Articles

An Examination of Interprofessional Team Functioning in a BScN Blended Learning Program: Implications for Accessible Distance-Based Nursing Education Programs

Lorraine Mary Carter, McMaster University
Bev Beattie, Wenda Caswell, Scott Fitzgerald, Nipissing University
Behdin Nowrouzi, Laurentian University

Abstract

In this study, the perceptions and experiences of an interprofessional team responsible for the development and delivery of the Registered Practical Nurse (RPN) to Bachelor of Science in Nursing (BScN) Blended Learning Program at Nipissing University were examined. In this program, RPNs can acquire a BScN through distance-based part-time study, including online courses and clinical practicum. In three years, the program has grown from an initial intake of 60 students to a current enrolment of over 600 students (Fitzgerald, Beattie, Carter, & Caswell, 2014).

The success of the program is attributed to three factors: a part-time curriculum that permits students to work as they study; partnerships with hospitals and other clinical

Résumé

Au cours de la présente étude à méthodologie mixte, nous avons étudié les perceptions et les expériences d'une équipe interprofessionnelle. Cette équipe a été responsable de la création et de la mise sur pied du Registered Practical Nurse (RPN) to Bachelor of Science in Nursing (BScN) Blended Learning Program (programme d'apprentissage mixte, du cours d'infirmier auxiliaire autorisé au baccalauréat en sciences infirmières) de l'Université Nipissing. Le sondage en ligne utilisé dans la phase quantitative de l'étude a permis de dégager six éléments démontrant la nécessité de pousser davantage la recherche en ce qui concerne le partage de la prise de décision, l'orientation, les contraintes de temps et les lignes directrices. Par ailleurs, six thèmes sont ressortis des phases qualitatives

Canadian Journal of University Continuing Education / Vol. 41, No. 1, spring 2015
Revue canadienne de l'éducation permanente universitaire / vol. 41, nº 1 printemps 2015
http://ejournals.library.ualberta.ca/index.php/cjuce-rcepu

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facilities to support the nurse-learner's clinical placements; and the performance of a high-functioning interprofessional team. This study of teamwork will benefit nursing and adult learning educators as well as e-learning professionals involved in the development and delivery of flexible programs for working nurses.

de l'étude : la communication, l'apprentissage et le perfectionnement, la clarification des rôles, le fonctionnement de l'équipe, le leadership de collaboration et la technologie.

Résultat direct de l'étude, l'équipe dudit programme d'apprentissage mixte a décidé de se réunir plus souvent afin d'évoluer comme une équipe à rendement élevé, la clarification des rôles et la communication étant des objectifs particuliers à ces réunions. L'équipe a également reconnu la nécessité de choisir trois actions pour un déploiement immédiat et une évaluation subséquente. Ainsi, cette équipe continuera d'évoluer comme une équipe vouée à l'excellence en matière d'apprentissage professionnel et d'éducation en ligne.

Literature Review

E-learning and Nursing Education

There is no dispute that e-learning has exploded in popularity (Allen & Seaman, 2013). Originally conceptualized to serve the learning needs of individuals who live at a distance from the educational provider, Western-based distance education has progressed from correspondence-type learning to learning grounded in interaction and communication strategies made possible through online technologies. Today, the e-learning setting can offer engagement with complex learning activities and materials; varied forms of interaction through synchronous and asynchronous strategies; multimedia-based self-assessment activities; and opportunities to participate in scholarly discourse (Carter & Graham, 2012; Moore, Dickson-Deane, & Galyen, 2011). Although these options are exciting, they have not always made the course developer's or the teacher's experience easier. With so many choices, the decisions about course design are best made by high-functioning teams including content experts, pedagogues, and technologists (Bates, 2015).

Additionally, because of the complexities of nursing education, there is a particular need for interprofessional teamwork in the development and delivery of e-learning courses and programs. Learning about nursing requires the student to be adept at transitioning from theory to practice and to be a highly skilled critical thinker (College of Nurses of Ontario, 2014). Critical thinking supports the clinical decision making that nurses perform at the point of care and in other aspects of their work. Not insignificantly, the choices that nurses make at the point of care are increasingly based on the use of information technology (Courtney, Demiris, & Alexander, 2008).

Among other considerations, the online development team for a nursing course requires knowledge of older and younger nurse-learners as users of educational technology. Information about older nurse-learners is important since, in Canada, many experienced nurses are turning to online programs for professional learning and credentialing. The draw of such programs is their flexibility, which permits nurses to work, study, and manage family life at the same time. By comparison, many younger nurse-learners have grown up with technology and and use it for socializing, personal banking, gaming, and accessing apps for managing their lives (Buzducea, 2010; Carter et al., 2011); for them, using technology is simply ordinary. Although many younger nurse-learners are comfortable with using technology to support their learning, there are also younger adult learners who do not gravitate to online learning for reasons including learning style differences and preferences (Dorian & Wache, 2009). Additionally, evidence based on work by Margaryan, Littlejohn, and Vojt (2011) does not "support popular claims that young people adopt radically different learning styles [in technology-supported learning settings]" (p. 429). In sum, the research tells us that, while there is evidence of generational differences between older and younger persons' preference for online learning, course designers and instructors must also be careful not to make assumptions.

Gender is also a key consideration in online nursing courses. While there are more male students in nursing programs today than in previous decades, nursing is still a female-dominated profession. In addition to learning style differences between men and women, gender differences involving technology use have been reported (Yang, Jung Cho, & Watson, 2015).

Facilitators and Barriers to Interprofessional Teamwork

There is a wealth of research documenting the barriers and facilitators of interprofessional teamwork. While the following observations are drawn from the health literature, they are equally applicable to the interprofessional teamwork that supports e-learning in health education.

Support by management is a key influence on teams, while a lack of administrative support for an interprofessional team approach has been identified as a negative influence on interprofessional team functioning (Jansen, 2008). Other barriers include feelings of competition between two or more professions on the team (Anderson, Kaufman, Kiel, & Carlson, 2008). Positive factors affecting interprofessional team functioning include effective leadership, awareness of the expertise of other team members, and commitment to team goals (Atwal & Caldwell, 2005; Jansen, 2008).

Communication between members of the interprofessional team has likewise been identified as critical to a team's success. Ways of improving communication include use of language such as "we" and "team" during team discourse (Arber, 2008; Sheehan, Robertson, & Ormond, 2007). Effective team communication may be further achieved through collaborative approaches, regular team meetings, and regular sharing of information among team members (Arber, 2008; Sheehan, Robertson, & Ormond, 2007).

Attitudes about interprofessional teamwork are reported to differ among different professionals (Curran, Sharpe, Forristall, & Flynn, 2008). Other factors that may influence interprofessional teamwork include the number of years of work experience, the fact that different

professionals on the same team carry out different roles (Atwal & Caldwell, 2005; Weller, Janssen, Merry, & Robinson, 2008), and a lack of knowledge about the expertise of all team members. This last factor may lead to failure to utilize the services and skills of colleagues on interprofessional teams (Reese & Sontag, 2001; Weller, Janssen, Merry, & Robinson, 2008).

In this article, the term *interprofessional* refers to team members who aspire to a common goal and carry out different but related roles. It does not necessarily refer, however, to team members who hold degrees in designated areas of study, although some team members may hold one or more degrees. Based on this understanding, in this article, the team includes nurse educators, instructional designers, technologists, and administrative staff. Together, they make decisions ranging from instructional design models to accommodations for adult learners to how best to ensure integration of theory with practice.

This kind of teamwork has been identified in the literature as a way to strengthen "individual leader[s] as well as foster collective leadership" (Roberts & Coghlan, 2011, p. 231). Leadership is not unimportant in e-learning since, in some institutions, online education may still be regarded as a lesser learning experience (Moore, Dickson-Deane, & Galyen, 2011). In all, there is still a need for those involved in e-learning to be strong in their commitment to their work and be able to demonstrate leadership to internal and external stakeholders.

Study Framework

While both the health and the management literatures offer various descriptions of high-functioning interprofessional teams, this study built on the National Interprofessional Competency Framework developed by the Canadian Interprofessional Health Collaborative (2010). The framework provides an integrative approach to six competency domains required for effective interprofessional collaboration: interprofessional communication, patient/client/family/community-centred care (modified in this article to focus on successful development and delivery experiences in a blended learning program), role clarification, team functioning, collaborative leadership, and interprofessional conflict resolution.

The Study: An Interprofessional RPN to BScN Blended Learning Program

Design

A mixed-methods design was used in the study. This design was chosen based on the purpose of the study: to describe and interpret the participants' experience of interprofessional team functioning in the context of the development and delivery of the RPN to BScN Blended Learning Program offered by Nipissing University. As a first step, quantitative data were gathered and served as the entry point into the research process; qualitative data were used to enhance understanding. This approach is in line with Creswell's (2012) views that a mixed methods design typically involves quantitative and qualitative research in which there is "merging, integrating,

linking and embedding [of] the two strands" (p. 535). In this particular study, the methodology was "explanatory sequential [with the researcher(s)] first collecting the quantitative data and then collecting the qualitative data to help explain the quantitative results" (Creswell, 2012, p. 542).

Sample

The sample was purposive and included staff in the Centre for Flexible Teaching and Learning (CFTL) and the School of Nursing at Nipissing University. The participants from the CFTL included instructional design and clerical staff. School of Nursing participants included support staff, faculty, and the program manager. One faculty member and the program manager were limited to the quantitative part of the study and not the qualitative. This decision was made because they are members of the research team. The faculty who participated in both parts of the study had developed a course and/or taught in the program during the previous year. These faculty are part-time; most live and work at a distance from the university.

The director of the Centre for Flexible Teaching and Learning, who at the time of the study was also director of the School of Nursing, did not participate in the data collecting and analysis phases in order to alleviate concerns about a power imbalance. Further, the focus group work was conducted by an arm's-length research assistant with no relationship with the university. The study was approved by the Research Ethics Board of Nipissing University.

The mixed nature of the sample was deliberate in that, in order to develop and deliver the RPN to BScN program, a team of individuals from two different units and diverse skill sets work closely together as interprofessional team members. The professions represented in the sample included management, clerical and administrative support, nursing education, and instructional design.

Tools

Data were collected in two ways: through an adapted version of the Interprofessional Team Functioning Survey (ITFS), composed of 27 Likert questions each using a 5-point scale, and through focus group work based on semistructured questions. The ITFS is a psychometrically valid and reliable tool built on literature by Way, Jones, and Baskerville (2001), who identified the seven essential elements of collaboration: cooperation, assertiveness, coordination, communication, responsibility, autonomy, and mutual trust and respect (Heale, Carter, Dickieson, & Wenghofer, 2010).

The questions explored in the focus group were based on the literature and findings derived from the survey. The researchers met as a team to design the questions and refine them so they were true to the literature as well as the emerging findings.

Data Collection

An invitation to participate in the study was emailed to potential participants. The invitation included a link (without a password) that took the participant to the survey. To avoid any perceived pressure, the technologist who built the survey in the web environment (rather than the program manager or director) sent the email. Completion of the survey was regarded to be expression of consent.

Potential participants were contacted a second time via email with an invitation to participate in a focus group. Standard protocols were followed in the focus group, such as procuring signed consent from each participant, reviewing the rights of the participants before starting the session, keeping the session to time (90 minutes), and using a round-robin approach to discussion.

Data Analysis

Descriptive statistics were generated for the quantitative findings. Means, medians, and standard deviations were calculated, and graphical representations of findings were prepared.

The qualitative data were analyzed according to the method outlined by Miles and Huberman (1994): data collection is followed by data reduction, display of findings, and drawing and verifying conclusions. In particular, two members of the research team reviewed the transcripts independently. They then met to compare their analyses and determine final themes and subthemes. Representative statements from the data were also identified.

Findings

The findings are reported as follows: a demographic profile, key findings based on the online survey, and key findings from the focus group work. How the two data sets intersect and shed insight on interprofessional team functioning in the context of the RPN to BScN Blended Learning Program is considered in the Discussion section.

Participant Profile

Twenty-one respondents completed the ITFS. Means, medians, and standard deviations were calculated, and graphical representations of findings were prepared. Participants were not asked to identify their professional roles, since this information could have led to identification of the respondents. A third-party research assistant conducted the session to maintain a sense of separateness from the research team. Another third-party assistant conducted transcription.

Quantitative Findings

The survey included 27 items, but the findings from six items resonated as most important, given the strength of opinion expressed or the spread of the responses, and are reported here. These six ideas were also used as a springboard for the qualitative work.

The items and response patterns are noted below. In all cases, the number of respondents was 21. *Strongly agreed* and *agreed* as well as *disagreed* and *strongly disagreed* are collapsed when responses fell into these categories.

- "My professional opinion and expertise are welcomed by the other members": 18 agreed or strongly disagreed; 3 disagreed or strongly disagreed.

- "Decision making is shared among members of the RPN to BScN interprofessional team": 16 agreed or strongly disagreed; 2 neither agreed nor disagreed; 3 disagreed or strongly disagreed.
- "Each member of the RPN-BScN interprofessional team is responsible for ensuring a successful program": 20 agreed or strongly agreed; 1 neither agreed nor disagreed.
- "When they join the team, new team members are well oriented to the RPN to BScN program": 15 agreed or strongly agreed; 2 neither agreed nor disagreed; 4 disagreed.
- "I have the time I require to practise as a member of this interprofessional team": 14 agreed or strongly agreed; 4 neither agreed nor disagreed; 3 disagreed.
- "My workplace has guidelines available to support interprofessional teamwork": 11 agreed or disagreed; 7 neither agreed nor disagreed; 3 disagreed.

To summarize, particular spread was found in the items dealing with shared decision making, orientation, time constraints, and guidelines. It is noted that orientation and guidelines do share some overlap. In relation to decision making, it is important to determine how many persons and which persons need to have a voice in decision making, particularly since the team is large. Concerns about limited time included time for employees to share their experiences with their supervisors as well as time required to do quality work. Addressing time concerns may require distinctions between what is needed versus what is wanted during the work process.

Qualitative Findings

Six themes emerged from the focus group work: communication, learning and development, role clarification, team functioning, collaborative leadership, and technology.

Communication

The participants raised two main ideas about communication. The first is that, in the case of the RPN to BScN blended learning team, communication was a positive process: "[I] also like the feedback: that it's not a closed loop, it's a very collaborative and open system that we have going here" (participant 3). Additionally, participants revealed that communication is important to the functioning of the program as a whole: "[It is] extremely important that we all understand what everyone does in the different areas. . . . Knowing where to send these students so that you're not sending them to five wrong people before they get to the right person would be really beneficial" (participant 5).

Learning and Development

Participants who were instructors in the program were particularly vocal about their learning about being a member of the interprofessional team. According to one participant, "I'm learning things, I must say, in my teaching abilities, I'm learning things online that I never thought I'd be able to do. So, so I am learning. I'm learning. This has provided me a technological leap" (participant 2). Similarly, another participant commented that "the team has been really open to listening and taking in what you're saying. . . . They've been really great at maybe assisting me with putting my thoughts in a certain direction, so making me see what I'm seeing from a different view and just kind of opening my eyes to certain things" (participant 5).

Role Clarification

Role clarification emerged as an important principle on the departmental level so that the students could be accurately advised about where to go for various supports. Meetings were noted as the preferred way of facilitating role clarification: "An interoffice meeting between the CFTL and the nursing department saying here's so and so and this is what they do, and if you have a student ask this question you can refer them to X…or that sort of thing, would be nice" (participant 6). Meetings were also valued as a means of cultivating relationships among team members: "A get-to-know-you meeting would be very valuable . . . [with] the result of an evolving relationship between these two departments" (participant 4).

Team Functioning

Two main ideas about team functioning emerged in the data. The first was that it is necessary for the team members to rely on each other: "[I] really rely on the nursing expertise of my partner, otherwise there wouldn't be nursing content in these courses" (participant 4). The second was that, at times, the team does not work as effectively when team members are not pursuing the same goal: "I wouldn't say that I always find that we are working together towards the same goal and maybe I'm speaking particularly from the administrative aspect of the delivery of these courses, but with so many different departments involved, sometimes different departments have their own goals that they're working towards or their own priorities" (participant 4). It was interesting to note that these two statements were from the same participant. The participant is an example of someone who must rely on others for work but experiences challenges that affect the work when the team is larger and multidepartmental.

Collaborative Leadership and Mentorship

Leadership emerged as something positive: "Those in a higher role, so directors, managers, coordinators, are very open to communication. . . . Phone calls with YYY discussing strategies for her students or her instructors. . . . Our leadership is very good and very open . . . There's not really a hierarchical standard" (participant 6). The quality of the leadership was attributed to having the same person, at the time of the study, providing leadership to both the School of Nursing and the CFTL: "I think it's a very unique situation that we've had [her] in a joint director position of the School of Nursing as well as the CFTL" (participant 4). Participants also expressed interest in mentorship opportunities.

Technology

The administrative planning of technical support for students and instructors was described as getting "the right people in place to sort of orchestrate all that and get the technology in place" (participant 4). An alternative opinion about technology for learning was presented in the following statement: "If I do this course again in the summer I will probably do some Skype videos, but no, I absolutely have not, I've not let them past my computer. . . . My students in Toronto who I see in the classroom, I speak with them on the telephone if they need me right away, but the online course—for some reason I keep them at a distance" (participant 2).

Discussion

Grist for the Thinking Mill: Quantitative

While the research team could recommend the development of actions based on each survey question, doing so would be neither expedient nor practical. Instead, the team is presently continuing to discuss and develop action plans in four main areas found in the quantitative findings: approaches to decision making; provision of sufficient time to members of the team to do their work; the need for orientation to teamwork and to the program itself, given its team-based nature; and the value of guidelines with an emphasis on interprofessional team functioning. Introducing too many things or making too many changes quickly can generate confusion and anxiety among team members. Because of the complexity of distance education and e-learning, changes need to be implemented according to priority and generally in stages.

Approaches to decision making and time management, while discrete items, share the commonality of ensuring that work gets done to appropriate standards, in relation to set goals, and in ways that allow team members to do their best work. In the literature on teamwork, decision making is frequently an item of some contention (Xyrichis & Ream, 2008). Certainly, the value of collaborative thinking is self-evident; however, it takes time and requires clear processes to be productive, especially when there are conflicting views. An example from health care will make this clear: although many health professionals value interprofessional models of care, the time required to build a high-functioning interprofessional team can be prohibitive, particularly for individuals who already have well-established protocols for carrying out their work. Additionally, meetings are seen both positively and negatively in the literature (Gerwick, 2013). Criticisms may arise when a meeting does not have a person to lead and/or guide the discussion; then time can be lost, frustrations can mount, and decision making can fall by the wayside.

All teams involved in the development and delivery of sophisticated health education programs require vehicles for providing input into decisions without impeding or slowing down decision making. Time allotments for various work tasks also constitute an area requiring careful consideration. Certainly, the best-practices literature on online course development and delivery will inform some choices (Bates, 2015). Time decisions must be considered in relation to whether the team, at a given time, is working together on the same task or as discrete members of the same team. The first might be characterized by the term *interprofessional* and the second, by the term *multiprofessional*.

Although teamwork or group work may be intuitive to some, it is vital not to assume that all persons can or want to function as members of a team. Similarly, those who have worked successfully on teams may or may not want to work as part of a team in other situations. Thus, when deliverables depend upon a team that works well together, it follows that orientation strategies and guidelines for team functioning are vitally important. They are important not only to current functioning but to future functioning, assuming patterns of growth and new opportunities based on new learning models and tools. In the case of the program described in this article, offering a full program with online theoretical courses and face-to-face clinical practicums requires extensive complex planning, especially since working nurses are involved and many faculty who teach in the program are part-time.

Grist for the Thinking Mill: Qualitative

As with the quantitative findings, the research team has had to reflect carefully on the ideas and recommendations that emerged from the six themes of the qualitative phase of the study. Table 1 is a summary of potential actions.

Table 1: Qualitative Findings Expressed as Action Items

Theme 1: Communication	• Explore additional strategies for communicating and information sharing with faculty, students, and staff. • Expand use of existing communication methods such as email, Skype, telephone calls, collaboration sessions, etc.
Theme 2: Learning and development	• Use expertise of team members to ensure personal and professional growth. • Consider opportunities for full- and part-time interprofessional team members to provide program feedback. • Continue to provide professional development opportunities and resources (e.g., blackboard training).
Theme 3: Role clarification	• Identify expertise of other team members to facilitate program growth and development. • Encourage new instructors to read all resources provided for role clarification. • Explore the concept of boundaries in the context of being an online educator.
Theme 4: Team functioning	• Share positive feedback and celebrate individual and team successes. • Recognize and rely on the expertise of other team members. • Determine priorities for the program, including deciding on tasks and deadlines collaboratively, and trust that each team member will do his or her part.
Theme 5: Collaborative leadership	• Develop a mentorship program. • Foster a collegial and respectful work environment. • Seek feedback from partner agencies.
Theme 6: Technology	• Acknowledge that technology influences and transforms the role of the instructor. • Develop guidelines and policies to support effective communication in the online setting. • Re-establish/re-emphasize the availability of an online resource site for faculty.

The majority of findings noted in Table 1 are also found in the interprofessional care literature. In general, the literature reports that interprofessional care results in increased satisfaction for patients and health care providers, enhanced knowledge and skills for primary health care providers, better self-care and health outcomes for patients, and more efficient use of health care dollars (Barrett, Curran, Glynn, & Godwin, 2007). However, there is further evidence that doing interprofessional care well is much more complex than merely creating teams. As Byrnes et al. (2012) have pointed out, putting various health care providers on a team does not mean they have the knowledge, skills, and disposition necessary to work collaboratively. Instead, time and mutual learning, particularly about the roles of team members, are required to build strong interprofessional teams that will, ideally, enable improved health outcomes.

Immediate Actions

As an immediate outcome of the study, the RPN to BScN team has determined to meet more frequently so that it gives itself the opportunity to cohere and evolve as a high-functioning team. Role clarification and communication are particular objectives set for these meetings. Of the numerous possibilities that emerged from the focus group work, team members are in the process of agreeing on three actions that they will roll out for 6 to 12 months and then assess. Plans are also under way to replicate the study, this time including students as key stakeholders.

Sharing the study's results is important; this way, the insights and experiences of one team committed to excellence in blended learning can benefit others. While the findings are not based on a case study, arguably, the case of this one team will be valuable to other universities engaged in innovative program and delivery models.

Limitations

Because of the small sample, the quantitative findings are not generalizable. Rather, the study is a focused look at interprofessional team functioning within a single program at a small university. There may, however, be the possibility of transferability of findings to other blended learning programs delivered at a distance.

Final Thoughts

While the success of the program highlighted in this study is multifactorial, there is no question that interprofessional teamwork is an important influence. As the comments of the participants revealed, interprofessional teamwork includes specific elements and characteristics. At the same time, the participants identified areas for improvement. Such are the realities of teams that are evolving and maturing: team members need to be provided opportunities to identify strengths as well as areas requiring improvement. In a time when innovative learning models and complex delivery mechanisms are increasingly important in nursing and health education, it behooves us to take time to learn about how we function as teams so that we can advance health and education more broadly.

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Biographies

Lorraine Carter is the director of the Centre for Continuing Education at McMaster University. Her research interests include flexible education models in the health education field; interprofessionalism in e-learning; leadership; and telemedicine-telehealth. Lorraine has contributed substantively to leadership in adult education and e-learning in Canada, having served as the president of the Canadian Association for University Continuing Education and of the Canadian Network for Innovation in Education.

Lorraine Carter est directrice du centre de l'éducation permanente (Centre for Continuing Education) de l'Université McMaster. Ses travaux de recherche portent sur les modèles d'éducation souple en enseignement de la santé; l'interprofessionnalisme dans l'apprentissage en ligne; le leadership; et la télémédecine-télésanté. À titre de présidente de l'Association pour l'éducation permanente dans les universités du Canada et du Réseau canadien pour l'innovation en éducation (RCIE), elle a énormément contribué aux connaissances en leadership dans la formation aux adultes et dans l'apprentissage en ligne au Canada.

Bev Beattie is a faculty member in the School of Nursing at Nipissing University. She teaches online in the RPN to BScN Blended Learning Program. Her passions include working with students and the scholarship of teaching and learning.

Membre du corps professoral de l'École des sciences infirmières de l'Université Nipissing, Bev Beattie enseigne en ligne pour le RPN to BScN Blended Learning Program (programme d'apprentissage mixte, du baccalauréat en sciences infirmières au cours d'infirmier auxiliaire autorisé). Parmi ses passions, on compte le travail avec les étudiants et le haut savoir en matière d'enseignement et d'apprentissage.

Wenda Caswell is the manager of Nipissing University's RPN to BScN Blended Learning Program. Wenda has been integral to the growth of the program. She is also a champion of online and distance education for working professionals.

Wenda Caswell gère le programme d'apprentissage mixte, du cours d'infirmier auxiliaire autorisé au baccalauréat en sciences infirmières, de l'Université Nipissing. Son apport a été essentiel à l'expansion du programme. Elle excelle également dans la formation en ligne et à distance pour les professionnels sur le marché du travail.

Scott Fitzgerald is the clinical education lead for the RPN to BScN Blended Learning Program at Nipissing University. Scott also teaches nursing and is presently completing his MScN through Laurentian University.

Scott Fitzgerald est à la tête de la formation clinique du programme d'apprentissage mixte, du cours d'infirmier auxiliaire autorisé au baccalauréat en sciences infirmières, de l'Université Nipissing. Il enseigne également les soins infirmiers tout en terminant sa maîtrise en sciences infirmières à l'Université Laurentienne.

Behdin Nowrouzi holds a PhD in rural and northern health through Laurentian University. In his doctoral work, Behdin examined quality of life among working nurses in northern Ontario.

Behdin Nowrouzi détient un doctorat en santé dans les milieux ruraux et du nord de l'Université Laurentienne. Pour sa thèse de doctorat, il a étudié la qualité de vie des infirmiers exerçant dans le nord de l'Ontario.