
Professional Learning Communities as a Faculty Support During the COVID-19 Transition to Online Learning

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Abstract

The COVID-19 pandemic resulted in the dramatic shift to online learning for professors and students. In addition to rapidly building capacity to teach and to learn online, professors were removed from their professional communities. Social learning opportunities which exist in the workplace are essential to brainstorm ideas, to discuss teaching practices, and to problem-solve situations (Gerken et al., 2016). However, some universities focused on formal technical training to rapidly build capacity, e.g. how-to video conference, how to share files. A qualitative study was conducted to investigate the impact of complementing the formal technology training provided by the university with weekly Professional Learning Communities (PLC) during the unexpected online transition. Full and part-time faculty members from two departments were invited to participate. After 10 sessions, the findings revealed significant community-building that ranged from self-care to professional support. The participants evolved from simply sharing tools and asking technical how-to questions to deep discussions around online learning pedagogy. The PLC approach allowed the faculty to move from simply learning online teaching tools to engaging in meaningful discussions around online teaching pedagogy and improving student learning.

Background

In March 2020, institutions of higher education transitioned to emergency online learning given the global COVID-19 pandemic. Universities were tasked with moving all teaching and learning into a virtual format, revealing multiple deficits in capacity for teaching and learning online. During this transition, faculty members were removed from their professional communities and thrust into the isolation of working from home. Traditionally, many faculty members learn new practices and approaches informally through colleagues through feedback and discussions (Gerken et al., 2016; Schmidt et al., 2016). The online learning training provided during the pandemic has primarily focused on technological step by step processes and course design, which often results in faculty frustration versus adoption, instead of how to actually teach online (Schmidt et al., 2016). This research investigated the impact of professional learning communities (PLCs) for faculty during the COVID-19 transition to online learning.

Background

Technology implementation has been shifting not only the way communities work but also how education forms our current generations. Digital contexts have become indispensable tools to work, communicate, and engage with individuals from professional to personal environments (Schmidt et al., 2016). Universities and colleges strive to adapt their classrooms and lessons to welcome new forms of instruction, going from on-campus to online and/or hybrid instruction, offering different options to students to approach their academic experience (Nugent et al., 2008). As institutions invest in the newest technologies such as learning management systems (LMS), devices, and applications, faculty find themselves learning how to suffice the technological proficiency as well as rethinking how to shape instruction and pedagogies based on the changing virtual context (Hutchison & Woodward, 2018; Nugent et al., 2008). The March 2020 COVID-19 social distancing practices resulted in the abrupt, required transition to online learning and the dependence on instructional technology. Suddenly, universities, professors, and students were thrust into learning and integrating technology rapidly and for at least eight weeks. Research in the field of professional development posits the necessity of offering specialized training to faculty where teaching experiences, areas of expertise, and personal interests are in play to motivate and have a

more positive attitude towards technology integration in the curriculum (Hutchison & Woodward, 2018; Schmidt et al., 2016; Vongkulluksn et al., 2018). This research examines how the implementation of professional learning communities help faculty with online learning practices in their curriculum design during this unprecedented transition.

The Relevance of Technology in Education

In the era of social media and digital communication, online and hybrid courses have become the opportunity that students face to engage in learning practices when in-person lectures might decrease their interest or might not fit their schedule or financial status (Nugent et al., 2008). Universities embrace digital technology not only as a means to support students but also as a tool in the academic strategic plan to increase enrollment as more students are interested in online courses (Nugent et al., 2008; Schmidt et al., 2016). The U.S. Department of Education states in its *National Education Technology Plan for Higher Education* (2017) that technology can help faculty to promote collaborative learning spaces for students giving them a real-world experience instead of using traditional methods. Technology integration becomes a necessary tool to reach the new generation of students who have been immersed in the digital era and to support academia when in-person instruction is not a safe option to abide by social distancing requirements. The Department of Education (2017) also describes how faculty who implement technology in the classroom create a student-centered education ecosystem where learners have access to a flexible, reliable, and affordable pathway to independent and professional skills. Garrison et al. (2000) discussed how technology in education moves faculty towards a different type of communication, creating some new challenges that imply a foundation to connect with and support students as well as creating cooperative opportunities for faculty to grow their educational experiences within digital environments. However, having access to technology is not enough when educators find themselves with an opposing perception towards technology due to a lack of knowledge or digital skills (Dinc, 2019; Vongkulluksn et al., 2018).

Nugent et al. (2008) suggest that the expectation of the current millennial and digital generation of students is what urges universities and colleges to support faculty in developing technological proficiency towards the digitalization of education. For instance, the 2019 EDUCAUSE Report expresses the importance of educating professionals for the future by enhancing not only critical thinking and cultural awareness but also digital fluency so students can create new knowledge utilizing technology (Sparrow, 2018). Different scholars studied how the demands for digital knowledge push faculty to create online instructional practices that transform classrooms into innovating learning spaces where pedagogical practices and technology transform the relationship between students and educators (Baran, 2016; Nugent et al., 2008; Schmidt et al., 2016). According to Hutchison and Woodward (2018), aligning pedagogical tools to instructional goals will help to create a more meaningful and effective learning experience for students, leading them not only to experiencing a real-context environment but also creating other forms of communication and collaboration in and out of the classroom. Likewise, Garrison et al. (2000) proposed in their study how creating a Community of Inquiry can help faculty to overcome the challenges of utilizing technology in teaching practices. The scholar's model contains three elements: cognitive, social, and teaching presence, that help align education needs to the digital experience (Garrison et al., 2000). The need for authentic and meaningful professional learning is vital for faculty to implement high quality online learning practices, indicating the need for the creation of virtual professional learning communities during this pandemic.

Technology and Faculty Perceptions

Educational technology in the classroom might leave a negative impact on faculty preparation if there is an unforeseen transition from regular methodologies to implementation of digital tools due to lack of support and knowledge (Vongkulluksn et al., 2018), which occurred during the pandemic transition. Without proper professional development, faculty might change their perception of the positive outcomes that digital tools bring to education. Schmidt et al. (2016) developed research to comprehend the perspective of faculty towards methodologies to support online teaching. Their study showed how faculty expressed the frustration of attending faculty development training that only focuses on the use of technology when there is a difference between technology implementation in class, online curriculum design, and online teaching pedagogies (Schmidt et al., 2016). Vongkulluksn et al. (2018) explained how the value that faculty give to technology integration in the curriculum can maximize not only student learning experiences but also, faculty's perception and comfortability when integrating technology in the classroom. Coupling this discomfort with the anxieties of a global pandemic raises faculties fears and anxieties regarding online teaching practices even more.

The Horizon Report (2018) states how some institutions just wait for others to integrate and implement technologies due to the high cost and faculty time investing in piloting programs, creating barriers that disrupt

teaching experiences and student success. However, this transition to online learning forced universities to rapidly adopt new technology and build faculty capacity. Scholars agree that the complexity of the interaction between technology and teaching practices might create barriers to faculty based on lack of motivation, knowledge, skills, or simply incredulity about the outcomes that integrating technology in the curriculum could bring (Baran, 2016; Vongkulluksn et al., 2018). Especially in emergency teaching situations, faculty need opportunities to learn how to use technology effectively and professional development should offer a focused approach where pedagogical goals, instructional planning, and digital platforms come together seamlessly (Nugent et al., 2008; Schmidt et al., 2016). Recent research has tried to identify how to prepare faculty in terms of educational technology integration besides using the traditional professional development that universities offer (Banasik & Dean, 2016; Baran, 2016; Hutchison & Woodward, 2014; Nugent et al., 2008). Sometimes, faculty trainings are directed by experts in technology without having a pedagogical background (Hutchison & Woodward, 2018; Nugent et al., 2008). Schmidt et al. (2016) talk about how faculty teach as they were taught, if faculty do not have a close experience of learning with technology, there will be a disconnection between students' expectations and faculty instruction. Vongkulluksn et al. (2018) explained how faculty translated the lack of digital skills, mindful school support, and negative perceptions as an obstacle to assimilate online learning practices in the classroom. Traditional professional development typically does not provide specific insight details of digital tools in pedagogical practices. Literature showed faculty doubted professional training because the theme covered a wide spectrum of how to use the digital tool instead of focusing on the instructional adaptation of the digital environment within pedagogical practices (Baran, 2016; Hutchison & Woodward, 2018; Schmidt et al., 2016). Instead, initiating a collaborative space open to dialogues, community building, and informal learning have shown positive results for faculty support. Gerken et al. (2016) indicated in their study how informal spaces create social learning opportunities that are essential to brainstorm ideas, discuss teaching practices, problem-solving situations, and develop proactive relationships with colleagues to seek and offer feedback. Thus, professional learning communities can bring an opportunity for faculty to work together and transform negative perceptions of technology into positive experiences in the classroom by combining the instructional and technical knowledge of colleagues.

The Professional Learning Community Model

Professional learning community (PLC) is a professional development framework that helps to create a sense of community as well as offering a space where faculty can explore how to integrate technology in instructional plans, explore new methodologies, and share academic experiences with peers (Banasik & Dean, 2016). The PLC framework lends itself to a virtual environment because distance and physical space is no longer an obstacle. Though there is not an exact definition of what a professional learning community consists of, but there is a contextual idea of how PLCs work in the educational area. Kimberly Archer (2012) explains the historical development of PLC, which started in the late 1980s during the different reforms that public education was going through to create a supportive environment that could guarantee student achievement. Archer explains how few schools were able to succeed in supporting students and teachers, grounding its bases on the PCL framework, where teachers work collaboratively towards a common goal (2012). DuFour (2006) explains that to accomplish a successful PLC it is necessary to integrate three elements: setting up goals for student learning success by identifying their different needs, creating a strong sense of collaborative culture within educators, and finally, educators should work together to reach results based on continuous up-to-date teaching practices. The informal focus on the PLC framework helps to create learning environments where participants not only develop professional skills but personal and collaborative skills as well. During a pandemic, this community is vital to combat professional isolation during significant changes in course delivery. Gerken et al. (2016) described how formal training does not provide the learning competencies that individuals need to succeed in their careers as sometimes they lack up-to-date structure, opportunities to collaborate, and create solid networks. Though the initial focus of the PLC started in K-12 education, thanks to the holistic view of its core: working collaboratively to support student learning achievement, the foundation of its framework is applicable to higher education.

PLC becomes an innovative model that can help faculty to not only understand technology from the technical perception, but also from an instructional approach. Evrim Baran (2016) studied how learning communities is a positive strategy for faculty trying to integrate technology into the curriculum. Baran aimed to fill the gap between faculty development and the barriers that are present in technology adoption by promoting faculty mentees, forming teams of experts and novices in technology (2016). Likewise, researchers at a large urban university developed a faculty learning community plan to support and to create technological learning spaces to enhance classroom development for a complete academic year with biweekly meetings (Nugent et al., 2008). The scholars used topic-based learning communities to address digital teaching and learning needs. The findings showed participants to be more engaged and determined to include technology spaces in the instructional design. Learning communities create a confident environment where faculty interact and communicate with peers and the

technology specialist by addressing goals, debunking barriers, and selecting the digital tools that will align with their instructional goals, instead of focusing merely on the function of it (Baran, 2016). Similarly, Hutchison and Woodward (2014) presented the Technology Integration Planning Cycle (TIPC) to literacy teachers in a K-12 school in the United States and replicated the research in 2018, adapting the model to a professional development study. The findings of TIPC showed that this model helped elementary school teachers align digital technology and instructional planning while reflecting on their roles in the classroom. The success of this research was based on learning communities, where teachers could help each other sharing experiences, planning their courses, and finding digital technology that fitted their academic goals. The Planning Cycle is a subcategory of the PLC model, which showed how the learning communities used as professional development can support faculty members by transforming their beliefs into a more valuable and feasible view of digital tool integration in the curriculum. Given the embedded support and documented success of the PLC model, that approach was chosen to implement during the pandemic to complement formal technical training.

Research Question

Backed by the university and Teaching and Learning Center, the researchers initiated an interdepartmental PLC to support online instruction during the COVID-19 pandemic. The research question driving the investigation was how can professional learning communities support faculty when abruptly transitioning to online learning?

Methodology

The qualitative research focused on the analysis of faculty discussions during weekly, virtual PLC meetings facilitated by the two researchers. A qualitative research design was chosen to provide a rich context and understanding of the discussions and information exchanged during the PLC sessions.

Setting

The research was conducted at a private university in Connecticut. The university has approximately 149 full-time faculty members and 900 undergraduate students. The Teaching and Learning Center is led by an instructional designer to support all faculty development. The university has some online course options, but the majority of programs and courses are on-the-ground.

Sample

Participants were recruited from the Education and Social Work departments. These departments were chosen because they are both focusing on pre-service or current practitioners in with common social justice frames or environments. Given this similarity, the researchers felt the experiences of the faculty members would complement each other.

Participants

After acquiring IRB approval, the researchers sent out recruitment emails to all faculty – full and part time – teaching in the spring 2020 semester in the departments. There were 22 faculty from the Education Department and 23 from the Social Work Department. The initial recruitment email, subsequent weekly reminder emails, and summaries of each session were sent to all 45 full and part time faculty members. The weekly PLCs were held via the universities' video streaming platform, Blackboard Collaborate, and were recorded with participant permission.

Before participating in the virtual PLC, participants completed informed consent and provided general demographic information. In total, eight faculty members participated in the PLCs: three attended for 90% of the sessions, one 60%, and four participated in 30% or less. The university's instructional designer attended four of the sessions. Of the eight participants, six were full-time faculty with an average of 8.5 years of experience (range 4-13 years). The two adjuncts who participated had 5-6 years of experience.

Data Collection

Each PLC was recorded using Blackboard Collaborate, the university supported online Learning Management System. The transcript was created using the application Otter.ai and analyzed using Dedoose. Any identifying participant information was redacted from the transcripts. The participants were provided with pseudonyms to maintain confidentiality during the analysis. The PLC sessions spread across the spring and summer 2020

semesters. The first five sessions were in Spring 2020 and the final five were during the first summer semester. The two researchers began each session with guiding questions:

- What are your instructional goals for this week?
- What type of activities and strategies do you have in mind for your online courses?
- What has worked well for you in your online class?
- What did not work for you this week?

Data Analysis

Initially, the two frameworks utilized in the qualitative coding were Levels of Technology Integration (LoTi) (Moersch, 1995) and the Technology Acceptance Model (TAM) (Davis et al., 1989). The LoTi framework emerged from the need to categorize authentic use of technology integration to provide appropriate training and support (Moersch, 1995). The six levels of technology integration are: nonuse, awareness, exploration, infusion, integration, expansion, and refinement (Moersch, 1995, p. 42). Figure 1 displays the LoTi framework definitions designated by Moersch (1995). The technology integration framework was initially chosen to categorize how instructors were using technology in their courses during the transition.

Figure 1

The LoTi Framework level descriptions

The LoTi Framework

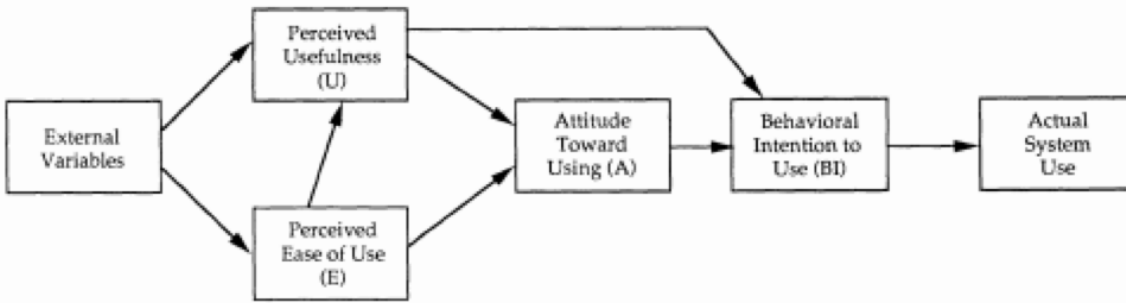
Level	Category	Description
0	Nonuse	A perceived lack of access to technology-based tools or a lack of time to pursue electronic technology implementation. Existing technology is predominately text-based (e.g., ditto sheets, chalkboard, overhead projector).
1	Awareness	The use of computers is generally one step removed from the classroom teacher (e.g., integrated learning system labs, special computer-based pullout programs, computer literacy classes, central word processing labs). Computer-based applications have little or no relevance to the individual teacher's instructional program.
2	Exploration	Technology-based tools serve as a supplement to existing instructional program (e.g., tutorials, educational games, simulations). The electronic technology is employed either as extension activities or as enrichment exercises to the instructional program.
3	Infusion	Technology-based tools, including databases, spreadsheets, graphing packages, probes, calculators, multimedia applications, desktop publishing applications, and telecommunications applications, augment isolated instructional events (e.g., a science-kit experiment using spreadsheets/graphs to analyze results or a telecommunications activity involving data-sharing among schools).
4	Integration	Technology-based tools are integrated in a manner that provides a rich context for students' understanding of the pertinent concepts, themes, and processes. Technology (e.g., multimedia, telecommunications, databases, spreadsheets, word processors) is perceived as a tool to identify and solve authentic problems relating to an overall theme/concept.
5	Expansion	Technology access is extended beyond the classroom. Classroom teachers actively elicit technology applications and networking from business enterprises, governmental agencies (e.g., contacting NASA to establish a link to an orbiting space shuttle via the Internet), research institutions, and universities to expand student experiences directed at problem solving, issues resolution, and student activism surrounding a major theme/concept.
6	Refinement	Technology is perceived as a process, product (e.g., invention, patent, new software design), and tool to help students solve authentic problems related to an identified real-world problem or issue. Technology, in this context, provides a seamless medium for information queries, problem solving, and/or product development. Students have ready access to and a complete understanding of a vast array of technology-based tools.

Note: Visual representation of the LoTi framework from Moersch, C. (1995). Levels of Technology Implementation (LoTi): A framework for measuring classroom technology use. *Learning & Leading with Technology*, 23(3), 40–41.

To complement the LoTi framework, the researchers also analyzed the data using portions of TAM framework, as shown on Figure 2.

Figure 2

Technology Acceptance Model



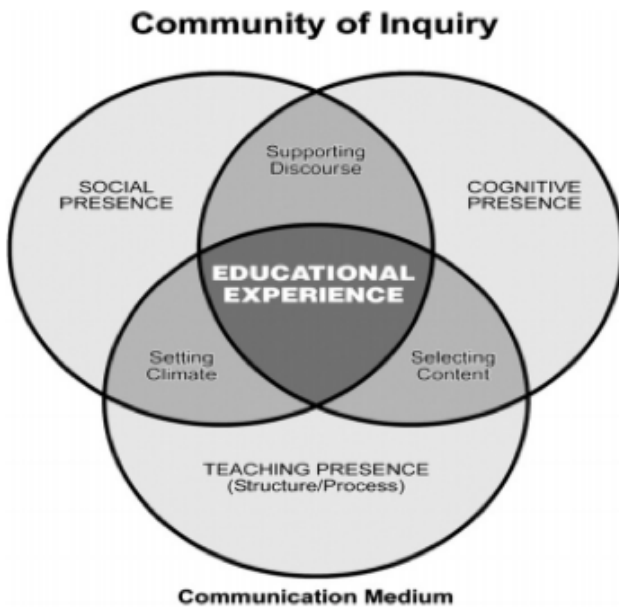
Note: Visual representation of the original Technology Acceptance Model. From “User Acceptance of Computer Technology: A Comparison of Two Theoretical Models”, by Davis, F. D., Bagozzi, R. P., & Warshaw, P. R., 1989, *Management Science*, 35(8), 982–1003, p. 985.

In this research, the aspects of “perceived usefulness,” “perceived ease of use,” and “use behavior” were utilized. The researchers were interested in the faculty members’ perceptions of ease and usefulness of technology discussed within their newly online courses.

As the data was analyzed, the researchers revealed several new themes emerging that focused less on the technology integration and more on online teaching practices. To capture this data, the Community of Inquiry framework (Garrison et al., 2000) combined with open coding was also utilized to analyze the PLC transcripts. A visual of the Community of Inquiry framework is included as Figure 3.

Figure 3

Community of Inquiry Framework



Note: This figure represents the elements necessary for Community Inquiry. From “Researching the community of inquiry framework: Review, issues, and future directions”, by Garrison, D. R., & Arbaugh, J. B., 2007, *Internet and Higher Education*, 10(3), 157–172, p. 158.

The Community of Inquiry focuses on three elements: social, cognitive, and teaching presence (Garrison & Arbaugh, 2007). Social presence focuses on creating a social community and connecting with students during the learning process (Garrison & Arbaugh, 2007). Cognitive presence is how students are able to create meaning around content through learning activities (Garrison & Arbaugh, 2007). Finally, teaching presence focuses on the instructors’ “design, facilitation, and direction of cognitive and social processes for the purpose of realizing personally meaningful and educationally worthwhile learning outcomes” (Garrison & Arbaugh, 2007, p. 163). These elements were utilized to capture the varied discussions surrounding online learning practices. Open coding was also utilized for aspects not included within the frameworks.

Findings

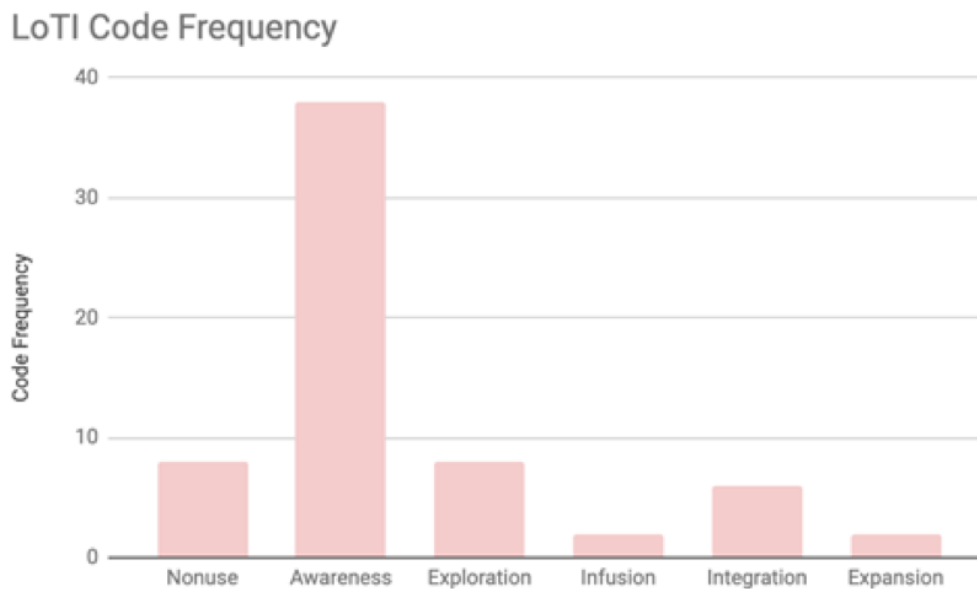
When investigating how can professional learning communities support faculty when abruptly transitioning to online learning, the coding analysis revealed a variety of findings in regard to technology implementation, community building, and online learning practices. These areas appeared as the foundation of the research analysis when faculty were in the process of transitioning from in-person to online learning practices. The identified frameworks helped the researchers to focus on the areas of technology integration and online teaching practices during the online transition.

Technology Integration

During the first session, participants showed evidence of basic knowledge about technology practices when transitioning to online pedagogies based on the tools and questions shared. As shown on Figure 4, it was possible to witness participants' progress from the first session, which was a guided session exploring their expectations and fears towards technology integration in the curriculum and to expressing awareness of the impact of the role of digital tools and resources in online teaching practices (Moersch, 1995). The LoTi framework identifies the "Awareness" stage as utilizing the technology to mirror the same teaching practices, one such example as using Blackboard collaborate for synchronous classes. Faculty sharing these instances was the highest throughout the sessions. There were some moments of "Exploration" when faculty not only used technology as a tool to support their instructional and learning goals, but also to communicate and support students in distress during the pandemic. Therefore, creating a personalized, online environment where students felt safe. As PLC sessions advanced, faculty reached the level of "Integration" where digital tools and resources became an inherent support to learning experiences, for instance, a faculty excitedly expressed how she taught her sister how to use a digital platform to help prepare her class.

Figure 4

LoTi Code Frequency

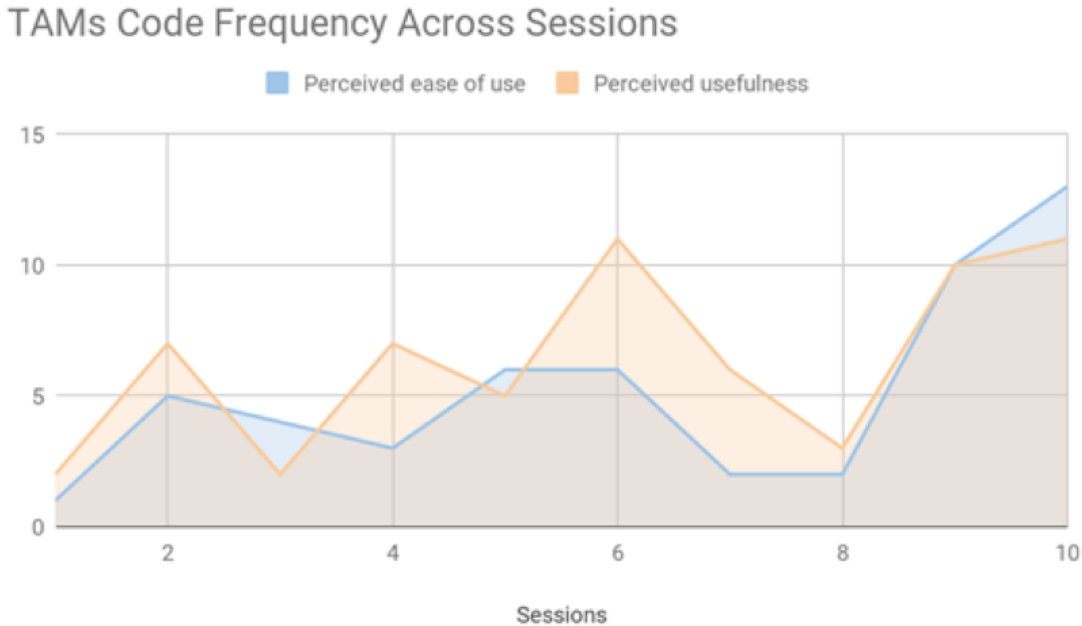


Moreover, the findings showed two elements of the TAM that correlated with the research. Perceived ease of use and perceived usefulness were two TAM elements that repeatedly appeared in faculty conversations. Davis et al. (1989) refer to perceived ease of use as when an individual sees a digital resource is easy to utilize, while perceived usefulness is when the individual understands and believes that using a digital tool will help them to improve their role, in this case, as a pedagogical tool to support online instruction. As shown on Figure 5, perceived ease of use and perceived usefulness had minimal difference but a constant appearance during the PLC sessions. While at the beginning, feelings of frustration and lack of digital tools knowledge impacted these two elements, they did not take away the foundation of the relevance of using technology to support students' learning. As faculty gained confidence and trust while the sessions advanced, the researchers noticed a difference on how faculty went from viewing technology with frustration to creating a more open and flexible point of view. They even expressed willingness to explore and to integrate digital tools they had not used before. An example of the technology integration progression in Figure 5 was the incorporation and utilization of Blackboard

Collaborate, Zoom, and Google Hangouts, as well as interactive presentation tools such as PearDeck and VoiceThread. At the beginning of the sessions, faculty mentioned that they understood the importance of integrating the digital tools into their learning. After the short tool guiding sessions, faculty used and explored those tools independently, coming back to the PLC meetings sharing their willingness and motivation to integrate the tools in their lessons reflecting their perceived usefulness.

Figure 5

TAM Code Frequency Across PLC Sessions



Community Building

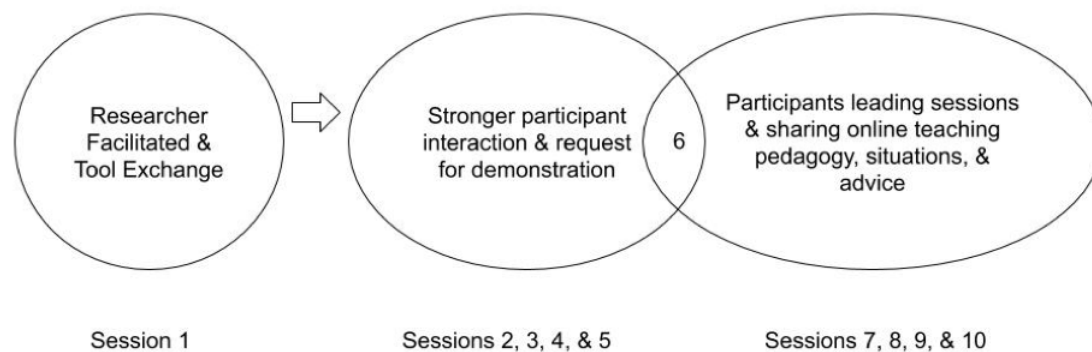
Integral to the PLC approach is the creation of a professional community. Learning communities create a comfortable environment to brainstorm goals, discuss barriers, and learn new digital tools to support their teaching (Baran, 2016; Hutchison & Woodward, 2018). By the second session, participants began sharing self-care advice, personal COVID-19 experiences, and humor with each other. For example, an adjunct shared that she has been coloring during her virtual meetings throughout the day to help her maintain her concentration. The group even began an “inside” joke because the instructional designer had a cardboard cutout of a comedian included in her office. The community building continued to strengthen personally and professionally as the sessions progressed.

As mentioned in the methodology, the researchers came to each session with guiding questions to pose to participants. In the first session, as depicted in Figure 6, the researchers facilitated the session and shared a variety of tools and scenarios with the participants. In sessions two through five, the participants came to the session with specific questions regarding integrating technology and requested interactive demonstrations. During the demonstrations, the participants asked very specific foundational technology questions. For example, asking about the difference between Google Drive and Google Docs, what iMovie is, and how to add a Chrome extension. In a large formal professional training, participants may not have felt comfortable enough to ask these vital questions. These questions and discussions provide evidence that faculty inhibitions were reduced within the PLC, similar to the findings of (Baran, 2016; Hutchison & Woodward, 2018).

By the sixth session, faculty arrived at the virtual meeting to share challenges and advice on teaching their summer courses. One faculty member’s course started one week prior to the rest of the university. She shared her challenges with student engagement and expectations embarking on their first fully online classes. Another participant reflected that she learned so much from her colleague’s challenges because she was able to proactively address some of those issues in her summer course. During this community building, the instructional designer (who attended four sessions) and the researchers had ample technology and online teaching experiences combined to support the faculty challenges and offer solutions. Their facilitation was vital to guide the discussions around best practices, appropriate tools, and additional resources.

Figure 6

Visual representation of the evolution of participation in the PLC sessions



Online Learning Practices

All of the faculty participating in the PLC had little to no experience teaching online before the pandemic. Figure 7 graphically presents the instances of discussions around cognitive and social presence (Garrison et al., 2000). The graph depicts the frequency of conversation revolving around social and teaching presence throughout the ten sessions. The majority of the online teaching discussions occurred in the second half of the PLC sessions. As mentioned, the second half of the sessions was the beginning of the fully online summer classes. Table 1 provides examples of topics coded under social and teaching presence.

Table 1
Segment Examples for Social and Cognitive Presence

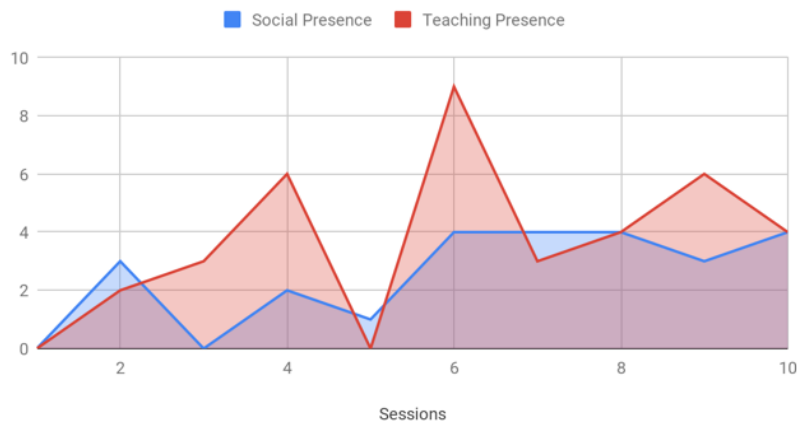
Code	Segment Examples
Social Presence	Online expectations Communication of expectations Social dynamics Student attitudes Building relationships
Teaching Presence	Synchronous class meetings Coaching students Virtual discussions Essential learning

The researchers examined the discussions within the PLC sessions surrounding online practices. The definitions of social and teaching presence identified by Garrison et al. (2000) helped to categorize the content. The researchers anticipated that faculty would ask more questions about converting content into the online course, which would focus on cognitive presence. As the participants drove the conversations in the PLC sessions, the discussions were directed at building community, expectations, and approaches versus the specifics of learning tasks. If the researchers were choosing the content, the needs of the faculty would have been missed. As Figure 7 illustrates, the latter sessions focused more on online teaching practices since the summer sessions was beginning.

Figure 7

Graph of the code frequency for social and teaching presence across PLC sessions

Online Teaching Pedagogy Discussions



The frequency of teaching presence discussions peaked at session 6, when the new summer semester began. Faculty were asking advice, proposing scenarios, and sharing strategies. The second half of the sessions organically focused on the online teaching practices versus technology implementation. For example, faculty asked about synchronous class expectations, how to communicate those expectations, and understanding the student perspective. One adjunct shared her perspective shift to coaching her students through the material and approaching her live synchronous classes as coaching sessions, helping the students apply concepts and analyze data. Other faculty members shared in future sessions that adopting the “coaching” mindset helped to increase the interactivity of their online classes which resulted in more success. The shift to primarily discussing online learning practices over specific tools reflected the acknowledgement that pedagogical change is needed to effectively teach online (Schmidt et al., 2016).

Conclusion

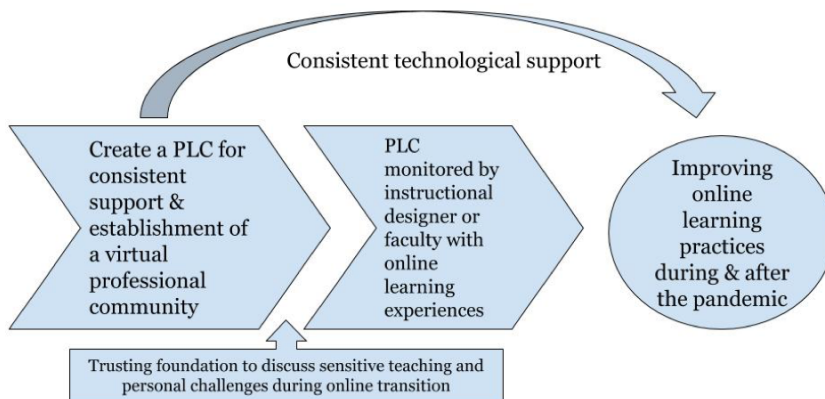
When investigating the research question how can professional learning communities support faculty when abruptly transitioning to online learning, the current study adds to the field of literature (Banasik et al., 2016; Baran, 2016) on the value of PLCs and informal learning. As universities are trying to transition from surviving to thriving in abrupt online classes, the current study suggests that establishing interdepartmental PLCs complemented with technical training would be beneficial to establish an informal learning setting for faculty to problem solve, to brainstorm, and to collaborate (Gerken et al., 2016) around online learning. The research also revealed some important components to the PLC structure.

PLC Components

Collaborative strategies are critical aspects of the PLC components, forming a type of mentoring/supportive figure for those who have little experience with technological practices in the classroom. Creating these collaborative spaces within the faculty community allows them to build together a system of trust, learning experiences, and professional growth breaking the traditional training programs that emphasize in one single element (Baran, 2016; Banasik et al., 2016). Figure 8 was developed by the researchers to reflect the important components of a PLC during the COVID-19 pandemic. Given this ground-breaking crisis, establishing multiple channels for faculty to grow and to support each other is pivotal.

Figure 8

Visual depicting the components establishing during the COVID-19 pandemic PLC



This study provided a positive impact in online learning practices during a pandemic and it also validated the importance of maintaining a year-round PLC team. This research compiled positive and expanding experiences from ten consecutive weeks. Therefore, sustaining PLCs during the academic year can be beneficial to faculty and students bringing positive relationships, professional development, and innovative pedagogies (Hutchinson & Woodward, 2018; Banasik & Dean, 2016; Baran, 2016; Nugent et al., 2008). The PLC sessions not only offered the support that faculty needed in the transition to online teaching during COVID-19, but also created the perfect balance between informal support from the instructional designer and knowledgeable faculty (Gerken et al., 2016). This connection formed a foundation of critical-thinking/collaborative skills and a community of trust where faculty felt confident to share personal and professional experiences in academia during the pandemic. The PLCs opened the opportunity for faculty to network with colleagues they hadn't collaborated with before COVID-19 due to the different roles in their departments, building a solid community to consolidate experiences, grow understanding of online learning practices, and improve online teaching pedagogies.

Importance of Community in Pandemic

Building a community in academia is necessary to create a safe space for faculty to promote support, strategies for self-care, and counteract the sudden stressors that a pandemic brings to their roles (Gedro et al., 2020). Implementing the PLC during this COVID-19 pandemic was a vital piece to support faculty in not only their professional roles, but also an opportunity for them to express their feelings about how their roles as educators changed and to understand students' fears, frustrations, and personal life changes during the crisis. Additionally, successful online learning practices should provide a social environment where communication can be done formally and informally creating a collaborative space for students and faculty (Rapanta et al., 2020). Although remote PLCs aren't the same as a typical workspace learning conversation, COVID-19 revealed the possibility to create a human and supportive digital environment similar to face-to-face social interactions.

Next Steps

The landscape of higher education will likely shift after this pandemic, but what remains is the importance of informal learning for faculty. This drastic shift jolted many institutions and professors reluctantly into online instruction and technology integration. Hopefully this immersion will stimulate meaningful conversations around long term best practices and technology to impact student learning. What has emerged at this university is the need to complement formal technology training with consistent informal learning networks to promote the utilization of best practices for online learning and technology integration. Future research should be conducted to evaluate the actual course implementation of practices and strategies discussed in the PLC. This research on real impact on student learning and experiences would complete the learning cycle and evidence of PLC impacts.

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