition for free and open dialogue, critical debate, negotiation, and agreement – the hallmark of higher education" (p. 97). The Community of Inquiry focuses on the

intentional design and practice of three areas of "presence" (cognitive, social, and teaching), as well as the relationship between them (Shea & Bidjerano, 2010, p. 1722). The framework is often depicted using the Venn diagram in Figure 1 below, which indicates not only each area of presence but the ways they interact with each other (Garrison et al., 2000):

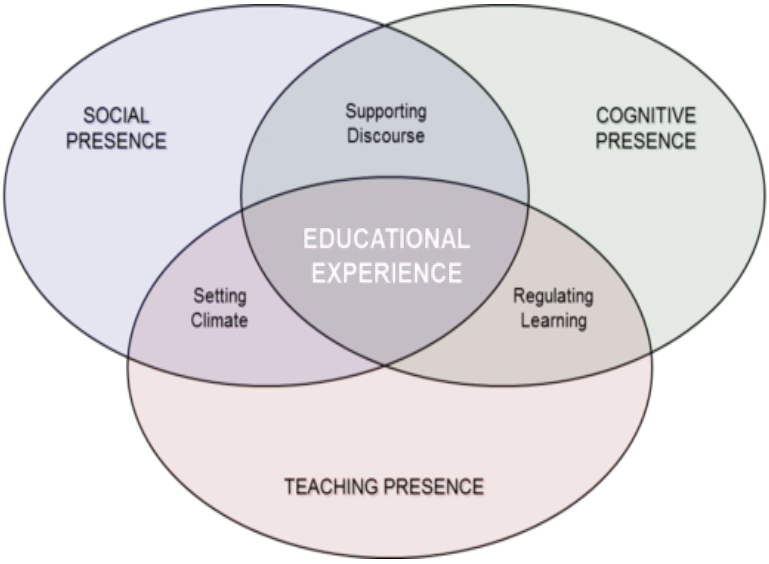


Figure 1. Community of Inquiry Venn Diagram.

This construct applies to online, blended, or traditional (face-to-face) formats (Garrison & Kanuka, 2004).

Communities of Inquiry have also been explored in how they increase metacognition and self-efficacy in learning communities. Akyol and Garrison (2011) applied the framework as an attempt to see if it would engender, sustain, and measure metacognition in online discussion forums. This particular study holds relevance since some have called for an expansion of the Community of Inquiry to include "learning

presence" to account for metacognition of the community members (Shea & Bidjerano, 2010; Shea et al., 2014). Sixteen graduate students participated in an online course designed with the Community of Inquiry as a guide, with a transcript analysis of text-based discussions being performed by the researchers (Akyol & Garrison, 2011). Akyol and Garrison (2011) discovered indicators of metacognition in the transcript analysis, particularly in the areas of teaching and cognitive presence of the Community of Inquiry framework. Due to these results, Akyol and Garrison (2011) rejected the call for adding learning presence to the framework, since it may indicate that students only learn and instructors only teach – the Community of Inquiry model maintains strong ties to social learning theory, which would not be compatible with such an understanding. The social and collaborative learning opportunities afforded by a FLC align with Community of Inquiry as a meaningful lens for investigating whether such faculty development approaches similarly engender metacognition and self-efficacy of participants. In the FLC proposed by this study, the Community of Inquiry would act as a cohesive description for FLC activities throughout the blended learning modality.

Cognitive presence. Garrison et al. (2000) explained that cognitive presence refers to "…the extent to which participants [students]…are able to construct meaning through sustained communication" (p. 89). This concept addresses the need for critical thinking, both on the individual and social levels. It recognizes that as students learn and practice thinking about their own thinking, such a process rarely happens only at the individual level – rather, as students confront divergent ideas in community, they may reflect on their own processes (Garrison & Kanuka, 2004). Garrison et al. (2000) suggested that cognitive presence is a cyclical process which follows four steps:

triggering event, exploration, integration, and resolution. The triggering event involves the introduction of a problem or moment of cognitive dissonance wherein the student realizes the need to pursue resolution (Akyol & Garrison, 2011). Next, students individually and collaborative explore possible solutions to make sense of the problem (Kozan & Richardson, 2014). The third step, integration, involves the formation of a concept (again, occurring both individually and in community), developing an understanding to answer the problem following the exploration of information (Garrison, et al. 2000). Finally, resolution entails the community forming a solution to the initial problem (Akyol & Garrison, 2011). As seen above, cognitive presence speaks to both individual and collaborative exercises. Although it can be discussed and understood as a unique element of the framework, it also gains meaning and context from the other two pieces of Community of Inquiry.

During a FLC, Cognitive presence might be facilitated through the instructional videos (each with an essential question) acting as impetus for the triggering event, the brief online reflection or discussion and the on-campus discussions then allows for collaborative problem-solving, and group or individual follow-up facilitated resolution of problems related to course design. Here, either the FLC leader or participants may lead and shape cognitive presence through introducing new ideas, sharing frustrations (as a triggering event), and scaffolding the understanding of the group through interactions.

Social presence. If cognitive presence speaks to the notion of critical thought, social presence understands the importance of the affective elements of learning. Garrison et al. (2000) subdivided this category into three "indicators" of social presence: expression of emotion, open communication, and group cohesion (pp. 99-101). Garrison

et al. (2000) explained that "…emotional expression is indicated by the ability and confidence to express feelings related to the educational experience" (p. 99). This entails opportunities for students to express their individual personalities, including emotions such as humor and vulnerability (Garrison et al., 2000; Kozan & Richardson, 2014). Shared emotional experiences guide and inform the learning process of individual students (Garrison et al., 2000). Open communication describes equal exchanges of ideas – an environment where divergent thinking and ideas are considered for the good of the group's understanding (Garrison et al., 2000; Garrison & Kanuka 2004; Kozan & Richardson, 2014). The final category of social presence is group cohesion. Group cohesion portrays students identifying as a part of the learning community, with all the responsibilities, shared commitment, and mutual concern that this entails (Garrison et al., 2000). Social presence plays a vital role in establishing the idea of community, and thus proves a necessary component to the Community of Inquiry.

An FLC would facilitate Social presence through the leader's own supporting discourse with participants as they engaged with new ideas and content, and through opportunities for online or face-to-face interaction between all members of the FLC. Equal time and consideration for each member's contributions to the FLC lays the foundation for group cohesion, open communication, and shared emotional experiences (reflective of the social-constructivist persuasion of Community of Inquiry). Wicks et al. (2015) surveyed students in blended courses and measured Social presence by community indicators such as "affective expression," "open communication," and "group cohesion," as well as how they perceived the personal relationships developed with peers through course activities (p. 56). In the FLC environment, Social presence could be

observed through digital and personal communications expressing emotions such as frustration, excitement, and confusion, or even through the level of collaboration observed in FLC activities (Vaughan & Garrison, 2006; Wicks et al., 2015).

Teaching presence. The final element of Community of Inquiry is teaching presence. As may be indicated by the title, this piece explicates the role of the instructor in facilitating and maintaining a Community of Inquiry. Garrison et al. (2000) subdivided teaching presence into three components: instructional management, building understanding, and direct instruction. Instructional management focuses on the instructor's curation of course design and content, as well as planning how the environment (classroom, online, blended) will be employed (Akyol & Garrison, 2011; Garrison et al., 2000; Kozan & Richardson, 2014). Building understanding sees the instructor managing group dynamics to ensure all members of the community engage and contribute in the process of meaning-making and understanding (Akyol & Garrison, 2011; Garrison et al., 2000; Kozan & Richardson, 2014). Finally, direct instruction depicts the instructor actively engaged in the community, asking probing questions, filling gaps in understanding, and playing out the role of expert guide (Akyol & Garrison, 2011; Garrison et al., 2000; Kozan & Richardson, 2014).

Although one might think that teaching presence in the FLC or classroom environment falls primarily under the responsibilities of the FLC leader, it is important to note that each participant shares responsibility for this element (Garrison et al., 2000). For example, the FLC environment could easily allow for innovators who have practiced blended learning over time to share their experiences and successes with early adopters in ways resembling direct instruction. Online or blended learning communities in particular

require frequent evidences of the leader's "presence" in these digital environments. Such evidences may include the curation of additional or remedial resources for participants or students as they interact with instruction, extending the conversation in discussion forums, and ensuring all share equal opportunity to contribute to the group's collective understanding (Garrison et al., 2000; Vaughan & Garrison, 2006; Wicks et al., 2015).

Relationships between the Presences. Although each category of Community of Inquiry proves valuable in its own right, they are best understood as informed and supported by the framework as a whole, rather than being seen as mutually exclusive. In an effort to identify the relationships and interactions between each category of presence, Garrison et al. (2010) applied the Community of Inquiry Survey Instrument (completed by students) to 14 online courses. The researchers found that teaching presence plays a vital role in establishing social presence, which in turn supports cognitive presence (Garrison et al., 2010). A direct causal relationship between teaching and cognitive presence illustrated the role of the instructor to assist students in finding resolution to problems (Garrison et al., 2010). Garrison et al. (2010) explained, "…the importance of teaching presence in creating and sustaining social and cognitive presence in online environments would seem to be clear" (p. 35). Such a result seems to hold substantial implications for online and blended course design and teaching methodologies.

As illustrated in Figure 1, the nature of overlap between the three "presences" contributes to the strength of the model. Supporting Discourse, the intersection between Social and Cognitive presence, describes moments when students experience connection between the cognitive and affective aspects of learning (Garrison, Cleveland-Innes, & Fung, 2010; Garrison & Kanuka, 2004). As Garrison et al. (2010) portrayed it, this

intersection represents "…the responsibility for initiating and sustaining collaborative and open communication" (p. 32).

The intersection between Cognitive and Teaching presence, identified as "regulating learning," provides another view into the inner workings of the framework (Kozan & Richardson, 2014). Here, the instructor provides a scaffold for learning – the instruction and guidance which enable students to accomplish the course learning goals (Garrison et al., 2000; Garrison & Kanuka, 2004). Participants in an FLC could also engage this presence as they draw on experiences and resources which have served them well in the past to teach each other.

Finally, "setting climate" represents the intersection between Social and Teaching presence (Garrison et al., 2000). Garrison et al. explain that here the instructor enacts "the responsibility for establishing an environment for inquiry," encouraging risk-taking and open conversation (2000, p. 95). An FLC modeling this intersection will provide ample time for open conversation and sharing of struggles and successes.

Such a framework proves valuable in envisioning blended learning environments which focus on the process of learning in community (Garrison et al., 2000; Garrison & Kanuka, 2004; Kozan & Richardson, 2014; Shea, Hayes, Uzuner-Smith, Gozza-Cohen, Vickers, & Bidjerano, 2014). The Community of Inquiry provided both a model for faculty members in this research to employ for their blended courses, as well as a template for the design and facilitation of the FLC itself.

Community of Inquiry: Related Studies

The Community of Inquiry and Faculty Development. Since the Community of Inquiry framework was originally devised for text-based environments, it seems a

natural fit for online and blended learning (Garrison et al., 2000). Furthermore, it has been applied to faculty development for blended teaching and learning support (Vaughan & Garrison, 2005; Vaughan & Garrison, 2006; Wicks et al., 2015). Studies investigating the use of Community of Inquiry in a faculty development environment lay the groundwork for the ways the framework was employed in this research.

Vaughan and Garrison's (2005) study focused on a faculty development program to discover if "inquiry" (as measured by cognitive presence in the framework) was supported by a blended learning approach (p. 2). The researchers maintained this approach due to the concern that one-time faculty development workshops often do not offer extended reflection on faculty member practices; a blended approach offers sustained thought and conversation and remains respectful of faculty member time commitment (Vaughan & Garrison, 2005). The qualitative study included 12 faculty members from multiple academic disciplines who were each redesigning undergraduate blended courses, a practice which this research seeks to replicate (Vaughan & Garrison, 2005). Audio transcripts from face-to-face sessions, text-based online discussion, and post-study interviews were all included as data (Vaughan & Garrison, 2005). Vaughan and Garrison (2005) found that a blended approach seemed necessary for students to find resolution for cognitive dissonance (finishing the four-step cycle of cognitive presence) since online forums alone lacked the impetus to facilitate this resolution; the combination of blended and face-to-face sessions proved effective in creating necessary continuity for students to achieve resolution. Results were promising for blended faculty development communities, as Vaughan & Garrison (2005) explained: "…the participants stated that both components [online and blended] created a sense of

communal commitment and responsibility for ensuring that all members…completed their blended learning projects (p. 7).

Vaughan and Garrison (2006) built on the work of their previous study by investigating the same FLC for elements of social and teaching presence. Audio and text transcripts revealed each category of both social and teaching presences (Vaughan & Garrison, 2006). The authors concluded that taken together with the results of their 2005 study, implications for using the Community of Inquiry model in a blended FLC remain substantial – such an approach holds the adaptability and depth necessary for faculty members redesigning their blended courses.

In a similar but more recent study, Wicks et al. (2015) applied the Community of Inquiry framework to a FLC redesigning blended courses. This exploratory case study recognized the implications from Vaughan and Garrison's 2006 study and employed the student-completed Community of Inquiry Survey instrument (74 student responses) to allow the six faculty participants to identify the framework in their own courses (Wicks et al., 2015). Wicks et al. (2015) arrived at two key conclusions: that the Community of Inquiry Survey may be a valuable resource in understanding student experiences in blended courses, and that FLCs hold substantial value and promise to engender meaningful reflection and improvement on teaching practice.

These studies lay a foundational understanding of the ways the Community of Inquiry as a framework could inform the formation of FLCs for the purpose of supporting blended learning practice.

Related Literature

Blended Learning and Higher Education

Blended learning, when designed and implemented carefully, holds substantial potential to meet the ever-evolving needs of higher education, including a shift to student-centered learning. Researchers familiar with this educational approach eagerly define this mode of learning by explaining that it does not entail the simple addition of technology to the traditional classroom. Rather, it represents a pedagogical shift which leverages the strengths of both the face-to-face and online modalities, and in particular, a shift toward student-centered learning (Garrison & Kanuka, 2004; Rovai & Jordan, 2004; Vaughan, 2007). In essence, a new "third" modality is created through the merging of the two original modalities. According to Rovai and Jordan (2004), this involves a turn from the former faculty-centered, lecture dominated model, to a student-centered environment catered to critical reflection and problem-solving skills. Building on this understanding, blended learning presents an attractive option allowing students extra time to process and reflect critically in the online format, reserving face-to-face discussion time for the instructor to identify and meet the learner's needs or gaps in understanding (Garrison & Kanuka, 2004). This approach also creates continuity and extended conversation between face-to-face sessions, promoting the notion that learning may occur outside of the classroom as well as in (Vaughan, 2007). However, such a difference in practice entails a seismic shift in the culture of higher education institutions – a shift from education as knowing to education as developing learning over a lifetime (Benson, Anderson, & Ooms, 2011; Rovai & Jordan, 2004).

This shift has often been deemed worth the risks and effort by administration who rightly see blended learning as a more cost-effective allocation of resources (Vaughan, 2007). When scheduled appropriately, more classes can be held in the same brick-and-mortar facilities due to the decreased demand for physical space. Vaughan explains that administration may also view the methodology as an effective marketing tool, contributing to the prestige of an institution (2007). Marketing blended programs allows institutions to highlight their mission of advancing student learning, as well as innovating to meet the ever-changing needs of society (Garrison & Kanuka, 2004; Rovai & Jordan, 2004; Vaughan, 2007). Similarly, the benefits of a more continuous, engaged, and learning-in-community approach afforded by blended education offer an answer to concerns over student drop-out rates (Rovai & Jordan, 2004). Rovai and Jordan (2004) observed that deeper and more frequent interactions with the professor and other students is likely to reduce student feelings of isolation. Further addressing administrative concerns, colleges and universities may frame the blended approach as one congruent with and extending from long-standing heritage of the school. Decision-makers in higher education have been entrusted with prioritizing the maintenance of these institution-defining traditions (Garrison & Kanuka, 2004). Along these lines, Garrison and Kanuka (2004) argued that the blended approach "…can preserve and enhance the traditional values of higher education" (p. 102). Although administrators readily point to the value of blending previously traditional programs, considerations of how to implement such a substantial change present an array of challenges. Crucially, even the most well-crafted blended learning policy must be adopted by those who will ultimately be responsible for implementation: the faculty members (Porter & Graham, 2016).

Faculty Adoption of Blended Learning

Faculty definitions of blended learning. Careful implementation of blended learning must consider the preparedness and understanding of those entrusted to carry it out. Along these lines, multiple studies seek to understand the perceptions of faculty members around blended learning and what it may look like to teach a blended course (Benson et al., 2011; Ellis, Steed, & Applebee, 2006; Tshabalala, Ndeya-Ndereya, & Van Der Merwe, 2014; Woods, Baker, & Hopper, 2004). Perhaps unsurprisingly, faculty members share a variety of perspectives on blended learning. Faculty perceptions of blended learning represent a range of understanding, from use of technology with little regard to pedagogy, to careful integration between the online and face-to-face formats. For example, Woods et al. (2004) reported that a majority of faculty members in their study of 38 institutions use the online portion of the course primarily to host the syllabus, handouts, or extra reading, without consideration of hosting instruction or submission of course work online. In contrast, some faculty members envision blended learning as a thoughtful leveraging of online and face-to-face strengths to advance student learning (Benson et al., 2011; Ellis et al., 2006). Benson et al. relate one group of faculty participants who prioritized pedagogical decision-making prior to creating activities or materials online or in class (2011). These definitions of blended learning represent a vast spectrum – an important consideration for institutions considering the adoption of blended courses.

Faculty perceptions of blended learning in practice. Closely tied to the ways faculty members define blended learning, faculty perceptions on effective practice and purposes of blended learning provide a valuable discourse to inform effective blended

adoption. Some faculty members hold negative perceptions of the practice. Time investment and lack of belief in the technology itself has been reported by faculty members as a common concern (Benson et al., 2011; Tshabalala et al., 2014; Vaughan, 2007). One example of faculty member perceptions on blended learning focuses on community and connectedness to students (Napier, Dekhane, & Smith, 2011; Vaughan, 2007). Vaughan (2007) related that prior to engaging in blended practices, faculty members in his study expressed concern over the reduction in face-to-face time – however, most participants indicated a greater sense of community and relationship with their students after engaging in the practice. This reflects the initial perception of some faculty members that the online portions of the course are simply inferior to traditional models (Woods et al., 2004). In a more positive sense, many faculty members reported appreciation for the flexibility that blended learning affords both the instructor and students (Benson et al., 2011; Napier et al., 2011; Vaughan, 2007). The variety of methods and technology available in the blended environment allow for new avenues of meeting instructional objectives (Vaughan, 2007). Finally, faculty member perspectives may contain a spectrum of integration or consideration of pedagogy. In Ellis et al.'s (2006) study, a variety of patterns emerged regarding how faculty perceived blended learning practice. In this study of 22 faculty members, four categories of responses emerged regarding faculty perceptions of the practice of blended learning: "helping students develop and apply new concepts," "developing student understanding through alignment of media to learning outcomes," "using technological media to deliver information," and "using technological media to replace the teacher" (Ellis et al., 2006, p. 327). As stated earlier, the diversity in faculty member perceptions of blended learning is

useful in understanding blended learning practices and why faculty may or may not adopt the method. Given the importance of faculty member perceptions of blended learning, the FLC began its first session by exploring these perceptions through group discussion. These early conceptions of blended learning provided insight into specific needs of participants which the FLC was able to support.

Perceived challenges to implementing blended learning. A consideration of faculty member attitudes toward blended learning reveals multiple challenges perceived in the implementation of blended courses. The first challenge often cited by faculty members across multiple studies relates to the amount of time required to prepare for teaching a blended course (Heilesen & Josephsen, 2008; Ocak, 2011; Vaughan, 2007). Vaughan (2007) showed that faculty members often identify the need for far more preparation and time spent prior to the course start than in traditional, face-to-face deliveries. Ocak (2011) similarly shared the experience of one faculty member: "Teaching blended courses is more time intensive than other teaching methods... On top of that, you have to find the correct balance of time spent for face-to-face and online components" (p. 696).

Confidence in one's own pedagogical and technological skills represents another challenge for some faculty members (Furco & Moely, 2012; Heilesen & Josephsen, 2008; Ocak, 2011; Reid, 2015; Tshabalala et al., 2014). Reid (2015) explained that past experiences with technology greatly impact whether a faculty member believes they are capable of being successful in teaching a blended course. Similarly, Ocak (2011) found that faculty members in his study believed comfort in employing new technologies was

key in successfully teaching blended courses – even to the extent of desiring separate training just for the use of technology.

Faculty members also indicate that clear policy and direction of institutional leadership remains a challenge in their own personal adoption of blended learning. In other words, when administration lacks broad promotion and expectations of faculty members engaging in this practice, the time and effort involved are considered as not worth the risk (Furco & Moely, 2012; Ocak, 2011; Tshabalala et al., 2014). "…support for an innovation is garnered when faculty members become convinced that the institution is making a genuine, long-term commitment to the innovation" (Furco & Moely, 2012, p. 147). Experienced faculty members may wish to wait past the initial marketing and excitement around an innovation to see whether adoption is worth the substantial time and effort required.

Finally, a key consideration in the perceptions of blended learning often cited by faculty members is how and to what extent they will be supported by their institution in this endeavor (Furco & Moely, 2012; Napier et al., 2011; Ocak, 2011; Tshabalala et al., 2014; Vaughan, 2007). Such institutional support must account for faculty learning of new methods of pedagogy as well as technology (Ocak, 2011; Reid, 2015; Vaughan, 2007). In response to this challenge appearing often across the literature, Vaughan (2007) cites the faculty development programs of the University of Central Florida and the University of Wisconsin-Milwaukee as exemplars of considering both initial and ongoing faculty member needs. Along similar lines, Tshabalala et al. (2014) explain that faculty in their study called for ongoing faculty workshops to meet these needs. Ocak (2011) shares the complaint of one faculty member which mirrors my own problem of practice "I feel

isolated in my blended class, because there is no one from whom I can get help. Mostly, I am working by myself to go through struggles and problems I face" (p. 696).

Leading Organizational Change Toward Blended Learning

A consistent thread among the aforementioned studies relates to institutional support for innovation in blended learning (Ocak, 2011; Reid, 2015). Organizational capacity and support for change must play a central role in planning for such efforts (Rogers, 2003). Additionally, change across individuals and organizations represents an inherently social process (Heath & Heath, 2010; Moran & Brightman, 2000; Rogers, 2003). Successful organizational change must then consider both individuals and the systems in which they reside (Moran & Brightman, 2000; Rogers, 2003).

Structural Holes as Opportunities for Innovation. Lack of movement beyond the stated plan to adopt blended learning as an innovation created a gap between an institutional goal and actual practice at LBC. However, as Battilana and Casciaro (2012) point out, such "structural holes" provide avenues for innovation. Importantly, "…structural holes…aid the initiation and adoption of changes that diverge from the institutional status quo but hinder the adoption of less divergent changes" (Battilina & Casciaro, 2012, p. 382). Although this gap in practice may at first appear to be a hindrance to innovation, it holds potential to serve true change in institutional adoption of new practices (Battilana & Casciaro, 2012; Rogers, 2003). This structural hole creates the opportunity for a method of adopting innovations new to this context, the faculty learning community (further descriptions of this method will follow).

Leading Organizational Change. Although broader institutional structure must inform meaningful adoption of innovations, the role of individual actors in facilitating

change must also be considered. Such individual "change agents" engage in specific leadership behaviors which contribute toward further diffusion of innovations (Battilana & Casciaro, 2012; Heath & Heath, 2010; Rogers, 2003). Such change agents may lead organizational change appealing to intellectual and affective motivation for change and establish more clear lines of communication throughout the organization, actively monitoring their multi-layered role through cyclical reflection (Battilana & Casciaro, 2012; Heath & Heath, 2010; Osentoski, 2015; Rogers, 2003; Seo, Taylor, Hill, Zhang, Tesluk, & Lorinkova, 2012).

Roles of Change Agents. The literature on change agents portrays a multi-dimensional figure engaging in several roles (Battilana & Casciaro, 2012; Heath & Heath, 2010; Osentoski, 2015; Rogers, 2003; Seo et al., 2012). Rogers (2003) explains how these roles shift over time through the following seven-step sequence: "To develop a need for change," "To establish an information exchange relationship," "To diagnose problems," "To create an intent to change in the client," "To translate an intent into action," "To stabilize adoption and prevent discontinuance," and "To achieve a terminal relationship" (pp. 369-370). This sequence indicates a shift in responsibilities of the change agent as the innovation is diffused through an organization. Osentoski (2015) provides a more granular description of the change agent, signifying the dispositions and skills need to facilitate these multiple roles over time. Change agent skills may include "observation, negotiation, communicating effectively, and inquiring," whereas abilities may include "serving as mentor and role-model, navigate underlying political and sociocultural dynamics, understand people and their capabilities" (Osentoski, 2015, p. 48). A substantial role here is that of affective leadership, wherein the change agent

addresses participant's emotional motivations to adopt the innovation near the beginning of implementation, which may also impact retention of the innovation over time (Seo et al., 2012).

Another key role played by change agents is that of a "linker" (Osentoski, 2015; Rogers, 2003). In this way, the change agent acts as a dynamic intermediary between the innovation and the people charged with practicing it over time (Rogers, 2003). Such linking provides the contextualization needed for the innovation to navigate social and technical roadblocks (Osentoski, 2015; Rogers, 2003). Rogers (2003) helpfully explains that change agents act as a bridge between the pre-innovation institution and practice after the innovation is adopted, "…with one foot in each of the two worlds" (p. 368).

Factors in Change Agent Success. Although the change agent must navigate multiple roles over time as an innovation is diffused, several factors have been identified to contribute towards their success. Rogers (2003) describes four primary factors for change agent success: "change agent effort," "client orientation," "compatibility with client needs," and "change agent empathy" (pp. 373-376). Change agent effort might be expended through regular and consistent personal contact with potential adopters and should be targeted towards the groups and timing appropriate to each of Rogers' (2003) Diffusion of Innovations categories (as demonstrated in Figure 2 below). "Client orientation" reflects a change agent willing to engage in feedback loops and meaningful contextualized engagement with adopters of the innovation (Rogers, 2003). An innovation adoption program facilitated by the change agent must also be perceived as "compatible" with the needs of the practitioner (Rogers, 2003). Finally, the change agent

must be prepared to empathetically lead others, seeing potential problems or successes through the eyes of the adopter (Rogers, 2003).

Osentoski (2015) adds to Roger's (2003) characterization of successful change agents by depicting a disposition of reflexivity. Osentoski (2015) explains that due to the prolonged identification with the innovation itself, the change agent becomes susceptible to losing self-awareness as they lead change. Thus, regular reflective practice on the change agent's own managing of multiple roles guards against improperly conflating the innovative practice with the change agent themselves (Osentoski, 2015). Osentoski (2015) relates that change agent reflexivity can be practiced through reflective journaling or more robust methods such as auto-ethnography. The dynamic roles and required organizational leadership skills of the change agent reflect the complexity of adopting and diffusing innovation.

Faculty Development for Blended Learning

Targeting Faculty Development. Due to the complexities of teaching innovations such as blended learning, faculty developers often target efforts toward certain sectors of their faculty population (Bennett & Bennett, 2004; Porter et al., 2016; Reid, 2015; Rogers, 2003). Toward this end, many have found Rogers' Diffusion of Innovations (2003) valuable in understanding which interventions might be most helpful to certain groups of faculty members (Doyle, Bernie, & Leanne, 2014; Kohles, Bligh, & Carsten, 2013; Porter et al., 2016; Porter & Graham, 2016). Rogers (2003) recognized individual and group stages of adoption in the Diffusion of Innovations theoretical framework. For a given innovation, participants may be grouped along a normal distribution or bell curve (Rogers, 2003). Along this distribution, Rogers recognizes five

groups: innovators, early adopters, early majority, late majority, and laggards (2003). This distribution is often characterized by the following bell curve in Figure 2:

Figure 2. Rogers' Diffusion of Innovations Adoption Curve.

At the first stage, innovators represent individuals who explore innovations on their own and are often familiar and proficient with new technology (Porter & Graham, 2016). Early adopters follow after the innovators and exercise another layer of discernment prior to adopting new technology or innovation (Porter & Graham, 2016). The early majority grouping incorporates innovation prior but in close proximity to the "average" individual in a population (Doyle et al., 2014, p. 779). The term "deliberate" may be used to describe this group (Rogers, 2003, p. 283). Rogers (2003) explained that their placement in the adoption stages proves a vital connection and conduit for innovation to spread through a population. The next group contains those classified as the late majority (Porter & Graham, 2016). These individuals likely need more extensive support and likely lack familiarity with technology (Porter & Graham, 2016). Rogers explained that this group

may be adopting the innovation out of "economic necessity" or institutional influence (2003, p. 284). Given the optional nature of blended courses in my local context, this group likely does not feature prominently. The final group categorized by the Diffusion of Innovations theory is the Laggards (Rogers, 2003). Porter and Graham (2016) explained that laggards "…resist adopting new innovations even after necessity prompts adoption" (p. 751). In fact, Rogers explained that laggards may not adopt an innovation until a new idea is beginning to move through the other groupings (2003). Although each of these stages provides a helpful description for the state of innovation diffusion, such a framework may also prove valuable for targeting development or training programs for each subset (Fetters & Duby, 2011).

Fetters and Duby (2011) employed a case study of Babson College, where professional development was targeted to specific stages of faculty adopters. Faculty members were identified by their practice and categorized into groupings of early adopters, early majority, and late majority, reflecting Rogers (2003) stages of faculty adoption (Fetters & Duby, 2011). Each grouping received targeted training programs which reflected the needs specific to their level of adoption (Fetters & Duby, 2011). Ten years after the program's implementation, the researchers point to the success of targeting faculty development along the lines of Rogers (2003) Diffusion of Innovations and call for further resourcing and programs to ensure continuity and ongoing progress (Fetters & Duby, 2011).

In a similar effort, this study sought to meet particular needs of two categories of Rogers' Diffusion of Innovations: innovators and early adopters. As stated previously, innovators are those who regularly seek out innovations without prompting (Rogers,

2003). Since this group of faculty members consider risk-taking a regular part of practice, they often find hearing new ideas from others and opportunities to peruse resources at their own pace most helpful (Rogers, 2003). In this way, the BLR provided in early cycles of research intended to present faculty members with an array of possible options – faculty feedback at this stage of the research indicated that they desired even more resources than were provided. To meet the needs of these innovators, one element of the faculty development initiative included a variety of ideas and resources which can be explored at their own pace.

Rogers (2003) explains that early adopters hold a different set of needs in adopting innovations. Although not as quick to adopt new ideas, this faculty section finds safety in the increasing numbers of adopters and values collaboration. As indicated in the previous discussion of the earlier research cycles, this sector of faculty is also represented in this proposed study. To meet the needs of this population, much of the intervention activities focused on collaborative opportunities to share struggles, successes, and concerns. Combining the innovators with early adopters in the intervention allowed innovators to lead during collaborative times, acting as a bridge for the innovation to spread more deeply amongst early adopters (Fetters & Duby, 2011; Porter & Graham, 2016; Rogers, 2003). Such an approach reveals the social-constructivist nature of the Community of Inquiry framework as well, as all participants share in leading activities demonstrating cognitive, teaching, and social presence (Garrison et al., 2000).

Faculty Learning Communities. Although historic trends of introducing technological innovations follow a once and done "workshop" or similar approach, such a model lacks the continuity and depth of critical reflection offered by an ongoing culture

of faculty development (Carbonell, Dailey-Hebert, & Gijselaers, 2012; Wicks, Craft, Mason, Gritter, & Bolding, 2015). Professional learning communities, FLCs, or Communities of Practice (Wenger, 1998), provide one avenue of establishing a sustained critical reflection on faculty member practice. Parsons, Lovato, Hutchinson, and Wilson (2016) described them as follows: "They [communities of practice] are driven by a personal desire and professional need to share problems, experiences, insights, tools, and practice" (p. 22). Carbonell et al. (2012) added to this description by explaining that such an approach keeps individual practitioner concerns at the forefront and leverages the creative problem solving capabilities of faculty participants. Furco and Moely's (2012) study employed FLCs to implement the innovation of service-learning, finding that this approach "…provided structure, content, and peer-networking opportunities that helped enhance faculty participants' understanding of service-learning and strengthened their buy-in and support for this instructional innovation" (p. 146). Furthermore, the results of the study revealed that faculty participants grew in confidence as practitioners of the innovation and gained a clearer picture of their institution's commitment to the innovation, elements which reflect similar faculty member responses in the studies discussed previously (Furco & Moely, 2012; Ocak, 2011; Reid, 2015; Tshabalala et al., 2014; Vaughan, 2007). Additionally, Parsons et al. (2016) explained that inter-disciplinary faculty learning communities often reveal paths of inquiry and insight that administration alone may not have identified. A growing consensus across the literature reveals the potential for faculty learning communities to effectively implement educational innovations and provide community support for faculty innovators (Carbonell et al., 2012; Furco & Moely, 2012; Owston, Wideman, Murphy,

& Lupshenyuk, 2008; Parsons et al., 2016; Vaughan & Garrison, 2005; Wicks et al., 2015). Thus, the guidance, collaboration, and mutual inquiry of a FLC approach represents an appropriate measure to support blended learning practice.

Characteristics of Faculty Learning Communities. Certain characteristics define the formation of a FLC. One of these characteristics holds that participants should represent diversity across levels of experience with teaching, the innovation in question, and willingness to innovate (Carbonell et al., 2012; Furco & Moely, 2012; Wicks et al., 2015). This diversity allows for peer-learning opportunities, an expanded ability to tackle a breadth of problems, and multiple perspectives for creative problem-solving (Carbonell et al., 2012). Another key characteristic of FLCs is that the community should investigate problems and projects that apply in tangible ways to their own practice (Carbonell et al., 2012; Furco & Moely, 2012; Parsons et al., 2016; Wicks et al., 2015). This principle lends itself toward more effective transfer of learning, engagement, and commitment to finding solutions. A final consideration defining characteristics of FLCs is the creation of an atmosphere promoting the open sharing of ideas, opinions, and questions (Carbonell et al., 2012; Furco & Moely, 2012; Parsons et al., 2016; Wicks et al., 2015). A consistent term in the literature to summarize this concept is “safe” – open inquiry involves taking intellectual and social risks, and an environment allowing for trial and error may play a crucial role in the formation of a FLC. Although different frameworks for FLCs may list additional characteristics, they hold in common the concepts of participant diversity, applications to practice, and safe environments for open inquiry. Such attributes serve to the potential value of a FLC in supporting faculty member experiences in blended learning.

Faculty Learning Communities as Bottom-Up Faculty Development.

Carbonell et al. (2012) explained that though institutional administration can dictate faculty development measures from the top-down for an innovation, such an approach is limited: "The outcome is a set of new procedures that faculty use reluctantly or ignore" (p. 30). In contrast, "bottom-up" innovation embraces the creative potential of individual faculty members who are also the end users of the planned innovation (Carbonell et al., 2012, p. 30). Rather than following dictates from a seemingly distant administrator, faculty members collaborate around common problems, share ideas, and inspire each other to continually improve (Wicks et al., 2015). From this perspective, FLCs present themselves as a meaningful opportunity for faculty members to share the burden of learning and committing to an innovation. Employing such FLCs to implement innovation may seem inefficient to some, however, it holds potential for long-term, quality execution of blended learning practice (Carbonell et al., 2012).

Blended Faculty Learning Communities. Although some researchers point to FLCs as excellent vehicles for lasting innovation with strong faculty member buy-in, others build on the concept further by arguing for conducting the communities in a blended format (Owston et al., 2008; Vaughan & Garrison, 2005). Vaughan and Garrison (2005) studied the efficacy of a blended FLC to model the teaching of blended courses, an application nearly identical to my own problem of practice. Discussing the value of a blended approach, Vaughan and Garrison (2005) explain that in a successful FLC, "…the potential to support faculty development inquiry by creating opportunities for both synchronous and asynchronous discourse and reflection is powerful" (p. 4). Traditional workshops that take place synchronously (either face-to-face or online) deluge the

participants with information, not allowing time to process or reflect on what implications the innovation may hold for each member's practice (Vaughan & Garrison, 2005). This allows the faculty participant to first digest the innovation and what it may look like in their setting, implement it, and then reflect and identify solutions to problems that arise. Owston et al. (2008) studied three different blended faculty development programs at three different higher education institutions, concluding not only that the blended method provides an effective platform for FLCs, but also that it holds potential for improving faculty member and student experiences inside the classroom. Considering the goal of meaningfully supporting blended learning at my institution, employing a blended FLC seemed an appropriate method to both provide effective professional development and model blended learning best practices.

Summary

Institutions of higher education value the method of blended learning as a practical and cost savings matter, as well as in a shift to find relevancy and innovation around a learner-centered education (as opposed to content-driven models; Garrison & Kanuka, 2004; Rovai & Jordan, 2004; Vaughan, 2007). However, there often seems to be a disconnect in the stated goals of administrators and those who must carry them out (Porter & Graham, 2016). Institutions seeking to implement blended learning should consider context-specific instructional and technological support to guide faculty members in adopting this innovation (Furco & Moely, 2012; Heilesen & Josephsen, 2008; Ocak, 2011; Reid, 2015; Tshabalala et al., 2014).

As institutions plan such support, guiding theoretical frameworks such as the Community of Inquiry align efforts with prior research. Garrison, Anderson, and

Archer's (2000) Community of Inquiry framework provides a template for an engaged online or blended course. This framework serves as a guide for design of blended courses and for the FLC itself to model. Utilization of this theory situates the study amongst prior research aimed at supporting blended learning and faculty development.

The FLC remains a key method of providing professional development for faculty members, providing opportunity for collaboration and sustained critical reflection on teaching practices (Carbonell et al., 2012; Wicks et al., 2015). In this way, participating faculty members both worked on shared problems of practice and experienced blended learning from the perspective of a student. Studies cited in this chapter point to meaningful applications of the FLC for blended learning faculty development (Owston et al., 2008; Vaughan & Garrison, 2005).

The goal of this research was to support faculty members blending undergraduate courses at Lancaster Bible College. Guided by the theoretical framework discussed above, a bottom-up approach to faculty development was employed through multiple cycles of intervention and inquiry.

Chapter 3

Method

"When campuses begin to implement learning communities, whether they know it or not they are embarking on a road that leads to profound change in culture" (Shapiro & Levine, 1999, front cover).

Introduction

This study employed an action research approach as a measure of seeking contextually driven answers to the problem of practice (support for undergraduate blended learning) (Mertler, 2017). Earliest references to action research as a discipline often trace back to Kurt Lewin, due to his formation of the approach in the 1930's (Hendricks, 2009). As opposed to more traditional research approaches seeking generalizable results, action research positions itself within the immediacy of a particular context (Hendricks, 2009; Ivankova, 2015; Mertler, 2017). Such an approach lends itself to the classroom, where the complexities of each community come to bear on the research. This contextually-driven research positioned the researcher as participant, allowing teacher-leaders to study and effect meaningful change in their local teaching environments (Mertler, 2017). The cyclical, reflective process inherent to action research provided the opportunity for meaningful innovation in my context.

Although the action research approach acts as a guide for leading innovation in a given setting, specific methodologies provide the means for understanding whether an innovation held a meaningful impact. This research enacted a qualitative framework to maximize insight into what perceptions participants might hold regarding the intervention of a FLC through multiple qualitative data sources. Qualitative inquiry holds learning as

its key aim (Rossman & Rallis, 2017). In this study, such data empowers depth of insight into the ways participants engage in innovation as a result of the FLC.

Setting

Lancaster Bible College in Lancaster, Pennsylvania offered online and blended courses at the undergraduate, graduate, and doctoral levels. The Office of Digital Learning (ODL) supported these courses through ongoing professional development, resources, and an instructional design team. Nearly all graduate and doctoral courses were blended at the program level, whereas blending an undergraduate course remained the prerogative of each professor (note that in this study, one participant was teaching a graduate course which also was receiving now support from the ODL). Due to the optional nature of these blended undergraduate courses, the ODL did not support their design and delivery. Limited staffing in the past prevented meaningful support for professors blending their courses. More recent efforts to support new and growing online programs underscore the reality that resourcing continues to centralize in the areas of greatest need, which did not include traditional undergraduate blended courses. The Office of Teaching Effectiveness at Lancaster Bible College leads professional development initiatives for faculty members at all locations, and often partners with the Office of Digital Learning where appropriate. My own positioning as a member of each of these offices acts as a natural placement for leading such an intervention to improve blended learning practices.

Participants

Approximately 40 of 500 faculty members practiced undergraduate blended learning on the Lancaster campus in a given semester. Faculty participants were

purposively selected by two key criteria: that they were planning to teach a blended course for the first time in the Spring 2019 semester, and that they desired the support of a FLC during the Fall 2018 semester while they designed the course. From this population, five faculty members were willing and able to join the FLC. Faculty participation in FLCs was encouraged from multiple levels of administration. Although the Provost's Office supported such professional development opportunities through public recognition and encouragement to join, it left individual faculty member release time up to the judgment of individual academic departments. Academic Chairs and program coordinators worked individually with faculty members to arrange who might be available to join a given FLC or professional development effort.

Recruitment occurred through the summer, initiated through an email to academic department chairs who assisted in identifying faculty members who were interested in teaching a blended course in Spring, 2019. Attempts to guard for population validity sought to identify participants holding varied teaching experience, teaching across disciplines, and varied gender. Once these faculty members were identified, an initial email with attached recruitment letter (Appendix D) confirmed their willingness to participate in the research. Participants were required to bring a laptop or device to on-campus FLC sessions to facilitate discussions around their own courses and address needs in technological training.

A brief survey (Appendix E) provided initial demographic details on participants prior to the beginning of the FLC. The following descriptions of each participant employ pseudonyms created by the researcher. These introductions serve to enhance the clarity

around unique experiences of participants, as well as framing potential transferability of key takeaways from this action research.

Steve held six years of teaching experience at the college level, a position which he began after a prior career as a social worker. He taught in the Counseling and Social Work program and primarily viewed his course as skills-based. Through the initial demographic survey, Steve reported comfort with taking risks in the classroom and moving at his own independent pace, having previously taught two blended courses. He is a Caucasian male.

"Mary," another former social worker, taught in the Counseling and Social Work program for five years. Her responses to the survey indicated that she too was comfortable with taking risks in the classroom and enjoyed exploring new resources for the classroom at her own pace. Prior to this study, Mary had yet to teach an undergraduate blended course. She is an Asian female.

Ben was also a former social worker. He held one year of teaching experience in the Counseling and Social Work program. Ben viewed his course as content-based and differed from Steve and Mary in that he reported a preference to learn alongside others and observe their use of an educational innovation before adopting it himself. He had previously taught one blended course. Ben is a Caucasian male.

James taught in the Criminal Justice program as a former lawyer, holding 12 years of experience in the classroom. He viewed his course as content-based. James indicated he, like "Ben," preferred to adopt a practice after observing colleagues and enjoyed collaboration around shared problems of practice. He also preferred exploring

new resources at his own pace. James had not yet taught a blended course prior to this study. He is an African-American male.

Mark taught in the Counseling program, with two years' classroom experience. He reported seeing his course as skills-based and was eager to experiment with innovative teaching, although he preferred collaborating with others when doing so. He has previously taught two blended courses. Mark is an Asian male.

Role of the Researcher

I served as both observer and participant during this study. Since 2014, my role as instructional designer in the ODL positioned me as a resource for professors in blended or online teaching environments. Expansion of such a role occurred on July 1, 2017, as I took the role of Coordinator of the Office of Teaching Effectiveness (OTE). This new role placed me at the center of all professional development for the institution. Finally, I served as an assistant professor; this role allows me to approach faculty members as a peer, having experienced many of the same challenges as others in teaching online, on campus, or in a blended format. As stated in chapter one, these roles were divided as 75% time as instructional designer, 25% faculty developer during the 2018-2019 academic year (teaching courses occurred above this workload). Although I did not teach a blended course at the same time as faculty, my prior experiences in teaching a blended course informed my own participation in the FLC as I provided insight, advice, and encouragement to faculty participants. Faculty ranking and the ability to achieve peer status to faculty members at the institution remained an intentional decision by the institution to provide those in faculty development credibility with those they serve, as well as relevancy to daily teaching practice by experiencing the same challenges in their

own courses. Through these roles, I have been able to establish meaningful relationships with the faculty members in nearly all of the academic departments at the institution. I served as an insider to the local context. Interventions such as the one provided in this study represent actions within my own typical practice, which ranged from one-on-one collaboration for online course design to leading professional development initiatives.

I facilitated the FLC by modeling effective blended design (with the FLC "course" acting as an exemplar for faculty members designing their courses) and teaching. Online, I modeled regular examples of instructor presence through regular announcements, feedback on assignments, engagement in forums, and recorded mini-lectures. In this way, Community of Inquiry was modeled both through my direct identification of each activity in the FLC course as aligning with one or more of the three presences, and through carrying them out alongside the participants. On campus, I shared from past experiences teaching blended courses, provided direct instruction and guidance on relevant blended course topics, and modeled active learning practices in the session for participants. As shared problems of practice arose, I encouraged collaboration among participants and joined in locating resources or ideas to address faculty member needs. In these ways, I served both as faculty peer and as a guide through the blended design and teaching process. Since Community of Inquiry represents a social-constructivist model, both the participants and myself engaged in each of the three presences of the framework, rather than more cleanly dividing responsibilities of teaching presence to myself and social or cognitive presences to the participants.

All data collection and analysis was enacted by the researcher as participant. I conducted the FLC (including on campus and online sessions) and continued observing

faculty members as they taught their blended courses. As the data collection and analysis procedures outlined below indicate, several opportunities emerged for reflecting on how this situated role will reveal my own growth as a scholarly, reflective practitioner and leader. Formally, I practiced reflexivity through taking field notes as an opportunity to examine how my own behavior shaped faculty member perceptions of the support offered by an FLC (Osentoski, 2015). This study represented an opportunity to empower a small group of high-performing faculty towards building organizational capacity to innovate. My own role in facilitating such a cultural shift represented one of little authority, but substantial potential influence as the institution continued to grow and invest in its faculty members.

Procedure

During the summer of 2018, the FLC course site and accompanying resources were built in the institution's learning management system, Schoology. The FLC course site contained instruction through videos, articles, and other resources, as well as opportunities for reflection and collaboration in discussion forums and assignments. Recruitment occurred concurrently through the summer, initiated through an email to academic department chairs who assisted me in identifying faculty members who are interested in teaching a blended course in Spring, 2019. Participant demographic data such as teaching experience, discipline, and gender was documented in detail to guard population validity in the study. This data was collected via a brief survey (Appendix E) at the onset of the FLC.

During the Fall 2018 semester, the FLC was spread across the three online sessions and four face-to-face sessions, with the final session on campus acting as a focus

group. Each session was designed in a way to cohere with the next, so as to communicate blended learning as one interwoven modality. Sessions held on campus lasted one hour, whereas all online activities were asynchronous to provide flexibility and mirror the blended model employed by the participants in their own courses. Online activities required approximately one to two hours of work for participants to complete, although further participation in extended discussion forum conversations or digital communications allowed for further investment if desired. Participants brought a laptop or similar device to display their courses when they have specific questions for the group. During both modalities of FLC session, mini lectures provided a platform for collaboration and open discussion around shared problems of practice or areas of concern.

When a participant was unable to attend a given session, the faculty developer emailed them to send any resources discussed during our session, as well as a brief recap of what was discussed. Since each session was video recorded, the faculty developer obtained permission from participants to send the recording to those faculty members unable to attend a given session. In cases where a participant did not engage online or attend an on-campus session, the faculty developer documented the loss (or partial loss) of data appropriately for that session.

FLC sessions on campus were video recorded, whereas the asynchronous online portions acted as artifacts housed in the learning management system. Field notes were composed throughout the FLC experience to provide initial insights into the video recordings. Analysis of these data through thematic analysis began concurrently with the FLC and continued through the Spring 2019 semester. After each on-campus session

during the fall, analysis involved open-coding for research question four, followed by eclectic coding (Saldaña, 2016). Additionally, as aligned with research question two, provisional coding following Garrison and Vaughan's (2006) coding template was subsequently supported by open and eclectic coding (Saldaña, 2016). These codes were refined after each session. After the focus group, which occurred during the final FLC meeting, all codes were refined once more and then analyzed for emergent themes. For each session, two rounds of coding occurred, each aligning with research questions two and four.

At the beginning of the Spring semester, a consent form (Appendix F) was presented to students enrolled in the FLC participant's courses to seek permission for course observations and filming. The researcher briefly explained the study when handing out and collecting consent forms to ensure students fully understood. All students in each course consented to observations for this study in the face-to-face and online elements of their courses. A name blurring filter provided student anonymity in online course observations. During the Spring 2019 semester, each participant's course was observed for three hours total (one hour of online observations and two separate one-hour classes on campus), with data collection occurring via field notes, video recording, and the learning management system. Once again, analysis occurred through initial open codes which were refined after each observation. Data analysis for evidence of Community of Inquiry presences through Garrison and Vaughan's (2006) coding template took place concurrently with data collection during the Spring semester.

Data analysis was finished during the late spring and early summer of 2019. This process included finalization of codes and triangulation of all data sets toward each research question. Table 1 displays the full timeline of this study:

Table 1

Timeline and Procedures of the Study

Time frame	Actions	Procedures
Summer 2018	• Created FLC course site • Obtained IRB approval • Recruited Participants	• Created FLC course site, structure, instructional videos, and resources. • Contacted academic department heads to identify potential participants.
Fall 2018 Semester	• Surveyed participant demographics • Conducted FLC • Began data analysis	• Conducted blended FLC on campus and online (4 sessions each). • Conducted focus group during final session on campus. • Recorded field notes during facilitation of FLC (on campus and online). • Began data analysis through open and in vivo coding.
Spring 2019 Semester	• Requested permission for observations from students • Conducted observations for each participant • Conducted second focus group • Continued data analysis	• Sent permission form to students. • Video recording and field notes of each observation. • Coded observations and field notes according to COI coding template. • Continued open and in vivo codes for second focus group

Summer 2019	• Finished data analysis	• Finished coding of field notes and video recorded class observations. • Triangulated field notes and observations of courses. • Established code guide from focus groups for analysis.

Intervention

This action research study utilized a FLC to support faculty members in blended course development. Despite the prevalence of the FLC model in the literature, Lancaster Bible College held little formal experience with the approach (Carbonell, Dailey-Hebert, & Gijselaers, 2012; Wicks, Craft, Mason, Gritter, & Bolding, 2015). This intervention provided an appropriate support structure for faculty of new blended courses to gain confidence as they sought to innovate in their own classrooms (Furco & Moely, 2012; Ocak, 2011; Reid, 2015; Tshabalala et al., 2014; Vaughan, 2007). Although the FLC allowed for collaboration on shared problems of practice and a safe environment for innovation, it also acted as a model of blended learning for participants (Carbonell et al., 2012; Wicks et al., 2015). This blended model offered both the autonomy and self-paced elements desired by faculty "innovators" and the collaboration and shared experiences desired by faculty "early adopters" (Fetters & Duby, 2011; Porter & Graham, 2016; Rogers, 2003).

Structure. The FLC consisted of four sessions on campus, with three online sessions taking place between each face-to-face meeting. Lancaster Bible College's learning management system, Schoology, hosted the online portions of the FLC.

Although the FLC course site held less content than the full 15-week courses faculty members would eventually teach, it modeled clear and purposeful course layout for the blended approach (several screenshots of the course are provided in Appendix G). Each of the main folders of the FLC course site followed a similar structure: a brief video of instruction regarding a specific area of blended learning design, an opportunity for individual or group reflection designed to act as a formative assessment to shape the discussions of the next on-campus session of the FLC, and a collection of related resources. As an option, "out-of-class" opportunities were suggested to extend the thinking of participants relative to their own course experiences.

Integration with Community of Inquiry. Both the design and facilitation of the FLC modeled the Community of Inquiry framework (Garrison et al., 2000). Integration of online and on-campus sessions modeled cognitive presence, where the initial video introduced the triggering event and exploration and on-campus discussions reinforced integration and resolution (Akyol & Garrison, 2011; Garrison et al., 2000; Kozan & Richardson, 2014). Opportunities for social presence occurred during collaborative discussions online and face-to-face, where participants were encouraged to learn from diversity in their academic disciplines and experiences in blended learning (Garrison et al., 2000; Garrison & Kanuka, 2004; Kozan & Richardson, 2014). Brief instructional videos, course announcements, and active engagement in discussion forums served the notion of teaching presence in online sessions, whereas direct guidance of the FLC facilitated teaching presence on campus (Garrison et al., 2000). Although each session was designed to facilitate each of the three presences, each activity was prefaced by an identification for which of the three presences it is intended to enact (although more than

one may be enacted at once). It remains important to note that Garrison et al.'s (2000) Community of Inquiry is a social-constructivist framework. This held implications for the ways it was both facilitated and observed, since both researcher and participants shared responsibilities in each of the three spheres and their intersections (Vaughan & Garrison, 2006). Although as the leader of the FLC I took initiative to guide the group in a given direction at times, I gave substantial opportunities for all participants to lead in facilitating each of the three presences. Speaking directly about these presences and their intersections with participants allowed participants to see how they may play these multiple roles in their blended courses as they teach. Table 2 displays the timeline and curricular topics for FLC activities during the Fall 2018 semester. Learning goals and methods of assessing these goals in each FLC session are provided in Table 3 below, whereas a diagram of how online on campus sessions are integrated into one modality is provided in Figure 3.

Table 2

FLC Schedule

Date/Session	Topics
9/7; On Campus 1 2:00 pm – 3:00 pm	• Introduced FLC • Conceptualizing Your Blended Course mini lecture • Mix-Map practice activity • Ended with ticket out door
9/8-10/4; Online 1	• Justin posted follow up on their tickets out the door in "updates" area • Assessing for Learning mini lecture • Differentiation mini lecture • Brief individual reflection writing
10/5; On Campus 2 2:00 pm – 3:00 pm	• Opening debrief of first online session and interactions • Discussion around assessing for learning/differentiation, focused on specific applications or questions for each participant • Ended with essential question: "How might a blended course create different educational opportunities than a traditional course?"
10/6-11/8; Online 2	• Initial discussion forum, participants offered answers to essential question from On Campus session 2 • Using Schoology for BL (Course layout/tools) mini lecture • Discussion where they shared concerns & ideas centered around using Schoology and other tools
11/9; On Campus 3 2:00 pm – 3:00 pm	• Opening debrief of online session, use of tech tools • Meeting instructional hour requirements mini lecture • Discussion brainstorm on tools and techniques for instructing online • Ended with ticket out door
11/10-12/6; Online 3	• Justin posted follow up on their tickets out the door in "updates" area • Teaching BL courses mini lecture • Brainstorm discussion on methods for instructor presence • Assessing your blended course discussion, focused on UCF peer review rubric • Discussed outstanding questions
12/7; On Campus 4 2:00 pm – 3:00 pm	• Focus group reflected on designing a course with the FLC

Table 3

FLC Timeline and Curricular Topics

Session	*Learning Goals*	*Assessment*	*Optional Task*
1: Conceptualizing Your Blended course (On campus)	• Define blended learning • Conceptualize blended learning through the framework of the Community of Inquiry	• Think-Pair-Share activity • COI activity, Mix-Map activity • Ticket Out the Door	
2: Assessing for Learning Part 1 (Online)	• Design learning-centered assessments • Create a plan to differentiate in your blended course	• Assessing for Learning activity • Differentiated Learning activity	Find someone teaching a blended course this semester and ask for a piece of advice to share with the FLC.
3: Assessing for Learning Part 2 (On campus)	• Plan for authentic assessment of learning in your blended course • Plan for differentiation of learning in your blended course	• Discussion on struggles and successes with assessment • Discussion on struggles and successes with differentiation	
4: Putting the "Blend" into Blended Learning (Online)	• Define blended learning as a modality in and of itself, rather than the combination of online and face-to-face activities • Build your blended course in Schoology	• Blended vs. Traditional Courses forum • Using Schoology for Blended Learning forum	Ask students who have taken blended courses which course layout seemed the best from their perspective, and share with the FLC.
5: Tools for Blended Learning (On campus)	• Identify which technological tools you will employ in your blended course • Plan to calculate hours of instructional activity for your blended course	• Discussion brainstorm on tools and techniques for instructing online	
6: Teaching Your Blended Course (Online)	• List examples of online instructor presence • Assess the quality of your blended course	• Online Instructor Presence module • Assessing Your Blended Course forum	Ask students who have taken blended courses what their favorite blended course professors did to ensure a

	meaningful learning experience, and share with the FLC.

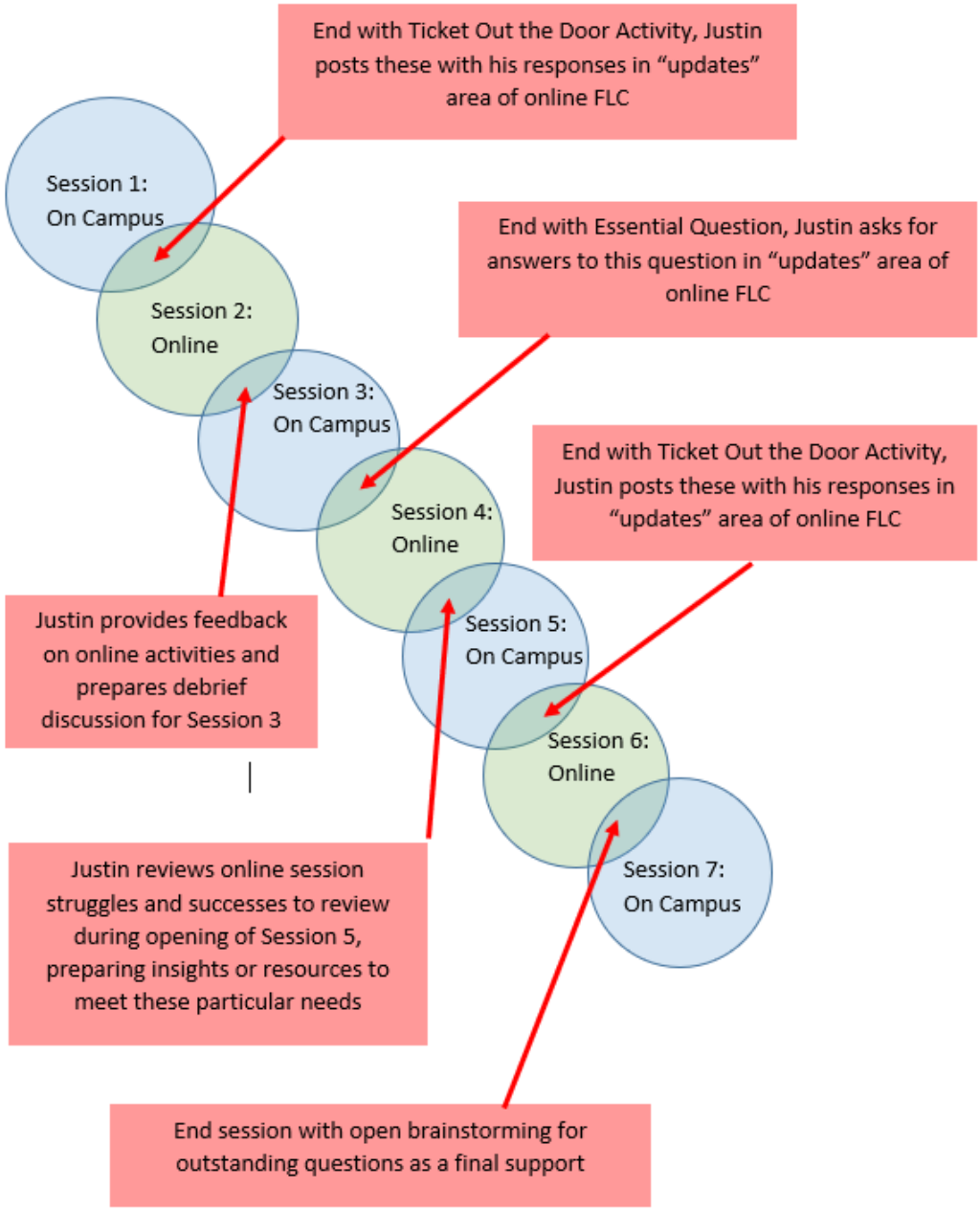


Figure 3. Blended FLC Integration Diagram.

Data Collection & Instruments

The FLC intervention afforded several opportunities for data collection. An overview of data collection and alignment to the research questions is provided in Table 4 below.

Table 4

Data Collection Alignment

Research Question	Measure	Data Collected	Time of Collection
Q1. How did faculty perceive the value of a faculty learning community as a support for designing blended courses?	• Recorded on campus sessions • Field notes	• Video recordings • Typed field notes	• Fall and Spring focus groups • Fall and Spring focus groups
Q2. Which evidence of teaching, social, and cognitive presence did faculty exhibit during a blended faculty learning community?	• Recorded of on campus FLC sessions • Field notes • Course artifacts	• Video recordings • Typed field notes • Screenshots of courses	• During facilitation of FLC
Q3. Which evidence of teaching, social, and cognitive presence did faculty exhibit after participating in a faculty learning community to design a blended course?	• Recorded on campus classes for each participant • Field notes • Course artifacts • Recording of final focus group	• Video recordings • Typed field notes • Screenshots of courses • Video recordings	• Two, one-hour classes for each participant during Spring 2019 • During observation of on campus and online classes • During final focus group • During observation of online course sessions

			• During final focus group in Spring 2019
Q4: How were faculty perceptions of support during a faculty learning community (FLC) shaped by faculty developer behavior?	• Recorded FLC on campus sessions • Course artifacts • Field notes	• Video recordings • Screenshots of courses • Typed field notes	• During facilitation of FLC

The asynchronous online portion of the FLC (the FLC course in Schoology) acted as a qualitative artifact, providing textual evidence of the researcher and participant's interactions and thinking regarding course design concepts. This data represented a valuable insight into the early thinking of participants as such asynchronous environments represent a combination of oral and written communication (Schiek & Ullrich, 2017). Evidences of participant and researcher involvement in the learning management system was recorded via screenshots and uploaded into MAXQDA 2018 for coding. This data provided opportunity for reflection on how faculty developer behaviors may shape the FLC experience for participants, as investigated by question four. Screenshots of all types of interactions were included in this phase of data collection, including discussion forum conversations, responses to course announcements, and researcher feedback on individual responses. Although open-coding provides the basis for data analysis here, Community of Inquiry categories of Teaching presence, Cognitive presence, and Social presence were also employed as a foundational coding scheme. This data was collected throughout the semester as the FLC members worked together in the

online sessions. The online portion of the FLC was monitored to encourage regular participation by all members, including individual follow up messages in the learning management system to participants who struggled with the activities of the FLC. Additionally, all participation in the online activities was recorded to avoid researcher bias in selectively recording portions of the FLC which portrayed the study in a positive light.

On-campus sessions of the FLC were video recorded, including the final focus-group session at the end of the Fall 2018 semester (the full focus group guide is provided in Appendix H). These one-hour sessions largely consisted of guided discussion amongst all participants. All members were visible on camera to allow for analysis of interactions between each person, including the researcher. Video recordings were chosen to provide deeper nuance to the social interactions of the FLC as opposed to audio-only recordings. Video files were uploaded into MAXQDA 2018 for coding. Similar to the online course artifacts, open-coding provided the basis for analysis, guided by initial codes of Teaching presence, Cognitive presence, and Social presence. All sessions were fully recorded and analyzed to avoid researcher bias. These video recordings also provided opportunity for reflection on faculty developer behaviors which may have influenced participant perceptions of support regarding the FLC, as indicated in question four.

The faculty developer recorded field notes during online and face-to-face sessions, allowing for reflection throughout the intervention phase of research. These notes were recorded in a running Word document and uploaded into MAXQDA 2018 for open-coding. These field notes provided opportunity for reflection as the faculty developer lead the FLC, as well as providing an additional data set for triangulation

against the video recordings and online screenshots. Field notes were recorded concurrently with the session so as to avoid the problem of selectively remembering in the case of recording after the session. Throughout the semester, the faculty developer practiced reflexivity as an effort to ensure validity across the three data sources. Such reflexive notes were recorded in the field note document, allowing for reflection on the faculty developer's own role in the FLC environment as aligned with question four (Osentoski, 2015).

During the Spring 2019 semester, each participant was observed while teaching their new blended course. Each participant's classroom was observed for two, one-hour on campus classes, as well as two online sessions. These observations were scheduled with each professor and staggered throughout the semester. On campus observations were video recorded for the duration of each class period. Since this segment of data collection aligned with the second research question regarding evidences of Social, Teaching, and Cognitive presence, video recordings provide appropriate detail and opportunities for analysis of social interactions. Garrison and Vaughan's (2006) coding template provided additional structure to the initial open-coding analysis. Initial analysis occurred concurrently throughout the semester along with the data collection. Full recordings of each class were uploaded into MAXQDA 2018 for this analysis through open-coding and the coding template to avoid selective data analysis or researcher bias.

Similar to data collection during Fall 2018, the online portions of the blended courses were observed as qualitative artifacts. As with the on-campus course observations, this data aligns with research question two, where specific evidences of the Community of Inquiry framework were coded. All interactions between professor and

students in the learning management system over the course of two online sessions (roughly equivalent of 3-6 hours of activity for students) were recorded via screenshots. These screenshots were uploaded into MAXQDA 2018 for analysis. These observations were carried out for each participant's course, staggered evenly throughout the semester. Researcher bias through selective data collection was avoided by complete recording of all online activities during the two sessions of each class.

Throughout the Spring 2019 semester, field notes were recorded to aid in reflexivity and provide an additional source for triangulation. These field notes were recorded during course observations (on-campus and online), as well as during the final focus-group session. As in the previous semester, field notes were recorded in a running Word document and uploaded into MAXQDA for analysis through open-coding. Initial reflections, observational notes, and notes on my own potential impact on the observed classrooms were recorded as an effort to build reflexivity.

Toward the conclusion of the Spring 2019 semester, a second focus group was held with participants to guide discussions on how the FLC was perceived as support for blended learning at the conclusion of teaching the new course. This focus group was video recorded with all participants and the researcher in full view (the full focus group guide is located in Appendix I). The resulting video file was uploaded into MAXQDA 2018 for coding. This data set primarily aligns with research question one, where faculty members discussed ongoing perceptions of support afforded by the FLC experience. Triangulation of this data with field notes, video, and screenshot data recorded during the Fall 2018 semester served to protect study validity.

Data Analysis

Field notes from both the FLC sessions and observed classroom teaching, videos of the focus groups and observed teaching, and online portions of classes and the FLC provided raw data for analysis. MAXQDA 2018 qualitative research software aided in organizing the raw data into codes and themes during the analysis process. In order to analyze this data from the perspective of the first research question ("How did faculty perceive the value of a faculty learning community as a support for designing blended courses?"), the focus groups and field notes were open-coded to identify themes regarding perceptions of support. Open coding allowed for an inductive exploration of qualitative data to examine which themes might emerge around the areas of interest (Corbin & Strauss, 1990; Silverman, 2008). This process entails identifying segments of data and organizing them around key words or phrases for sorting and analysis (Mertler, 2017; Silverman, 2008). As the data fragments were coded, they were grouped around common themes. Specific attention toward developing "in vivo" codes took place at this stage as well. In vivo codes frame the meaning of a data segment in the participant's own terms and lived experiences, guarding the voices of those being recorded (Corbin & Strauss, 1990; Ivankova, 2015). Analysis of these codes also gave attention to the ways faculty members displayed characteristics of Rogers' (2003) "innovator" and "early adopter" categories. The field notes, online portions of the FLC, and the recorded focus group were triangulated as a measure of increasing study validity.

Video recordings, online course data, and field notes provided raw data to investigate the second and third research questions (Which evidence of teaching, social, and cognitive presence did faculty exhibit during the FLC on blended learning and after

participating in a FLC within their own blended course?). These questions sought to identify evidence of the Community of Inquiry framework, so Vaughan and Garrison's (2006) Community of Inquiry coding template directed the data analysis (the full template can be viewed in Appendix J). This coding template provided a guide toward identifying specific data segments as evidence of social, cognitive, or teaching presence and was applied after the initial open coding phase (Vaughan & Garrison, 2006). The field notes, online portions of the classes, recorded class sessions, and the recorded focus group were triangulated as a measure of increasing study validity. Once again, MAXQDA 2018 software allowed for organization and identification of codes or themes across these data sets.

Recorded videos of FLC sessions, screenshots from the online elements of the FLC, and typed field notes (recorded during FLC) provided data to analyze regarding the fourth research question ("How were faculty perceptions of support during a faculty learning community (FLC) shaped by faculty developer behavior?"). MAXQDA 2018 software provided opportunity to triangulate and organize the raw data for the open coding process. This coding approach sought to identify emergent themes surrounding the behaviors of myself as faculty developer as I facilitated the FLC, mirroring the analysis process undertaken for question one. Particular attention was given to how faculty developer behaviors changed over time and what participant reactions or changes were observed in relation to this facilitation. Reflexive field notes recorded throughout the FLC and video recordings of physical behaviors or emotional expression provided insight into the ways the faculty developer shaped the FLC experience.

Threats to Validity

Several threats to validity were identified and measures were taken to reduce their impact as much as possible. Validity entails whether the study accurately reports that which it portends to report (Mertler, 2015). Thus, any possible threats to a study should be identified and steps taken to minimize the possibility that findings are not valid. Validity of the qualitative data in this study was addressed through the practice of reflexive journaling, where the researcher reflected carefully during data collection and analysis to guard against bias. Additionally, the multiple qualitative data sets for each research question were triangulated to ensure analysis faithfully represented the events of the study.

The primary threat identified for this study was population validity. Although action research tends not to be concerned with generalizability or transferability, population validity could become a factor as research implications are considered for the broader population in the same context (Mertler, 2015). During recruitment, purposeful sampling took place not only around the criterion that professors were seeking to design a new blended course for the Spring 2019 semester, but to select as broad a sample as possible towards obtaining a representative sample from the faculty population at large. Toward this end, a demographic survey was provided to participants at the onset of the FLC, measuring core demographic data as well as potential alignment to either the innovators or early-adopters groups as defined by Rogers (2003). Once this data was collected, meaningful descriptions of the participants were provided to illuminate context and clarity to the study so that it could be replicated in the same or similar contexts.

Chapter 4

Data Analysis and Results

"In the process of ongoing education of teachers, the essential moment is that of critical reflection on one's practice" (Freire, 2000, p. 43)

This action research study employed multiple qualitative data sources to understand more deeply how a FLC might support and model the innovation of blended learning for professors at Lancaster Bible College. As detailed below, the research questions for the study surrounded the ways faculty members perceive a FLC as a support for innovation in teaching practice, as well as which evidences of the Community of Inquiry framework (provided as a model to faculty members) could be identified during an FLC and while participants taught their own classes the next semester. When discussing participant data, pseudonyms have been used for each participant to protect their confidentiality.

The FLC took place during the Fall 2018 semester, employing a blended format as a model for participants while designing their own blended courses. Each one-hour on-campus session of the FLC was video recorded, and screenshots of the online FLC elements provided insight into asynchronous interactions. The faculty developer kept an ongoing journal throughout the FLC delivery to aid in reflection and reflexivity. These three data sets were triangulated to answer research questions two and four, investigating which evidences of the Community of Inquiry were present during the FLC, and how participants perceived the support afforded by an FLC led by a faculty developer.

Participants were also observed twice as they taught their courses in the Spring 2019 semester. Parallel to the fall semester, each on-campus session was video recorded

while screenshots captured the online elements of their blended courses. Again, the faculty developer maintained a reflexive journal throughout the entire semester when the courses were being delivered. The three qualitative data sets were triangulated to answer research questions one and three, investigating how faculty members perceive a FLC as a support for designing blended courses, and which evidence of the Community of Inquiry was exhibited as faculty members taught their courses.

This chapter details the results for each research question in order. Findings for each research question are then oriented around a theme emerging from the data, where the theme was located, and an assertion arising from the theme. The results for each research question are triangulated from the three qualitative data sets.

During the semester when the FLC was delivered, four one-hour videos were recorded and analyzed using MAXQDA 2018 research software. Six journal entries were recorded during reflexive journaling, and 42 screenshots captured every interaction in the learning management system. Additionally, a demographic survey provided further information on participants and was triangulated with the other data sets to answer research question four; screenshots of the survey results were coded in MAXQDA 2018. Each data set was coded using the research software, which generated a codebook including all coded segments from each data source. Table 5 indicates the frequency of coded data across all sets:

Table 5

Total Number Code Frequency Per Research Question

Question #	Frequency across all data sets
1	1,338
2	2,780
3	11,021
4	1,788

Excerpts from each source will be provided to support the findings and assertions detailed below. The creation of the common codebook across all data sets initiated triangulation, and specific data were compared across the three qualitative datasets to ensure the data supported any assertions made in the following sections.

Faculty member perceptions of whether the FLC provided support for innovation in teaching were coded by the Innovator and Early Adopter categories of Diffusion of Innovations to understand which elements of the FLC may be perceived as supportive. Prior to the study, it was determined that participants likely would fall under the Innovator and Early Adopter categories of Diffusion of Innovations given their willingness to engage in a pedagogical innovation without support (Kohles et al., 2013; Rogers, 2003). Emergent evidence of the data reflecting Innovator and Early Adopter perceptions amongst the exploration of faculty member perceptions of support will be indicated throughout the discussion of question one and question four. Analysis of the field notes and video recordings yielded substantially more coded data for the Innovator category (n=569) than for Early Adopter (n=96).

The recorded evidence discussed in questions one and four reflects characteristics of both Innovator and Early Adopter categories. As Rogers explains, individuals may not

fit into categories cleanly, but faculty member reporting of support afforded by learning and implementing new ideas on their own appears congruent with the innovator category. Although FLC members reported collaboration as one of the greatest strengths of the experience, their willingness to immediately implement ideas learned rather than observing others carrying them out first likely frames them more as Innovators than Early Adopters (Rogers, 2003).

Q1: How did faculty perceive the value of a faculty learning community (FLC) as a support for designing blended courses?

Introduction to Findings

Understanding the ways a FLC supports faculty members as they seek to innovate in teaching practice remains a key aim of this research. Such community-based faculty development receives substantial support in the literature for providing a meaningful learning environment (Furco & Moely, 2012; Owston et al., 2016; Vaughan & Garrison, 2006; Wicks et al., 2015). Two focus groups gave opportunities for participants to reflect on how they perceived the value of the FLC experience as supportive for their own innovation in designing blended courses. Each of the two, 1-hour sessions were video recorded alongside faculty developer field notes, with demographic survey results supplementing the analysis of how participants may have perceived support afforded by the FLC.

Initial data analysis took place through open-coding to explore faculty member reflections on whether the experience was found to be supportive (Saldaña, 2016). The next phase of analysis included eclectic coding, establishing two code themes, each with

four supporting sub codes (each will be detailed in the following sections). Initial code categories for each designation arose from key descriptive words in Roger's (2003) work, with subsequent rounds for analysis employing open and eclectic coding. Results for Question 1 employ a theme-related component-theme-assertion organization.

Perceptions of Support

Faculty member perceptions of the support afforded by the FLC experience were explored through analysis of the focus group data. This analysis (video recording and field notes) yielded two emergent code categories: "Value Collaboration for Support" (n=212) and "Identifying Needed Improvements" (n=507). "Value Collaboration for Support" held three codes, as displayed in Table 6.

Table 6

Value Collaboration for Support Codes

Name of Sub-category	Frequency across all data sets
Learning from Others	121
Shared Experience	62
Trust	26

"Identifying Needed Improvements" was comprised of five codes, as seen in Table 7.

Table 7

Identifying Needed Improvements

Name of Sub-category	Frequency across all data sets
Identifying Needed Improvements	78
Direct Mention of Support	79
Desired Institutional Improvements	42
Conceptualizing on Their Own Terms	241
Compatibility	67

Key assertions and themes for faculty participant perceptions of support are depicted below in Table 8:

Table 8

Themes and Assertions for "Perceptions of Support"

*Themes** and Theme-related components	Assertions
Valuing Collaboration 1. Participants learned from FLC colleagues. 2. Participants drew upon shared experience. 3. Participants exhibited trust in other FLC members	Participants valued the collaborative nature of the FLC for supporting teaching practice.
Relevancy to Practice 1. Participants perceived FLC concepts as compatible with their teaching practice. 2. Participants conceptualized FLC resources within their own practice. 3. Participants identified desired institutional improvements. 4. Participants directly mentioned the supported afforded by the FLC.	Participants found the FLC relevant to their teaching practice.

Valuing Collaboration. Assertion 1 - *Participants valued the collaborative nature of the FLC for supporting teaching practice*. Assertion 1 finds support in three theme-related components, such that participants (a) learned from FLC colleagues, (b) drew upon shared experience, and (c) exhibited trust in other FLC members. During each focus group, participants indicated that they felt that they had learned from fellow FLC participants. After an idea was shared for practicing review and retrieval practice, Steve repeated the concept in his own terms and described how it might look in his classroom, affirming vocally for the group that this seemed to be a good idea for his own context (observation, December 7, 2018). Other times, as a participant would share a new concept or teaching idea, colleagues would nod their head in agreement and say things such as "aha!" or "I like that" to indicate their understanding and approval of the idea (observation, April 12, 2019). Such evidence of valuing collaboration seems to indicate alignment with Rogers' (2003) Early Adopter, a category of faculty members who gain confidence in an innovation by observing its adoption by others.

Participants also drew upon shared experience as support. During the first focus group, James recalled the value of learning in community through the blended format FLC: "Yes, being in community helps you work through your fears, and Steve would share things online and I would be like, Steve totally understands where I'm coming from!" (observation, December 7, 2018).

Not only did participants learn from each other and share experiences, but they also exhibited trust in their fellow members as an indicator of the support offered by the FLC. One way participants demonstrated trust included requesting insight from the faculty developer, trusting his expertise for guidance. Mark displayed such trust, asking,

"So, in your observations, did you find any common themes with our pattern of teaching the blended courses?" (observation, April 12, 2019). Participants also demonstrated "trust" by referencing their value of the guidance or insight from fellow FLC members. "Doing the blended thing and making them discuss it, they [students] were forced to then do it, and I think I got that from "Steve," you talked about if you do things out of class for their learning, then you can springboard off that in the class" (observation, April 12, 2019).

Relevancy to Practice. Assertion 2 - *Participants found the FLC relevant to their teaching practice*. Assertion 2 finds support in four theme-related components, such that Participants (a) perceived FLC concepts as compatible with their teaching practice, (b) conceptualized FLC resources within their own practice, (c) identified desired institutional improvements, and (d) directly mentioned the supported afforded by the FLC. Participants indicated the FLC maintained relevance to their teaching practice by identifying concepts as compatible with their own teaching practice. Mary pointed out that many in the group were field practitioners prior to joining the faculty, so the pedagogical training present in the FLC met a perceived need: "Most of us aren't trained as teachers…the tools you gave us were basically a brief course on how to be an educator…I wish I had that when I was a young teacher" (observation, December 7, 2018). Ben echoed a similar sentiment in expressing the value of the FLC experience due to the fact that he was brand new to teaching (observation, December 7, 2018).

Participants also conceptualized FLC resources within their own teaching practice. James built on the sentiments of other former-practitioners in the group by stating, "I appreciate what you [Ben] said, because right before you spoke, I was

thinking, really, so much of my life has been as an attorney, I'm still learning this whole teaching thing…the wealth of resources we have to teach now…the collaboration, learning from other people…" (observation, December 7, 2018).

Congruent with the institutional gaps identified in chapter one of this study, participants identified desired areas of institutional improvement revealed by their experiences in the FLC. According to these professors, their experiences could maintain relevancy to broader faculty populations at the institution. Steve shared a desire to increase such collaborative opportunities across the institution: "Yeah, I don't know if everyone is interested or vulnerable enough to have their teaching style examined, but those that would be, what would it look like to have collaborative partnerships, with people who could take risks…so you're constantly refining…" (observation, April 12, 2019). Mary extended the discussion in this direction to indicate her belief that such an increase in collaboration could engender deeper community amongst the faculty members (observation, April 12, 2019). Mark connected this approach to the needs of newer faculty as well, stating: "I think that would help people to kind of build connections, have you walk with them and actually show them, 'this is how things are done,' it's a collaborative way of learning from each other' (observation, April 12, 2019). By identifying desired institutional improvements based on the FLC, participants indicated the relevancy of the experience to their own teaching practice.

Finally, participants directly mentioned the support afforded by the FLC. Data coded for "direct mention of support" plays a substantial role in this research question's inquiry into whether the FLC was supportive to faculty member teaching practice. Steve explained that the collaboration had been a "normalizing" experience where common

problems could be shared rather than his previous experiences of isolation in teaching blended courses (observation, December 7, 2018). James indicated a shift in his own thinking, stating, "…that was a paradigm shift for me – I was scared of it, it was the unknown…so this has helped me navigate the fear of it…it was a huge shift" (observation, December 7, 2018). Participants also depicted the collaborative element as particularly supportive. Mary explained, "When we met together, it always helped, like even right now while I reflect with you guys, there are four things I want to do differently, already I'm listing things I need to change, so the meeting together was helpful for brainstorming…that really helped me…I find this very valuable" (observation, April 12, 2019). Participants indicated relevancy to practice of the FLC as a support by perceiving concepts as compatible, conceptualizing concepts in their own practice, identifying desired institutional support, and directly mentioning support.

Summary of Results and Analysis for Question 1

Question one investigated whether participants perceived the FLC as supportive for their innovation in teaching practice. Participants directly reported support afforded by the FLC experience. This support arrived through collaboration and engagement with new blended learning resources, as well as the modeling of the blended format by the faculty developer. Participants expressed changes in understanding and practice as a result of their membership in the FLC. Additionally, participants moved beyond mentions of their own support to indicate desired changes to institution-wide supports for broader groups of faculty, particularly those without formal pedagogical training such as themselves. Such results seem to indicate that the FLC may have provided meaningful support to these participants.

Q2: Which evidences of teaching, social, and cognitive presence did faculty exhibit during a blended faculty learning community (FLC)?

Introduction to Findings

Garrison et al.'s (2000) Community Inquiry frames this study by modeling engaged blended learning for participants, as well as informing methods of meaningful faculty development in a setting such as a FLC. After the framework was introduced to faculty members during the first FLC session, all online and on campus activities were modeled for participants in line with the three "presences" of Community of Inquiry: Teaching presence, Social presence, and Cognitive presence (Garrison et al., 2000). Guided by research question two, the four 1-hour video recordings, 42 screenshots, and 7 field notes (word count = 2,415) were analyzed to identify evidences of the Community of Inquiry present during the FLC.

The data were analyzed through an initial open-coding approach, then refined using a provisional coding scheme aligned to the three presences of Community of Inquiry, based on the coding template devised by Vaughan and Garrison (2006). This resulted in a codebook containing the three presences as top-level categories and producing 54 codes in total. It should be noted that due to the nature of the Community of Inquiry framework, codes often overlapped as congruent with simultaneous coding approaches (Saldaña, 2016). Figure 4 depicts the three major presences of Community of Inquiry and the subcategories identified for each.

Figure 4. Coding Categories with frequency.

Coding subcategories will be explained in the following sections. The findings and discussion for each presence of the Community of Inquiry follow a theme-related component-theme-assertion organization.

Evidence of the Community of Inquiry

Teaching presence. Teaching presence portrays the role of the faculty developer and participants as they share in facilitating the Community of Inquiry (Garrison et al. 2000). As acknowledged in the literature review, although this primarily explains the role of the "teacher" in the learning community, "students" (in this case, participants), may also take up the role throughout the FLC.

Following the provisional coding template from Vaughan and Garrison (2006), three subcategories comprise the major components of Teaching presence as observed in the FLC. These subcategories include "Design and Organization" (n=148), "Facilitating Discourse" (n=382), and "Direct Instruction" (n=446).

Social presence. According to Garrison et al. (2000), Social presence represents the emotional or affective element of the learning community. This affirms the integral role of emotion in establishing a community, acting as a link between group dynamics and the learning process.

Beginning with the provisional coding framework of Vaughan and Garrison (2006), three categories were established for Social presence: "Affective Expression" (n=196), "Open Communication" (n=489), and "Group Cohesion" (n=408). These evidences built on observed "Teaching presence" categories to affirm the presence of Community of Inquiry in the FLC.

Cognitive presence. Garrison et al. (2000) frame Cognitive presence as an explanation for cognitive processing in the learning community, as well as the role of instruction and guidance in scaffolding this processing. Examining evidences of such an element in the FLC provided a crucial glimpse into whether the Community of Inquiry was being properly modeled as a framework for blended learning. Cognitive presence takes place over four stages in thinking: a triggering event, exploration, integration, and resolution (Garrison et al., 2000, Vaughan & Garrison, 2006). As in Vaughan and Garrison's (2006) provisional coding guide, these four stages provided the primary categories for coding Cognitive presence. Theme-related components and assertions regarding the evidence of each of the "presences" are provided in Table 9.

Table 9

Themes and Assertions for "Evidences of Community of Inquiry" during FLC

*Themes** and Theme-related components	Assertions
Teaching presence 1. Asynchronous and in-person communication set expectations and activity parameters for participants. 2. Participants and the faculty developer extended collaborative conversation by affirming and building on the contributions of others. 3. Participants and the faculty developer adapted instruction and provided resources for each other as needed.	Both the faculty developer and participants demonstrated Teaching presence by engaging in instruction, guiding conversation, and adapting resources for the needs of the group.
Social presence 1. Participants and the faculty developer exhibited overt emotional expressions. 2. Participants and the faculty developer shared personal successes and challenges. 3. Participants and the faculty developer demonstrated concern for the success of others in the group.	Both the faculty developer and participants demonstrated Social presence through vulnerability and concern for fellow FLC members.
Cognitive presence 1. Faculty developer and participants shared changes in understanding. 2. Faculty developer and participants integrated new ideas into their conception of teaching practice.	Both the faculty developer and participants demonstrated Cognitive presence by conceptualizing new ideas with personalized understanding.

Teaching presence. Assertion 1 - *Both the faculty developer and participants demonstrated Teaching presence by engaging in instruction, guiding conversation, and adapting resources for the needs of the group*. This assertion finds support among three

theme-related components, such that (a) asynchronous and in-person communication set expectations and activity parameters for participants, (b) participants and the faculty developer extended collaborative conversation by affirming and building on the contributions of others, and (c) participants and the faculty developer adapted instruction and provided resources for each other as needed. The faculty developer portrayed Teaching presence through asynchronous and in-person communication which clarified expectations or activity instructions for FLC participants. The FLC centered around supporting faculty members as they designed a blended course to be taught in the Spring 2019 semester. As such, discussions and activities were carefully curated by the faculty developer to facilitate this blended course design. The faculty developer demonstrated Teaching presence by providing detailed instruction for participants, as seen in Figure 5, an example of a discussion forum taking place in the second online phase of the FLC.

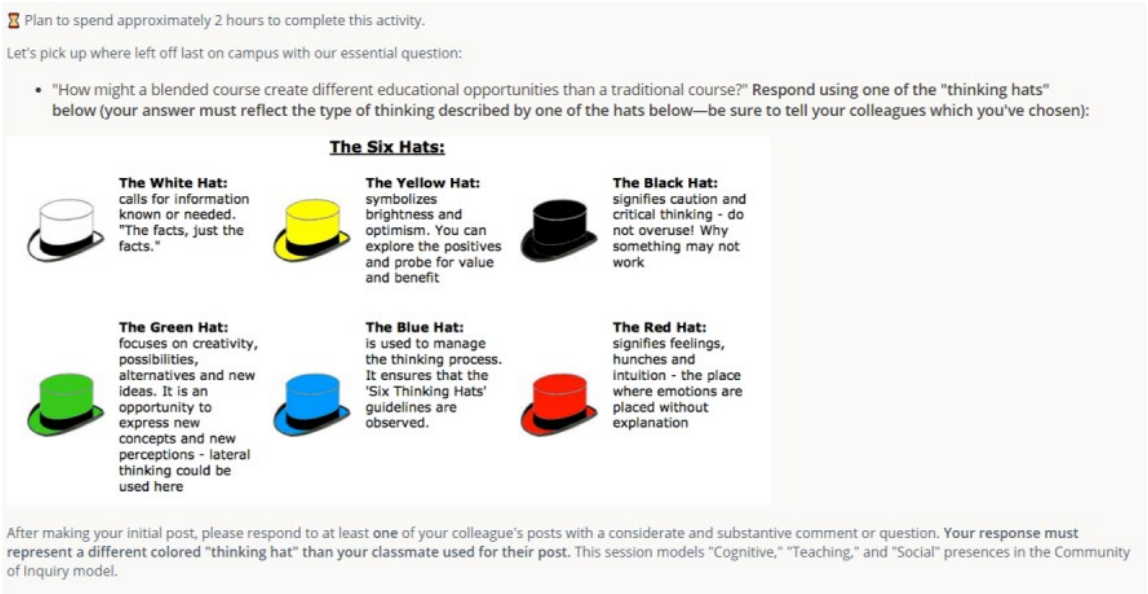


Figure 5. Screenshot of Discussion 1 instructions.

Teaching presence was also demonstrated where faculty participants explained the structure or purposes for their course activities. Along these lines, Mary explained to the FLC how she models charitable conversation for her students: “In the discussion board I model affirming student’s perspective, or even when I disagree, I disagree in a way that’s respectful…so it helps them take risks…I model how to disagree based on fact, not feelings” (observation, October 5, 2018).

Teaching presence also occurred as participants and the faculty developer extended collaborative conversation during FLC activities. The FLC not only provided a platform for discussions curated around concepts introduced by the faculty developer, but also allowed for conversations to follow faculty member interest or inquiry. As one participant would share an idea, others would often express how they had observed the same concept in their setting or provide a solution or follow up question depending on the moment in the conversation. “Extending Discussion” was coded 108 times across all data. For example, after the faculty developer provided guidance on the creation of syllabi, Mary raised the concept of how helpful it might be to hold an event where faculty members would collaborate on creating their syllabi together with the support of a faculty developer, and Steve added to her comment by identifying specific faculty to whom it might be valuable (observation, December 7, 2018). This extension of discussion also occurred between sessions. Field notes for the second online session record, “’Mary’ posted [in the forum] early on, and even used an image to carry on an inside joke [which had been initiated in the previous session] – encouraging to see this continuity between sessions” (observation, November 8, 2018).

Participants and the faculty developer adapted instruction and provided resources for each other as needed as a final evidence of Teaching presence. One instance of this included clarification of concepts. For example, the first on campus session held a conversation where the concept of blended learning as one interwoven modality was introduced, which seemed new to several of the participants. Some FLC members struggled over whether to place content primarily online or to cover it in class. Steve stepped in to clarify for others, "For me, in a blended format, I think that's the crucial question, is do you want to start with the foundational knowledge, or do you want to build upon that?" (observation, September 7, 2018). Another clear demonstration of Teaching presence through direct instruction entailed adapting instruction or providing remedial resources. As questions or confusion arose, the faculty developer would regularly divert from planned instruction to meet the needs of participants, and participants would share from personal experience to assist others toward this end as well. 146 codes regarding these theme components were identified across the data sets. For instance, the third on campus session revealed that participants were very interested in recording online mini lectures and finding alternative methods of instructing online. These conversations led to the suggestion of PowerPoint Recording and Hypothes.is Web Annotation tools, with which the FLC members were not familiar. To provide remediation, the faculty developer shared "how-to" resources on each of these tools in a course announcement which introduced the next online session, as demonstrated in Figure 6.

Figure 6. Screenshot of sixth FLC course announcement.

Teaching presence was evidenced by the faculty developer and participants by engaging in instruction, guiding conversation, and adapting resources for the needs of the group.

Social presence. Assertion 1 - *Both the faculty developer and participants demonstrated Social presence through vulnerability and concern for fellow FLC members*. This assertion finds support among three theme-related components: participants and the faculty developer (a) exhibited overt emotional expression, (b) shared personal successes and challenges, and (c) demonstrated concern for the success of others in the group. Throughout the FLC, the faculty developer and participants displayed overt emotional expression. “Humor” and “Excitement” represent two codes in the category of positive emotions, with frequencies of 69 and 42, respectively. One source of humor emerged from the provision of De Bono’s “Thinking Hats” discussion protocol for a discussion forum (2017). Mary humorously made the comment that although she was not sure why, the hats in the picture provided were “creepy” (observation, October 5, 2018). As another expression of emotion, FLC participants often expressed excitement (n=42) as they encountered new ideas or tools. During the first on campus session, Mary explained

that she had employed a teaching strategy called an “Aha! Wall” which had been suggested through a faculty development video (not related to this study), and the faculty developer expressed surprise and excitement in reaction to seeing a faculty member utilize the idea so quickly: “Did you? That is so cool!” (observation, September 7, 2018). Such examples point to positive emotional expression during the FLC.

Participants and the faculty developer also demonstrated Social presence by sharing personal successes and challenges related to their adoption and design of blended courses. Sometimes, these successes and growth in understanding occurred in reaction to a mini-lecture or resources provided through the FLC. Ben shares such an example while reflecting in an online FLC activity in the screenshot below (Figure 7).

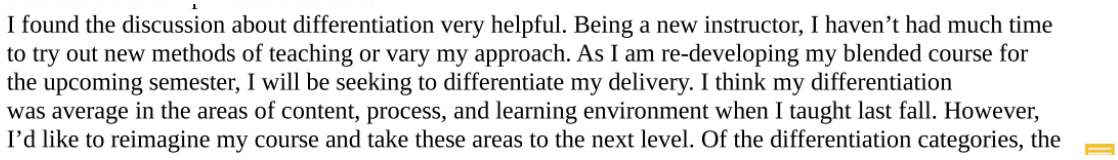

I found the discussion about differentiation very helpful. Being a new instructor, I haven’t had much time to try out new methods of teaching or vary my approach. As I am re-developing my blended course for the upcoming semester, I will be seeking to differentiate my delivery. I think my differentiation was average in the areas of content, process, and learning environment when I taught last fall. However, I’d like to reimagine my course and take these areas to the next level. Of the differentiation categories, the

Figure 7. Screenshot of “Ben’s” reflection paper in the first online FLC session.

Participants also celebrated personal success around particular “aha!” moments experienced throughout the FLC. One such moment occurred while participants were asked to define blended learning in their own words, and Mary reflected, “I learned something from the definition that I never thought about…I wrote down instruction that takes place in person and online, then I realized, why am I focused on location? I wasn’t thinking blended learning, meaning pedagogy and different methods…I realize my definition seems narrow now” (observation, September 7, 2018). Roadblocks within the

FLC were identified as well, where two participants experienced difficulty understanding the video mini-lectures as English is not their first language. Mark recounted, “I think from my perspective, I needed a transcript of what was going on. I was using the closed caption thing, but I was thinking it would be very helpful to have a transcript and not have to scroll the video up and down” (observation, October 5, 2018). Fortunately, in this situation the group was able to have a meaningful conversation about difficulties, and transcripts were added to all upcoming videos in the FLC (reflective of Teaching presence on the part of the faculty developer).

Finally, the faculty developer and participants displayed Social presence by demonstrating concern for the success of others in the group. Data coded here aligned with the “Group Cohesion” category of Vaughan and Garrison’s (2006) provisional coding template. In some cases, collaboration occurred as the group sought to find solutions for a member’s problems. As Ben struggled to find a student workload feature in the learning management system, “Mark,” “James,” and the faculty developer drew on their experiences teaching and advising students to locate the feature (observation, November 9, 2018). In one conversation regarding calculations for equivalent instructional time (a necessary step for accreditation requirements), James made a comment, which indicated he misunderstood the parameters of the task. Mark and the faculty developer then stepped in to clarify for him, in an effort to ensure all participants understood the concept (observation, November 9, 2018). Such group cohesion also took place through comments of affirmation and encouragement. For example, Mark shared a moment of success in a prior blended course, and Mary affirmed his contribution by stating, “I like that you stated, this is the goal, this is where I want to improve next time, I

like that!" (observation, September 7, 2018). In these ways, the FLC provided multiple evidences for the Social presence component of the Community of Inquiry.

Cognitive presence. Assertion 1 - *Both the faculty developer and participants demonstrated Cognitive presence by conceptualizing new ideas with personalized understanding*. This assertion received support through two theme-related components: the faculty developer and participants (a) shared changes in understanding and (b) integrated new ideas into their conception of teaching practice. Garrison et al. (2000) frame Cognitive presence as an explanation for cognitive processing in the learning community, as well as the role of instruction and guidance in scaffolding this processing. Participants often checked new understandings as a way of indicating new lines of thought. After discussing the concept of differentiation of instruction, Steve asked if one of his course activities accomplished differentiation: "I created 10 possible assignments – you could choose 5 out of the 10. Is that part of [differentiation]?" (observation, October 5, 2018). Connecting new information to the network of prior understanding remains a crucial step in assimilating novel concepts (Akyol & Garrison, 2011). Mary demonstrated this element of Cognitive presence while writing a reaction to an online mini-lecture, as seen in the screenshot portrayed in Figure 8.

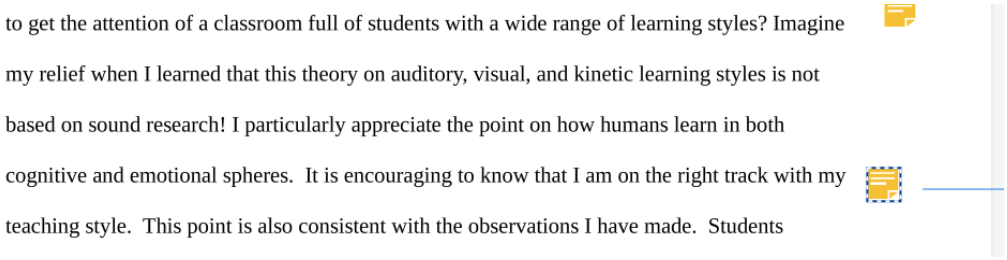

to get the attention of a classroom full of students with a wide range of learning styles? Imagine my relief when I learned that this theory on auditory, visual, and kinetic learning styles is not based on sound research! I particularly appreciate the point on how humans learn in both cognitive and emotional spheres. It is encouraging to know that I am on the right track with my teaching style. This point is also consistent with the observations I have made. Students

Figure 8. Screenshot of "Mary's" reflection paper in first online FLC session.

Participants and the faculty developer also illustrated Cognitive presence by integrating new understanding into their own conception of teaching practice. Ben applied course concepts to a tangible action plan for the next semester, as seen in the screenshot depicted by Figure 9:

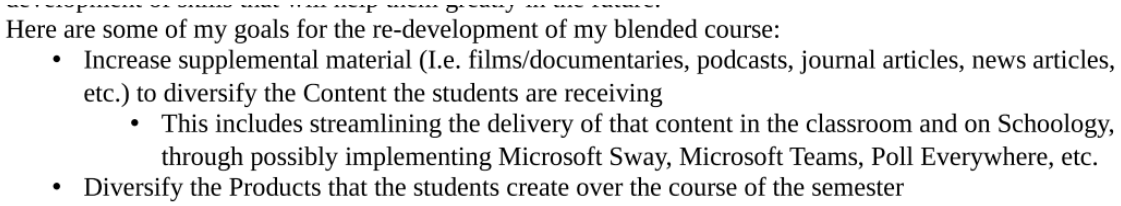

development of skills that will help them greatly in the future.
Here are some of my goals for the re-development of my blended course:
- Increase supplemental material (I.e. films/documentaries, podcasts, journal articles, news articles, etc.) to diversify the Content the students are receiving
    - This includes streamlining the delivery of that content in the classroom and on Schoology, through possibly implementing Microsoft Sway, Microsoft Teams, Poll Everywhere, etc.
- Diversify the Products that the students create over the course of the semester

Figure 9. Screenshot of "Ben's" reflection paper during first online FLC session.

Both the faculty developer and participants demonstrated Cognitive presence by conceptualizing new ideas with personalized understanding.

Summary of Results and Analysis for Question 2

Question 2 investigated which evidences of the Community of Inquiry were present in the FLC. All members of the FLC including the faculty developer shared in demonstrating the Teaching, Social, and Cognitive presence components of Garrison et al.'s (2000) Community of Inquiry. Of the three presences, "Social presence" was the most frequently occurring, as depicted in Table 10:

Table 10

Community of Inquiry Components

Name of Component	Code frequency across all data sets
Teaching presence	977
Social presence	1,093
Cognitive presence	711

Both the faculty developer and participants demonstrated Teaching presence by engaging in instruction, guiding conversation, and adapting resources for the needs of the group. The faculty developer and participants also demonstrated Social presence through vulnerability and concern for fellow FLC members. Evidences of Cognitive presence among faculty developer and participants emerged as they conceptualized new ideas with personalized understanding.

Q3: Which evidence of teaching, social, and cognitive presences did faculty exhibit after participating in a faculty learning community (FLC) within their own blended courses?

Introduction to Findings

As in research question two, Garrison et al.'s (2000) Community of Inquiry provided the framework for inquiry into each of the participants classrooms. Where research question two investigated whether the faculty developer modeled Community of Inquiry, this question sought to identify the same Presence elements of Teaching, Cognitive, and Social within the individual participant classrooms. Each participant's classroom was observed in both the on campus and online components of the blended courses, culminating in a second focus group held at the end of the Spring 2019 semester.

Eleven one-hour videos (two classes per participant and the focus group), 50 screenshots from the learning management system (10 per participant), and field notes for each session (11 documents, word count = 5,091) were each analyzed for evidence of the Community of Inquiry framework. As with previous research questions, participants will be identified by pseudonym.

Employing the same approach as research question two, the data were analyzed through an initial wave of open coding then revised via a provisional coding scheme aligned to the three presences of Community of Inquiry based on the coding template devised by Vaughan and Garrison (2006). This approach resulted in a codebook containing the three presences as top-level categories and producing 51 codes in total. Codes ascribed to Teaching (n=4,318), Social (n=4,318), and Cognitive (n=2,715) Presences often overlapped as congruent with simultaneous coding approaches (Saldaña, 2016). Figure 10 depicts the three major presences of Community of Inquiry and the subcategories identified for each in this phase of the study.

Figure 10. Coding Categories with Frequency.

The findings for each presence of the Community of Inquiry follow a theme-related component-theme-assertion organization.

Evidence of the Community of Inquiry

Teaching presence. Garrison et al. (2000) frame Teaching presence as the facilitation of learning and social interaction. As described in the literature review and depicted in research question two, such a role may be employed by students or teaching faculty. Vaughan and Garrison's (2006) provisional coding template established the three primary subcategories, "Design and Organization" (n=524), "Facilitating Discourse" (n=2,074), and "Direct Instruction" (n=1,720).

Social presence. Social presence within the Community of Inquiry represents the affective or emotional domain of learning (Garrison et al., 2000). As with Teaching and Cognitive presences, this may be observed throughout the blended environment, whether in class or through the learning management system. Employing Vaughan and Garrison's

(2006) provisional coding template, the three categories of "Affective Expression" (n=778), "Open Communication" (n=1,445), and "Group Cohesion" (n=1,765) form the primary organization for data coded under Social presence. Open and In-vivo codes supplemented the provisional coding template.

Cognitive presence. Cognitive presence covers the domain of community learning related to cognitive processing and metacognition (Garrison et al., 2000; Kozan & Richardson, 2014). As students and participants engaged in the learning process, evidence was coded according to Vaughan and Garrison's (2006) provisional coding template, and later supplemented with open and in-vivo coding. Garrison et al. (2000) provide four categories of progression through metacognition, which also provided the provisional codebook framework: "Triggering Event" (n=216), "Exploration" (n=526), "Integration" (n=1,757), and "Resolution" (n=215). Table 11 displays the themes and assertions emerging from the data as aligned with the three presences of the Community of Inquiry framework.

Table 11

Themes and Assertions for "Evidences of Community of Inquiry" in blended courses

*Themes** and Theme-related components	Assertions
Teaching presence 1. Participants detailed course expectations and protocols throughout their blended courses. 2. Participants extended collaborative conversation by asking questions and focusing discussion. 3. Participants connected discussions to course concepts. 4. Participants and students provided clarifying instruction and examples for each other.	Participants demonstrated Teaching presence by providing clear instruction, enhancing discourse, and clarifying student learning.
Social presence 1. Participants and students displayed emotional responses. 2. Participants and students personalized communication amongst each other. 3. Participants and students demonstrated vulnerability in communication. 4. Participants and students showed empathy toward, affirmed, and encouraged others.	Participants demonstrated Social presence by displaying emotional responses, exhibiting trust, and taking responsibility for the learning of others.
Cognitive presence 1. Participants and students asked questions and exchanged information. 2. Participants and students demonstrated personal understanding and connected to prior knowledge. 3. Participants and students introduced new ideas to the learning community.	Participants and students demonstrated Cognitive presence by pursuing deeper understanding of new learning and sharing personalized understandings with the community.

Teaching presence. Assertion 1 - *Participants demonstrated Teaching presence by providing clear instruction, enhancing discourse, and clarifying student learning*. Four theme-related components support this assertion: (a) participants detailed course expectations and protocols throughout their blended courses, (b) participants extended collaborative conversation by asking questions and focusing discussion, (c) participants connected discussions to course concepts, and (d) participants and students provided clarifying instruction and examples for each other. Participants demonstrated Teaching presence through detailing course expectations for students. Vaughan and Garrison's (2006) provisional coding template identifies "Defining Content and Activities" as a sub code under "Teaching presence." Participants would provide expectations and parameters for course activities and assessments through instructional videos or written instructions in the online environment, and through verbal and written instruction on campus. Figure 11 depicts "Ben's" online activity where instructions and expectations were clearly set:

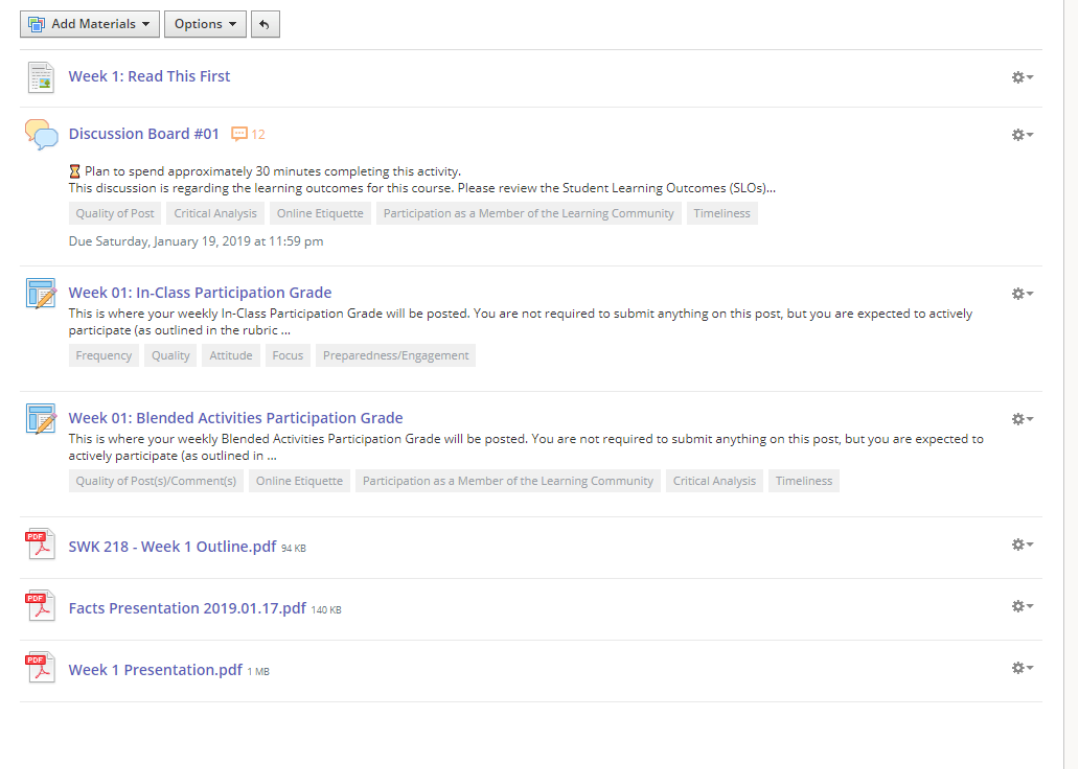


Figure 11. Ben's online example of Teaching presence.

The screenshot above demonstrates Teaching presence through a clear defining of order in which activities should be completed, as well as estimated time investment students can expect, all in addition to a more robust set of written instructions (note that the screenshot also depicts the titles for various criteria in the grading rubrics used for some assignments as well). On campus sessions typically depicted this element during transitions between activities as the participant set up the next portion of class. For example, Steve employed a discussion protocol where students would hold up their group's response (using cards designated as A, B, C, or D) to a case study to initiate justification of their position and debate. To ensure students knew what the activity

would entail, Steve stated, "…So, for those of you who don't know the cards that are on the table, this is your introduction to the A-B-C-D process, so here are some instructions for you and notes to take as you go through the process…We have one scenario but two responses [distributes handouts]…When you are ready to report out, we'll do the A-B-C-D response" (observation, January 30, 2019).

Participants also demonstrated Teaching presence by extending collaborative conversation through asking questions and focusing discussion. Sustained discussion often evidences Teaching presence: "Through active intervention, the teacher draws in less active participants, acknowledges individual contributions, reinforces appropriate contributions, focuses discussion, and generally facilitates an educational transaction" (Garrison et al., 2000). Participants (and their students) would extend class discussion by asking follow-up questions and focusing conversation around points of interest or confusion. For instance, Mark often used a quasi-Socratic method in discussions, asking questions in a manner which guided students to his intended learning goals. During the first observation, a student asked "Mark," "What I'm saying is, how do we use both [cultural] 'truth's' as one common 'truth' to help the client?"; rather than answer the student directly, Mark redirected the question toward the class, saying, "So what do you think, how do you think we can help, it's a great question [student name redacted], but how do you think we can help the clients with what [student name redacted] is presenting?" (observation, February 15, 2019). Such facilitation of conversation played a key role in online discussions as well. Figure 12 displays where Ben focused conversation in a forum based on the prior contributions of a student:

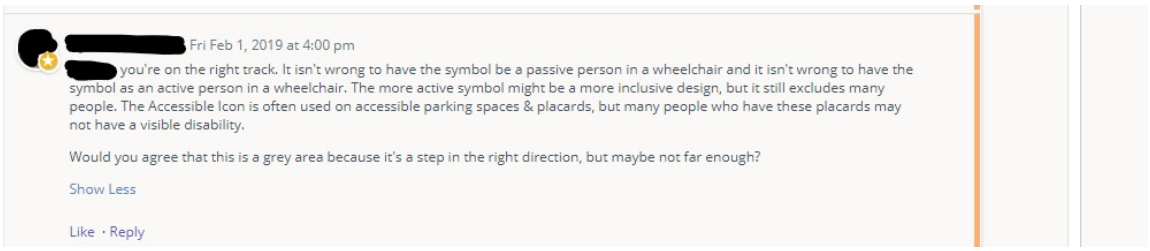


Figure 12. Ben focuses discussion based on student response.

Teaching presence also emerged as participants connected discussions to course concepts. Garrison et al. (2000) indicate that Teaching presence illustrates where a teacher is responsible for cultivating the "academic integrity" of conversations in class. This code, "Connecting to Course Concepts," applied where the participant or student connected to a key course term or idea, ensuring that discussion continued to build understanding of students. James connected a current event, the trial of "El Chapo," to course concepts of criminal defense law: "Think, 'El Chapo's' defense is not that he's not a drug dealer…He's not saying, I didn't do all these terrible things, he's saying, 'I'm not really the worst.' That's what the lawyer has to do with the cards they got dealt, [prosecution] has wiretaps, and a ton of evidence" (observation, February 5, 2019). Another frequent example was that of asking questions during conversation to recall students toward prior knowledge and course concepts, such as defining a key term or recalling the meaning of a concept.

Finally, participants evidenced Teaching presence by providing clarifying instruction and examples for each other. One key indicator of clarification was a sub-code labeled "Providing Examples" (n=577). During the second focus group, Ben clarified a concept of student choice through providing examples: "I gave the students a little bit of

choice, in choosing what 'topic of the week' I'd present, for the last 15-20 minutes of class, to give them a little bit of agency…" (observation, April 12, 2019). Participants also provided examples to clarify student thinking. When providing feedback on an online assignment, Mark explained, "When you are citing a reference please use all the authors last name followed by the year. In the subsequent text you can use (Pedersen et al., 2016, p. 34)" (observation, March 22, 2019). As seen in these four theme-related components, participants demonstrated Teaching presence by providing clear instruction, enhancing discourse, and clarifying student learning.

Social presence. Assertion 1 - *Participants demonstrated Social presence by displaying emotional responses, exhibiting trust, and taking responsibility for the learning of others*. This assertion receives support from four theme-related components, such that participants and students (a) displayed emotional responses, (b) personalized communication amongst each other, (c) demonstrated vulnerability in communication, and (d) showed empathy toward, affirmed, and encouraged others. Social presence emerged as participants and students demonstrated emotional response. Among the codes representing social response, "Humor" (n=431) was the most frequent. Examples of humor ranged from participants sharing humorous stories to illustrate a point in class, to engaging with students around a class "inside joke" (n=22). Steve often personalized his humor with individual students, employing mild sarcasm and encouraging the class not to take themselves too seriously, which appeared to be a regular part of classroom culture as students readily partook in the humorous exchange (observation, January 30, 2019). Another positive emotional expression was that of "Excitement" (n=271), coded for moments of passionate discussion and lively interaction. Mary passionately told the story

of a young man in need she recently supported (modeling course concepts related to social work), and the moment he thanked her for the way she had served him: “I saw him down the road, and he started running toward me! And I started crying! He ran to me and hugged me like he has never seen me in his entire life and reunited with his best friend!” (observation, April 11, 2019). Such positive emotional reactions also occurred in the digital environment of the blended courses. “Emoticons” (n=36) represented one way students and participants engaged with emotion through typing emoticons into discussion forum posts, or “liking” a fellow student’s post, as seen in Figure 13.

Figure 13. Examples of Liking Forum Posts.

Social presence was also observed as participants and their students personalized communication amongst each other. Social presence, as Garrison, Innes, Fung, and Shing (2010) state, must involve community allowing students to “develop inter-personal relationships by way of projecting their individual personalities” (p. 32). The code “Personalizing” (n=820) represented expressions personalizing a concept or discussion to individual experience of the speaker or others in the class. During a blended forum

activity in “Steve’s” course, students personalized discussion after one had expressed doubt in her own ability, as seen in Figure 14.

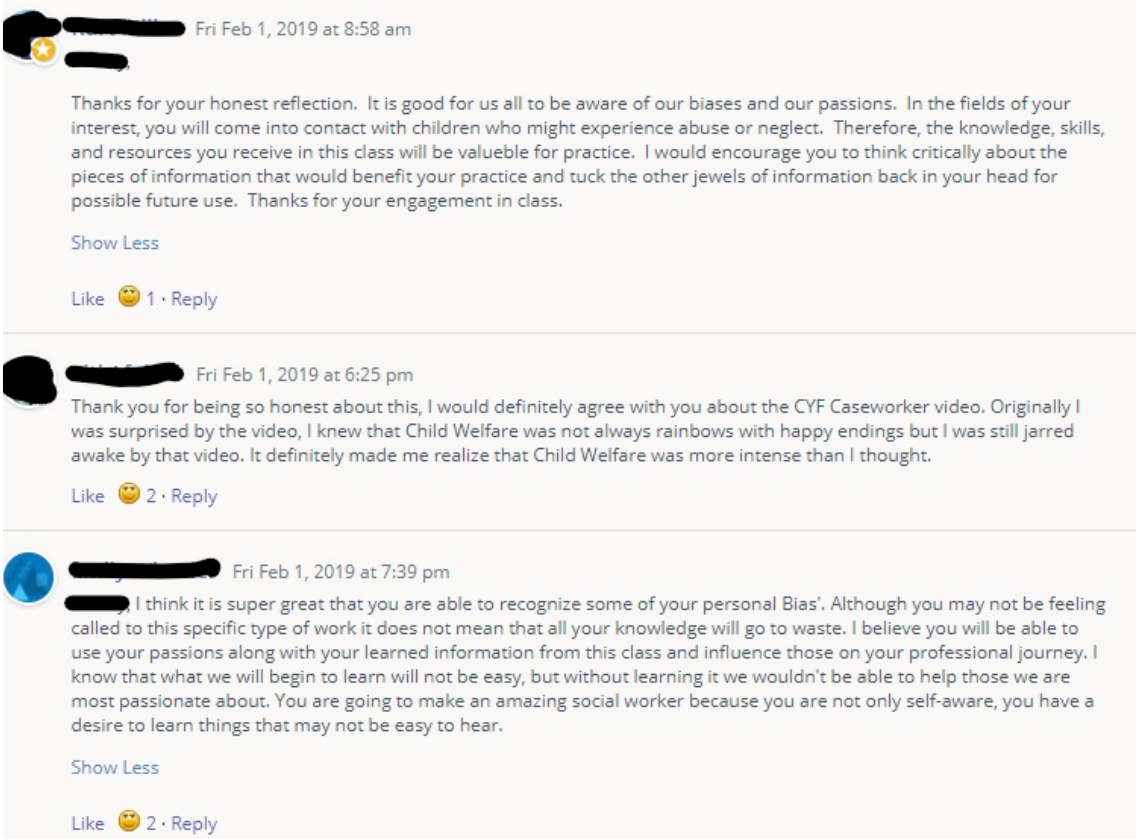


Figure 14. Example of Personalizing in Social presence.

Participants also engaged in personalizing by sharing inside jokes with students, as mentioned above. For example, Mary humorously encouraged specific students to contribute to a discussion where their unique background may provide insight into the discussion at hand (observation, April 11, 2019). Such personalization of communication points to the existence of Social presence in the blended courses.

Participants and students also demonstrated vulnerability in conversation. "Vulnerability" (n=213) and the in-vivo code, "I'm not sure, but" (n=131) captured moments of academic and personal risk and openness by attempting to answer challenging questions and share personal struggles. Steve demonstrated substantial vulnerability while sharing his own family background and proximity to substance abuse, detailing the emotional and relational toll it took on his family in order to demonstrate a key concept in social work practice (observation, January 30, 2019). Students also demonstrated vulnerability. In one reflective journal for "James'" ethics course, one student provided a deeply personal reflection on a challenge to her own ethics, as seen in Figure 15:

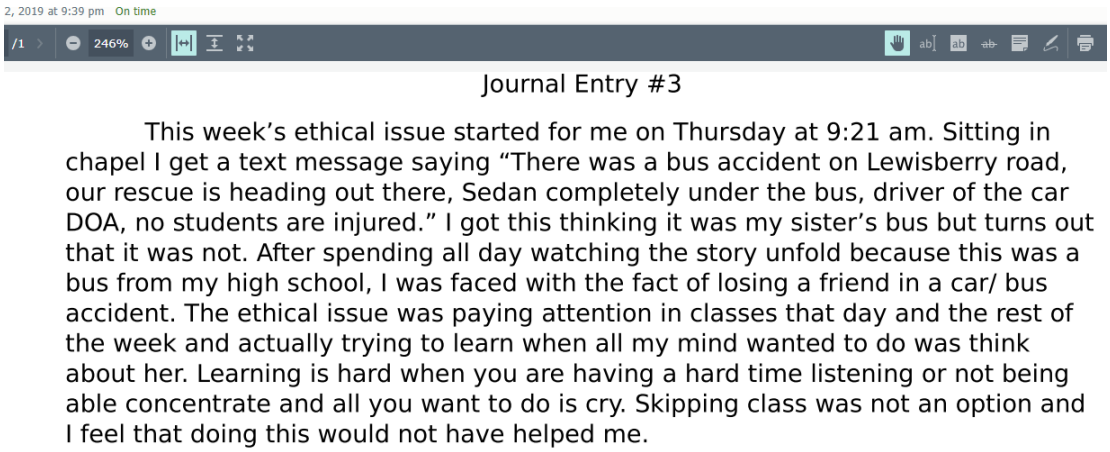


Figure 15. Example of Student Vulnerability.

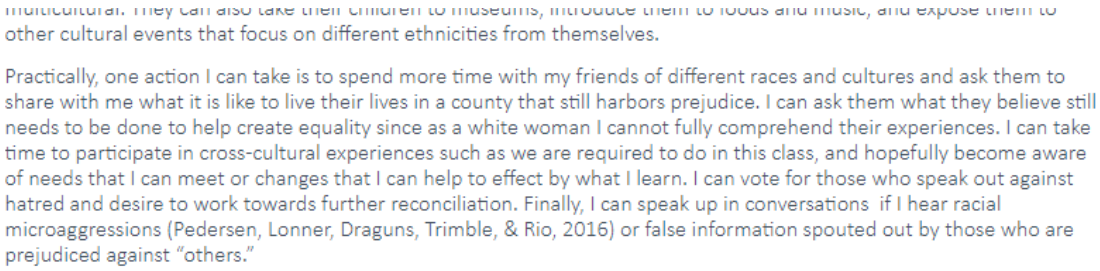
Social presence was also demonstrated as participants and students showed empathy toward, affirmed, and encouraged others. Kozan and Richardson (2014) indicate that Group Cohesion (a subset of Social presence) "establishes and maintains a feeling or

sense of a community fueled by a feeling of belongingness" (p. 40). "Responsibility for Others" (n=644) was coded where students or participants took an interest and stake in the understanding of others or demonstrated care for others. This took place across a variety of settings. During the second observation of "Ben's" course, he provided chocolate to the students as a kind gesture during a busy portion of the semester (observation, February 28, 2019). Additionally, a typical practice at Lancaster Bible College, opening class with prayer and requests for prayer, occurred in each participant's blended course. This represented an opportunity to share personal struggles and demonstrate care for the class community. "Mary's" class demonstrated such relational responsibility in a powerful way by organizing several methods to provide meals and otherwise assist for an absent student whose mother was increasingly ill with terminal cancer (observation, February 21, 2019). Participants and students also demonstrated Group Cohesion through "Encouragement" (n=174) of others. Mark took time to congratulate and encourage students in response to a recently submitted paper: "Your papers are amazing! The way you have overcome your challenges regarding cultures and putting your biases aside, went in with an open mind and open heart to understand others. I'm really proud of all of you…" (observation, March 22, 2019). Reflecting the provisional coding designations of Garrison et al. (2000), participants and their students evidenced Social presence through Affective Expression, Open Communication, and Group Cohesion.

Cognitive presence. Assertion 1 - *Participants and students demonstrated Cognitive presence by pursuing deeper understanding of new learning and sharing personalized understandings with the community*. This assertion emerges from three

theme-related components: participants and students (a) asked questions and exchanged information, (b) demonstrated understanding and connected to prior knowledge, and (c) introduced new ideas to the learning community. Garrison et al. (2000) define these early stages of learning as "a state of dissonance or feeling of unease resulting from an experience" (p. 98). Although students and participants experienced cognitive dissonance, they also pursued a resolution to this confusion by asking questions and exchanging information. This often evidenced as students seeking clarification as they processed through their puzzlement. "Mark's" class held a discussion regarding the stringent requirements for foreign students in American colleges, which seemed to produce dissonance for the students who had never experienced such challenges in their own path as students. Three different students asked clarifying questions in short succession to further understand the legal structure and requirements placed upon these foreign students (observation, March 22, 2019). Participants and students often exchanged information amidst questions to evidence their own processing of dissonance. In some cases, this evidenced quite directly. During the first observation of "Mary's" class, a difficult discussion topic saw many students sitting in silence rather than sharing their thoughts out loud. "Mary," called upon a student to ask for an answer to the question, to which the student replied, "I'm still processing" (observation, February 21, 2019). During such situations, other students eventually began speaking out loud as they worked through a question or concept, eventually drawing in classmates to the discussion (observation, February 21, 2019). Participants and their students thus persevered through cognitive dissonance to obtain a deeper understanding of new concepts.

Cognitive presence could also be observed as participants and students showed personal understanding and connection to prior knowledge. Mark expertly guided students to make connections between recently submitted papers and a current discussion in the course, citing specific examples from student papers as exemplars and assisting in activating prior knowledge (observation, February 15, 2019). In Figure 16 below, a student discussion forum post clearly illustrates the connections to prior knowledge and personal understanding of course concepts:

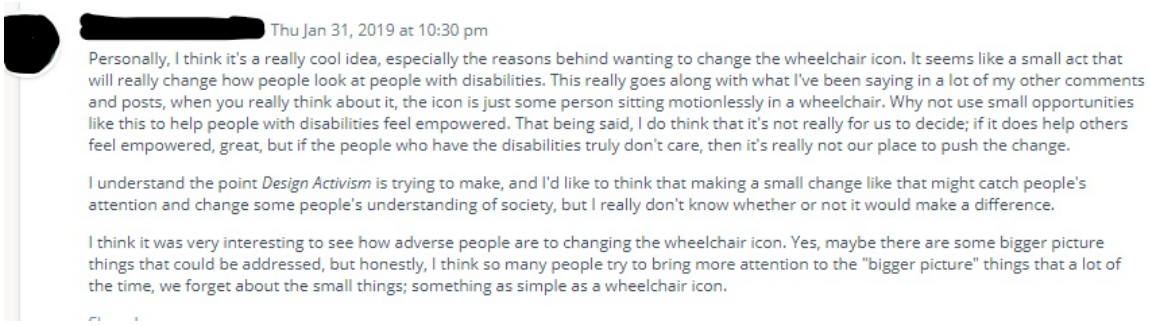

multicultural. They can also take their children to museums, introduce them to foods and music, and expose them to other cultural events that focus on different ethnicities from themselves.

Practically, one action I can take is to spend more time with my friends of different races and cultures and ask them to share with me what it is like to live their lives in a county that still harbors prejudice. I can ask them what they believe still needs to be done to help create equality since as a white woman I cannot fully comprehend their experiences. I can take time to participate in cross-cultural experiences such as we are required to do in this class, and hopefully become aware of needs that I can meet or changes that I can help to effect by what I learn. I can vote for those who speak out against hatred and desire to work towards further reconciliation. Finally, I can speak up in conversations if I hear racial microaggressions (Pedersen, Lonner, Draguns, Trimble, & Rio, 2016) or false information spouted out by those who are prejudiced against "others."

Figure 16. Example of Student Connecting Prior Knowledge.

Students and participants often responded with an initial display of personal understanding of a course concept, followed by a connection to other prior knowledge. During the second observation of "Mary's" class, students were asked to identify the least advantaged people groups within their home communities. One student immediately pointed to a given socio-economic demographic prevalent in her area, and then connected this to the allure of gang culture which also occurs there (observation, April 11, 2019). These participants and students identified connections to prior understanding as a means of integrating new concepts.

Participants and students also introduced new ideas to the learning community. One example of this occurred when a student expressed personal frustration with the discrimination of a local family which Mary knew. He asked whether the class could band together to assist the family, an idea not previously discussed in class (observation, February 21, 2019). Steve engaged students around specific case studies during the first observation, allowing students to choose from a set number of responses to the scenario. As students discussed their reasoning for choosing a given response as a group, individual students began to introduce new ideas to the group to further support a choice, while others decided to break off with the choice of the group to explain their thinking had changed (observation, January 30, 2019). Students also applied new ideas to the learning community in the learning management system. In one discussion forum from "Ben's" class, a student provided nuance and critical engagement with a concept yet unseen to that point in the forum, as depicted in Figure 17.


[redacted] Thu Jan 31, 2019 at 10:30 pm

Personally, I think it's a really cool idea, especially the reasons behind wanting to change the wheelchair icon. It seems like a small act that will really change how people look at people with disabilities. This really goes along with what I've been saying in a lot of my other comments and posts, when you really think about it, the icon is just some person sitting motionlessly in a wheelchair. Why not use small opportunities like this to help people with disabilities feel empowered. That being said, I do think that it's not really for us to decide; if it does help others feel empowered, great, but if the people who have the disabilities truly don't care, then it's really not our place to push the change.

I understand the point *Design Activism* is trying to make, and I'd like to think that making a small change like that might catch people's attention and change some people's understanding of society, but I really don't know whether or not it would make a difference.

I think it was very interesting to see how adverse people are to changing the wheelchair icon. Yes, maybe there are some bigger picture things that could be addressed, but honestly, I think so many people try to bring more attention to the "bigger picture" things that a lot of the time, we forget about the small things; something as simple as a wheelchair icon.

Figure 17. Student Example of Introducing New Ideas.

Through the introduction of new ideas, participants and students integrated new learning as a way of contributing to Cognitive presence in the learning community.

Summary of Results and Analysis for Question 3

Parallel to question two, question three hosted inquiry into which evidence of the Community of Inquiry were present as participants taught their blended courses. Each of the five participant's blended courses observed in this study demonstrated Teaching presence, Social presence, and Cognitive presence of Garrison et al.'s (2000) Community of Inquiry framework. Among the presences, Teaching presence occurred the most frequently, as seen in Table 12:

Table 12

Community of Inquiry Components

Name of Component	Code frequency across all data sets
Teaching presence	4,318
Cognitive presence	2,715
Social presence	3,988

Participants and their students demonstrated Teaching presence by engaging in instruction, guiding conversation, and adapting resources for the needs of the group. Social presence occurred by participants and students through vulnerability and concern for fellow FLC members. Finally, participants and students demonstrated Cognitive presence by conceptualizing new ideas with personalized understanding.

Q4: How were faculty perceptions of support during a faculty learning community (FLC) shaped by faculty developer behavior?

Introduction to Findings

Vaughan and Garrison (2006) point out the crucial role of teaching presence in leading an effective faculty development community. The approach of the faculty developer to lead and model Teaching presence in the FLC followed methods which were designed for innovators and early-adopters, as participants currently practicing blended learning without support likely were anticipated to fall within either of these categories (Rogers, 2003). For research question four, the four, 1-hour video recordings, 42 screenshots, and 7 field note entry data (word count = 2,415), and demographic survey results were analyzed to identify how faculty members may have perceived support as shaped by faculty developer behaviors (all data were collected during the FLC).

The data were analyzed through an initial open-coding approach, to allow for an open consideration of any possible evidences of support present in the data (Saldaña, 2016). Subsequent rounds of analysis included eclectic coding, producing 4 code themes in total regarding perceptions of support. Coding subcategories will be provided in the following sections.

Faculty Developer Behavior

The faculty-developer held a researcher-participant role which lead recruitment, communication, and facilitation of the FLC, including the final focus group. The faculty developer communicated regularly through the LMS and email to remind participants of upcoming meetings, online activity engagement, and to address immediate concerns.

Figure 18 illustrates one such communication via an announcement in the FLC course site:

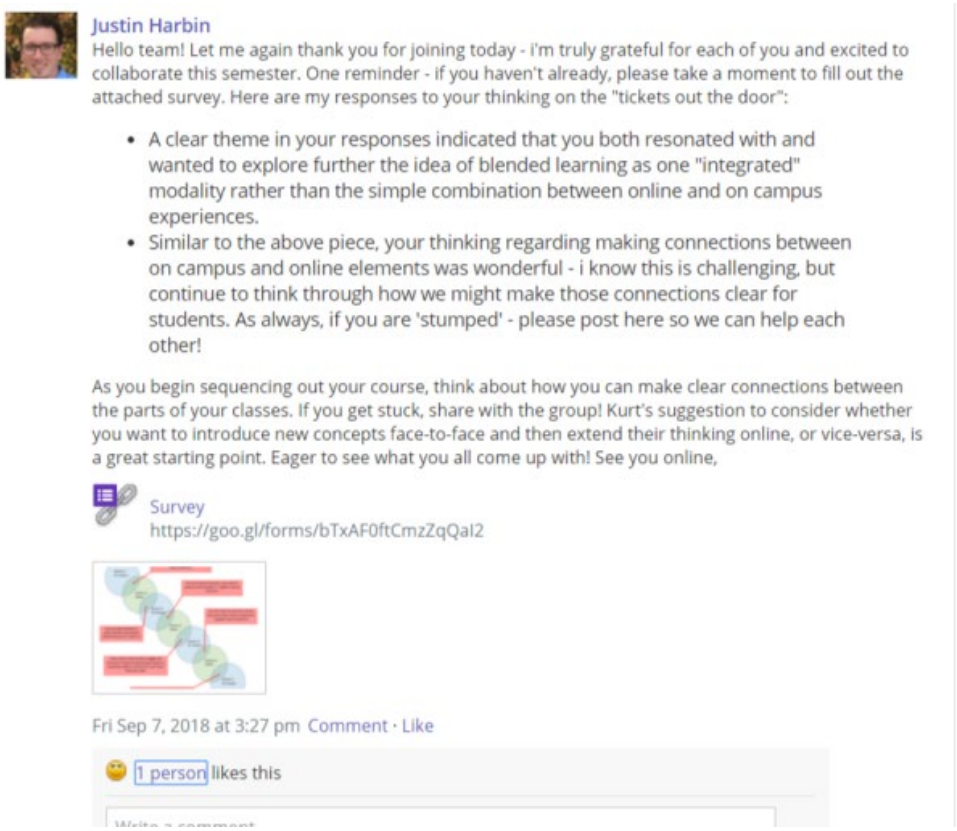


Figure 18. Example Communication in LMS.

Additionally, when a participant missed an on-campus session, the faculty developer set up a follow up session with the faculty member to share any key instruction or insights the group came up with during the missed session (observation, November 9, 2018). The faculty developer also provided resources and instruction customized for the needs of participants. Although the FLC was originally designed with instructional elements and resources suited to this particular subset of faculty members teaching blended courses,

participant need resulted in on the fly adaptation of instruction. Examples of such adaptation were often minor (such as a brief explanation of a concept), but did occur in each on campus and online session of the FLC. For instance, Figure 19 illustrates a shift in response to faculty member challenges in time management towards completing online FLC activities. Here, the faculty developer introduced time estimates for each activity, announcing the new resource via an announcement in the LMS:

Figure 19. Example of adapting and providing new resources.

Faculty developer behaviors most frequently centered around clear communication of FLC objectives, clarification for confusion, personalization of resources, and adaptation for the unique blended practices of each participant. Such behaviors could regularly be observed in FLC agenda's, online activities stating objectives, digital announcements, and group messages where specific resources were provided to participants as a means of adapting instruction (observation, November 9, 2018). These behaviors in particular align with Teaching presence in Garrison et al.'s (2000) Community of Inquiry, as identified

by specific examples in question two. Garrison et al. (2000) describe this Teaching presence as holding responsibility for "instructional management, building understanding, and direct instruction" (p. 101). Further evidence of these components is found throughout the following sections as faculty member perceptions of support are addressed in response to faculty developer behavior.

Perceptions of Support

The central aim of research question four intended to understand how the behaviors of the faculty developer impacted perceptions of support afforded by the FLC. Each data set was analyzed to determine how the behaviors of the faculty developer directed the FLC and participants. A total of 4 code designations were grouped into two dominant themes, which are detailed below. Code sub-categories and frequencies for the first theme, "client orientation" are provided in Table 13.

Table 13

Client Orientation Sub-categories

Name of Sub-category	Frequency across all data sets
Client Orientation	86
Empathy	28
Direct Mention of Support	93
Asking for Examples	31
Trust	29
Asking Questions	65

Code sub-categories and frequencies for the second theme, "identifying a need for change," are provided in Table 14.

Table 14

Identifying a Need for Change Sub-categories

Name of Sub-category	Frequency across all data sets
Identifying a Need for Change	77
Active Participation	22
Information Exchange	95
Conceptualizing on Their Own Terms	129
Compatibility	141
Connection to Practice	158

Prior to discussion of how faculty members perceived the support of the FLC, it remains important to note participation to situate the level of engagement with the intervention. A substantial but not unexpected barrier to the success of the FLC was time commitment and lack of participation for the online elements. Although the FLC approach is nearly brand new at the institution, the same elements of attrition and inconsistent participation experienced in previous cycles of research surfaced during the Fall 2018 semester. Through email and FLC course announcements, the faculty developer reminded faculty members as often as seemed to not annoy participants, recognizing the many priorities they maintain. This typically resulted in a reminder every two to three weeks throughout the semester. In the final session, Mary referenced the value of this regular reminding of FLC responsibilities, and that it helped her to stay on track. Faculty members referenced time as a substantial barrier to their participation during the semester, but in the final session, explained that all of the time invested was well worth the effort, and that time should not have been a barrier in retrospect (observation, December 7, 2018). Table 15 illustrates faculty member participation in

online FLC components throughout the semester (each online component required roughly 1-2 hours of work, with an allotment of roughly four weeks for completion).

Table 15

Faculty participation in online FLC components

	Number of faculty participating within first week	Number of faculty participating within last week	Number of faculty not participating
Online Session 1	2	2	1
Online Session 2	1	3	1
Online Session 3	0	4	1

As demonstrated above, faculty member engagement with online activities decreased in timeliness over the course of the semester. That said, faculty engagement on campus remained lively and attentive throughout the FLC experience. These levels of engagement indicate the amount of the intervention received by the faculty participants. Two assertions arose from the data for the theme labeled “Perceptions of Support”, indicated in Table 16.

Table 16

Themes and Assertions for "Perceptions of Support"

*Themes** and Theme-related components	Assertions
Client Orientation 1. The faculty developer demonstrated client orientation. 2. The faculty developer personalized instruction to participant needs. 3. Participants requested clarification and examples of the faculty developer. 4. Participants made direct mention of support afforded by faculty developer behaviors.	Participants perceived faculty developer support as customized to their needs.
Identifying a Need for Change 1. The faculty developer helped participants conceptualize FLC concepts in their own terms. 2. The faculty developer made connections between FLC resources and teaching practice. 3. The faculty developer portrayed FLC concepts as compatible with participant teaching practice. 4. The faculty developer's guidance resulted in desired changes in practice.	Participants perceived faculty developer support as an adequate support for improving teaching practice.

Client Orientation. Assertion 1 - *Participants perceived faculty developer support as customized to their needs*. Assertion 1 receives support from four theme-related components, stating that (a) the faculty developer demonstrated client orientation, and the participants (b) the faculty developer personalized instruction to meet participant needs, (c) requested clarification and examples of the faculty developer, and (d) made direct mention of support afforded by faculty developer behaviors. Client orientation is a term which derives from the literature on Rogers' Diffusion of Innovations (2003) and

was coded where the faculty developer adapted activities for the needs of the group, or made accommodations for specific members (Kohles et al., 2016; Porter & Graham, 2016; Rogers, 2003). Over the semester, three participants were unable to attend an on campus FLC session (three separate sessions). Client orientation was demonstrated by meeting one-on-one with that participant, working through key concepts with them, and providing resources or instruction for their unique courses. Mark affirmed the value of working with others: "I've been doing the blended courses for the past two years, but after coming to this FLC, especially with this group setting, I'm able to explore how creative we can become when it comes to the online learning (observation, December 7, 2018). Client orientation was demonstrated through the FLC structure as well, which recognized that participants often practice in isolation and may desire closer working relationships. The final FLC session on December 7, 2018 in particular saw faculty members directly mention their own isolation in practicing blended learning, and affirming the value of collaborating with others, as indicated above.

The faculty developer personalized instruction to meet participant needs. Participant questions often revealed contextualized needs. These questions reflected an implied trust in the expertise of the faculty developer, someone they believed to be current with best practice from a technological and pedagogical perspective. For example, Mark asked, "So if you are using session by session [course structure], is it better to have a published and unpublished timing, or is it better to have all folders open at the beginning of the course?" (observation, November 9, 2018). Here he asked a technical question about structuring and facilitating the course in the learning management system, trusting that the faculty developer would know the ideal setup. For

several minutes following this question, the faculty developer provided guidance on specific course set up for Mark while also providing possible solutions for other FLC members (observation, November 8, 2018). In another session, Steve requested the faculty developer's pedagogical insight to help him understand how he employs assessments in his course: "I think some of my courses, even traditional, I've done many formative evaluations, not a summative, and that still is ok?" (observation, October 5, 2018). The faculty developer then directed instruction around the value and appropriate application of both formative and summative assessments as related to "Steve's" course, eventually drawing possible examples for other FLC member's courses into the conversation (observation, October 5, 2018). In these ways, the faculty developer adapted instruction to the specific needs of participants.

Similarly, participants requested clarification and asked questions of the faculty developer. Sometimes these questions arose around new concepts, such as the Community of Inquiry. Several participants asked about whether a given activity they had in mind would emphasize Teaching presence, or another element of the framework (observation, September 7, 2018). Similarly, Mary asked for examples of how the faculty developer practiced integration between blended sessions of a course, to "get some ideas" (observation, September 7, 2018). In a screenshot from an online activity, Mark provides an example of asking questions for clarification of an idea (Figure 20).

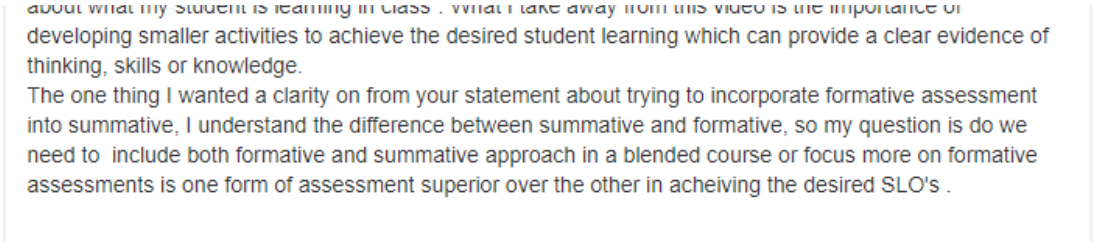


Figure 20. Screenshot of "Mark's" response to a quiz during the first online FLC session.

Participants also asked questions regarding clarification for online FLC activities, faculty developer insight on how others outside the group practiced blended learning, and clarifying statements or comments made by the faculty developer (observation, October 5, 2018).

Finally, Assertion 1 is supported by multiple instances of participants indicating that they felt supported by the faculty developer. Participants often indicated support and deeper understanding received through the direct instructional videos created by the faculty developer for online components of the FLC. While responding to a video which instructed participants regarding authentic assessment of learning, Mark indicated that this instruction corrected his own misunderstandings about learning styles and provided new guidance around meaningful assessment of learning and provision of feedback (observation, October 4, 2018). Another video which introduced a variety of blended learning strategies resonated with "Steve," who said "I've enjoyed finding options for learning that include a perspective different from my own" (observation, November 2, 2018). Ben even indicated a planned change in teaching practice as a result of receiving guidance for online instructor presence from the faculty developer: "After…reviewing the information for this session, I will be focusing on my online presence and

involvement in the blended aspects of my course…Previously, I took more of an observational approach to discussion boards. Now I plan on engaging the students and guiding discussions more intentionally" (observation, October 5, 2018). These quotes of direct support guide the assertion that participants did feel that they received support for their own needs from the faculty developer as they designed blended courses throughout the FLC.

Identifying a Need for Change. Assertion 2 - *Participants perceived faculty developer support as an adequate support for improving teaching practice*. This assertion is supported by four theme-related components, such that the faculty developer: (a) helped participants conceptualize FLC concepts in their own terms, (b) made connections between FLC resources and teaching practice, (c) portrayed FLC concepts as compatible with participant teaching practice, and (d) guided participants to identify desired changes in practice. On campus and online FLC activities introduced a number of new curricular design and technological concepts to participants. As participants engaged these concepts, they considered what they might look like in future courses or their current daily practice. During the first on-campus session where blended learning as a unique modality was introduced, participants indicated that their previous understanding simply entailed a shifting of some on-campus activities to the online environment for greater instructor convenience (observation, September 4, 2018). After the faculty developer led a discussion around maintaining focus on learning goals throughout a course, Steve spent time considering how his day-to-day instruction and class activities aligned with his learning goals, eventually deciding to build his course calendar around essential questions

aligned to the learning goals as a means of contextualizing his new understanding with his practice (observation, December 7, 2018).

Similarly, the faculty developer made regular connections between FLC resources and teaching practice. Ben provided an example of this kind of response to the faculty developer's guidance while reacting in an online session to a mini-lecture on differentiation of instruction (Figure 21).

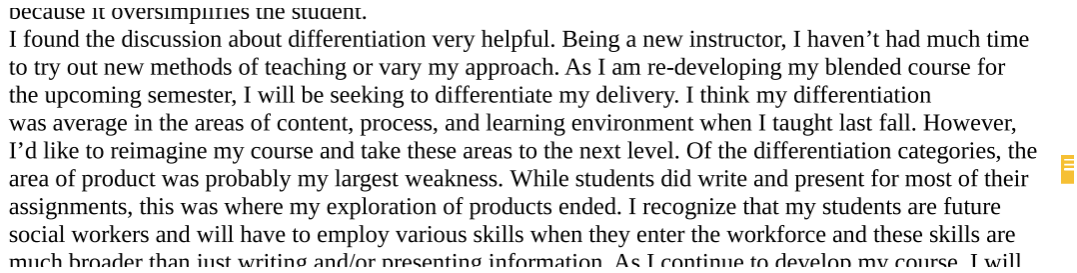

because it oversimplifies the student.
I found the discussion about differentiation very helpful. Being a new instructor, I haven't had much time to try out new methods of teaching or vary my approach. As I am re-developing my blended course for the upcoming semester, I will be seeking to differentiate my delivery. I think my differentiation was average in the areas of content, process, and learning environment when I taught last fall. However, I'd like to reimagine my course and take these areas to the next level. Of the differentiation categories, the area of product was probably my largest weakness. While students did write and present for most of their assignments, this was where my exploration of products ended. I recognize that my students are future social workers and will have to employ various skills when they enter the workforce and these skills are much broader than just writing and/or presenting information. As I continue to develop my course, I will

Figure 21. Screenshot of "Ben's" reflection paper in the first online FLC session.

As demonstrated in the screenshot above, Ben was able to connect concepts presented in the FLC with past teaching practice and develop plans for implementing improvements in the future. After the faculty developer discussed strategies for envisioning the interweaving of on-campus and online course components, Mark shared how he connects the elements of one of his counseling courses, encouraging students to engage with peers in ways which demonstrate counseling skills in both online and face-to-face environments (observation, September 7, 2018). As more experienced educators, Steve and the faculty developer were able to make connections to specific teaching practices (such as grading and classroom management) for "James," who has been teaching for two years.

The notion of "compatibility" features prominently in Rogers' (2003) Diffusion of Innovations, such that a given practice or innovation must be seen as compatible with beliefs and capabilities of the participant who might adopt it. According to Rogers (2003), compatibility of an innovation is a trait that appeals to any level of adopter (including the Innovator and Early Adopter categories). Due to the importance of this, the faculty developer sought to understand whether specific guided instruction around FLC concepts of instructional design or teaching practice would be seen as compatible with participants' teaching practice. Mary indicated that the faculty developer's instruction on evidenced-based learning practices was compatible with her teaching practice (Figure 22):

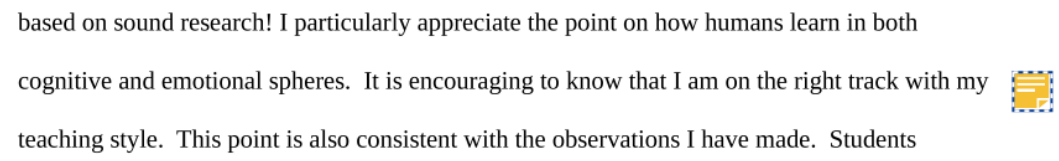

based on sound research! I particularly appreciate the point on how humans learn in both cognitive and emotional spheres. It is encouraging to know that I am on the right track with my teaching style. This point is also consistent with the observations I have made. Students

Figure 22. Screenshot of "Mary's" reflection paper in the first online FLC session.

This mention of consistency between a concept provided by the faculty developer and her personal experience demonstrates alignment with what Mary might consider feasible for implementing into her teaching practice. In the same online activity, Steve shared how a faculty developer mini-lecture on engaging multiple modalities in the classroom meshes with his overall learning goals in the social work classroom (Figure 23):

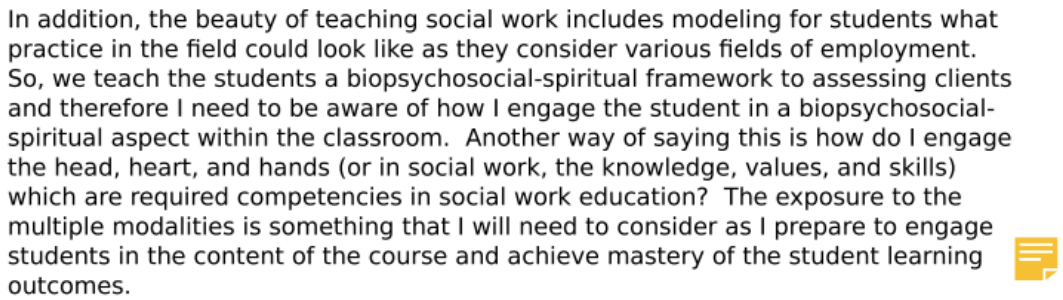


Figure 23. Screenshot of "Steve's" reflection paper in the first online FLC session.

During the third on campus session, the faculty developer offered the strategy of structuring the blended course around essential questions rather than weeks or another type of structure. Mary and James both indicated such an approach would be a substantial aid to their instructional goals, and how they could see this working out in previous courses they have taught (observation, November 9, 2018). Instruction regarding the design and teaching of blended courses, as indicated above, was deemed as compatible with participants – each reporting to varying degrees as to how or when they may be able to implement them. In this way, the faculty developer created opportunity for participants to see specific changes in teaching practice such as differentiation as congruent and compatible with their daily teaching.

Importantly, the faculty developer's guidance resulted in desired changes to teaching practice. These changes often occurred as participants encountered FLC activities and reflected on their past teaching of blended courses. In an online discussion regarding instructor presence, Ben shared such an example (Figure 24):

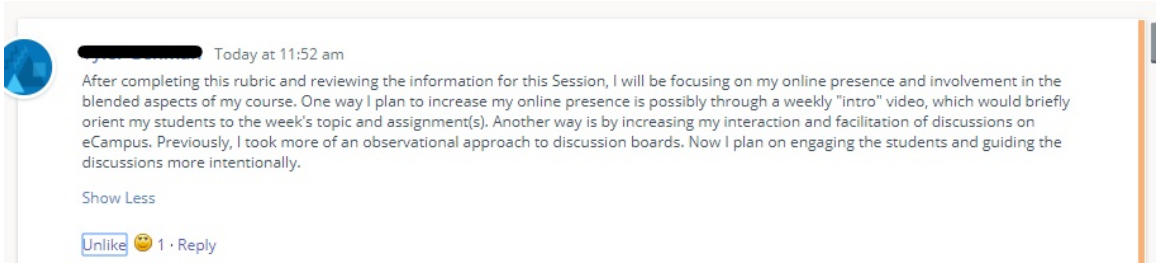


Figure 24. Screenshot of "Ben's" post in the final online session of the FLC.

Steve shared a similar concern and recognized his minimal involvement during online activities in the past was something that needed to change (observation, November 19, 2018). Steve then also identified PowerPoint recording as another change to implement in order to increase the amount of direct instruction present in the online element of his course. This specific example arose in reaction to viewing the faculty developer's own mini-lectures recorded using PowerPoint. In some cases, participants spoke of how previous misconceptions about blended courses were illuminated for them. Mark stated, "You talked about the importance of the chain reaction…the importance of follow up [between on campus and online sessions]. I think that I actually have failed in that area in the past…I'm thinking that next semester that's what I'm going to do" (observation, December 7, 2018). In these ways, the faculty developer seemed to introduce better alternatives to current or past teaching practice where participants decided a change would be needed. These interactions demonstrate specific ways in which the behavior of the faculty developer shaped perceived support afforded by the FLC experience.

Summary of Results and Analysis for Question 4

Faculty members indicated several ways in which they believed they were supported by the faculty developer in the FLC context. Despite what was at times minimal participation in online activities, participants indicated that they experienced meaningful support through the FLC experience. The ability of the meetings throughout the semester to sustain conversation relevant to the teaching practice of the members seems to have supported them in tangible ways. Participants indicated that easy and consistent access to the faculty developer, as well as others in a similar teaching position, allowed them to conceptualize changes to their teaching practice in a contextualized manner. FLC members mentioned faculty developer behaviors such as providing instruction, adapting resources for individualized needs, and class observations as tangible evidence of support for their teaching practice.

Finally, the first focus group held substantial conversation around how the FLC structure would have been an ideal faculty onboarding structure. This was an unexpected turn, but one which seems congruent with the particular segment of faculty members represented – four out of the five participants began their careers as field practitioners rather than college professors. As James indicated, he still very much views himself professionally as an attorney, still learning how to teach well. This relatively intuitive insight given institutional mission and context seemed important for future implications of the FLC. Although faculty member onboarding programs do exist, comments from participants along these lines seem to reveal gaps that were unexpected for this study to reveal. Along these lines, the researcher was surprised to see comments from Steve and Mark indicating their concerns for other practitioners of blended learning who have not

participated in the FLC, with Steve going so far as to say the next department meeting he leads will raise concepts from the FLC for the benefit of the group. Although these evidences seemed to indicate promising results for faculty member support, implications raised by participants remained unexpected.

Chapter 5

Discussion

"The love of knowledge and Truth should invite us to continue learning. The love of others should compel us to teach" (St. Augustine, Answers to the Eight Questions of Dulcitius, 3)

This qualitative action research study investigated whether a faculty learning community was able to support an under resourced sector of faculty at Lancaster Bible College. Faculty members teaching undergraduate blended courses received no support from formal faculty development structures for the design and facilitation of their courses. A FLC was identified as a possible means of support for faculty members seeking to innovate by blending their courses. The institution's faculty developer led the FLC as participant-researcher, providing direct instruction and modeling of blended learning while collaborating with participants to design their courses. Engaging the innovation of blended learning in community offered support where prior research revealed isolated practice by faculty members. Garrison et al.'s (2000) Community of Inquiry acted as the theoretical framework in the design of the FLC, as well as offering participants a potential model to employ within their own blended courses. The research questions for this study were as follows:

Q1: How did faculty perceive the value of a faculty learning community (FLC) as a support for designing blended courses?

Q2: Which evidences of teaching, social, and cognitive presence did faculty exhibit during a blended faculty learning community (FLC)?

Q3: Which evidence of teaching, social, and cognitive presences did faculty exhibit after participating in a faculty learning community (FLC) within their own blended courses?

Q4: How were faculty perceptions of support during a faculty learning community (FLC) shaped by faculty developer behavior?

Discussion of Findings

Community of Inquiry as a Model for Blended Learning. Garrison et al.'s (2000) Community of Inquiry acted as the theoretical framework for the study, particularly to guide the design of the FLC and as a model for participant's blended courses. Meaningful evidence of the framework was recorded during both the FLC and faculty member's teaching in the blended modality (Evidence for each type of presence: Teaching presence n=977, Social presence n=1,093, Cognitive presence n=711 during FLC; Teaching presence n=4,318, Social presence n=3,998, Cognitive presence n=2,715 during blended courses). Employing COI for the design of the FLC provided a means of engendering a community of learners, which was described as a need for faculty members who previously practiced blended learning in isolation. The lenses of Teaching, Social, and Cognitive presence allowed the faculty developer to understand that learning did occur in community throughout the FLC. The faculty developer dedicated a portion of the first FLC meeting to introduce Community of Inquiry as a framework, indicating that it was used to guide the design and facilitation of the FLC, as well as providing a helpful guide for faculty members to conceptualize engendering community in their own blended courses. Specific FLC activities were designated as focusing on particular presences within the framework so that faculty members could clearly identify how

Community of Inquiry appeared in practice. Consistent with Wicks et al. (2015), greater evidence of the Community of Inquiry presences increased participant perceptions of community, a key concern for faculty members who previously experienced isolation. Their perceptions of support offered by the FLC will be discussed later in this chapter.

Although Teaching presence was demonstrated by both the faculty developer and participants during the FLC, it seemed that the faculty developer's role in modeling this component of the Community of Inquiry proved useful for participants as they considered their own teaching practice. Vaughan and Garrison (2005) support such a theme, stressing that a faculty developer's role in modeling effecting Teaching presence influences the overall formation of a Community of Inquiry. The faculty developer designed FLC activities online and on campus with clear instruction and expectations, provided direct instruction, and facilitated collaborative learning opportunities, reflective of key roles pertaining to Teaching presence (Garrison et al., 2000). These behaviors evidenced a desire to scaffold the learning experiences of participants and leverage the strengths the FLC as a collaborative tool. Participants stated throughout the FLC, but particularly during the two focus groups, that such Teaching presence represented a substantial impact on their own learning during the experience (observation, December 7, 2018). Teaching presence was further evidenced through the faculty developer's initiative in adapting instruction or resources to the needs of participants during facilitation, following up individually with participants as needed, and providing clear and timely communication to encourage engagement in FLC activities throughout the semester. Such behaviors indicated to FLC members that the faculty developer was invested in their personal learning and growth through a willingness to adapt and change plans for

the needs of group members. Participants in the FLC reflected that the faculty developer's Teaching presence continually encouraged them to consider their Spring courses even amidst the busy fall semester (observation, December 7, 2018), a finding congruent with Vaughan and Garrison's (2006) study where faculty participants stated that Teaching presence in their FLC encouraged their consistent attention despite other responsibilities vying for their time.

Each member of the FLC also showed Social presence. Group Cohesion was evident from the first session, where in the field notes the faculty developer recorded surprise at how quickly the group seemed to engage with each other. It remains possible that the prior working relationships of three participants (teaching for the same department) may have contributed to this. However, the small faculty population at the college and institutional commitment to community also play a strong role in faculty member willingness to build relationships with one another. The faculty developer provided clear indication that the goal of the FLC was to provide a collaborative space for learning together across disciplines and designed activities to maximize collaboration which likely factored as well in the quick development of Social presence. The various elements of Social presence represented a common reference as faculty members recalled the value of collaborating around shared problems of practice. This shared experience of support resonates with other studies employing the Community of Inquiry for faculty development (Vaughan & Garrison, 2005; Vaughan & Garrison, 2006; Wicks et al., 2015). One area that seemed to suffer in terms of Social presence was the online portion of the FLC. Field note observations regularly reference inconsistent participation over the course of the Fall 2018 semester. Interestingly, student engagement in online activities

during the Spring remained active. Although lack of participation in this way remains congruent with the two FLC's the faculty developer has led at the institution before (unrelated to this research and blended learning), it seems perhaps the format of allowing around one month for online activities to take place in between face-to-face sessions may give participants the feeling that they can put it off since they have so much time. This idea was even directly stated by Ben in an on-campus session (observation, October 5, 2018). Student engagement in these activities may be impacted by the shorter periods of time allotted for completion of online components. The barrier of "time" for professional development remains a challenge for faculty members, although as stated by participants, they would have spent the time at a different point to prepare for the classes, and that the FLC was worth the time investment required (observation, December 7, 2018; Porter et al., 2016). These reports conflict, but perhaps amount to faculty members underestimating the time it takes to properly design a course prior to teaching or failing to see a meaningful connection between time invested in professional development and effort required to improve teaching practice.

Cognitive presence, although the least represented among the components of the Community of Inquiry, was also evidenced throughout the FLC and courses. Garrison et al. (2000) depict Cognitive presence as a process containing four stages: cognitive dissonance, exploration, integration, and resolution. Initially, the faculty developer was unsure of how much cognitive dissonance faculty members would experience when introducing FLC concepts, since some participants regularly attend professional development and may have previously engaged with the principles discussed. More frequent evidences of exploration and integration seemed to point to these FLC concepts

as perhaps not the first time a participant had encountered them, but rather providing opportunity for them to consider and even operationalize those concepts in the context of actual practice. In other words, faculty members could more readily deeply engage or implement the concepts if they had heard of them previously. If this is in fact the case, the finding would be congruent with the literature regarding the value of ongoing faculty development in an FLC (Furco & Moely, 2012; Owston et al., 2008; Vaughan & Garrison, 2006). Participant's descriptions of how the FLC provided exposure to new ideas and ways of blending their courses also find commonality with Vaughan and Garrison's research on employing FLC's for blended faculty development (2005; 2006).

Participants clearly evidenced all three Presences' from the framework during their teaching, making note of specific efforts such as increasing Teaching presence in the online activities (observation, April 12, 2019). This point, in particular, seems to have arisen from faculty member acknowledgement of their own disengagement as "students" in the FLC, and a known need to make similar efforts to the faculty developer (observation, December 7, 2018). Varying experience with blended learning and unique outcomes across participant courses understandably produced different course structures and facilitation. Mary indicated hesitancy in whether her blended course was a success, specifically pointing to the fact that this is the first time she had taught the course in any modality, which likely contributed to her uncertainty (observation, April 12, 2019). Steve and Mark seemed much more comfortable carrying out and reflecting on their courses, consistent with Vaughan and Garrison's (2006) assertion that faculty members who have previously taught a course in a different modality are more likely to understand and appreciate the ways the blended modality shapes student learning. Although the data

collected clearly indicate substantial evidence for each Presence in participant's courses, it remains unclear whether such evidence resulted from past teaching experience or from intentional effort to employ the Community of Inquiry.

FLC as a Support for Faculty. Congruent with the literature on faculty learning communities, participants perceived the FLC as a meaningful support (Carbonell et al., 2012; Furco & Moely, 2012; Wicks et al., 2015). Although the success of the FLC approach for ongoing faculty development is well documented, it remains a relatively untested approach. Such methods remain vital to engender "sustained critical reflection and discourse about one's teaching practice" (Garrison & Vaughan, 2006, p. 140). The ongoing collaborative nature of the FLC was cited by participants as a meaningful element of support (observation, December 7, 2018). Vaughan and Garrison (2005) state, "a faculty development program must provide the time, support, and encouragement for participants to re-examine and reflect on their course curriculum, teaching practice, and use of educational technology" (p. 3). Participants referenced consistent access and collaboration to the faculty developer and fellow FLC members as essential to their success in designing a blended course (observation, December 7, 2018). The faculty developer's faculty ranking and experience in the classroom (both past and present) appeared to be particularly relevant to participants, who not only sought resources and instruction, but examples from the faculty developer's own teaching experience. Previously, participants practiced blended learning without the knowledge of which other faculty members taught blended courses, or whether the faculty developer would have the time to guide them in the process under the currently limited resourcing for faculty developer time.

Although participants spanned only three academic disciplines, it seems that this diversity provided value as different learning outcomes (such as skill-oriented versus knowledge-oriented) required different approaches across conceptualization and facilitation of the courses. Participants indicated that this understanding caused them to develop their own courses more clearly, especially regarding the design choice of placing specific activities online or on campus (observation, December 7, 2018). The intended learning outcomes of a blended course substantially shape the necessary structuring of activities (Mortera-Gutierrez, 2005; Wang, Han, & Yang, 2015; Wong et al., 2014). FLC members identified ways the different outcomes required different blended learning designs between each other's courses, but conversation mostly focused on the fact that these differences existed rather than to explore further which methods may be best suited to given outcomes (observation, October 5, 2018). Thus, it seems the FLC approach for this specific blended learning application may also benefit from targeting specific types of courses and maintaining interdisciplinary composition, to allow participants to focus conversation around more deeply contextualized needs. Mortera-Gutierrez (2005) explains that different learning outcomes require different structuring of the blended course, divvying up the design of courses into three components of "content," "communication," and "construction." In this way, participants may benefit from hearing others facing similar instructional design concerns as in their course, rather than those engaging with the full gamut of course design. Four of the five participants held careers in other professions (social work and law) prior to becoming faculty at the collegiate level. Given the practice-oriented context of the college, this is not an uncommon occurrence. However, it may also serve to illustrate why this kind of community learning

professional development might be useful as few professors in higher education at large receive formal pedagogical training (Alsop, 2018).

Participants directly identified the FLC as supportive for their own teaching practice. Although this may be unsurprising due to the support for collaborative, ongoing professional development in the literature (Furco & Moely, 2012; Parsons et al., 2016; Vaughan & Garrison, 2005; Vaughan & Garrison, 2006), certain contextual factors may also have contributed to its success. As a small faith-based, practice-oriented institution, Lancaster Bible College prizes community as a distinguishing feature of the institution. Embedding professional development within a context where this is so valued maximizes the potential of faculty member support for the FLC approach. The close working relationship of three participants within the same department likely assisted in the formation of community for this study, but due to the limited number of full-time faculty at the institution, such an effect seems likely for similar approaches in the future, as faculty members often engage across disciplines in their daily work on campus (nearly all full-time faculty hold offices in the same academic building).

Roger's Diffusion of Innovations (2003) provided further insight into how faculty members might perceive support during the FLC. Each participant demonstrated characteristics identified for both the Innovator and Early Adopter categories, although with much greater evidence for Innovator (willingness to immediately implement new strategies on their own and lead FLC conversation toward new avenues of exploration exemplify the Innovator). Initial coding drew on descriptive words found in Roger's Diffusion of Innovations (2003), aligning collaboration and seeing the work of others as a key component for Early Adopters. Such collaboration was also reported as an essential

element of faculty support (observation, December 7, 2018). However, closer analysis of participant observations and communication revealed that such collaboration centered around relatively immediate implementation of ideas heard during the FLC, rather than waiting until they had observed others trying a new practice (observation, April 12, 2019). In these cases, most participants seemed less concerned over slower and more deliberate innovation akin to Rogers' (2003) Early Adopter. This remains consistent with Roger's (2003) explanation of Innovators as those willing to practice innovation without external supports, a description fitting for the context of this study (Porter et al., 2016; Porter & Graham, 2016). Rogers' (2003) Early Adopter prefers more careful innovation after observing others, which may happen in a collaborative environment. However, all participants cited the collaborative nature of the FLC as a meaningful contribution to their own experience. It seems that such collaboration offers the new insights and ideas for implementation for the Innovator, while also providing the support ability to observe the innovation of others desired by the Early Adopter.

Faculty Developer as Change Agent. Importantly, FLC members made direct statements about the support the faculty developer offered them throughout the semester. Each participant referenced the value of modeling "teaching" of the FLC in ways which helped them see the need to lead in similar ways as they teach their blended courses. As Vaughan and Garrison (2005) indicate, Teaching presence is strongly linked to Cognitive presence, so that such modeling may have played a role in faculty member understanding of certain concepts. Throughout the FLC, the faculty developer regularly adapted plans to follow the participant's paths of inquiry or to provide resources catered to the needs of the faculty members. Such resources included creating transcripts for videos, meeting

one-on-one, and providing estimated times of completion on each FLC online activity (observation, December 7, 2018). In this way, the faculty developer played the role of "linking" innovations or resources with the faculty participants' needs (Osentoski, 2015; Rogers, 2003). Additionally, such flexibility demonstrates "empathy," a factor for change agent success according to Rogers (2003).

The faculty developer also demonstrated "change agent effort" as a means of increasing impact (Rogers, 2003). Such "change agents" seek to implement an innovation across an institution through targeted advocacy and communication (Rogers, 2003). "Change agents' success in securing the adoption of innovations by clients is positively related to the extent of change agent effort in contacting clients" (Rogers, 2003, p. 373). This took place by taking initiative to lead the FLC, providing regular digital communication and reminders for involvement, and meeting with participants who missed an FLC meeting to ensure they did not miss resources or guidance which would be useful for their practice. Observing classes also served to affirm a visible and concerted effort to support participants in their innovation, an element that participants often noted for their classes as they introduced the faculty developer's presence in the room. Participants directly cited experiences of support provided by the faculty developer above and beyond the collaboration with peers in the FLC while reflecting during each focus group (observation, April 12, 2019).

A relatively surprising development occurred where during each focus group, participants directed conversation to the need for greater faculty developer involvement in observing courses and leading interdisciplinary collaboration (observation, April 12, 2019). These requests moved beyond personal benefit from the FLC into larger desired

institutional improvements. This seems to indicate that participants viewed the faculty developer as a change agent, and that they believed that such initiatives would be useful on a larger scale. Such investments into academic support for faculty members are well noted in the literature, but here participants connected their experience in the FLC to felt needs across the institution (Carbonell et al., 2012; Furco & Moely, 2012; Wicks et al., 2015). This may align with a previously held belief in the importance of faculty development (Steve regularly attends offered professional development initiatives, for example). However, such faculty member insight may also derive from institutional knowledge of how other faculty desire or require increased support.

The threefold roles of the faculty developer (researcher, faculty member, and faculty developer) seemed to be an advantage in both identifying the problem of practice, as well as facilitating the FLC in ways which the participants found supportive. It remains likely that this multi-faceted position played a substantial role in the successes this study experienced.

Limitations

Limitations for this study include (a) sample size and (b) diversity of the sample, with the unique context surrounding the faculty developer potentially playing a unique factor in the successes experienced. The most obvious limitation of this study is that of sample size. Although a FLC consisting of only five participants remains consistent with similar professional development opportunities at the institution, future FLC experiences may enhance understanding as to the ways the FLC approach impacts broader institutional culture.

Diversity of the small sample should also be noted. Although the ethnic and gender representation of the sample remains roughly representative of the broader faculty population, they were not diverse in terms of academic discipline. Though commonalities may carry to other skill-focused programs, this study lacked exposure to participants from humanities and knowledge-focused academic disciplines.

The unique setting and experiences of the faculty developer also act as a potentially qualifying factor. At the college, the faculty developer holds personal relationships with each participant, and is known to provide support and resources for innovation in teaching practice by each of the faculty members in this study. Familiarity with the faculty developer remains largely possible due to the small size of the institution, where the limited number of full-time faculty members increases probability of daily personal engagement with faculty outside one's academic discipline. Additionally, the faculty developer holds the position as peer of participants, a ranked faculty member with teaching responsibilities who experiences the same struggles as faculty at the institution. Such a position provides insight into the lived experience and felt needs of participants, as well as credibility in the eyes of faculty members. As stated previously, these roles provided an advantage to this study and likely contributed to the successful intervention. Other faculty developers lacking such a broad ranging standing at their institution may find such an approach difficult to replicate.

Implications

Studies employing the Community of Inquiry for the design of an FLC are limited, but this study both contributes to the literature and further affirms the value of such an approach (Myers et al., 2011; Vaughan & Garrison, 2005; Vaughan & Garrison,

2006; Wicks et al., 2015). This theoretical framework provided clear guidelines for the design and facilitation of the FLC, as well as lending a targeted means of observing whether community learning occurs through the facilitation of the FLC.

Another implication is that of divergence in the actual ways participants structured their blended courses. Participants structured the online and on campus components in a far more diverse manner than was initially understood by the faculty developer, with some meeting on campus twice a week, and others only meeting on campus every other week. Furthermore, one participant (Mark) taught a graduate blended course, which was also unknown at the beginning of the study (although it should be noted that this unique graduate program also receives no support for blended learning practice). The graduate blended course only met on campus once a month, with the rest of the course occurring online throughout the semester. The nature of graduate work may have also resulted in more robust online and on campus discussions amongst that learning community, although several undergraduates were enrolled in the course. Such diversity in course design may point to a broader usefulness of the FLC approach, allowing for greater flexibility for course design than originally anticipated. This may also explain participant's comments that the FLC approach would have meaningfully supported them in a completely different need, faculty orientation.

Additionally, the FLC format as a means of learning in the community setting remains a contextually appropriate method of professional development. Although social learning receives appreciation across a multitude of contexts, the unique attributes of a faith-based environment where faculty members tend to gravitate towards a common set of a values with community at the forefront played to the strengths of the FLC. The

prevalence of faculty-practitioners with limited training in the field of teaching and learning provided ample opportunity for further work in the area of blended learning, as well as in other efforts related to the scholarship of teaching and learning and daily classroom practices.

The faculty developer's role was aligned with Rogers' (2003) "change agent," and also addressed the value of faculty-developer being embedded in faculty leadership and institutional improvement through professional development. As a ranked faculty member, the faculty developer was able to resonate with the lived experiences and felt needs of faculty participants, being seen as a peer. This position also allowed the faculty developer to identify potential institutional gaps such as the lack of support for blended learning. Further investment and resourcing into such positions may illuminate further institutional gaps and increase faculty member support where it is most needed.

Finally, both focus groups documented participants' belief in the FLC format as potentially useful for faculty onboarding as well as ongoing professional development. LBC's contextual disposition for hiring faculty members with practitioner experience increases the need for onboarding new or inexperienced faculty well. Steve and Mary also indicated a desire to see multiple FLC's focused around beginning, intermediate, and advanced teaching practice, holding implications for ongoing professional development structures.

Future Cycles of Action Research

According to participants, time remained a substantial barrier to engagement in professional development and personal improvement of teaching (observation, December 7, 2018). Despite this, participants also indicated that the time spent in the FLC was well

worth the investment (observation, December 7, 2018). Further cycles of action research on whether time is a perceived or real barrier to participation in professional development (such as an FLC) with the broader faculty population may clarify the conflicting reports of participants in this study and inform methods of engendering greater faculty participation.

Reflecting a limitation of this study, further research regarding FLC's as a support for blended learning should employ purposeful sampling across a greater variety of academic disciplines. A broader faculty member representation in such research would also serve to clarify and deepen the findings of this study. Future action research cycles should seek to gain participants from different academic departments from those participating in this study, addressing courses which seek to achieve varying student learning outcomes.

Additionally, action research into the manner in which an FLC may support the onboarding of new faculty members, particularly those with prior work experience outside of the classroom, would prove useful in this unique context (current offerings for faculty onboarding also represent a minimally resourced element of institutional need). Similarly, participants referenced the value of more frequent classroom observations and mentorship. Combining such efforts with this study may see newer faculty members more quickly assimilating into blended learning practice than those who previously received no support. Research into these initiatives in conjunction with FLC's as supports for academic life would provide valuable information to the institution for prioritizing its own investment in faculty member support.

Finally, considering Roger's (2003) Diffusion of Innovations depiction of how innovation spreads throughout an organization, it is recommended that another cycle of action research aims to study how the participants of this research and the faculty developer influence the spread of blended learning at LBC. During the first focus group, Steve mentioned his intent to promote FLC concepts at his next department meeting (observation, December 7, 2018). Although it is anticipated that the greatest impact would be within the academic departments and amongst the colleagues of participants, inquiry into how this group of faculty members contribute toward a tipping point of institutional adoption would provide meaningful insight into future endeavors for faculty development. Careful consideration of the three roles exhibited in this study (researcher, faculty, faculty developer) should be investigated for their possible influence on the adoption of innovations. As potential adopters of blended learning consider next steps, a follow-up study may inquire into whether learning from a faculty ranked faculty developer or simply another faculty member influences willingness to engage a new innovation.

Next Steps

The results and implications of this study reveal the need for several action steps for the faculty developer at LBC. First, the faculty developer plans to submit a proposal to seek implementation of an annual FLC for blended practitioners. This proposal will include a requirement that all faculty members at least design their first blended course within this context, introducing a new policy to cover the current gap.

A second proposal will seek to leverage the findings of this study regarding faculty onboarding. This proposal would adapt the current faculty onboarding experience

which holds some characteristics of a FLC (a weekly meeting throughout the fall semester) to a more concentrated effort in engendering community for new faculty members.

Finally, a third proposal addresses the need for implementing the FLC for ongoing faculty development. As requested by the participants of this study (particularly Steve and Mary), FLC's will center around beginning, intermediate, and advanced teaching needs as fitting for the broader faculty population at LBC. Current FLC efforts remain an optional offering from the Office of Teaching Effectiveness, whereas this proposal will request a formalized structure allowing faculty members to count participation toward professional goals and promotion requirements.

Suggestions for Faculty Developers

This study obtained results congruent with the literature cited in chapter two regarding FLC's. Such a format provides a meaningful platform for reflection on teaching practice and monitoring attempts to improve teaching practice. The FLC format should be strongly considered for addressing shared problems of practice at other types of institutions in higher education.

As stated previously, the three roles of researcher, faculty member, and faculty developer seem to have influenced the results of this study positively. Faculty developers who do not maintain faculty ranking or teaching loads may consider petitioning their institution for incorporating these elements into their current roles. Additionally, institutions may consider allowing designated faculty members release time where budget may constrain full implementation of a faculty developer or center.

Conclusion

Garrison et al.'s (2000) Community of Inquiry provided a solid model for the design of the learning-in-community approach of the FLC and was clearly evidenced in the classrooms of participants during the semester after the FLC. The insight provided by the framework allowed the participant-researcher to clearly document evidence of community learning in the FLC and participant's classrooms.

Improving and innovating classroom practices remains a challenging task for the teaching professor. Where rapid institutional growth has created gaps in faculty resourcing for blended courses at LBC, the FLC format provided ongoing, collaborative, and targeted support for participants. Although such a format of faculty development has been well documented in higher education, the approach was found to show great promise within the unique institutional context of LBC. Faculty members who are newer to life in the classroom (including the blended classroom) face many challenges to successful teaching practice, from time to invest in their own development, to identifying appropriate resources for teaching, which may be an entirely new discipline of study. Structured time for reflection on their own strengths and weaknesses, timely provision of resources related to their practice, and collaboration with peers working through the same struggles all remain crucial elements of support which the FLC format provides. Through identifying institutional gaps and areas of potential innovation, as well as guiding practitioners through their implementation of the innovation, the faculty developer facilitated meaningful support for teaching professors at LBC. Further resourcing in such faculty-development initiatives represents one of the most powerful investments a college

can make – an investment into the lives and practice of those tasked with carrying out the mission and vision of the institution.

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APPENDIX A

CYCLE 0 INTERVIEW GUIDE

1. Have you previously taught a blended course? If so, how many?
2. How would you compare the experience of teaching a blended course as compared to a fully face to face course?
3. What would you identify as the strengths of blended learning?
4. What would you identify as the weaknesses of blended learning?
5. Are there specific characteristics of the courses or discipline you teach that you believe work well or do not work well in a blended model?
6. What areas do you want to improve on in your design and teaching of blended courses?
7. What kind of support do you think would be ideal for improving our blended courses at LBC?
8. What other comments do you have regarding teaching blended courses?
9. What questions do you have for me?

APPENDIX B

EXAMPLE CODES FROM FOCUS GROUP TRANSCRIPT

Theme 1: The BLR increased clarity around blended design and teaching

- Impact on teaching practice
- Increased clarity on blended learning
- Affirmation of current practices
- Connecting to current understanding
- Benefits of BL

Theme 2: The BLR increased understanding of blended pedagogy by revealing new areas of desired understanding or support

- Lack of support
- Hearing new ideas
- Breakdown between admin and teacher
- Community in blended courses
- Lack of confidence in current practice
- Students need blended learning training
- Concern for other practitioners
- Difficulty imagining blended
- Setting expectations for students
- Choosing best course delivery
- Understanding of LMS
- Expectations for blended learning practice
- Student blended learning feedback
- Desire to collaborate
- Time limitations

APPENDIX C

EVIDENCES OF “SCAFFOLDING LEARNING”

[Consult Attached Files]

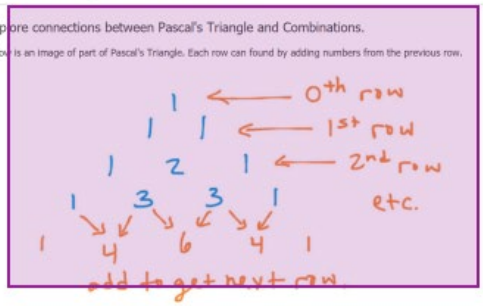
..Scaffolding Learning

..Sequencing

Pascal's Triangle and Combinations

Explore connections between Pascal's Triangle and Combinations.

Below is an image of part of Pascal's Triangle. Each row can found by adding numbers from the previous row.



1. Expand Pascal's Triangle to the 10th row.

2. Find these combinations, in the order below:

   ${}_0C_0$

   ${}_1C_1$ ${}_1C_0$

   ${}_2C_2$ ${}_2C_1$ ${}_2C_0$

   ${}_3C_3$ ${}_3C_2$ ${}_3C_1$ ${}_3C_0$

   ${}_4C_4$ ${}_4C_3$ ${}_4C_2$ ${}_4C_1$ ${}_4C_0$

   ${}_5C_5$ ${}_5C_4$ ${}_5C_3$ ${}_5C_2$ ${}_5C_1$ ${}_5C_0$

   What do you notice??

3. Let's do some multiplication using rules from algebra.

   $(a+b)^0 = 1$ (since anything to the 0th power is 1).

   $(a+b)^1 = 1a + 1b$

   Find $(a+b)^2$. You can use FOIL to correctly multiply this.

   Find $(a + b)^3$. The distributive property is helpful, here.

   Look at all of the coefficients (the numbers in front of the variables). What do you notice??? Any connection to Pascal's triangle?

4. Find $(a + b)^{10}$ using Pascal's Triangle, rather than by multiplying as you did in the previous problem.

5. Prove that ${}_4C_3 + {}_4C_2 = {}_5C_3$.

6. In general, prove that ${}_nC_r + {}_nC_{r-1} = {}_{n+1}C_r$. (Do this using variables and the formula for a combination. Do not use specific numbers for n and r.)

7. Do some research to explore other patterns within Pascal's triangle. What did you find?

Three sources are required for this project. You may cite any that you used to help you understand #1-6, as well as any sources used for your research in #7. Give citations in MLA format.

Submit in any format - but be aware that Word documents will often not display charts and numbers correctly on my end of things. You may want to go with a PDF or image file.

APPENDIX D

FACULTY CONSENT FORM

Dear Colleague:

My name is Justin Harbin and I am a doctoral student in the Mary Lou Fulton Teachers College (MLFTC) at Arizona State University (ASU). I am working under the direction of Dr. Erin Rotheram-Fuller, a faculty member in the MLFTC. We are conducting a research study on the creation of a faculty learning community (FLC) to support blended undergraduate education at Lancaster Bible College (LBC). The purpose of this faculty learning community is to support faculty as they design blended courses in preparation for teaching the next semester.

We are asking for your help, which will involve your participation in the Fall 2018 FLC. Each of the four meetings entailed in this faculty learning community will last approximately 1 hour. Online activities for the FLC will require minimal time (approximately 1-2 hours), although this time will be spent working on designing your course rather than adding new work. We are also asking your permission to record each FLC meeting. During the Spring 2019 semester, I am requesting to observe two class sessions on campus and your online sessions. At the end of the Spring semester I would like to facilitate another focus group to see how the faculty learning community seemed to support you after teaching the class. You will be required to bring a laptop or device to live FLC sessions in order to facilitate discussions around the elements of course design and teaching particular to your course.

Keep in mind that due to the nature of the focus-group setting, complete confidentiality for the two focus groups cannot be guaranteed. Only the research team will have access to the recordings. The recordings will be deleted after being transcribed. Let me know if, at any time, you do not want to be recorded and I will stop.

Your participation in this study is voluntary. If you choose not to participate or withdraw from the study at any time, there will be no penalty whatsoever. You must be 18 years of age or older to participate. Note that participation in the research is required if you wish to participate in the FLC.

The benefit to participation is the opportunity for you to reflect on and think more about the ways you understand and practice blended learning in LBC's undergraduate courses, as well as taking steps to improve a specific blended course you teach. Thus, there is potential to enhance the experiences of our students. There are no foreseeable risks or discomforts to your participation.

Your responses will be confidential. Results from this study may be used in reports, presentations, or publications but your name will not be used.

If you have any questions concerning the research study, please contact the research team – Erin Rotheram-Fuller at Erin.Rotheram-Fuller@asu.edu or Justin Harbin at jharbin@lbc.edu or (267) 664-3248.

Thank you,

Justin Harbin, Doctoral Student
Erin Rotheram-Fuller, Professor

If you have any questions about your rights as a participant in this research, or if you feel you have been placed at risk, you can contact the Chair of Human Subjects Institutional Review Board through the ASU Office of Research Integrity and Assurance at (480) 965-6788.

By signing below you are agreeing to be part of the study.

Name:

Signature: Date:

APPENDIX E

PARTICIPANT DEMOGRAPHIC SURVEY

1. How many years have you been teaching?
2. What is your gender?
3. What is your ethnicity?
    - White.
    - Hispanic or Latino.
    - Black or African American.
    - Native American or American Indian.
    - Asian/Pacific Islander.
    - Other.
4. Which academic department do you teach for?
5. Do you consider your course to primarily be skills-based or content-based?
    - Skills-based
    - Content-based
6. How many blended courses have you taught before?
7. As you consider designing a blended course, which of the following statements best describes you?
    - I am typically eager to try new things in the classroom, even if new methods might fail as I try them.
    - I am careful about which new teaching practices I adopt, and am happy to share my experiences with colleagues.
    - I prefer to try a new teaching practice after a colleague has implemented it, so I can seek advice and best practices.
8. As you consider designing a blended course, which of the following statements best describes you?
    - I prefer to collaborate with others when I attempt new teaching practices.
    - I prefer to move at my own pace, following new ideas and resources as they fit my needs.
    - I prefer to observe others employ a new teaching practice prior to adopting it myself.
9. As you consider designing a blended course, which of the following statements best describes you?
    - Teaching is an adventure – it can be risky, but that is just part of the job. I enjoy regularly experimenting with new teaching ideas.
    - Although I enjoy trying new teaching practices, I prefer to carefully choose what innovations I attempt and when.
    - I prefer to learn new teaching practices from my colleagues – I greatly value their experiences which may benefit my classroom as well.

APPENDIX F

STUDENT CONSENT FORM

Dear LBC Student:

My name is Justin Harbin and I am a doctoral student in the Mary Lou Fulton Teachers College (MLFTC) at Arizona State University (ASU). I am working under the direction of Dr. Erin Rotheram-Fuller, a faculty member in the MLFTC. We are conducting a research study on the creation of a faculty learning community (FLC) to support blended undergraduate education at Lancaster Bible College (LBC). The purpose of this faculty learning community is to support faculty as they design blended courses in preparation for teaching the next semester.

We are asking for your help, which will involve your consent to be observed through video during two class periods on campus and your interactions in the online portion of your blended course. Only the research team will have access to the recordings. The recordings will be deleted after being transcribed. Let me know if, at any time, you do not want to be recorded and I will stop. If you choose to not participate in the video recording, you will be asked to sit outside of the camera frame of view during the class sessions which are recorded (any portions of the recording reflecting your participation, even if off-screen, will be deleted from the record).

Your choice to participate or not participate will in no way impact your grades or standing at LBC. Your participation in this study is voluntary. If you choose not to participate or withdraw from the study at any time, there will be no penalty whatsoever. You must be 18 years of age or older to participate. There are no foreseeable risks or discomforts to your participation.

Your responses will be confidential. Results from this study may be used in a dissertation or publications but your name will not be used.

If you have any questions concerning the research study, please contact the research team – Erin Rotheram-Fuller at Erin.Rotheram-Fuller@asu.edu or Justin Harbin at jharbin@lbc.edu or (267) 664-3248.

This study has been reviewed and approved by the Arizona State University Institutional Review Board. If you have any questions about your rights as a subject/participant in this research, or if you feel you have been placed at risk, you can contact the Institutional Review Board, through the ASU Office of Research Integrity and Assurance, at (480) 965-6788.

Thank you,

Justin Harbin, Doctoral Student
Erin Rotheram-Fuller, Professor

By signing below you are agreeing to be part of the study.

Name:

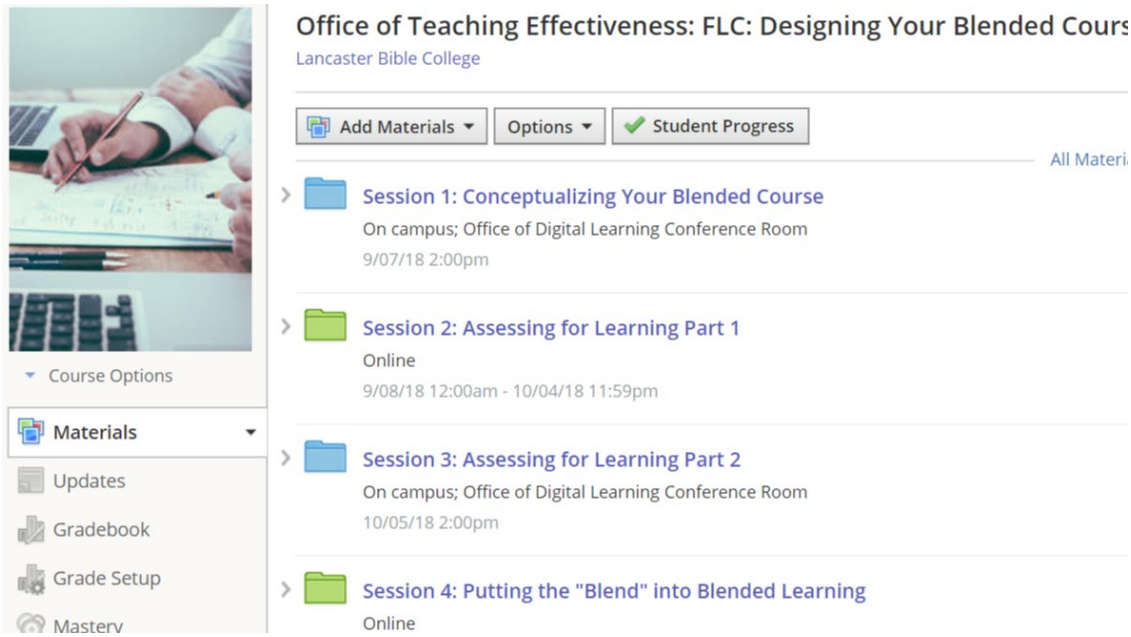
Signature: Date:

APPENDIX G

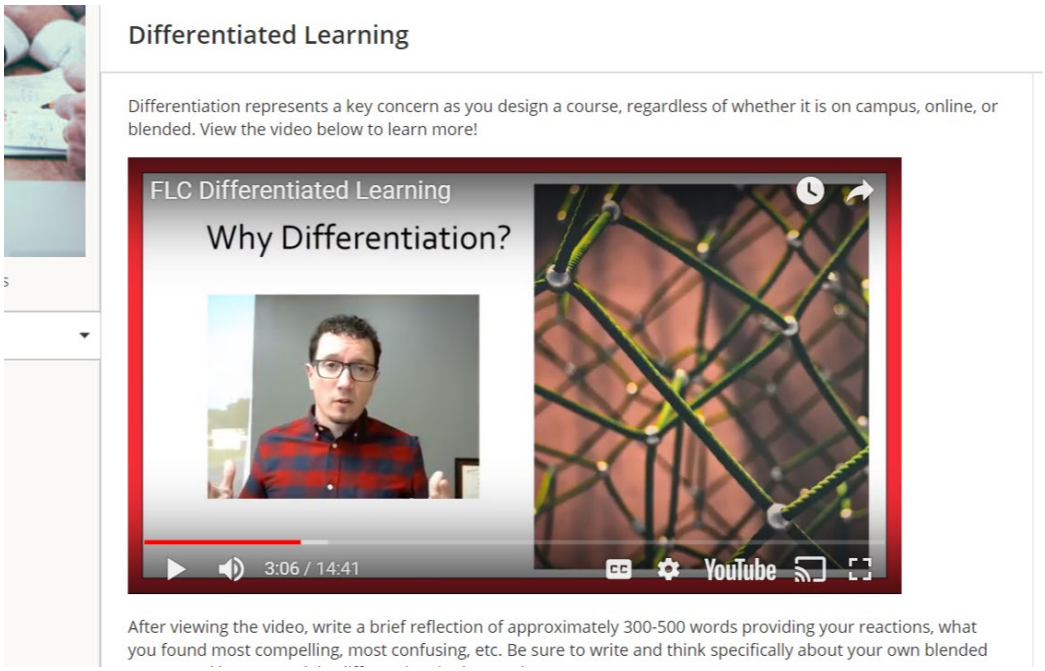
SCREENSHOTS OF FLC COURSE

[Consult Attached Files]

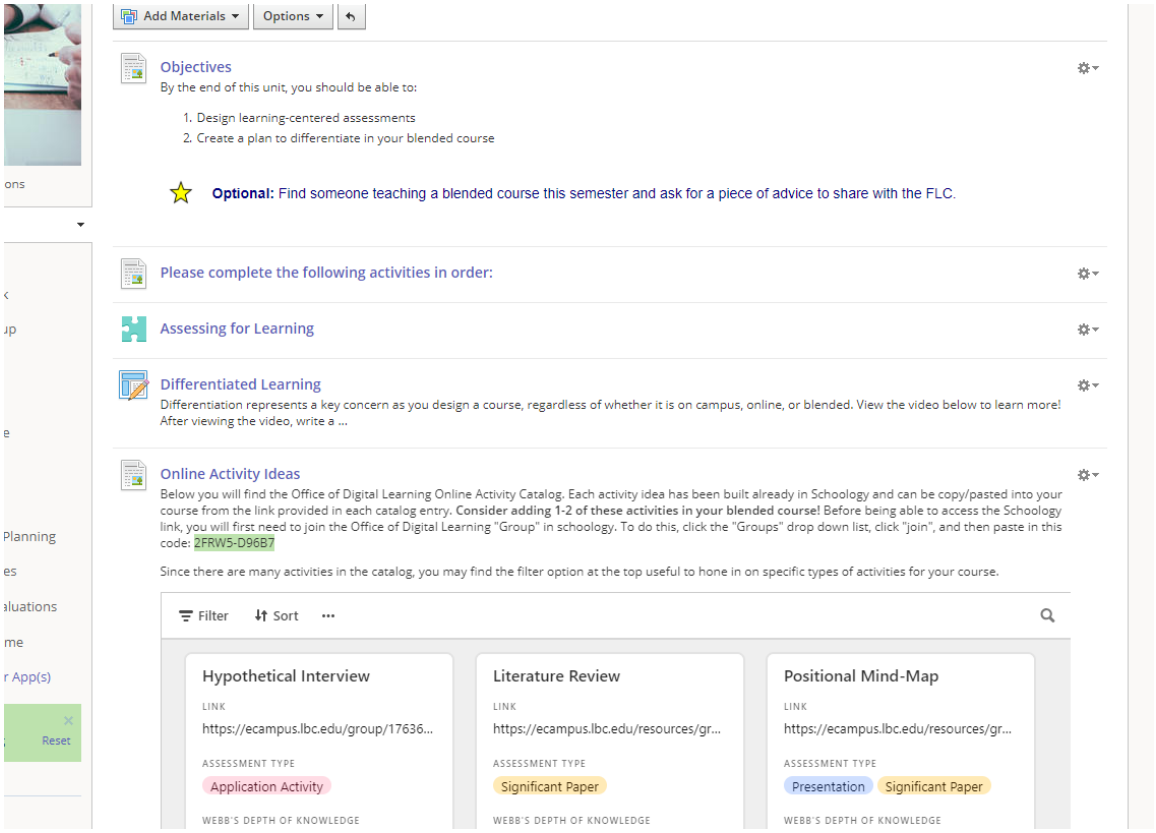
Course overview:



Mini lecture:



Overview of online unit:



APPENDIX H

FOCUS GROUP 1 GUIDE

Discussion Guide

1. What “went well” for you during the FLC this semester?
2. What “breakdowns” did you experience during the FLC this semester?
3. Did the FLC shape your understanding of blended learning? If so, how?
4. What benefits come to mind as you think about your experience in the FLC this semester?
5. What downsides come to mind as you think about your experience in the FLC this semester?
6. Was the effort required to participate in the FLC worth it as you consider the work involved to design your blended course? Explain.
7. In which specific ways did the FLC support you as you designed your blended course?
8. In which specific ways did the FLC fail to support you as you designed your blended course?
9. How would you improve upon the FLC experience for designing blended courses?
10. Would you recommend the FLC experience to a colleague designing a blended course?

APPENDIX I

FOCUS GROUP 2 GUIDE

Discussion Guide

1. What was your most positive takeaway from teaching a blended course this semester?
2. What was your most negative takeaway from teaching a blended course this semester?
3. How would you describe the process of teaching a blended course?
4. How would you describe facilitating the social or classroom community piece of your blended course?
5. How would you describe student learning in your blended course as opposed to a fully on campus course?
6. Did you draw upon your FLC experiences as you taught your blended course this semester?
7. Would you say the FLC experience adequately supported the teaching of your blended course? If so, how?
8. Would you say the FLC experience failed to support the teaching of your blended course? If so, how?
9. How would you improve upon the FLC experience for teaching blended courses?
10. Would you recommend the FLC experience to a colleague teaching a blended course?

APPENDIX J

COMMUNITY OF INQUIRY CODING TABLE

[Consult Attached Files]

Table 1: Community of Inquiry Categories

Elements	Categories	Indicators (examples only)
Social Presence	Affective expression	Emoticons
	Open communication	Express trust, agreement
	Group cohesion	Encourage collaboration
Teaching Presence	Design & organization	Defining content & activities
	Facilitating discourse	Sharing meaning
	Direct instruction	Focusing discussion
Cognitive Presence	Triggering event	Sense of puzzlement
	Exploration	Information exchange
	Integration	Connecting ideas
	Resolution	Apply new ideas

APPENDIX K

IRB APPROVAL DOCUMENTATION

EXEMPTION GRANTED

Erin Rotheram-Fuller
Division of Educational Leadership and Innovation - Tempe
-
Erin.Rotheram-Fuller@asu.edu

Dear Erin Rotheram-Fuller:

On 7/12/2018 the ASU IRB reviewed the following protocol:

Type of Review:	Initial Study
Title:	Innovating Together: Employing a Faculty Learning Community to Support Blended Learning
Investigator:	Erin Rotheram-Fuller
IRB ID:	STUDY00008457
Funding:	None
Grant Title:	None
Grant ID:	None
Documents Reviewed:	• Dissertation Student Recruitment.pdf, Category: Recruitment Materials; • IRB Approval.pdf, Category: Off-site authorizations (school permission, other IRB approvals, Tribal permission etc); • Dissertation Consent Faculty.pdf, Category: Consent Form; • Dissertation Student Consent.pdf, Category: Consent Form; • Dissertation Recruitment Faculty.pdf, Category: Recruitment Materials; • Focus Group 2 Guide.pdf, Category: Measures (Survey questions/Interview questions /interview guides/focus group questions); • IRB Form Dissertation.docx, Category: IRB Protocol; • Focus Group 1 Guide.pdf, Category: Measures (Survey questions/Interview questions /interview guides/focus group questions);

The IRB determined that the protocol is considered exempt pursuant to Federal Regulations 45CFR46 (2) Tests, surveys, interviews, or observation on 7/12/2018.

In conducting this protocol you are required to follow the requirements listed in the INVESTIGATOR MANUAL (HRP-103).

Sincerely,

IRB Administrator

cc: Justin Harbin
Justin Harbin