ORIGINAL RESEARCH

Nursing faculty perceptions of preparation and support for effective online teaching

Micki Puksa*

Faculty of Health, Wellness and Science, Georgian College, Barrie, Canada

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ABSTRACT

Background: The steady growth of online education has resulted in the need for more faculty. Faculty have an integral role in creating the structure, processes and environment for effective student learning and, thus, require preparation and support to effectively perform this new role. As nursing programs expand capacity with online course delivery, the author found limited research on faculty perceptions of preparedness for teaching online. The purpose of this study was to explore faculty perspectives of teaching nursing content online in prelicensure baccalaureate nursing programs. In this article, the focus is on one specific aspect of the study, that is, the data that sought a deeper understanding of how prepared nursing faculty perceived they were and supports they needed for effective online teaching.
Methods: The exploratory-descriptive, mixed-methods study design was based on document analysis, an online survey completed by 32 faculty (53.3%) and interviews with 16 faculty in a representative sample of 13 Ontario Colleges.
Results: Institutional and faculty supports related to all best teaching practices. More faculty received an orientation to technology compared to the pedagogy of teaching online and experienced some challenges with these supports.
Conclusions: Much more time was required for online teaching for which faculty should be compensated in workload assignments. Findings suggest that both technological and pedagogical training be integrated to faculty development programs and faculty be engaged in these programs prior to teaching online.

Key Words: Faculty preparedness, Faculty support, Institutional support, Online teaching, Nursing education

1. INTRODUCTION

Online education is pervasive in universities and colleges across Canada, with a growth of 10% in course registrations from 2016-17 to 2017-18 and an increase of 21% for Ontario Colleges.[1] Administrators and faculty anticipate further expansion of online and hybrid course offerings post-pandemic.[2] The steady growth of online course enrollment has resulted in the need for more faculty. Since faculty have an integral role in creating the structure, processes and environment for effective student learning, asserted the CNO,[3] they require preparation and support to effectively perform this new role. Faculty concerns of inadequate training and the additional effort required are ongoing, and comprise the top barriers to the adoption of online education, reported Johnson et al.[1,4] Institutions must be positioned to provide faculty the time, support and resources to successfully transition to online teaching.[2]

Educators new to online teaching must not only strive to learn the technologies but may need to transform traditional teaching styles to active online learning pedagogies to effectively reach online learners.[5,6] An active teaching-learning approach is at the heart of online pedagogy, of which student-

*Correspondence: Micki Puksa; Email: mickipuksa25@gmail.com; Address: Barrie, Ontario, Canada.

centeredness and interaction are foundational elements. A student-centered teaching framework in which human connection is honoured is central to effective online teaching, perceived participating faculty in a study by Carter et al.,[7] positive student-faculty and student-student interaction and timely feedback comprising sub-themes of human connection. The work of Frazer et al.[8] produced similar findings in which faculty viewed the following as effective practices - caring and finding meaning in student-faculty interactions, mutual respect and encouragement, and responsiveness to the individual needs of students. These practices are consistent with best teaching practice indicators in the online education literature.[9,10] Discipline-specific demands may amplify the need for these practices, for example, the nursing discipline, a high-stakes person- and practice-oriented field. Because nursing is a soft-applied discipline in which knowledge is constructed versus a pure-hard discipline, in which knowledge is more linear,[11] an essential need exists for an active teaching-learning approach, through which critical inquiry and higher levels of cognition are fostered - skills students require for safe, competent and ethical nursing practice.[12]

To develop courses of a higher quality, best teaching practices should be reflected in course design. The course-building process requires training, including an understanding of the relationship between technology, pedagogy and course content,[13] as content cannot simply be copied from a face-to-face to an online course. For instance, course design skills are required to create an online learning community and to integrate opportunities for interaction between student and faculty, student and peers and student and content.[14,15]

The College of Nurses of Ontario,[3] the governing body for Registered Nurses, and responsible for the approval of baccalaureate nursing education programs, explained that education programs are accountable for preparing graduates as safe, competent and ethical practitioners, based on the entry-to-practice competencies. Even as nursing programs address enrollment capacity through the expansion of online courses and the need for faculty increases,[16] I found limited research on how prepared and supported faculty perceived they were, including in the areas of technology, pedagogy, course design and delivery and workload. In one study by Smith et al.[17] on the challenges of nursing education, instructors were concerned about the quality of assessments, meeting the diverse needs of students, and of the course management system. In another study, Carter et al.[7] examined e-learning quality in a variety of programs (including nursing) across Canadian multi-higher education institutions and found there were challenges related to insufficient technical support and training and minimal or lack of institutional support, as perceived by faculty. In a wider study, Garrett et al.[18] reported that many U.S. higher education institutions from all sectors "face severe challenges in providing instructional design support across their online curriculum" (p. 23). Since the stakes of nursing education are high, due to the real-world consequences for practitioners, nurse educators must demonstrate effective teaching practices in this environment.

The larger study by Puksa[19] on which this article is based was designed to explore faculty perspectives of online teaching in a sample of prelicensure baccalaureate nursing programs. Findings of the data elicited to explore faculty perspectives of teaching nursing content online are reported in a separate publication.[20] Based on the findings, faculty perceived that content containing complex cognitive concepts was better suited to the traditional classroom. They identified challenges with developing higher level discussions and having students collaborate. The focus of the research in this article is on one specific aspect of the study, that is, on the data that sought a deeper understanding of how prepared nursing faculty perceived they were and supports they needed for effective online teaching.

2. RESEARCH DESIGN AND METHODOLOGY

An exploratory-descriptive design with a mixed-methods strategy was implemented. This approach was appropriate as the topic had not been explored and the intent was to understand.[21] The Council of Higher Education Accreditation (CHEA)[22] guidelines informed about institutional responsibilities in delivering quality online education. Quality assurance organizations, such as CHEA, frequently underscore institutional support as integral to quality, many stressing it as the most important aspect.[23] Given that institutional responsibilities in this study were examined from a faculty versus an institutional evaluative perspective, four of the seven CHEA guidelines were appropriate for use. These guidelines comprise institutional mission, institutional resources, curriculum and instruction, and faculty support.

Billings'[24] Framework for Assessing Outcomes and Practices in Web-Based Courses in Nursing informed about online institutional and faculty supports. Of the five framework concepts, three were suitable for use as the focus was on supports faculty perceived they needed for effective online teaching and not on outcomes. These concepts include technology, faculty support and educational practices.

Best teaching practices (BTP) were informed by Chickering and Gamson's[25] Seven Principles of Good Practice in Undergraduate Education. These principles include: (a) student-faculty interaction, (b) student collaboration, (c) active learning, (d) prompt feedback, (e) time on task, (f) high

expectations, and (g) respect for diverse talents and ways of learning. Billings framework (2000) further informed these principles. The frameworks are described in Puksa and Janzen[20] in which the findings of faculty perceptions of the quality of online teaching compared with the BTPs are reported. In this article, the focus is on the relationships between institutional and faculty supports and the BTPs.

2.1 Participants

The representative sample included 13 prelicensure collaborative baccalaureate nursing programs invited from 20 Ontario Colleges in which, of an estimated population of 60 nursing faculty, 32 (53%) completed the online questionnaire survey. Sixteen participants (23.3%) were interviewed, of whom 14 of these had completed the online survey. The faculty interviewees, which included nursing program coordinators, had experience with teaching nursing courses online during the past two years.

No non-consent driven recruitment was used. Consistent with Tri-Council Policy Statement 2 (2019) ethical considerations, the protection of the rights of participants were clearly articulated in the Information Letter and Request for Consent and only those who voluntarily agreed to participate in the study were surveyed or interviewed. The University of Toronto Research Ethics Board officially approved the study as did the research ethics boards of all the Colleges that were sites of the nursing programs where the study was conducted. Additionally, permission for faculty participation in the study was granted by deans or program directors of the College nursing programs.

2.2 Data collection

To provide the best understanding of the research problem, a mixed-methods, concurrent triangulation strategy was implemented. The central premise of mixed-methods research is that "the use of quantitative and qualitative approaches in combination provides a better understanding of research problems than either approach alone" (p.18).[26] Quantitative results were validated or expanded with qualitative data, utilizing a triangulation strategy.[26] Data were collected through analysis of publicly accessible documents on 13 college websites, completion of an online questionnaire survey and follow-up interviews.

Using two analytical approaches, the data sets were collected concurrently, each set analyzed independently and then merged at the interpretation and discussion stages, as recommended by Creswell and Plano Clark.[26]

2.3 Establishing credibility

To determine content and face validity of the online questionnaire and interview guides, pilot testing was conducted. In response to the input of subject matter experts who reviewed the survey, several changes were made to the online questionnaire. Triangulation served to increase credibility through cross-validation of the data and findings.[27] The reliability and internal validity of the study were strengthened by the multiple data sources and methods of data collection and analysis. The study findings were confirmed through the use of multiple data sources. Because of my experience as a nurse educator in a prelicensure collaborative baccalaureate nursing program, the use of these multiple strategies for establishing credibility minimized the potential for researcher bias.

2.4 Data analysis

First, the quantitative data were analyzed, using SPSS version 24. The qualitative responses were then reviewed to identify themes and sub-themes related to the variables explored in the quantitative data. To analyze the interview data, Creswell's[21] six-step protocol and Tesch's[28] organizing system were used. The themes identified were validated by three nursing professors, with online teaching experience, who cross-checked the codes for intercoder agreement.

Document Analysis. With the purpose of exploring each institution's commitment to online learning, as evident in its documentation, I examined key publicly available documents on the websites of the 13 colleges for references to online education. Mission statements, vision statements, strategic plans, and strategic mandate agreement documents were analyzed for relevant themes. The themes provided a context that permitted a deeper understanding of how prepared and supported nursing faculty perceived they were for online teaching, and the supports they needed for teaching online courses effectively.

2.4.1 *Online questionnaire survey*

Seventeen survey items, informed by CHEA[22] and Billings,[24] elicited data on Institutional Support and Faculty Support. While examined separately, these supports intersect. The items on institutional support elicited information on the online learning system (OLS) and the technological supports faculty perceived were available to them to support online teaching. The faculty support items sought information on pedagogical training, course development and design support, teaching load and workload acknowledgement.

Of the seven institutional support questions, five items formed the 'Institutional Support' (IS) scale, which produced a Cronbach's coefficient alpha of .68. The remaining two

questions were examined separately. Of the seven items, two were adapted, with permission, from Coates'[29] Online Engagement Scale. The ten faculty support items were adapted, with permission, from Smith's[30] researcher-designed survey.

The eight Best Teaching Practice (BTP) scales were comprised of 38 items, adapted, with permission, from Coates'[29] Online Engagement Scale. The scales included: Constructivist teaching (CT), Online Social Interaction (OSI), Collaborative work (CW), Teacher Approachability (TA), Active Learning (AL), Supportive Learning Environment (SLE), Academic Challenge (AC), and Student Staff Interaction (SSI). The BTPs and development of the scales are described in Puksa and Janzen.[20] Online response options consisted of a Likert-type, four-point response scale (ranging from strongly negative to strongly positive), check lists, free responses, completion statements, and yes/no options.

2.4.2 *Interviews*

Sixteen consenting participants participated in follow-up semi-structured interviews of which the average length was just over 50 minutes. Of the 16 interviews, one was conducted face-to-face, one by skype and the remaining by telephone. To explore a deeper understanding of responses, non-leading probes were used, as appropriate.

3. FINDINGS

Of the 32 survey participants, 24 (74%) were 47 years of age and older and 14 (45%) age 56 years and older. The age of participants was consistent with that of nurse educators in Canada.[31] Of online delivery formats (web-facilitated, hybrid, fully online), eight (25%) participants had teaching experience in all formats and 25 (78.1%) experience in a hybrid format model. Twenty-six (81.3%) of the participants taught nursing content online for more than four years. The 16 interviewees included 10 faculty, of whom all had online teaching experience, and six program coordinators, of whom four had experience. Fourteen of the interviewees were full-time and two part-time. The codes FE1 to FE10 represent the 10 faculty participants. The four program coordinators, with online teaching experience, were coded FEC1 to FEC4, and the two coordinators without experience, FECO1 and FECO2.

3.1 Research Question # 1 asked

What are the relationships between institutional and faculty support data and the Best Teaching Practice Scales?

Online survey. There were positive relationships between various aspects of faculty support data and all BTP Scales, including Academic Challenge (AC). For example, Point Biserial correlation test revealed a positive and moderately strong relationship between participation of faculty in formal course work preparation and six best teaching practice scales. These relationships are depicted in Table 1. Regarding the best practice, AC, in addition to the positive relationship between course workload hours and this practice, faculty who taught fully online courses scored higher on this best teaching practice scale. With regard to institutional support, Spearman's correlation analyses showed positive relationships between institutional support data and all BTP scales, with the exception of AC.

Table 1. Relationships between faculty support and best teaching practices scales

Faculty Support	Relationship	Best Practice Scales
Formal course work since teaching online* [SQ#12(a)]	Positive, moderate-strong	CT, CW, TA, SLE, OSI, SSI
Sought assistance outside the College for initial training* [SQ#11(e)]	Positive, moderate-strong	CT, CW, OSI
Frequency of PD participation in online teaching at College** (SQ#14)	Positive, moderate	CT, OSI, AL, SSI
Course workload hours** (SQ#5)	Positive, moderate-strong	AC

Note. CT = Constructivist Teaching; OSI = Online Social Interaction; CW = Collaborative Work; TA = Teacher Approachability; AL =Active Learning; SLE = Supportive Learning Environment; AC= Academic Challenge; SSI = Student Staff Interaction. *denotes Point Biserial correlation; **denotes Spearman' rho correlation. Moderate relationship = .3-.6; Strong relationship ≥.6

3.2 Research Question # 2 asked

What are participants' perceptions about the quality of their online teaching compared with institutional and faculty supports? The data to answer this question were derived from the document analysis, online survey questionnaire, and participant interviews.

Document analysis. Institutional perspectives were identified under two themes. Under the first theme, Online education, identified as a focus in College documents and on web-sites - none of the 13 Colleges Mission statements contained 'online education' or a related term. Of the Vision statements, three Colleges incorporated 'Online Education' while seven did

not allude to it. The term 'online education' was included in all College 2017-2020 Strategic Mandate Agreements (SMA) and in 12 Strategic Plans (SP).

Under theme two, Teaching and learning - technology and pedagogy of online learning, online education was predominantly discussed in College SMAs and SPs from a technological viewpoint. In SMA documents, 10 (76.9%) colleges highlighted professional development (PD) for faculty in the area of technology while online pedagogy was discussed (in various depths) by eight (61.5%) colleges. In the SPs, a technological perspective was evident in nine (69.2%) College plans while online pedagogy was explicitly emphasized in two (15.4%) plans.

Online survey

Institutional support. Most (93.5%) faculty participants perceived the OLS system to be accessible and reliable, and 87.6% were confident in their abilities to use it. Institutional Support (IS) scale data findings indicated that 28 (n = 32, 87.5%) of the participants perceived their colleges provided them with the ongoing technical support they needed to teach online 'fairly' or 'very much', 15 (n = 31, 48.4%) found the online teaching resources at their College libraries 'fairly' or 'very much' sufficient, and 14 (n = 31, 45.2%) participants used the OLS resources to improve how they taught online 'quite a bit' or 'very much'.

Faculty Support. Twenty-two (68.8%) of the faculty taught seven or fewer hours online per week, the largest number, 12 (37.5%), between four and seven hours. Twenty-one (65.7%) faculty had 41 or more students of which 14 (43.8%) had class sizes of 51 or more.

Regarding initial training in preparation for teaching online, 21(65.6%) faculty received an orientation to the learning platform and 13 (40.4%) to online pedagogy. Thirteen (40.4%) faculty had an individual session with a faculty trainer, seven (21.9%), an individual session with an instructional designer, five (15.6%) sought assistance outside the College, and six (18.8%) of the faculty had no initial training. Regarding participation in PD offerings at their Colleges, 18 (56.3%) faculty 'occasionally' and nine (28.1%) 'rarely' participated. In related PD engaged in since teaching online, 15 (46.9%) participants had webinar training, 13 (40.6%) face-to-face training and individual one-on-one training, 11 (34.4%) self-paced learning activities, and seven had (21.9%) formal coursework.

Faculty interviews. In my analysis of the transcripts of the 16 interviews I identified three themes that highlighted faculty perceptions of online teaching support. Under the first theme, 'Impact of technology', participants spoke highly of the level of technology support at their Colleges. For example, participant FE7 expressed, "The College provides an e-learning technical support specialist … will work one-on-one with me to get the software to do what I want". Thirteen (86.6%) participants perceived the OLS was accessible, of which seven (53.8%) said it was also reliable, and functional. Technological challenges included the need of support that was timely, dedicated and more campus-specific. Issues with bandwidth, support outside of business hours for both faculty and students, and support for part-time faculty were also highlighted. Challenges and sample quotes of the participants are displayed in Table 2.

Table 2. Technological challenges

Challenge	Participant Quotes
Support required outside of business hours	Students need to complete [preparation work] for the lab, and the lab is on Monday morning at eight am; I have to tell the students - you need to go online and get it done before four o'clock on Friday to make sure you don't have any tech issues, because if you get locked out or have other issues there is nobody on the weekend…there is not enough support for students…that does not work well for online. (FE6)
Dedicated support needed	…making sure that everybody has that go to person on their campus, in terms of dealing with some of the technical issues of online learning. (FEC4)
Not enough bandwidth	There have been some challenges [bandwidth] with the sites going down…we are kicked off at the end of three hours - we are not asynchronous, so it is very important that we have our three-hour time block. (FE10)
Tools not provided	I don't get a laptop or those kinds of toys if I am at home; I am using my data that I pay for…if they would give me a cell phone, I could set up my own personal hot spot…because online does not tie you to your desk…you need broader access, you need a tool to go along with that broader access. (FE7)

Note. FE = faculty participant; FEC = faculty coordinator

Under theme two, Pedagogy training, course development, and design - learning how to teach online, seven (50%) of the faculty participants said there were offerings of support on online pedagogy and assistance with course development. Six (42.8%) participants accessed PD opportunities through the teaching-learning centers at their colleges of which four

said there were course designers in place to assist them. Three (21.4%) participants said that they were supported during course delivery. Challenges related to timeliness of support, sequencing of PD offerings, and support for part-time faculty. Three colleges did not have teaching-learning centres or offer pedagogical PD, which sparked the need for informal learning and support. Challenges and sample participant quotes are displayed in Table 3.

Table 3. Pedagogical challenges

Challenge	Participant Quotes
Lack of pedagogical training	We have very good support (from) our IT people for any issues…but outside of that everything is the faculty's responsibility…there is no curriculum designer, content specialist person, and everything falls to faculty. (FECO2)
	There is no teaching and learning centre…no orientation to pedagogy…we talk amongst ourselves at staff meetings, or just in the hallway at an informal level about what works. (FE2)
Timeliness and sequencing of PD offerings	You have to have multiple sessions repeated throughout the week, for example, you can't have one topic for the month of June and a different one for July because your faculty may not be ready in June; (they) need multiple times and multiple repeats from month to month; although this is not cost-effective from an operations perspective. (FE9)
	The resources can only go so far; there are a lot of faculty and a lot of demands, so it is a struggle to necessarily do things in a time that might be ideal. (FEC1)
Dedicated support needed for faculty (including part-time)	…most (part-time teachers) I see come to me, they go to other people they work with, they try to figure it out on their own, then they call…someone from the teaching-learning centre [at the main campus]. (FEC4)
	I get asked all the time [by colleagues] show me this, just do this, and sometimes I feel there should be someone else supporting those people. (FE4)

Note. FE = faculty participant; FEC = faculty coordinator; FECO = faculty coordinator without online teaching experience

Under the third theme, Acknowledgement of time, most participants underscored the need for acknowledgment of time for course development and delivery on the Standard Workload Form (SWF). Additional time was required to set up course content, facilitate online discussion forums, clarify information for students (e.g., assignment expectations and submission requirements), and engage on the OLS. "There is a lot more prep time … just learning the platform and how you are going to organize it…having time to set up good basic content" said FEC2, and FE4 "You have to work a little harder to overcome the physical distance." While some participants perceived administration to be supportive, others did not. In Table 4, sample quotes of participants are presented.

Table 4. Acknowledgment of faculty time

Participant	Participant Quotes
FE1	There is not enough recognition for online course development….you spend a lot more time trying to connect to your students…you don't get credit for that. I think maybe administration recognizes that it takes more time online....but you are also governed by a SWF that gives you the maximum [hours]. [The dean] can put some accommodation in there [but]….some faculty say – I tried [teaching online] and I will stick to my face-to-face class.
FE9	It is time consuming; the teacher has to be willing to want to do this.
FE6	There is no faculty release time…[we do this] on our own time. You have to be an innovator to really want to do this for your students because they [administration] are not going to give you the time…you have [faculty] who are real keeners that will do this no matter what the workload.
FE3	….as long as the [class] size is appropriately gauged, I am okay with what has been happening.
FECO2	Right now, that is an ongoing battle, a struggle - it is negotiable, it is on an individual basis but, on the whole, there is really no recognition of that.…I think there is the perception [of administration] that [online] it is a time saver….When you see somebody do something almost effortlessly and quickly ….so simple and so easy - you get the sense that anybody can do that, and, as we know, it's when it appears that way, it really took a lot of time, detail and planning; faculty who have fine-tuned it; they did it on their own; they did not have the supports.

Note. FE = faculty participant; FECO = faculty coordinator without online teaching experience

4. DISCUSSION

The goal was to understand the nature, challenges and strengths of preparation and support for online teaching in participating prelicensure collaborative baccalaureate nursing programs in Ontario colleges and the implications for course delivery, as perceived by the participating online faculty.

Institutional support and faculty support together positively related to all best teaching practices, underscoring the integral role of these supports to quality. While only seven (21%) of the faculty participants engaged in formal online-related training since teaching online and 27 (84.4%) occasionally or rarely participated in PD offerings at their Colleges, faculty who engaged in these activities scored higher on seven of the eight best practice scales, punctuating the need for faculty to be engaged in these activities. Best online practices, including collaborative work, online social interaction and student and faculty interaction are increasingly important, particularly with asynchronous delivery, as real face-to-face interaction becomes more limited.[32] Faculty are better able to implement these practices when prepared for and supported in the online teaching role.[9, 14, 23]

The teaching practice scale, Academic Challenge, related only to two questions. Faculty who were teaching fully online courses and who had higher online teaching loads scored higher on this scale. It is reasonable to conclude that these faculty, perhaps, also had experience with, were confident with, and enjoyed this form of delivery (and may have requested to teach online courses), thus, were able to better challenge students academically. Allen and Seaman[33] reported that learning outcome attainment was viewed more favourably by faculty who taught fully online or hybrid courses than faculty who did not teach online and most favourably by faculty who taught fully online courses. These faculty may have also built capacity for online teaching within their teams and programs by being utilized as a resource for other faculty, for example, by sharing experiences and strategies that were successful in online teaching. Administrators and program deans may consider formally recognizing the valuable expertise of these experienced faculty, for example, through mentor-mentee partnerships or leadership positions. Mentoring provides novice online faculty with access to an important support resource, while mentors find value in passing on their wisdom as nurse educators to future faculty.[13, 34]

All participating Colleges had the technical infrastructure in place to offer online education, including online platforms, training and support, a finding consistent with CHEA[22] and others, for example, Baran & Correia[35] explained that technical support is key to nurturing online teaching practices. While faculty perceived they were supported technologically, fewer received training on pedagogy as initial preparation, with just half of the participants sharing that this training was available at their Colleges. Several interviewees received no pedagogical training and expressed the need for available or suitable opportunities, for example, FE4-2 commented, "You have to teach yourself how to do it." In the document analysis findings, the technological aspect of online education was emphasized to a greater extent than the pedagogical aspect.

Both pedagogy and technology, utilized in combination, are pivotal to the development and delivery of high-quality online courses, and training in both areas should be incorporated into PD programs. Anderson,[36] in describing the need for both these components, put it this way, "It is only in a complex dance between technologies and pedagogies that quality distance education emerges. The technology sets the beat and the timing. The pedagogy defines the moves" (p.1). About technology-based learning environments, Bates[37] explained that many "are bereft of some of the key components that make an effective learning environment" (p. 311), and improved learning outcomes will not be produced by technology alone.[5, 38, 39] Regarding pedagogical preparation in Canadian higher education institutions, Veletsianos[40] suggested the need for these institutions to "go beyond preparing faculty to use emerging technologies and instead focus on preparing everyone to gain further pedagogical expertise and become digitally fluent" (p. 40).

Regarding teaching preparation, six (19%) of the participants received no initial training, a finding not supported by CHEA,[22] that faculty be adequately trained to instruct in a distance learning environment, supported with appropriate educational resources and technology.

With regard to PD delivery mode preferences, the opportunities in which faculty engaged indicate a preference for one-on-one sessions to more formal training and that perhaps the nature of the training was not consistent with their needs. For example, 20 (62%) of the faculty participants completed an individual session with either a faculty trainer or an instructional designer, as initial training, and more faculty completed one-on-one training than formal coursework, as relevant PD since teaching online. Wingo et al.[41] reported that faculty may resist standardized training because their individual needs are better addressed through one-on-one meetings with instructional designers. Professional developers may consider exploring faculty preferences to better align PD offerings with the needs of faculty.

4.1 Implications

Colleges, administrators, deans and faculty developers should consider implications for quality in what and how to present PD and support for online nursing faculty. It is reasonable to suggest, based on the findings, that Colleges concentrate efforts on training and supports faculty need to effectively teach online and have these supports be available at their institutions.

All faculty, including part-time, be required to have appropriate preparation prior to teaching online. This perspective is illustrated in a comment by coordinator FEC4-13, "Faculty should have the credentials for teaching online. . . . [that it is not the same] as being a classroom teacher." Preparation may include, for example, a certificate to indicate successful completion of required PD components. While most institutions recognize the importance of PD, only a small portion require such training reported Johnson et al.[4] Regardless, findings indicate that faculty participation may be increased through dedicated support and provision of offerings that are timely, sequenced and available to both full and part-time faculty. This is consistent with the findings of Kibaru[42] in which online faculty stressed the need for on-demand support. Mentored support, key teaching resources, including tools (e.g., laptop & data) and support outside of business hours, for both faculty and students, would further help faculty successfully transition to online teaching, as would support with course design. With regard to course design, Puzziferro and Shelton[43] proposed a team-based, 14-week phased pre-launch approach to online course production, in which faculty were key team members.

Online teaching required a greater time commitment than traditional teaching, a finding heavily supported in the online education literature[4, 14] and faculty should be compensated for this time. The acknowledgment of time has implications for policy because providing faculty with adequate compensation may address possible quality issues related to high workload. Approaches to reducing workload include capping classes to smaller sizes, providing faculty with release time (e.g., for mentoring, course development), and allocating a higher time factor on the Standard Workload Form (SWF) for online and hybrid courses, compared with courses delivered traditionally. Institutions may also consider providing adequate compensation for PD to incentivize faculty to partake in opportunities, particularly those who work part-time. Regarding faculty workload, post-secondary institutions offering online education must have the financial capacity to do so, so that workload is not impacted, advised CHEA.[22]

Further, when institutions compensate faculty for their time, they convey to stakeholders, including faculty, that online education is valued and there is an understanding of the effort and training needed to successfully engage in this teaching approach. The work of Lloyd et al.[44] is consistent with this perspective. Institutions may further demonstrate commitment to online education by integrating its purpose to the mission statement,[22] a finding not consistent in this study. The valuing of and commitment to online education may enthuse faculty to engage in this form of teaching, potentially addressing faculty capacity, a barrier to the expansion of online education.[4] In providing faculty with PD, support and opportunities for teaching experience, higher education institutions play a central role in enhancing the quality of online education.

More research may provide further insight to PD preferences of nursing faculty and explore more deeply the perspectives of part-time faculty about their teaching experiences and needs.

4.2 Limitations

The main limitation of this study is that the findings are not generalizable beyond the participating programs because the college sites and participants were purposefully selected. The document analysis and survey questionnaire included only a representative sample of 13 (65%) of the 20 very diverse English language colleges in Ontario that offer collaborative baccalaureate nursing programs, and the interviewees came from only 10 of these colleges.

5. Conclusions

Findings of data elicited from document analysis and the participants revealed that institutional and faculty supports are integral to online education quality. It is reasonable to suggest, based on the findings, that PD programs include training in both pedagogy and technology and that Colleges offering online education have these programs in place, in which faculty be required to engage prior to teaching online. Insights gained may provide guidance to policy makers and faculty development staff in participating colleges on how to more effectively present essential training and support for online faculty in prelicensure collaborative baccalaureate nursing programs. Since the colleges selected for this study are representative of the Ontario Colleges of Applied Arts and Technology, the findings are not generalizable, however, will be of interest to them and other similar academic programs who wish to assess their PD programs and supports, especially in person-and practice-based professional programs.

Conflicts of Interest Disclosure

The author declares that there is no conflict of interest.

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