

Belonging in Online Nursing Education

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Article

Abstract

Belonging is a fundamental human need and prerequisite for higher-level learning. This sense of belonging in nursing begins during nursing education and coincides with the development of a professional nursing identity. Nurses who have a sense of belonging during their initial education typically develop a solidified professional nursing identity, are committed to the profession, and are less likely to experience burnout as nurses. Belonging is linked with retention; thus, fostering belonging may improve nursing retention among new graduate nurses. The extent to which online education affects a sense of belonging for nursing students and their future commitment to the nursing profession is not well understood. The purpose of this article is to explore belonging in online education, highlighting research within online nursing education where possible, and to review strategies to foster belonging in online nursing classrooms. Nurse educators are positioned to address barriers to belonging and implement strategies to foster a sense of belonging with their students. Future research is needed to examine benefits of a sense of belonging for students and professional nurses, related to educational delivery format, program level, and persistent impact on professional nursing practice.

Key Words: Belonging, virtual nursing, online education, nursing education, remote, online, inclusion, connectedness

Belonging can be defined as a person's feeling or perception of connectedness and acceptance within a relationship or group.

Having a sense of belonging (hereafter also referred to as belonging) is a fundamental, innate human need and motivation that, according to Maslow (1943), is ranked just above safety. Belonging can be defined as a person's feeling or perception of connectedness and acceptance within a relationship or group (Baumeister & Leary, 1995). According to Baumeister and Leary, people are inherently social beings who seek warm, positive, caring interpersonal relationships to develop a sense of belonging. In the context of education, belonging can be defined as:

...being accepted, valued, included, and encouraged by others (teachers and peers) in the academic classroom and of feeling oneself to be an important part of the life and activity of the class. More than simple perceived liking or warmth, it also involves support and respect for personal autonomy and for the students as an individual (Goodenow, 1993, p. 25).

Maslow (1943), a motivation theorist, posited that having belonging is foundational and takes precedence to knowledge, understanding, and self-actualization.

Belonging and Nurses

To become healthcare providers who use effective clinical judgment, mere recall or comprehension of a topic is insufficient. Nursing students need to be able to apply, synthesize, evaluate, and create knowledge (Dickison et al., 2019). With this level of expectation, belonging is a critical prerequisite to success as a nursing student and for achieving professional self-actualization as a nurse. Many virtual opportunities for nurses are in the form of online

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coursework. The purpose of this article is to explore belonging in online education, highlighting research within online nursing education where possible, and to review strategies to foster belonging in online nursing classrooms.

actualization as a nurse.

Belonging in nursing has been linked to a sense of community. Community is defined as a group of individuals with common professional interests dispersed throughout a larger group ([Merriam-Webster, n.d.](#)). Nursing students complete a program of study with an aim to prepare them to enter the professional nursing community. A sense of belonging has been shown to develop through living with responsibility and commitment within a community ([Bunkers, 2021](#)). Within the practice of nursing, nurses are responsible for and committed to delivering autonomous care to patients. This responsibility to patients contributes to belonging as a member of the community of nursing.

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A strong sense of belonging can foster strong therapeutic relationships with patients, which has been demonstrated to increase patient self-efficacy, improve patient disease self-management after hospital discharge, and ultimately improve patient outcomes ([Lutgendorf et al., 2012](#); [McManus, 2002](#); [Thorne et al., 2005](#)). Nursing education offers the setting where the

development of community begins and is critical to students faced with the rigor of a nursing curriculum. Studies have identified that development of belonging from community had a direct impact on student academic success, persistence, motivation, and well-being ([Moreland et al., 2015](#); [Puranitee et al., 2022](#)).

Research and Sense of Belonging

Nurses in Practice

Nurses with a strong professional nursing identity and sense of belonging in the nursing profession are significantly more likely to remain in nursing during their career and report higher levels of job satisfaction ([Moreland et al., 2015](#); [Reinhardt et al., 2020](#)). Belonging is a factor associated with retention of nurses. The nursing workforce was negatively impacted by the recent global pandemic. As front-line workers, the nursing profession lost 100,000 nursing professionals between 2020 and 2021, the largest decrease in 40 years ([Auerbach et al., 2022](#)). This loss is even more impactful, as the workforce was projected to increase by 4.4% to meet population needs, but instead the United States saw a reduction of 1.8% ([Auerbach et al., 2022](#)). The loss of nursing professionals and failure of growth in the workforce results in an actual loss of nearly 200,000 workers. The leading causes of this loss are job dissatisfaction and burnout ([American Nurses Foundation \[ANF\], 2022](#)), which could be mediated by a sense of belonging.

Belonging is a factor associated with retention of nurses.

Belonging can also moderate the effects of isolation and loneliness.

Belonging can also moderate the effects of isolation and loneliness ([Arslan, 2021](#)). Isolation and loneliness have been linked to a variety of psychiatric disorders including depression ([Matthews et al., 2016](#); [Mushtaq et al., 2014](#)). It is well documented that a strong sense of belonging is protective against depressive symptoms and burnout ([Baumeister & Leary, 1995](#)); [Cockshaw, 2013](#); [Cockshaw et al., 2012](#); [Fisher et al., 2015](#); [Parr et al., 2020](#)). Nurses are particularly at risk for the development of depression, anxiety, and burnout ([Côté et al., 2022](#); [Urban et al., 2022](#)). *The Foundations Mental Health and Wellness Survey* conducted in 2020 reported 30% of nurses experienced feelings of depression ([ANF, 2021](#)).

More recent data showed an increase of nearly 10% in nurses who reported experiencing depression in 2021, which is largely thought to be related to the increased demands placed on nurses during the COVID-19 pandemic ([ANF, 2021](#)). With the nursing shortage, the association between depression and absenteeism, errors, and burnout contributes to a vicious cycle of stressors that practicing nurses experience ([Brandford & Read, 2016](#); [Garrouste-Orgeas et al., 2015](#)). The incidence of depression, anxiety, and feelings of being overwhelmed among nurses 25-34 years of age was disproportionately higher than in other age groups ([ANF, 2021](#)). Brandford and Read's (2016) research found that younger nurses, and nurses with fewer years of nursing experience and less developed sense of professional identity, were at increased risk of depression. To offset this increased risk, development of a sense of belonging is even more important to sustain the long-term nursing workforce and to protect nurses from deleterious mental health challenges.

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Professional identity, enculturation in nursing, and a sense of belonging begins in nursing school.

Student Nurses

Professional identity, enculturation in nursing, and a sense of belonging begins in nursing school ([Keshmiri & Bahramnezhad, 2022](#); [Varbo et al., 2022](#)). Identifying with peers and the profession of nursing is considered part of the hidden curriculum ([Raso et al., 2019](#)) and belonging is a key factor in developing an identity as a professional nurse during prelicensure nursing education ([Keshmiri & Bahramnezhad, 2022](#)). Throughout nursing school, students internalize professional values such as caring, activism, and social justice as stepping stones toward nursing competence ([Green, 2020](#)). In an integrative review, Varbo et al. (2022) found that the development of nursing student professional identity requires socialization and partnerships with

faculty, patients, and peers. When placed in a caring classroom, laboratory, or clinical environment and in situations requiring the responsibility to provide care, students develop and internalize professional values through reflection and professional socialization.

Online engagement through social media may mitigate loneliness and promote a sense of belonging. Students transitioning to college who use social media without self-censoring have a greater sense of belonging, reduced loneliness through maintaining social capital, and increased frequency of offline relationships (Thomas et al., 2019). Within nursing education, engagement with nursing related social media content fosters professional nursing identity development (Alharbi et al., 2020). In a literature review of social media use in nursing education, Ross and Myers (2017) found that nursing students participate in computer-mediated collaborative learning through interaction with tools such as creating Wikis, reading and posting on blogs (e.g., Facebook, Twitter), and viewing or submitting videos of skill performance, patient education, or project presentations to YouTube or TikTok (Ross & Myers, 2017). This structured and monitored interaction with nursing content can meet course requirements in an engaging way while simultaneously promoting group-based problem solving (Amemado & Manca, 2017), self-efficacy, and the nursing identity development (Ross & Myers, 2017).

Within nursing education, engagement with nursing related social media content fosters professional nursing identity development.

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Fostering belonging early in the educational stages of a nurse's career and building upon professional belonging during the transition-to-practice stage may lessen attrition of new graduate nurses. The nursing profession can benefit from the sense of belonging that this type of technology can bring, as nurses with high belonging stay at the organization longer, work more collaboratively, and report fewer symptoms of burnout (Moreland et al., 2015; Reinhardt et al., 2020). Inclusion of social media as an education strategy has promise but must be implemented with caution due to concerns regarding the need to maintain student privacy and data security to comply with regulatory policies such as the Health Insurance Portability and Accountability Act (HIPAA) and Family Educational Right and Privacy Act (FERPA).

Nursing students and nurses have high rates of anxiety and depression, and this appears to have worsened since the pandemic (Brandford & Reed, 2016; Kim et al., 2021; Urban et al., 2022). Researchers have examined the affective impact of belonging, identifying some protection from depressive symptoms (Allen, 2022). One study found that a sense of belonging explained 34% of the variance in depressive symptoms and general belonging explained an additional 17% of the variance (for a total over 50%) in depressive symptoms in an adolescent sample (Parr et al., 2020). It is possible that fostering a sense of belonging among nursing students could have this potential to facilitate retention of nurses and protect their mental health as well.

Belonging in Online Higher Education

Online education has become widespread throughout nursing and higher education due to the ability of evolving instructional modalities to meet needs of students and industries (Pelletier et al., 2022). Over a decade ago, 65% of higher education institutions reported that online learning was critical to their long-term strategic plan (Allen & Seaman, 2011). The demand for online education continues to grow. Between 2020 and 2022, student preference for online courses increased from 9% to 29% while their preference for completely face-to-face learning decreased from 65% to 41% (Pelletier et al., 2022). Students who chose online education often cited personal needs as the motivating factor, such as flexibility in class location or time, access to text-to-speech software, and access to video closed captioning (Robert, 2022). Students' reason for choosing face-to-face courses related to a desire for a sense of belonging; they make this choice out of a desire for engagement and connection to others.

The lack of connectivity in early online education hindered the development of belonging and left learners feeling disconnected and marginalized.

Potential for learner-to-learner, learner-to-content, and learner-to-instructor interactivity has increased with technological advancements.

Distance learning traces its roots to correspondence courses that provided slow and intermittent communication to learners (Crow & Murray, 2020). This education modality is akin to early versions of online learning that progressed in an asynchronous manner and consisted primarily of text with a few images and limited opportunities for interactivity (Locatis, 2018). The lack of connectivity in early online education hindered the development of belonging and left learners feeling disconnected and marginalized (Rovai & Wighting, 2005). These feelings negatively impacted learner persistence in the course (Standford-Bowers, 2008; Adversa & MacCall, 2013).

Potential for learner-to-learner, learner-to-content, and learner-to-instructor interactivity has increased with technological advancements. Learners and instructors in different geographical locations can use the hardware and software, such as the Internet, video conferencing, computers, cellular phones, tablets, social media, learning management systems, email, and

virtual reality headsets, to access rich multimedia course materials, share information, and connect with each other either synchronously or asynchronously. Inclusion of the ability to interact, which could foster development of belonging, has long been considered a hallmark of effective online education ([Fulford & Zhang, 1993](#)).

Barriers to Belonging

General Barriers in Online Higher Education. While there are benefits to a sense of belonging in online learning, including connectedness, flexibility, and the ability of the learner experience to be individualized to the student, barriers have been identified. From an academic perspective, sensitivity to these barriers is crucial as belonging impacts student success and engagement in the program, including graduation rates ([Brannon & Lin, 2021](#)). Many identified barriers to online education are innate characteristics of the learner and should be considered by faculty. The Theory of Mattering and Marginality ([Schlossberg, 1989](#)) posited that belonging exists on a continuum, from marginalization (i.e., low/no belonging) to mattering (i.e., high belonging). This theory applies to the discussion of belonging in online higher education, including online nursing education. Students who are members of marginalized groups may experience exclusion, and micro- and macro-aggressions ([Brance, 2023](#)). The feeling for marginalized students of being othered or disconnected from the majority group may be amplified without faculty or peer representation of their identity group ([Glasford, 2021](#)).

Gender and sexual orientation may present barriers to belonging in online learning. Studies as far back as 2006 showed that males have a higher rate of use and are more comfortable in the online learning environment than females ([Ashong & Commander, 2012](#)). Females seem to find higher levels of connectedness in the online learning environment supporting the development of a sense of belonging ([Cho et al., 2022](#); [Ashong & Commander, 2012](#)). However, females also experience more unconscious bias ([Morales-Martinez et al., 2020](#)), creating barriers to online learning and impacting their belonging. An example of a marginalized group who experiences barriers to online learning is the LGBTQ+ community. As compared to gender- and sexual- majority students, LGBTQ+ students in the online environment experienced increased mental health symptoms, issues with motivation/focus, loneliness and isolation, and issues with academics ([U. S. Department of Education \[DOE\], 2021](#)). As previously noted, belonging has been found to moderate the sense of loneliness and isolation ([Arslan, 2021](#)) and support mental health, making it crucial to the success of those students who identify as a member of the LGBTQ+ community.

Gender and sexual orientation may present barriers to belonging in online learning.

Age may also have an impact on comfort level with technology.

Socioeconomic status and age may also present barriers to belonging in online learning. One study on belonging among college students from working class families found perceived differences in life experiences, responsibilities, and privilege compared to students from middle- and upper- class families; this contributed to low belonging ([Bettencort, 2021](#)). To improve belonging, working class students will often attempt to assimilate to “fit in” in an attempt to matter, as Schlossberg ([1989](#)) described. Assimilation of working-class students to the dominant culture within higher education is perceived as erasure of social class identity ([Bettencort, 2021](#)). Age may also have an impact on comfort level with technology. Generation Z and generation Y (i.e., millennials) reported more confidence level with technology ([Culp-Roche et al., 2020](#)), which may affect development of social relationships online as well as a sense of belonging.

Learners with neurodivergence include those with medical disorders and/or learning disabilities. This population of learners may require a variety of modifications of the online teaching learning environment to foster success. Disability disclosure is encouraged; however, it is not easy for students with disabilities ([Castrodale, 2015](#); [Desjarlais, 2022](#)), resulting in many students with ‘invisible disability’ as they choose not to disclose ([Grimes et al., 2019](#)). For those who do disclose, the need for modifications and extensive support; cost of assistive devices; and the inaccessibility of online learning platforms due to design factors negatively impact social inclusiveness ([Dude & Baleni, 2022](#)). Educators working with these students also encounter barriers, including difficulty in developing interpersonal relations and technology challenges ([Sumbas & Coban, 2023](#)). Despite barriers for students with some types of neurodivergence or disability, learning online can be beneficial for others.

Specific Barriers in Online Nursing Education. When the rigor of the academic challenge of nursing school is layered over the challenges to online learning, additional barriers are identified. With the recent global pandemic, students experienced emergency online education. Nursing faculty, many of whom were not trained in online pedagogy nor had experience in developing online learning environments, struggled to quickly adapt in-person classes to a fully online, distance-learning environment. Many faculty were experienced with learning management systems and audio/video recording lecturing; however, fewer faculty had experience with fully online, distance-learning ([Nurse-Clark & Joseph, 2022](#); [Roney et al., 2017](#)). Lack of experience and expertise contributed to significantly increased workloads for nurse educators, with little space left to consider the belonging of students.

Technical aspects of online learning are not the only barriers experienced in online nursing education. The professional identity of nurses is closely connected to the concept of caring (Jones et al., 2020). Schlossberg's (1989) theory presented the belief that one is cared about as an important aspect of mattering. Caring as a nurse involves cognitive, psychomotor, and affective actions to build relationships with patients and their support system (Jones et al., 2020). Fostering feelings of mattering and caring behaviors virtually presents an entirely different challenge that is not easily met. Jones et al. (2020) proposed that caring is developed by nurse educators who remodel caring behavior in the online environment through course organization, creating community, and providing cognitive and social support. Students who feel cared for leads to feelings of belonging.

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A sense of belonging is developed in nursing programs and is an important aspect of nursing education. Attrition within nursing programs remains high and is particularly high for students of color. Data are inconsistently reported, with attrition rates of students of color ranging from 15-85% and acceptable rates set at 20% per the National League of Nursing (DeWitty & Downing, 2018; Loftin et al., 2012). One systematic review found that belonging within their academic institution was a significant predictor of success for students of color in nursing programs (Osakwe et al., 2022). During the COVID-19 pandemic, students of color, as compared to white students, faced additional barriers including greater difficulties accessing activities that required a stable Internet connection and increased impact of mental health symptoms (U. S. DOE, 2021). In an effort to improve retention of students of color within nursing, the American Association of Colleges of Nursing (AACN) recently announced a national initiative focused on building a sense of belonging within nursing education, particularly for nursing students of color (2022). Initiatives like these contribute to an individual's sense of mattering by focusing attention and fostering dependence, two aspects of Schlossberg's (1989) theory.

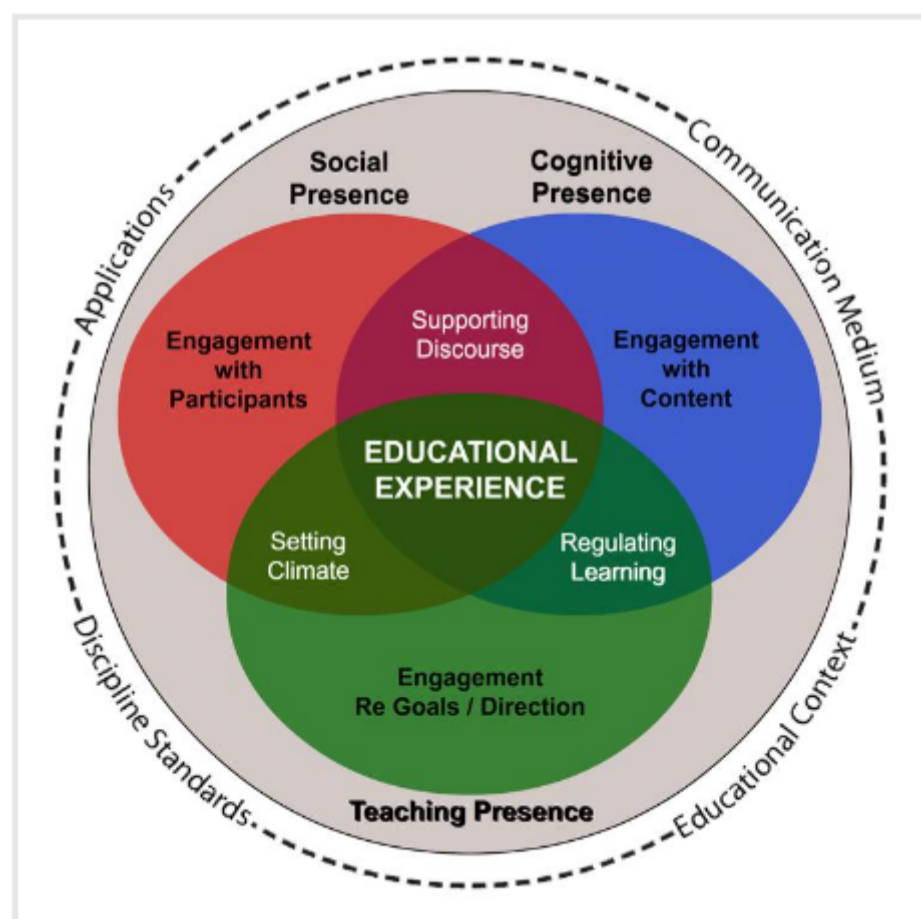
Fostering Belonging in Online Nursing Education

If developing a sense of belonging in nursing education has the potential to positively impact so many areas (e.g. student persistence; development of professional identity and a sense of community; therapeutic communication skills; connection to patients; higher learning skills; and ultimately perseverance in the profession of nursing), then fostering belonging is a critical component in online nursing education courses. Creating a virtual community is integral to developing an online educational atmosphere that is safe, facilitates trust, supports peer-peer and peer-teacher relationships, and allows for professional growth.

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Nurse educators can facilitate the intentional development of a connected, engaged, virtual community with guidance from the Community of Inquiry (CoI) Framework, a model of online learning that emphasizes three types of presence: cognitive, social, and teaching (Garrison et al., 2000). Cognitive presence includes thoughtful engagement with course content; social presence refers to the "ability of participants to project themselves socially and emotionally" (Garrison et al., 2000, p. 94); and teaching presence refers to the design and structure of the online classroom that direct students and the class towards meeting goals (see Figure 1).

Figure 1. The Community of Inquiry Framework



([The Community of Inquiry Framework, 2021](#)).

Cognitive Presence. Cognitive presence is “the extent to which learners are able to construct and confirm meaning through sustained reflection and discourse in a critical community of inquire an ability to construct meaning through collaboration” ([Garrison et al., 2001](#), p. 11). Thus, active and meaningful engagement with others is essential to the learning process. Through a social constructivist process, learners share individual perspectives and ideas, engage in a discussion with other learners, and construct new knowledge through discussion as well as reflection about how new information connects with prior knowledge ([Palincsar, 1998](#); [Sadaf et al., 2021](#)).

Social Presence. Social presence is the ability of the learner or instructor to project themselves as “real people” in the classroom environment ([Rourke et al., 2001](#)). In addition to supporting cognitive presence, social presence builds critical thinking processes in a community of learners. Establishing a strong social presence in an online teaching environment allows learners to function as a group through free expression of thoughts and ideas and by building connections with peers. This enhances the learning experience for students ([Garrison et al., 2000](#)).

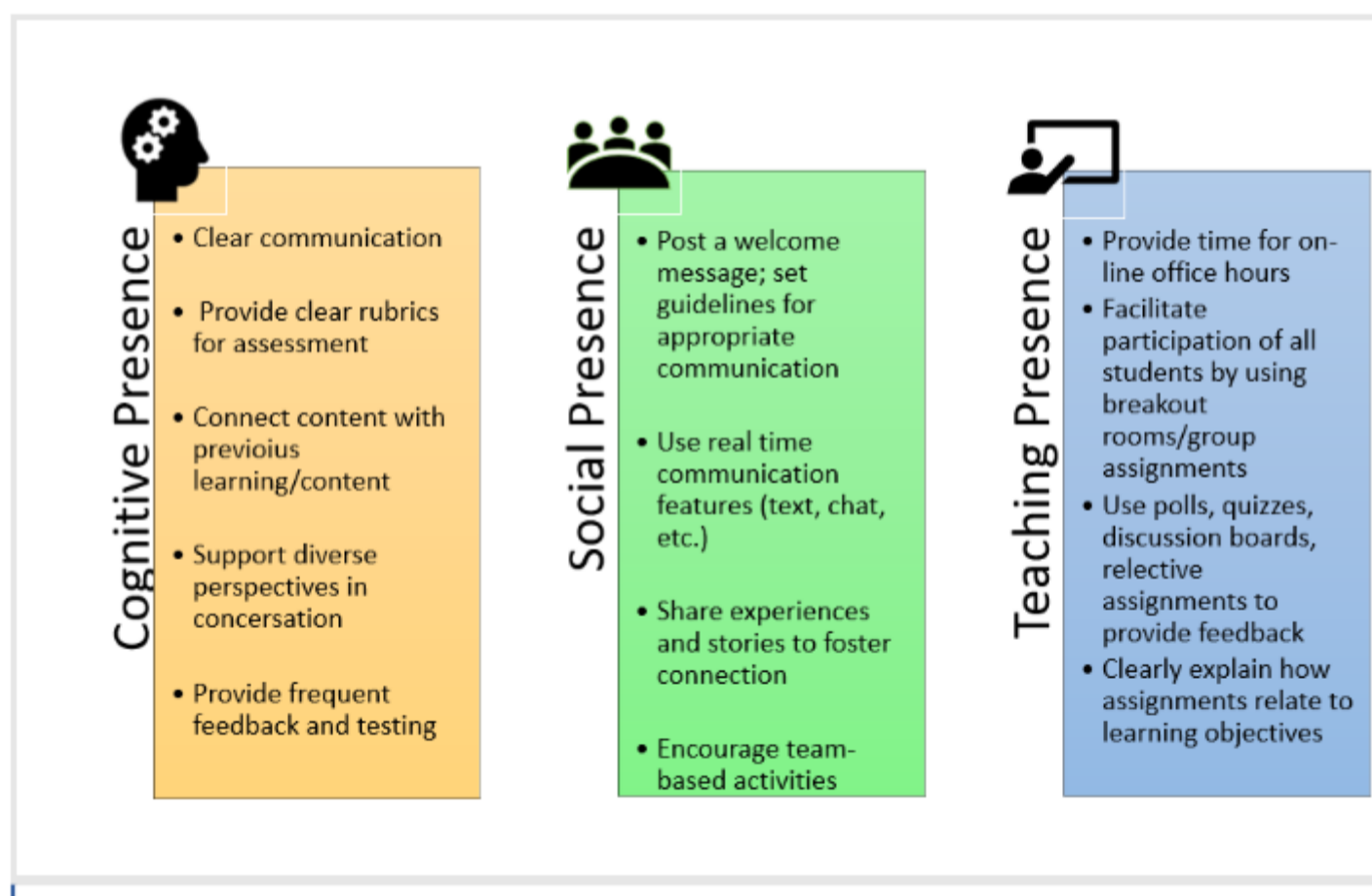
Teaching Presence. The final component of the CoI Framework is teaching presence. Garrison et al. ([2001](#)) defined teaching presence as “the design, facilitation, and direction of cognitive and social processes for the purpose of realizing personally meaningful and educationally worthwhile learning outcomes” (p. 5). Design plays a key role in on-line teaching. Elements of course design include activities such as organizing curricular materials, building lesson and assignment guidelines, and evaluation criteria. Instructors play a critical role in facilitation, as they monitor student work and provide feedback to help maintain student motivation, engagement, and communication in a course. In directing cognitive process, the instructor provides intellectual and scholarly leadership by guiding students and supporting their learning process through ongoing communication.

The CoI can help foster belonging by developing an online space to connect nursing students and engage in collaborative learning.

When students are part of a CoI, they engage in collaborative learning and have opportunities to develop meaningful relationships with other nursing students. Through these interactions, they develop a sense of belonging. The CoI can help foster belonging by developing an online space to connect nursing students and engage in collaborative learning. Additionally, belonging can further enhance the online community by promoting engagement and creating a positive learning environment. See Figure 2 for strategies to develop cognitive, social, and teaching

presence.

Figure 2. Community of Inquiry: Strategies to Increase Student Belonging



Source: Created by Authors

Creating Belonging in Communities of Inquiry. Virtual collaboration is a relatively easy and accessible strategy to promote peer interaction and foster connection among students. Formal and informal group work, as well as collaborative projects, can be integrated into the course structure. Strategies such as think-pair-share ([Kaddoura, 2013](#)) could be used to delve into course

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concepts, promote active learning, and connect students to a peer with whom they pair well during class sharing. Assignments may include collaborative work (e.g., case studies, collaborative quizzes, nursing care plans, papers, videos submitted to YouTube).

Virtual presentations may also foster peer connections and could include presentation of group projects, peer teaching, or use of the jigsaw method (Sanaie et al., 2019). The mechanism for these presentations could be teleconferencing or an online discussion forum. When teleconferencing, address requirements of camera status as on or off. A recent study (Pullan et al., 2023) indicated that some students perceive camera 'on' as distracting, while others shared that "camera on" status promotes engagement and connectedness. This study also found that quizzes, polls, live question and answer sessions, and group work/presentations supported better student engagement (as reported by the students) in live online class sessions (Pullan et al., 2023).

Students can have diverging experiences when engaging in online learning.

Students can have diverging experiences when engaging in online learning. Studies have demonstrated that students who are motivated to engage in online education are more likely to do so, whereas students with low motivation for engagement are at risk for disengagement and poor academic achievement (Suriagiri et al., 2022). Comfort and confidence with technology can also support or hinder the student experience with online learning. Strategies to promote online engagement and foster belonging include interactive activities such as participation in discussion (e.g., chat feature, online discussion boards, virtual office hours, social media posts/blogs/videos, meeting as an avatar in a virtual world).

Care to create and include an environment that recognizes diversity can reduce self-censorship and build a sense of community (Thomas et al., 2019). Participation in asynchronous online discussion provides an opportunity to engage in the creation of shared knowledge. This builds appreciation for new perspectives, diversity, and provides a connection between students and faculty members. Diversity in platforms allow wider student participation and collaboration that encourages deeper understanding and learning.

Online discussion posts establish a social presence in the virtual learning environment. This nurtures emotional connections between peers and faculty and fosters belonging specifically in virtual nursing (Dailey-Hubert, 2018; Plante & Asselin, 2014). It is important to note that online students should receive individual attention as it has been documented that they may have a difficult time feeling 'heard' (Pullan et al., 2023). Dailey-Herbert (2018) discussed effective and ineffective ways to use discussion boards for student engagement. Faculty members should pose open-ended questions or prompts to learners that promote critical thinking and deeper learning, and to prevent conversations from stagnating. Creating clear expectations for communication outlined in assignment rubrics and/or the syllabus is key. Expectations may include criteria such as respecting others' ideas and opinions, avoiding a repeat of what others have already shared, and avoiding statements of simple agreement or disagreement in posts. While faculty may not be able to respond to every post, they should read and synthesize several posts in one response to create a more personal connection with students.

Even with effective strategies for online discussions, there are barriers to effectiveness of the platform. Because interactions often occur asynchronously, students may feel impatient while awaiting responses. Depending on the number of students on the forum, it may be time consuming to read discussion board posts; students may overlook postings or responses. Students may also view this type of online interaction as "busywork" and forced interactivity between peers (Dailey-Hebert, 2018).

Discussion

Implications for Nurse Educators

Nurse educators can utilize strategies guided by the Community of Inquiry Framework (Garrison et al., 2000) to promote a sense of belonging within their online learning environments. Nurse educators should also consider barriers to the development of belonging, particularly for under-represented students. Because sense of belonging and professional nursing identity development begins in nursing programs, educators have an important role to encourage this also within the profession of nursing. Establishing a sense of belonging is essential for faculty members to foster student engagement and promote successful academic outcomes. As nursing faculty continue professional development on the topic of online nursing education, they need to investigate best practices for online education (e.g., Quality Matters, Col Framework) to guide their courses.

Additionally, institutions of higher education are encouraged to retain qualified instructional designers to collaborate with nursing faculty on course design and usability for both faculty and students. As the complexity of nursing education increases, faculty must seek current knowledge about educational technology. Further, administrative leadership at school-

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or university-levels should seek input from nursing faculty regarding changes to learning management systems or other platforms for online teaching. Lastly, administrators should assure ongoing support for faculty through professional development opportunities related to educational technology.

Recommendations for Future Research

Establishing a sense of belonging in virtual coursework is a ripe area for future research within nursing education. It is well supported that belonging is associated with positive academic and mental health outcomes. However, a considerable amount of research in this area has originated outside of nursing and nursing education. Opportunities for online nursing education continue to increase, with availability of hybrid (i.e., partially online) and fully online traditional- and accelerated- Bachelor of Science (BSN) programs. Given the convenience and flexibility of these programs, particularly for adult learners, it is logical to anticipate a continued growth in opportunities for online nursing education. Additionally, the need for a speedy transition to fully remote learning during the pandemic prompted nurse educators to explore opportunities for online learning beyond that immediate necessity. Many faculty have grown to enjoy the opportunities and challenges of teaching online (Nurse-Clark & Joseph, 2022).

Establishing a sense of belonging in virtual coursework is a ripe area for future research within nursing education.

While there is ample opportunity for research in this area, some initial recommendations include further examining predictors of belonging among nursing students and developing interventions to foster a sense of belonging among nursing students, particularly those who are considered underrepresented. Also unknown is the extent to which nursing licensure/degree (e.g., LPN/LVN, diploma, associate degree, RN-to-BSN, traditional BSN, accelerated BSN) and delivery format (e.g., fully in-person, hybrid, and fully online) affects a sense of belonging for student nurses or professional nurses in practice. Given the increase in virtual opportunities for nurses (e.g., telenursing, virtual conferences, meetings via teleconferencing), we recommend exploring the connection between experience with online nursing education and belonging in virtual nursing. Lastly, there is very little research that has explored sense of belonging in nursing faculty and its potential effect on faculty retention. In sum, we need more information about the benefits of a sense of belonging for students and professional nurses, related to educational delivery format, program level, and persistent impact on professional nursing practice.

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