10-21-2025

Experiences of Northern Ontario Nurse Educators in Adapting Teaching Methods

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This is to certify that the doctoral dissertation by

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Walden University
2025

Abstract

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Abstract

Nursing education is evolving, requiring educators to adapt teaching methods due to advances in technology, pedagogy, and accreditation standards. In Northern Ontario, geographic and resource limitations make this adaptability critical for ensuring equitable, high-quality education. Guided by Lewin's change theory, this qualitative phenomenological study examined how Bachelor of Science in Nursing (BScN) nursing educators in Northern Ontario adapted their teaching practices to these evolving demands. Six full-time educators teaching in BScN programs with at least 3 years of recent nursing education experience using synchronous instructional methods participated in semistructured qualitative interviews. Data were analyzed using Saldaña's coding framework. Four themes emerged from the analysis: recognizing the need to change methods, implementing active and student-centered approaches, adopting contemporary student-focused strategies, and embracing lifelong learning and reflective growth. Despite barriers such as underfunding and limited professional development, participants demonstrated resilience and innovation through collaborative, low-cost practices that enhanced student engagement and fostered professional renewal. The implications for positive social change include the potential for nursing educators to apply innovative, student-centered practices to improve outcomes, expand equitable access, and foster professional growth. Findings may also guide regionally responsive policy development to support sustainable nursing education in Northern Ontario and other underresourced contexts.

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Dedication

To my children, you are my greatest motivation and the reason I strive to accomplish all that I set my mind to. This work is dedicated to you as a reminder that, even when life presents unexpected obstacles, you can still pursue your dreams and achieve them. Never stop believing in your strength, your purpose, and your ability to succeed. I love you both!

Acknowledgments

I would like to express my deepest gratitude to the many individuals who supported me throughout this dissertation journey. First and foremost, I extend my sincere appreciation to my professors and academic mentors for their guidance, encouragement, and unwavering support. I am especially grateful to my chair, Dr. Senk, whose mentorship, dedication, and thoughtful guidance were invaluable at every stage of this process. I also thank my supervisory committee for their insightful feedback, commitment, and high standards of academic excellence.

To my children, thank you for your patience and understanding while I worked through this journey. To my parents, I am deeply grateful for the many ways you supported me, especially by caring for the youngest when I needed uninterrupted time. Your help truly made this work possible.

To my colleagues and friends, I am especially thankful for the solidarity, perspective, and encouragement you shared with me along the way. Walking through this process together brought me strength and reassurance, and your friendship was a lifeline. Finally, to the friend who first encouraged me to take this step and continued to believe in me throughout, your confidence made a lasting difference and will never be forgotten.

Table of Contents

List of Figures

Chapter 1: Introduction to the Study

Introduction

Nursing education is continuously evolving, necessitating that educators adapt their teaching methods to align with advancements in technology, evolving pedagogical frameworks, and changing accreditation standards (Canadian Association of Schools of Nursing [CASN], 2022; Epp et al., 2021; Huddle, 2019; Leidl et al., 2020). In Northern Ontario, these adaptations are further complicated by geographic constraints, resource limitations, and the growing demand for innovative teaching methodologies (Government of Ontario, 2019). As the expectations of nursing education continue to evolve, a critical examination of how educators modified their approaches was essential to ensuring the effectiveness, relevance, and sustainability of nursing education in this unique regional context.

This study explored how nurse educators in Northern Ontario modified their teaching strategies to meet evolving demands. Investigating these adaptations was crucial for identifying best practices, addressing challenges, and supporting educators' professional development. The study's findings highlighted the broader social impact of well-supported and well-prepared nursing educators in shaping the future of healthcare education. By examining the experiences and perspectives of nursing educators, this research contributed to the ongoing discourse on improving teaching practices and strengthening nursing education in dynamic and resource-limited settings.

This chapter begins with a background section outlining the regional context of Northern Ontario and the trends in nursing education. It presents the problem statement,

explaining the need for this study. The purpose of the study and its research question follow, providing clarity on the focus of the investigation. The theoretical framework guided the study's approach, while the nature of the study is described in terms of its qualitative methodology. Key definitions, assumptions, and the scope and delimitations of the research are also outlined to ensure a clear understanding of the study's parameters.

Background

Northern Ontario's vast geography, low population density, and cultural diversity influence its healthcare and nursing education system (Government of Ontario, 2022; Registered Nurses of Ontario, 2015). Despite growing demand, the region faces declining nursing graduates and evolving challenges in technology, pedagogy, and accreditation. (Balcom et al., 2021; Buchanan et al., 2021; CASN, 2023; Pere et al., 2023; Puksa & Janzen, 2020; Stanley & Hall, 2024; Wolf, 2023). This background highlights these factors, emphasizing the need for adaptable teaching methods to support nursing education in Northern Ontario.

Northern Ontario

Northern Ontario encompasses 10 territorial districts and 145 municipalities, covering over 800,000 square kilometers, or nearly 90% of Ontario's total land area (Government of Ontario, 2022). The region is characterized by a low population density, with many communities considered rural, defined as having populations under 30,000 and being more than 30 minutes away from larger urban centers. The demographics of Northern Ontario are marked by significant cultural diversity, including large populations

of Francophone, First Nations, Inuit, and Métis peoples, contributing to the region's cultural wealth (Government of Ontario, 2022).

According to the Government of Ontario (2019), Northern Ontario is home to more than 800,000 residents, including nearly half of Ontario's Indigenous population and approximately 140,000 Francophones. The region's workforce is shaped by underrepresented groups such as youth, displaced workers, Francophones, Indigenous peoples, newcomers, and individuals with disabilities. These populations are expected to be crucial in driving the future northern economy. Key to this economic development is enhanced access to healthcare, education, training, and skills development. In response, the Government of Ontario (2019) has implemented initiatives to expand access to postsecondary and continuing education, particularly through innovative technologies and online programs. These efforts aim to align educational offerings with emerging economic sectors, incorporating the region's history, language, and culture, and preparing youth for future economic opportunities (Government of Ontario, 2019).

Trends in Nursing Education in Ontario

In Canada, 137 institutions offered entry-to-practice (ETP) prelicensure education programs during the 2020/21 academic year, providing graduates with the opportunity to apply for initial licensure as registered nurses (RNs; CASN, 2023). In Northern Ontario, nine institutions offer baccalaureate nursing programs, contributing to the region's healthcare workforce (College of Nurses of Ontario [CNO], 2024). Registered nursing is recognized as one of the fastest growing occupations in Canada, with a 2% increase in employment from 2020 to 2021 (Confederation College, 2021). However, Ontario has

experienced a concerning decline in the number of ETP nursing graduates, with a 30.8% reduction from 2021 to 2022. This decline contrasts with the continuous upward trajectory of ETP graduates across Canada since 2000 (CASN, 2023). This trend suggests potential challenges within Ontario's nursing education system that may require closer examination to ensure the ongoing supply of qualified nurses to meet the region's healthcare needs.

Evolving Demands Within Nursing Education

The evolution of nursing education in Canada has been shaped by significant shifts in technological advancements, pedagogical approaches, student needs, and accreditation standards. Technology's potential to enhance learning, support diverse needs, and prepare students for a technologically driven healthcare system is widely acknowledged (Buchanan et al., 2021; Stanley & Hall, 2024; Wolf, 2023). However, existing research primarily focuses on theoretical frameworks, proposed models, and anticipated benefits, neglecting practical applications and strategies for implementation. Wolf (2023) found an increasing reliance on technology for engagement, even in traditional classrooms, yet stressed the need for actionable strategies to achieve this goal. Stanley and Hall's (2024) scoping review advocates for learner-centered approaches facilitated by technology but lacks empirical evidence and concrete examples for applying these strategies in diverse educational settings. Buchanan et al. (2021) further emphasized the importance of incorporating AI and digital health concepts into nursing education but noted that many educators face challenges in utilizing these tools due to a lack of knowledge and confidence. These gaps underscore the disconnect between

theoretical ideals and the realities of classroom implementation, signaling the need for research focused on evidence-based methods for integrating technology into nursing education.

Pedagogical approaches like learner-centered curricula, hybrid models, and concept-based learning offer theoretical benefits but face underexplored practical implementation challenges (Balcom et al., 2021; Pere et al., 2023; Puksa & Janzen, 2020; Stanley & Hall, 2024; Wolf, 2023). Stanley and Hall (2024) emphasized the importance of educator-level transformation to successfully integrate student-centered learning within the nursing education model (NED). Similarly, Puksa and Janzen (2020) found a preference among nursing educators for hybrid delivery formats for complex course content. This gap highlights the need for further research into evidence-based strategies that bridge the divide between theoretical frameworks and their application in nursing education practice.

The transition to online and hybrid learning during the COVID-19 pandemic marked a significant shift in nursing education, with technology becoming increasingly central. Kowitlawakul et al. (2022) emphasized the growing reliance on technology even in face-to-face settings, but their scoping review did not address the long-term implications of these changes, or the strategies educators employ to sustain these adaptations in the postpandemic context. Amankwaa et al. (2022) argued that the pandemic had permanently altered nursing education delivery and called for further research on the effectiveness and sustainability of these changes. In Ontario, Puksa and Janzen (2020) found a preference for hybrid learning models among nursing educators,

reflecting the flexibility these approaches offer. However, their study did not examine the resources, training, and institutional support necessary to maintain hybrid learning models over time. These gaps underscore the need for research investigating the long-term sustainability of pandemic-driven changes in nursing education.

Evolving accreditation standards, particularly those related to the Next Generation NCLEX-RN, create pressure on Canadian nursing programs to adapt (Gibbons et al., 2023). While much of the research focuses on student preparation strategies, little attention has been given to the challenges faced by educators (Singh-Carlson & May, 2020), especially in Northern Ontario. Issues such as the alignment of the NCLEX-RN with Canadian curricula and the need for French language support further complicate the adaptation process in this region (Singh-Carlson & May, 2020). The lack of Canadian-specific research and insufficient focus on the unique context of Northern Ontario educators create a significant gap in understanding their experiences and support needs. While Almasloukh et al. (2023) and Spector et al. (2020) advocated for active learning and competency-based education to prepare students for the Next Generation NCLEX-RN, their findings, derived from U.S.-based studies, may not fully address the unique challenges faced by Canadian nursing programs. This gap is especially evident in the concerns raised by Singh-Carlson and May (2020), who highlighted the potential misalignment between the U.S.-centric NCLEX-RN and Canadian curricula, as well as the linguistic challenges posed by the French translation of the exam.

The challenges faced by Northern Ontario, including rural and remote communities with demographic barriers and diverse student populations with varying

digital literacy levels (Northern Policy Institute, 2023; Registered Nurses' Association of Ontario, 2015), have not been widely studied. Eriksen and Huemer (2019) demonstrated the benefits of decentralized nursing education in rural Arctic Norway, which has similarities with northern Canadian communities (Bally et al., 2023) like Northern Ontario. They found that blended learning, combining face-to-face teaching with online learning, effectively addressed the unique challenges of rural education, such as long distances and harsh climates (Eriksen & Huemer, 2019). However, the applicability of these findings to Northern Ontario is uncertain due to differences in geography, culture, and socioeconomic factors, necessitating further research tailored to the specific needs of this region.

Although research has explored the evolution of nursing education, a critical gap remains in understanding the distinct experiences of nursing educators in Northern Ontario as they adapt their teaching methods to meet evolving demands. These demands include technological advancements, shifting pedagogical approaches, and changes in accreditation standards. Given the region's unique geographic and demographic characteristics, the challenges educators face in Northern Ontario are multifaceted. This study was essential to address these challenges by examining how educators adapt their teaching methods and strategies in this context. Through this exploration, I aimed to identify approaches that can enhance the effectiveness and sustainability of nursing education in Northern Ontario, ultimately ensuring a well-equipped nursing workforce to meet the region's healthcare needs.

Problem Statement

Nursing educators in Northern Ontario face increasing pressure to adapt their teaching methods to meet evolving educational demands. The rapid integration of technology into nursing education, shifting pedagogical approaches, and evolving accreditation standards have required educators to significantly modify their instructional strategies (Leidl et al., 2020). However, many educators are navigating these changes without standardized guidance or sufficient professional development, leading to inconsistent teaching approaches. The growing reliance on digital tools, such as learning management systems (LMS), simulation-based learning, and video conferencing, has transformed the educator's role, requiring them to develop new competencies in educational technology and instructional design (Huddle, 2019; Stanley & Hall, 2024; Vandenberg & Magnuson, 2021). Meanwhile, the shift toward competency-based and concept-based curricula, driven by accreditation and examination changes like the Next Generation NCLEX-RN, has further reshaped instructional priorities (Almasloukh et al., 2023; Balcom et al., 2021).

Despite these significant changes, there is a lack of research on how nursing educators in Northern Ontario have adapted their teaching strategies to meet these evolving demands. Existing studies primarily focus on broader trends in nursing education, without addressing the unique challenges faced by educators in this region, such as balancing digital literacy with traditional instructional methods and preparing students for the NCLEX-RN while fostering critical thinking skills (Gibbons et al., 2023; Singh-Carlson & May, 2020). This gap in knowledge leaves educators without clear

guidance on how to effectively integrate new teaching strategies, potentially impacting the quality and consistency of nursing education. Understanding these adaptations is essential for identifying best practices, improving faculty support, and ensuring that nursing educators are equipped to meet the demands of contemporary nursing education (CASN, 2022; Pere et al., 2023).

Purpose of the Study

The purpose of this qualitative study was to explore the experiences of Bachelor of Science in Nursing (BScN) nurse educators in Northern Ontario and how they adapted their teaching methods to address the changing demands of nursing education. This includes responding to technological advancements, evolving pedagogical approaches, shifting student needs, and the requirements set by accreditation standards.

Research Question

This study addressed the following question: What are the experiences of Northern Ontario nurse educators with adapting their teaching methods to meet evolving demands in nursing education?

Theoretical Framework for the Study

This study was grounded in Lewin’s three-step model of change, which provides a theoretical framework to understand the adaptation of teaching methods among Northern Ontario nurse educators. Lewin's model, comprising the stages of unfreezing, moving, and refreezing, offers a systematic approach to understanding behavioral and organizational change (Burnes, 2020). The first stage, *unfreezing*, involves recognizing the need for change and destabilizing the existing equilibrium (Burnes, 2020). In the

context of this study, this phase represented the awareness among nurse educators of the necessity to adapt their teaching practices due to evolving student needs, technological advancements, and shifting educational expectations. The unfreezing stage emphasized the identification of gaps in traditional teaching methods and the factors that catalyzed change.

The second stage, *moving*, focused on transitioning to new practices and behaviors (Burnes, 2020). This stage was central to the research, as it examined the specific teaching innovations and strategies educators implemented in response to the changing landscape of nursing education. This phase reflected the dynamic process of incorporating new pedagogical approaches, highlighting educators' challenges and successes, and practical steps to align with contemporary educational demands.

The final stage, *freezing,* involved integrating these changes into long-term practices to establish a new equilibrium (Burnes, 2020). This phase included exploring the sustainability of the adaptations made by nurse educators and assessing whether these changes had been embedded into their ongoing teaching methodologies. Refreezing also addressed the extent to which the new practices had influenced the broader educational landscape in nursing. The study further considered the role of organizational support in maintaining these changes, as Lewin emphasized the importance of a participative approach to ensure the durability of adaptations (Burnes, 2020).

This study applied Lewin’s three-step model of change as a lens to analyze how Northern Ontario nurse educators had adapted their teaching methods in response to evolving educational demands. By examining the processes of unfreezing, moving, and

refreezing, this framework provided a structured approach to understanding the factors that drive change, the strategies educators employ, and the sustainability of these adaptations. Through this model, the study explored how educators navigate challenges, integrate new teaching methodologies, and establish long-term improvements in nursing education. Detailed elaboration on the theoretical framework and its application to the research problem is provided in Chapter 2.

Nature of the Study

The selection of a phenomenological qualitative design for this study was grounded in the need to deeply understand the lived experiences of BScN nurse educators in Northern Ontario as they adapt their teaching methods in response to evolving demands in nursing education. Phenomenology was particularly suited for this research as it emphasized the subjective experiences of individuals, allowing for an exploration of how educators perceive and navigate the complexities introduced by technological advancements, changing pedagogical approaches, shifting student needs, and evolving accreditation standards (Patton, 2015). This design aligned with the constructivist paradigm, which posits that knowledge is constructed through social interactions and personal experiences, facilitating a rich understanding of participants' perspectives (Creswell & Poth, 2016).

The key phenomenon under investigation was the adaptation of teaching methods by nurse educators in Northern Ontario. This adaptation included intentional modifications to align with new educational demands, such as integrating digital tools, revising curriculum content, incorporating simulation-based learning, modifying

assessment strategies, and adjusting instructional delivery methods. These changes were influenced by multiple factors, including technological advancements, competency-based and concept-based curricula, and accreditation requirements, such as those introduced by the Next Generation NCLEX-RN. Understanding this phenomenon is crucial, as it sheds light on how educators responded to the dynamic landscape of nursing education and highlights the challenges and successes they encountered in adopting innovative teaching practices.

To explore these experiences, semistructured interviews were conducted with a purposive sample of BScN nurse educators in Northern Ontario. Inclusion criteria ensured that participants had experience adapting their course delivery or teaching methods over the years. Participants were asked to describe the specific strategies they implemented, the challenges they faced, and how they evaluated the effectiveness of their adaptations. Each interview was recorded using Zoom's video and audio recording feature to ensure that detailed verbal responses were captured. However, following each meeting, only the automatically generated audio file (M4A format) was retained, and the video file was deleted. The audio files were then used to generate transcripts for in-depth analysis.

Data analysis followed a thematic approach, utilizing first- and second-cycle coding as outlined by Saldaña (2016). This process involved identifying significant themes and patterns within the data, allowing for a comprehensive understanding of the educators' experiences and their implications for nursing education in Northern Ontario.

By employing this methodology, the study contributed original insights into the challenges and strategies nurse educators used to adapt their teaching methods. These findings may help inform best practices, faculty development initiatives, and future research aimed at enhancing nursing education in response to ongoing educational transformations.

Definitions

This section defines key terms and concepts essential to the study, ensuring clarity, consistency, and alignment with the research objectives. These definitions provide a foundation for accurately interpreting the study's findings.

Nurse educator: The CASN defines nurse educators as those who teach in undergraduate and graduate nursing programs, preparing students for nursing practice (Page-Cutrara & Bradley, 2020). This role encompasses delivering nursing content, facilitating critical thinking and clinical reasoning, and integrating evidence-based practice in nursing education (Salminen et al., 2021). Nurse educators play a crucial role in shaping the competencies and skills of nursing students, thereby influencing the quality of healthcare delivery.

Blended learning: Combines online and traditional face-to-face teaching methods, offering an effective and flexible strategy for delivering nursing education (Du et al., 2022; Leidl et al., 2020). The concept of blended learning includes terms such as *distributed learning*, *decentralized learning*, *hybrid learning*, and *flexible learning*, all designed to address geographical barriers and enhance students' access to educational content (Leidl et al., 2020).

Hybrid learning: Refers to educational models integrating in-person instruction with online resources and activities while maintaining a primarily classroom-based structure (Tynan et al., 2013). This model allows for a flexible learning environment where students can benefit from the advantages of both in-person interactions and the accessibility of online resources.

Online learning (also known as *e-learning* or *digital learning*): An educational approach that utilizes the internet and digital technologies to facilitate learning outside of traditional classroom settings (Chidzonga et al., 2022; Huddle, 2019). Fully online learning eliminates in-person components, with all instruction and activities occurring in a virtual environment (Smith et al., 2021). This mode of education allows students to access course materials, participate in discussions, complete assignments, and engage with instructors and peers through various online platforms and tools.

Assumptions

According to Burkholder and Allies (2019), an assumption is a fundamental belief accepted as true without evidence, relating to a critical condition of a study. It has a logical basis and concerns a procedure not fully within the researcher's control. This study involved the assumption that qualitative methods are best suited to explore the subjective realities of nursing educators' experiences adapting their teaching practices to meet evolving demands in nursing education. This assumption was rooted in constructivist ontology, which posits that reality is subjective and socially constructed through individuals' lived experiences and perceptions (Rubin & Rubin, 2012). The phenomena under investigation—nursing educators' perceptions and adaptations—cannot

be fully understood through objective or quantifiable means alone. The assumption allowed for exploring diverse perspectives and the co-construction of meaning with participants, aligning with the interpretivist epistemology that emphasizes interaction and dialogue between the researcher and participants (Ravitch & Carl, 2019).

The study also involved the assumption that multiple, equally valid realities are shaped by the unique contexts, backgrounds, and meaning-making processes of nursing educators (McEwen & Wills, 2018). This framed the study's focus on capturing the complexity and diversity of participants' experiences, which are inherently subjective and context-dependent. Without this assumption, the study would have lacked a foundation for exploring how educators perceive and navigate the evolving demands in nursing education.

For this study, I presumed that the naturalistic setting where the phenomena occur is critical for understanding changes in teaching methods (Cruz & Tantia, 2016). These changes are embedded in the dynamic and specific contexts of nursing education, influenced by factors such as population demographics, technological advancements, shifting pedagogical approaches, and accreditation standards. The assumption supported the use of qualitative methods in capturing the nuances and complexities of these embedded experiences, which might otherwise be overlooked by quantitative approaches.

Participants were assumed to provide honest and accurate responses during data collection. This was essential to the validity and credibility of the study, as qualitative research relies on participants' self-reported experiences, reflections, and perspectives. Without this assumption, the reliability of the data and the study's overall trustworthiness

would have been compromised. It was assumed that all participants were actively engaged in nursing education and were working to meet the most recent CASN standards. This assumption was necessary to ensure that participants had current, relevant experience that aligned with the focus of this study.

Qualitative methods, including interviews and observations, are assumed to provide the depth and adaptability required to explore dynamic phenomena such as the impact of evolving demands on nursing education (Rubin & Rubin, 2012). This assumption supported identifying themes like transformative learning outcomes, professional development, and collaboration. It justified using flexible, qualitative approaches to capture ongoing changes in nursing educators' practices and beliefs, providing timely and relevant insights for informing future educational strategies. Without these assumptions, the study's ability to generate meaningful and actionable insights would have been significantly limited.

Scope and Delimitations

According to Burkholer and Allies (2019), the scope defines a study's applicability, outlining its focus, objectives, and relevant population or context. Delimitation sets boundaries by specifying exclusions in participants, time frame, and location to maintain feasibility and focus. Clearly defining these elements enhanced the study's validity, ensuring precise interpretation and application of findings.

The study addressed several specific aspects of the research problem concerning the adaptation of teaching methods by BScN nurse educators in Northern Ontario to meet the evolving demands of nursing education. Notably, it examined the integration of

technological advancements into educational practices, highlighting the increasing reliance on digital tools within educational contexts. Additionally, the research explored the shift towards learner-centered and hybrid pedagogical approaches, emphasizing active learning and student engagement. Furthermore, the study investigated how educators aligned their teaching methodologies with the requirements set forth by accreditation bodies, ensuring that nursing programs adequately prepare students for licensure. This particular focus was chosen due to the unique challenges nursing educators face in Northern Ontario, including the region's rural and remote communities, diverse student populations, and the necessity for innovative teaching strategies in a technology-driven healthcare environment.

The study was carefully delineated by specific boundaries that defined its scope and focus. Geographically, it was confined to Northern Ontario, which may limit the generalizability of its findings to other regions in Canada or internationally. The socioeconomic, cultural, and healthcare contexts unique to Northern Ontario may not align with the experiences of nursing educators in urban or other rural settings. Furthermore, the research is specific to BScN programs, excluding other educational pathways such as diploma programs, practical nursing courses, or graduate-level nursing education. By concentrating on BScN educators in Northern Ontario, the study excluded nursing students, healthcare professionals outside of nursing education, and educators from other regions, ensuring a focused analysis of this specific context.

Additional boundaries included the dynamic nature of educational practices, technology, and accreditation standards, which could render findings time-sensitive and

subject to rapid change. Methodological constraints also shaped the study, as choosing a qualitative approach impacts the type and depth of data collected. While qualitative methods may provide rich narratives, they may lack the broad trends captured through quantitative approaches.

The study's theoretical framework, Lewin’s model of change, further defined its scope. While the theoretical framework provided a structured approach to understanding change, it may have oversimplified the complex, iterative nature of adapting teaching methods in nursing education. The framework focuses primarily on individual or organizational behavior and does not fully capture the broader contextual influences, such as the unique challenges faced by Northern Ontario educators, including geographic isolation and diverse student populations. Additionally, Lewin's emphasis on "refreezing" suggests a static view of change, which may not accurately reflect the continuous adjustments required in the dynamic landscape of nursing education (Burnes, 2020).

Several theoretical frameworks were considered for this study but were not selected in favor of Lewin’s change theory, which effectively captures the adaptation process among nursing educators. One alternative was Kolb’s (1984) experiential learning theory (ELT), which emphasizes learning as a cyclical process involving concrete experience, reflective observation, abstract conceptualization, and active experimentation. ELT is particularly relevant to nursing education, as it underscores the role of hands-on experience and reflection in skill development. However, it was not chosen because it primarily focuses on individual learning processes rather than the broader organizational and systemic changes required for adapting teaching methods to

evolving nursing education. While ELT provides valuable insights into how educators and students engage with new teaching strategies, it does not fully address the mechanisms of institutional and pedagogical change. With its unfreezing, changing, and refreezing stages, Lewin's change theory better aligned with the study's focus on how nursing educators modified their instructional practices in response to evolving educational demands.

Participant selection criteria, such as focusing solely on full-time faculty members, may also exclude perspectives from part-time educators, adjunct faculty, or individuals with varying levels of experience in nursing education. The study may emphasize particular teaching strategies or technologies, inadvertently excluding other innovative practices relevant to nursing education adaptation. If educators only teach in a synchronous environment, the scope of teaching practices could be limited, potentially excluding those who incorporate solely asynchronous delivery of courses. The focus on synchronous teaching only may result in overlooking the benefits of flexible learning models, which can better accommodate diverse student needs and enhance accessibility for learners in remote or rural areas.

The study offers valuable insights relevant to other regions with similar educational and healthcare contexts. The experiences of nurse educators in Northern Ontario could inform practices in other locales grappling with comparable challenges, such as integrating technology into nursing education and adopting innovative pedagogical approaches. Transferability is contingent upon regional factors, including local healthcare systems, demographic characteristics, and institutional support

structures. As such, while the findings may provide meaningful guidance, their applicability should be considered within the unique contexts of different educational settings. By acknowledging these boundaries and potential limitations, the study aimed to provide a clear understanding of its scope while offering insights that can contribute to advancing nursing education within and beyond Northern Ontario.

Limitations

One notable limitation was accessing participants, as the pool of nursing educators who experienced the shifts in teaching methods to meet the evolving needs of nursing education firsthand may be limited, particularly within a specific geographic area. This increases the risk of small sample bias, as the pool of nursing educators available for participation is inherently limited. Recruiting a sufficient number of nursing educators to achieve data saturation was challenging, given the small number of full-time faculty members across the BScN-accredited programs. This limitation may have affected the study's generalizability, as the findings might not fully represent the diversity of nursing educators' perspectives in other nursing schools in Canada.

Accessing data presents additional challenges, including the influence of time on participants' recollections, which can lead to recall bias and potentially affect the accuracy of the findings. Inclusion and exclusion criteria were established to mitigate this bias to ensure the reliability and relevance of participants' experiences. Participants needed to be nursing educators who had taught within the last 3 years and had direct experience adapting teaching methods to meet evolving educational needs. Educators without recent teaching experience or those who had not changed their course delivery or

teaching methods over the years were excluded to maintain the study's focus on firsthand experiences of pedagogical change. Strategies such as triangulation through multiple data sources, member checking, and structured interview prompts were employed to enhance recall accuracy and ensure a comprehensive understanding of participants' experiences.

Confidentiality and privacy were especially important with a small sample, as it was easier to identify individuals based on their specific teaching experiences. This necessitated stringent measures for secure data storage to protect sensitive participant information. Pseudonyms were assigned to all participants, and identifying details were removed from transcripts to prevent unintentional disclosure. Data were stored in encrypted, password-protected files, with access restricted to me and authorized personnel. Institutional ethical guidelines and informed consent processes further reinforced participant confidentiality, ensuring ethical integrity throughout the study.

Significance

Although researchers have explored the evolution of nursing education, there is a critical gap in understanding the unique experiences of Northern Ontario nurse educators as they adapt their teaching methods to meet evolving demands, including technological advancements, shifting pedagogical approaches, and accreditation standards. Existing research primarily focused on broad theoretical models, proposed strategies, and anticipated benefits yet lacked empirical evidence on how educators navigate these transitions in practice (Buchanan et al., 2021; Stanley & Hall, 2024; Wolf, 2023). Studies on technology integration emphasized its potential to enhance learning and support diverse student needs but provided little insight into the challenges faced by educators in

rural and remote areas, where access to resources, faculty development opportunities, and technological infrastructure may be limited (Balcom et al., 2021). Research addressing these gaps is necessary to inform evidence-based strategies that support sustainable teaching adaptations.

The findings from this study can inform faculty development programs, ensuring that educators receive targeted support and resources to implement new teaching strategies effectively. Addressing gaps in knowledge, time, and teaching resources, as well as common challenges faced during curriculum transitions, can lead to more successful adaptation processes (Balcom et al., 2021). The study offers valuable insights into faculty workload and the resources necessary to support innovative teaching practices. Such findings can guide administrative decisions regarding resource allocation, helping to ensure that faculty are equipped with the tools and support needed to embrace new teaching methods without undue burden (Balcom et al., 2021). The research outcomes may also contribute to evidence-based best practices aligned with CASN standards, fostering improvements in faculty development programs by identifying areas where additional training or support is required. This aligns with CASN's emphasis on faculty qualifications and continuous professional growth (CASN, 2022).

The study's findings may support policy development by providing evidence to advocate for additional resources and support in nursing education. This includes advancing technological infrastructure, strengthening faculty development initiatives, and optimizing resource allocation to meet the evolving demands of nursing education (Balcom et al., 2021). The findings from my study may also foster collaboration among

nursing educators in Northern Ontario, encouraging the sharing of resources and strategies that align with CASN's goals for interprofessional collaboration, which are crucial for advancing nursing education and practice and creating positive social change (CASN, 2022). Ultimately, these findings can drive sustainable improvements in nursing education, ensuring that educators are better supported in preparing future nurses while fostering a more adaptive, collaborative, and progressive academic environment.

Summary

This chapter outlined the context and purpose of the study, which explored how nurse educators in Northern Ontario are adapting their teaching methods to meet the evolving demands of nursing education. These needs are driven by technological advancements, shifting pedagogical approaches, and changing student needs and accreditation standards. The unique challenges posed by the region's geography and demographics were discussed, emphasizing the need for context-specific strategies in nursing education. Additionally, the chapter presented the problem statement, research question, theoretical framework, and study design, underscoring the importance of this research for enhancing the quality and sustainability of nursing programs in Northern Ontario.

In Chapter 2, the literature review will provide a comprehensive examination of existing research on nursing education, focusing on the challenges faced by educators in similar contexts. In this review, I will explore relevant theories, pedagogical frameworks, and technology integration in nursing education, aiming to establish a solid foundation for understanding the gaps and opportunities this study was conducted to address.

Chapter 2: Literature Review

Introduction

The problem addressed in this study was the need to understand how nurse educators in Northern Ontario have adapted their teaching methods to meet the evolving demands of nursing education. These demands are shaped by technological advancements, changing pedagogical approaches, and the shifting needs of students and accreditation standards.

Technological advancements like blended learning have transformed nursing education by enhancing engagement and accessibility. These innovations provide opportunities to make education more inclusive and interactive. However, they require strong faculty development and institutional support to ensure effective implementation (Akram et al., 2022; Huddle, 2019; Puksa & Janzen, 2020).

There has also been a significant shift in pedagogical approaches from traditional, teacher-centered learning to student-centered, active learning strategies in nursing education. This change prioritizes developing higher order thinking, problem-solving, and clinical reasoning skills. Interactive and technology-integrated approaches, such as flipped classrooms, simulation, and problem-based learning, are central to this transformation (Epp et al., 2021; Youhasan et al., 2021).

Pedagogical models have further evolved to incorporate competency-based and concept-based curricula. These models emphasize critical thinking, adaptability, and the ability to apply knowledge across diverse clinical scenarios. Such curricular shifts are

designed to address students' needs and prepare them with the skills essential for contemporary healthcare (Balcom et al., 2021; Pere et al., 2023).

Integrating the NCLEX-RN and the Next Generation NCLEX-RN into Canadian nursing education has introduced unique challenges. Nursing programs must align their curricula with exam competencies while also ensuring that students develop robust clinical judgment skills (Almasloukh et al., 2023; Singh-Carlson & May, 2020). This transition has been demanding for educators, who often report feelings of powerlessness, uncertainty, and the need for more support to manage increased workloads (Balcom et al., 2021).

In Northern Ontario, geographic isolation and diverse populations further underscore the importance of these educational shifts. The region's unique challenges demand tailored strategies to ensure that nursing graduates are equipped to meet the needs of their communities (CASN, 2022). Addressing these challenges is critical to supporting the broader healthcare system and fostering equitable care.

The purpose of this phenomenological qualitative study was to explore the experiences of BScN nurse educators in Northern Ontario on how they adapted their teaching methods to address the changing demands of nursing education. This includes responding to technological advancements, evolving pedagogical approaches, shifting student needs, and the requirements set by accreditation standards. This literature review includes the literature search strategy, the theoretical foundation, a review of key concepts, and a summary with conclusions.

Literature Search Strategy

To gather relevant literature, I employed a systematic and comprehensive search strategy. I began by conducting a broad search using the school's library database, focusing on key terms such as *nursing education*, *innovative*, *change theory*, *nursing* AND *faculty* OR *teachers* OR *educators*, *adaptations*, *Lewin's change model*, *Ontario*, *Canada*, and *teaching strategies* OR *learning strategies* OR *teaching methods*. I carefully assessed the titles and abstracts to determine the relevance of each article and ensure that it met my inclusion criteria.

Once I identified potentially relevant articles, I accessed them through several reputable databases, including Medline, Nursing & Allied Health Database Premium (ProQuest), Cochrane, PMC PubMed, ScienceDirect, and the Cumulative Index to Nursing and Allied Health Literature (EBSCOhost). I also conducted a search through ERIC and Academic OneFile (Gale) for education-specific resources. These databases provided a wide range of empirical literature that informed my research.

To ensure the quality and relevance of my sources, I adhered to strict inclusion criteria. The articles needed to be peer-reviewed, published in English, and available in full text. Initially, I concentrated on studies addressing nursing education at the undergraduate level. However, I expanded my search to include teaching methods from other postsecondary disciplines for comparison. While I started focusing on Ontario-based nursing faculty, I broadened the scope geographically to include Canadian literature and relevant studies from the United States due to a scarcity of results from Ontario.

After using the school library's generalized search, I conducted a targeted search in the CINAHL & MEDLINE Combined database and ProQuest Nursing & Allied Health Database with the same search terms to ensure that I performed an exhaustive review. Once I identified common themes in the North American literature—technological advancements, changing pedagogical approaches, and the shifting needs of students and accreditation standards—I explored the main subconcepts of these themes. This led to the inclusion of additional terms in my search, such as *technology*, *student diversity*, *constructivist learning theory*, *Next Generation NCLEX-RN*, *clinical judgement*, *concept-based curriculum* OR *concept-based learning*, *blended learning*, *learning management systems*, *flipped classroom*, *simulation*, *Canadian Association of Schools of Nursing*, and *accreditation*. These terms were combined using Boolean operator AND with *educational strategies*, *teaching methods*, and *nursing*.

I also applied specific limitations, including full-text availability, peer-reviewed status, and publication dates after 2019. From these articles, I employed backward referencing to locate original studies that were relevant and significant, even if they were published prior to 2019. Additionally, I expanded my scope of inclusion to encompass worldwide literature on generalized teaching methods involving technology. This broader inclusion helped demonstrate how technological innovations, such as blended learning, flipped classrooms, and simulation, are being utilized in nursing education globally.

By incorporating these strategies, including backward referencing and an expanded scope, I refined my findings further. Reviewing the reference lists of relevant articles helped me identify foundational and related studies, prioritizing those that aligned

with my inclusion criteria to ensure that they were recent and pertinent to my research focus.

Theoretical Foundation

A theoretical framework is essential in providing structure and organization to a research study, guiding the data collection process and offering a systematic approach to understanding phenomena (McEwen & Wills, 2018). In this study, Lewin's three-step model of change served as the theoretical foundation, offering a structured approach to examining how nurse educators have adapted their teaching methods to meet the evolving demands of nursing education. Lewin's model, consisting of the stages of unfreezing, changing, and freezing, helps to analyze the change processes, highlighting the factors that influenced adaptations and the long-term impacts on nursing education. This framework informed the study's methodology and helped in interpreting educators' lived experiences, providing a lens through which to understand how changes in teaching practices are implemented and sustained.

Lewin's Three-Step Model of Change

Kurt Lewin's three-step model of change, developed in 1947, was rooted in his earlier work on field theory and group dynamics (Burnes, 2020). This model outlines a straightforward process for implementing change: unfreezing, moving, and freezing (Burnes, 2020). Lewin (1947) stated,

> A successful change includes, therefore, three aspects: unfreezing (if necessary) the present level L1, moving to the new level L2, and freezing group life on the

> new level. Since any level is determined by a force field, permanency implies that the new force field is made relatively secure against change. (p. 35)

The first step, unfreezing, involves preparing an organization for change by disrupting the status quo and addressing resistance. The second step, moving, represents the transition phase, where individuals and groups adopt new behaviors and processes. Finally, the freezing step stabilizes the organization at the new level, ensuring the changes are integrated and maintained over time (Burnes, 2020; Lewin, 1947; Manchester et al., 2014). Lewin (1947) emphasized that successful change requires creating a new equilibrium to secure long-term changes. Initially designed to address social conflicts, such as racism, this model has become a foundational framework in organizational development, despite criticisms for its perceived simplicity and linear structure (Burnes, 2020).

Three-Step Model of Change Components

Unfreezing, the first step in Lewin's change process, focuses on destabilizing the current state of affairs, or what Lewin (1947) called the “quasi-stationary equilibrium.” This step is crucial for creating awareness of the need for change by identifying the shortcomings of the existing situation or presenting compelling reasons for adopting a new approach (Burnes, 2020). It requires challenging the status quo and dismantling established structures, norms, and patterns of behavior (Lewin, 1947; Manchester et al., 2014). By addressing concerns and reducing resistance, particularly by fostering psychological safety, the unfreezing phase helps facilitate a smooth transition (Burnes, 2020). This phase is particularly challenging, as it requires understanding the forces that

sustain the current state, including individual and group motivations, organizational culture, and power dynamics (Burnes, 2020).

The second phase, moving (originally termed *locomotion*), involves shifting from the current state to the desired state (Lewin, 1947). After destabilizing the current state, this step focuses on developing a clear vision for the change and outlining a detailed plan to achieve it. This plan provides direction and purpose, ensuring that the necessary steps for change are articulated and followed (Burnes, 2020). Moving requires implementing concrete actions, making adjustments, and providing adequate resources and support to facilitate the transition. Continuous evaluation and adjustment based on feedback are vital to ensure the successful implementation of the change (Burnes, 2020; Manchester et al., 2014). This iterative process demands flexibility, adaptability, and a commitment to continuous learning and improvement. Lewin (1947) highlighted the importance of understanding the forces within an individual's or group's “life space,” including the environment influencing the change process.

The final phase, freezing, focuses on solidifying the changes and establishing a new “quasi-stationary equilibrium” to prevent a regression to the previous state (Lewin, 1947). This step involves institutionalizing the new behaviors and practices by embedding them into organizational structures, systems, and processes, ensuring that they become part of the new normal (Burnes, 2020). Positive reinforcement, recognition, and rewards are critical in reinforcing these changes and encouraging their continued practice (Burnes, 2020). Additionally, creating a supportive environment that fosters a culture of continuous improvement and ongoing support is essential for sustaining the

transformation. Freezing is necessary to ensure that the changes become deeply embedded in the organization and are not easily reversed (Burnes, 2020; Lewin, 1947).

It is important to note that Lewin's three-step model is not a linear or prescriptive process; rather, it is iterative and cyclical, requiring ongoing evaluation, adjustment, and refinement (Burnes, 2020). This complexity is reflected in Lewin's use of life space diagrams and action research principles, illustrating the dynamic nature of the change process.

Lewin's Three-Step Model of Change Strengths and Weaknesses

Burnes (2020), in their comprehensive review of the literature, highlighted several strengths and limitations of Lewin's three-step model of change. Among its strengths, Burnes emphasized the model's simplicity and clarity, offering a straightforward framework that is accessible to practitioners and organizations. Grounded in Lewin's field theory, which underscores the importance of social context and group dynamics, the model provides depth by linking it to broader psychological principles. Burnes also noted its participative approach, which fosters stakeholder buy-in and commitment, and its adaptability to various contexts, including organizational change and social conflict resolution. Furthermore, the model's attention to resistance during the unfreezing phase is recognized as critical for successful implementation.

However, Burnes (2020) also identified significant limitations. The model is critiqued for its linear and overly simplistic nature, which fails to capture real-world change's complexities and iterative processes. It also lacks a cognitive dimension, insufficiently addressing individual beliefs and mental models influencing change.

Additionally, the assumption that change stabilizes at a new "frozen" state overlooks the continuous adaptation required in dynamic organizational environments. Finally, Burnes noted debates over whether Lewin intended the model as a prescriptive framework or a descriptive account of social dynamics, leading to potential misapplications. Burnes ultimately concluded that while Lewin's model remains a valuable foundational framework, its limitations warrant careful consideration in contemporary change management contexts.

Similar Studies Using Lewin's Three-Step Model of Change

Kurt Lewin's three-stage change model (unfreeze, moving, freeze) has been widely applied in educational and healthcare settings to guide systematic transformations, offering a valuable framework for implementing effective change. While the model has been extensively used to understand organizational and individual adaptations, it has not been specifically explored in the literature to examine nursing educators' experiences with changes in teaching methods. Given its focus on adaptation and innovation, this model is particularly relevant for understanding how nurse educators modify their teaching strategies to address the evolving demands of nursing education.

For instance, Mahmud et al. (2023) applied Lewin's model to enhance teacher professionalism in Indonesian Madrasahs by helping teachers adapt to digital advancements. The unfreeze phase involved identifying the need for change through needs assessments and raising awareness of gaps in professional development (Mahmud et al., 2023), which mirrors how nurse educators assess the need to adapt teaching methods in response to evolving demands. The move phase focused on implementing

structured professional development, such as training in technology integration development (Mahmud et al., 2023), similar to how nurse educators adopted virtual platforms and blended teaching. The refreeze phase ensured the sustainability of new practices by reinforcing them through supportive structures development (Mahmud et al., 2023), aligning with how nursing education institutions aim to embed these adaptations into long-term teaching frameworks.

In a healthcare context, Ahmed et al. (2022) used Lewin's model to improve patient discharge practices by training nurses to use the teach-back method. The unfreeze phase involved assessing existing practices and addressing resistance (Ahmed et al., 2022), a process similar to how nurse educators might confront resistance when shifting to new teaching methods. The move phase, which focuses on implementing structured training programs (Ahmed et al., 2022), mirrors nurse educators' professional development efforts when learning to incorporate new teaching methods. The refreeze phase involved evaluating the effectiveness of the training and institutionalizing the new practices (Ahmed et al., 2022), similar to how nurse educators integrate innovative teaching methods into standard curriculum frameworks.

Additionally, Pan and Seow (2019) adapted Lewin's model to study learning transformations within project-based learning (PBL) at a university. The unfreeze phase, which involved challenging students' preconceived notions and expectations (Pan & Seow, 2019), parallels how nurse educators may need to shift their traditional beliefs about teaching in response to the changing demands of nursing education. The move phase, where students were guided by instructors to adopt new perspectives (Pan &

Seow, 2019), reflects the role of nurse educators in guiding students through novel learning experiences. The refreeze phase emphasized the integration of new beliefs and practices (Pan & Seow, 2019), similar to how nurse educators must internalize and sustain new teaching methods.

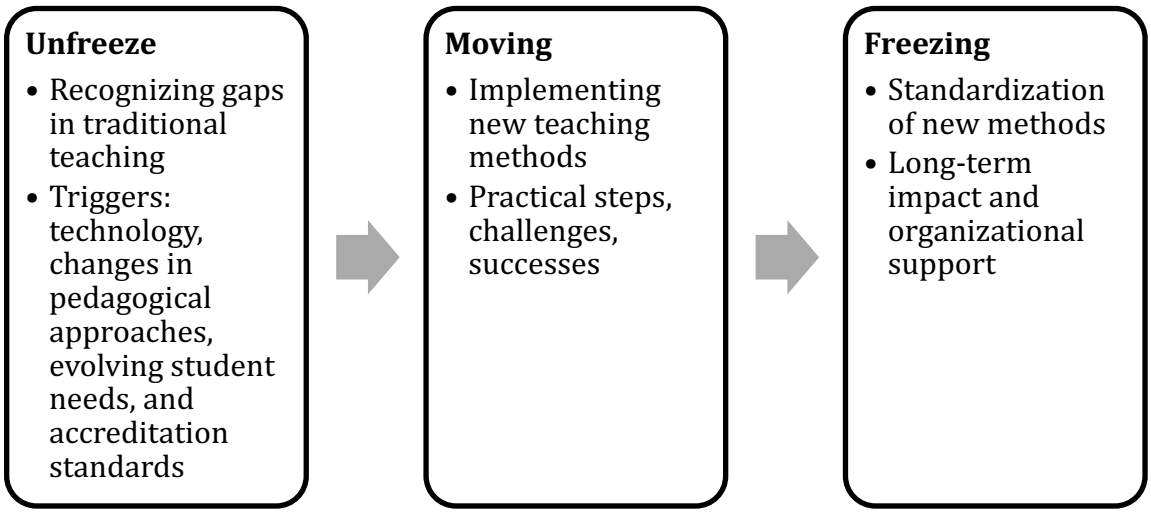
These studies collectively highlight the importance of the unfreeze, move, and refreeze phases in educational and healthcare settings, stressing the need for assessment, structured development, and institutional support to sustain change. By drawing on this literature, the current study reinforces the applicability of Lewin's change theory in nursing education. The theory's focus on preparing for change, implementing new practices, and ensuring their sustainability aligns with how nurse educators have adapted their teaching methods to meet the evolving demands of nursing education. In this way, Lewin's model remains a valuable tool for understanding the complexities of adapting teaching methods in response to shifting educational needs.

Application of Lewin's Three-Step Model

The application of Lewin's model highlights its usefulness in guiding significant behavioral and structural changes, particularly in response to evolving demands. In nursing education, Lewin's model provides a structured approach to understanding the process through which Northern Ontario nurse educators adapted their teaching methods to meet these demands. As depicted in Figure 1, the model explains the factors influencing these adaptations and offers a framework for understanding how educators navigated changes in technology, pedagogy, and student needs during this transformative period.

Figure 1

Lewin's Change Model as Applied to Nursing Educators' Adaptations in Teaching Practices



Note. Adapted from Burnes (2020).

Unfreezing

The first stage of Lewin's model, unfreezing, involves recognizing the need for change and "destabilizing an existing quasi-stationary equilibrium" (Burnes, 2020, p. 47). In the context of my study, this stage is pivotal, capturing the awareness among nurse educators in Northern Ontario of the necessity to adapt their teaching methods. The challenges posed by evolving student needs, technological advancements, and shifting educational expectations prompted educators to reconsider traditional teaching approaches. The unfreezing stage reflects how educators identified gaps in their existing practices and the factors that triggered the need for adaptation, providing essential insight into their experiences before undertaking significant changes.

Moving

The middle stage, moving, focuses on the process of transitioning to new practices and methods. Lewin described this stage as “locomotion through the life space” (Burnes, 2020, p. 44), representing a behavior change. This stage is central to my research, as it explores the specific teaching methods that educators implemented to address the evolving landscape of nursing education. The moving stage highlights the practical steps educators take to incorporate new teaching methods, capturing the concrete shifts in pedagogical practices, as well as the challenges and successes encountered during this transition.

Freezing

The final stage, freezing, involves “establishing a new quasi-stationary equilibrium free from regression” (Burnes, 2020, p. 47). This stage is essential for understanding how the changes made by nursing educators were integrated into their long-term teaching practices. It examines whether these adaptations have become standardized and whether educators continue to use these methods as part of the "new normal" in nursing education. The freezing stage aligns with my study’s aim of assessing the sustainability of these teaching adaptations and their influence on the evolving educational landscape. Lewin also emphasized the importance of a “demographic-participative approach to change” (Burnes, 2019, p. 44) to ensure lasting success. While nursing educators are largely self-regulated, this highlights the critical role of organizational support in maintaining and reinforcing these changes.

Literature Review Related to Key Concepts

An exhaustive review of the literature review was conducted to identify the key constructs associated with the evolving landscape of nursing education. This review focused on technological advancements, changing pedagogical approaches, and the shifting needs of students and accreditation standards, all of which have been identified as pivotal factors influencing the field. Previous literature indicated that technological advancements have led to the integration of digital tools and online learning platforms, significantly impacting the delivery of nursing education. Changing pedagogical approaches, including the shift towards student-centered education and active learning strategies, were also noted as critical in addressing the dynamic needs of students. Additionally, the evolving expectations of accreditation standards have necessitated adjustments to curriculum and assessment methods. These factors have collectively driven nurse educators to adapt their teaching methods, aiming to ensure that nursing education remains relevant and effective in meeting the demands of modern healthcare.

Technological Advancements

Nurse educators have increasingly adopted technology to enhance nursing education, adapting their teaching methods to meet the evolving technological demands of the profession and ensure students are prepared for the complexities of modern healthcare systems (Huddle, 2019). This shift reflects the rapid advancements in healthcare and the necessity for nursing education to integrate blended learning approaches, combining online resources, virtual simulations, and traditional in-person instruction to create a more flexible and effective learning environment.

In response to these challenges, blended learning has emerged as a versatile pedagogical approach, combining traditional face-to-face instruction with online components to create a more flexible and dynamic learning experience (Namulondo et al., 2023). Central to blended learning is the use of Learning Management Systems (LMS), which allow educators to distribute course content, assignments, and assessments while tracking student progress and providing a centralized space for communication (Sáiz-Manzanares et al., 2020). Video conferencing platforms enhance engagement by supporting real-time discussions, collaborative projects, and interactive learning experiences, bridging the gap between students and instructors, regardless of geographic limitations (Vandenberg and Magnuson, 2021). Simulation-based learning has also gained prominence, enabling students to practice clinical decision-making and refine skills in a safe, controlled virtual environment (Nagle et al., 2020). These technological advancements collectively enable nursing education to meet the evolving demands of modern healthcare, ensuring students are well-prepared for clinical and technological challenges.

Blended Learning

Blended learning has emerged as a promising pedagogical approach in nursing education, combining traditional face-to-face instruction with technology-mediated learning. A growing body of evidence highlights the effectiveness of blended learning in improving student knowledge, skills, and overall satisfaction (Du et al., 2022; Leidl et al., 2020). A scoping review by Leidl, Ritchie, and Moslemi (2020) examined blended learning in undergraduate nursing education. The review found blended learning has been

effectively used to teach diverse content areas, including professional nursing skills, mental health nursing, biosciences, pharmacology, and acute care nursing. Additionally, in their scholarly review, Altmiller and Pepe (2022) explain that blended learning improves access to a diverse range of resources, including online materials, simulations, and multimedia content.

Faculty and student experiences with blended learning have demonstrated both significant advantages and notable challenges. Research highlights key benefits, including increased flexibility and improved access to educational content (Elliott, 2020; Leidl et al., 2020; Li & Conway, 2024). Elliott's (2020) qualitative study examined perceptions of an accelerated BSN program utilizing blended learning, revealing that faculty and students valued the combination of online and in-person instruction. This approach facilitated more efficient use of class time, enabling face-to-face sessions to focus on interactive and engaging activities, ultimately fostering a deeper understanding of the material. Similarly, Leidl et al. (2020) identified blended learning as an effective method for teaching diverse nursing competencies. Their findings suggest that integrating digital resources with in-person instruction enhances skill acquisition and knowledge retention. Expanding on these insights, Li and Conway (2024) explored faculty and student perceptions of blended learning in an accelerated BSN program. Their study concluded that blended learning offers a structured yet flexible framework that accommodates various learning modalities when properly implemented. This flexibility allows students to engage with a broader range of content within a condensed timeframe, promoting efficiency without compromising comprehension.

Despite its advantages, blended learning presents significant challenges for nursing education, particularly in the context of digital health integration. Nagle et al. (2020) identified key obstacles in Canadian nursing schools, including insufficient infrastructure, limited technical support, and concerns about the time required to integrate technology effectively into curricula. While their study focused on digital health, the findings underscored an urgent need for faculty development to enhance digital competencies, which is essential for the success of blended learning. These challenges are further compounded by technology-related issues, increased time commitments, and difficulties maintaining student engagement, highlighting the complexities of implementing blended learning in nursing education.

Technical problems, such as platform glitches, lack of access to reliable technology, and inadequate proficiency with learning management systems, can significantly disrupt the teaching process (Elliott, 2020; Li & Conway, 2024; Suliman et al., 2021). Faculty members in Elliott's (2020) study reported frustration with the limited institutional support available for technology training. Similarly, Suliman et al. (2021) found there was a steep learning curve educators faced during the rapid transition to online teaching necessitated by the COVID-19 pandemic. These findings highlight the need for robust institutional support, faculty training, and improved infrastructure to realize the full potential of blended learning in nursing education.

Time commitment remains a significant challenge in the implementation of blended learning. Elliott (2020) found that developing and implementing blended learning curricula requires substantial effort, particularly during the initial course design.

Similarly, Tynan et al. (2013) reported that faculty members in Australian universities experienced increased workloads due to the integration of online components into their courses. Although online teaching is often assumed to reduce contact hours—the time students spend interacting with educators or engaging in instructional activities—faculty members found that it actually increased their teaching responsibilities (Tynan et al., 2013). Comparable trends have been observed in North America, where Nabolsi et al. (2021) found in their qualitative study that faculty experienced heightened workloads when adapting to online teaching modalities. Further emphasizing the resource-intensive nature of blended learning, Shorey et al. (2022) reported that preparing online materials could take up to three times longer than traditional methods.

Blended learning has become a key approach in nursing education, combining traditional face-to-face instruction with technology-mediated learning to address the evolving needs of students and faculty. By examining both the advantages and challenges of blended learning, can result in better understanding on how nurse educators are adapting their teaching methods to enhance student engagement, improve learning outcomes, and overcome obstacles related to technology integration, faculty development, and time commitments in the evolving educational landscape.

Learning Management Systems (LMS)

Several researchers have identified Learning Management Systems (LMSs) as integral tools in nursing education, facilitating the delivery of course content, communication, and tracking of student progress. The research supports that nurse educators utilize LMS platforms to host and distribute a variety of curriculum materials,

including video lessons, reading materials, modules, online quizzes, assignments, and discussion boards tailored to nursing students' needs (Leidl et al., 2020; Matthias et al., 2019; Sáiz-Manzanares et al., 2020). By providing a centralized platform, these systems enable students to engage with content, monitor their progress, and participate in interactive learning experiences, effectively supporting both teaching and assessment activities in a cohesive and streamlined manner.

Numerous studies emphasize the practical applications of LMS in nursing education, demonstrating how these platforms are used to deliver curriculum, assess student learning, and promote engagement (Sáiz-Manzanares et al., 2020; Sinacori, 2019). Sáiz-Manzanares et al. (2020) explored a blended learning approach that integrated an LMS with hypermedia resources and project-based learning in a nursing degree program. The results showed that this blended learning model accounted for 40.4% of student learning outcomes and 71.9% of effective learning behaviors in the LMS. These findings underscore the potential of LMSs to significantly enhance student learning and engagement when paired with engaging resources and active learning strategies.

Similarly, Shang and Lui (2018) examined the effectiveness of an LMS-based blended learning approach in a medical physiology course for nursing students. The study found that most students preferred blended learning over traditional classroom lectures or purely online study, with improved performance on final exams. This reflects a broader trend of incorporating technology in education to improve student outcomes, as LMS platforms provide students with flexibility and accessibility in their learning. However,

the study by Shang and Lui (2018) also identified a significant limitation: low participation in the discussion boards, with 93% of students not engaging in discussions. This is problematic because discussion boards are an important tool for assessing student learning and promoting interaction among students and instructors. Sinacori (2019) emphasized that discussion questions are designed to promote specific objectives, including fostering student engagement, encouraging critical thinking, and facilitating knowledge sharing. When students fail to participate actively, these objectives are compromised, diminishing the LMS's potential to support collaborative and interactive learning.

Sinacori (2019) further discovered that transitioning from traditional classroom teaching to online education necessitates a shift in pedagogy and skills. Nurse educators must receive adequate training in online teaching methods, LMS functionality, and time management to navigate online teaching environments effectively. Successful implementation of LMSs requires reliable technology, institutional support, and continuous technical assistance for faculty and students. Resources such as tutorial videos, discussion forums, and technical help desks can support a smooth transition to online learning, ensuring that educators and students are adequately prepared for the challenges of LMS-based education (Sáiz-Manzanares et al., 2020; Sinacori, 2019).

The use of Learning Management Systems (LMSs) in nursing education highlights how nurse educators are adapting their teaching methods to meet the evolving needs of students in a digital learning environment. By examining how LMS platforms facilitate course delivery, assessment, and engagement, can result in better understanding

of the challenges and opportunities these systems provide for nursing educators, as well as identify strategies to maximize their effectiveness in supporting diverse learning needs and improving student outcomes.

Simulation Learning

Simulation has become integral to nursing education, providing students with a safe and controlled environment to practice essential skills, develop critical thinking, and build confidence in their clinical abilities (Nagle et al., 2020). The literature highlights a variety of simulation modalities employed in nursing education, showcasing the diverse applications of this technology. For instance, web-based and virtual-world simulations utilize online platforms to deliver interactive and engaging learning experiences (Leidl et al., 2020). Cant et al. (2015) demonstrated that using FIRST2 ACT Web, a web-based simulation program for teaching the assessment of deteriorating patients, significantly enhanced student satisfaction and learning outcomes in a laboratory setting. Similarly, Al-Hatem et al. (2018) reported increased confidence, motivation, and self-regulated learning among students who used Second Life®, an online virtual-world simulation, for nursing assessments. These findings highlight the potential of virtual-world simulations to develop critical nursing skills.

Another innovative approach is using 3D virtual gaming simulations, which leverage gaming technology to create interactive and immersive learning environments. These simulations enable students to apply skills, reflect on clinical decision-making, and receive immediate feedback (Leidl et al., 2020; Verkuyl et al., 2017). For example, Verkuyl et al. (2017) implemented a 3D virtual gaming simulation in a health assessment

course, finding that it provided a secure learning environment for students to practice their knowledge, enhance clinical skills, and receive timely feedback. Similarly, other simulation modalities, such as virtual patient simulations, virtual reality (VR) simulations, and high- and low-fidelity simulations, expand opportunities for experiential learning, allowing students to build confidence and competence in clinical settings (Huddle, 2019).

While the use of simulation results in numerous benefits, nurse educators report both positive and negative experiences with its integration into nursing education. Leidl et al. (2020) found that blended learning approaches incorporating simulation improve student engagement and satisfaction. Students value simulation's safe, interactive environment, allowing them to apply knowledge and practice skills without risking patient harm. Amankwaa et al. (2022) identified virtual simulation as an innovative tool comparable to traditional clinical placements in fostering skills, knowledge, and confidence. Simulation effectively bridges the gap between theory and practice, as evidenced by Terry et al. (2018), who found that online simulation training for IV pump use led to greater knowledge retention than face-to-face methods.

However, significant challenges accompany the integration of simulation into nursing curricula. Aebersold (2018) identified insufficient infrastructure, inadequate equipment, limited faculty expertise, and the time-intensive nature of simulation hinder its effective implementation. Financial constraints also pose barriers, as simulation requires substantial investment in technology and faculty training (Aebersold, 2018). Additionally, Merrou et al. (2023) found that the time and resources required for

simulation-based learning can make it challenging to meet teaching objectives, particularly in programs with large student cohorts.

The integration of simulation into nursing education demonstrates how nurse educators are adapting their teaching methods to meet the evolving needs of students and the healthcare landscape. Educators are using simulation, particularly virtual simulation, as a key adaptation to enhance student learning (Amankwaa et al., 2022). By exploring their experiences with simulation and other innovative strategies, can result in a better understanding of how these adaptations shape nursing education, overcome challenges, and enhance student outcomes in response to the changing demands of healthcare.

Video Conferencing

Video conferencing tools like Zoom have become essential in nursing education, particularly during the COVID-19 pandemic. These platforms enable synchronous online classes, virtual office hours, and group discussions, providing critical support for remote learning (Altmiller & Pepe, 2022; Chidzonga et al., 2022). De Gagne et al. (2023) found several benefits of video conferencing, including enhanced accessibility and flexibility, allowing educators to respond effectively to disruptions like those caused by the pandemic. Furthermore, nurse educators often use video conferencing to record lectures for asynchronous viewing, accommodating diverse student needs and schedules (De Gagne et al., 2023).

A systematic review by De Gagne et al. (2023) and a research study by Vandenberg and Magnuson (2021) found the potential of video conferencing platforms to enhance student engagement and interaction. Features such as polls, chat functions, and

screen sharing were identified as tools that foster a dynamic and interactive learning environment. In a mixed-methods study examining attitudes toward Zoom among nursing students and faculty in Alberta, Canada, Vandenberg and Magnuson (2021) found that faculty generally reported more positive experiences than students. For example, 41% of faculty enjoyed using Zoom for teaching theory courses, compared to 25% of students. Most faculty members (89%) felt that Zoom fostered a welcoming and supportive learning environment, with over half indicating a sense of connection with students during sessions.

Despite these benefits, the study by Vandenberg and Magnuson (2021) also revealed challenges. A significant proportion (88%) of faculty preferred traditional face-to-face instruction over virtual platforms, reflecting a sentiment shared by many students. Additionally, nearly half (47%) of faculty members reported technological and psychological barriers, including poor internet connectivity and increased stress or anxiety. These findings underscore the importance of thoughtfully integrating online strategies with in-person methods to address the limitations of video conferencing and optimize learning outcomes in nursing education.

Understanding how nurse educators adapt their teaching methods is crucial as they navigate the evolving needs of nursing education, including the integration of video conferencing tools like Zoom. These adaptations reflect a shift toward balancing innovative virtual strategies with traditional approaches to enhance accessibility, engagement, and student outcomes amidst ongoing challenges.

Strengths and Limitations

The reviewed literature offers valuable insights into the evolving landscape of nursing education, particularly regarding technology integration. A recurring theme across the literature is the increasing adoption of blended learning in nursing education. However, several sources also underscore the challenges nurse educators face in implementing technology, including issues related to infrastructure, technical support, and the need for faculty training (Akram et al., 2022; Huddle, 2019; Nagle et al., 2020; Namulondo et al., 2023; Richter & Schuessler, 2019). These challenges are likely relevant to nurse educators in Ontario, who may encounter similar obstacles within their educational settings.

The literature reviewed also has notable limitations. Many studies reviewed lack generalizability, often focusing on specific institutions, geographic regions, or course subjects, limiting their applicability to broader contexts (Chidzonga et al., 2022; Iglesias-Pradas et al., 2021; Isam Al-hatem et al., 2018; Li & Conway, 2024; Marek et al., 2021; Matthias et al., 2019; Merrou et al., 2023; Namulondo et al., 2023; Shang & Liu, 2018; Yeo et al., 2024). For instance, research conducted at universities in Australia may not directly translate to nursing programs in Canada, given the differences in educational systems and technological infrastructure (Tynan et al., 2013). Additionally, studies frequently employed small sample sizes or convenience sampling methods, which can introduce bias and reduce the representativeness of findings (Sáiz-Manzanares et al., 2020; Sinacorri, 2019; Yeo et al., 2024).

Reliance on self-reported data or interviews presents a limitation, as participant responses may be influenced by social desirability bias, particularly during events such as the COVID-19 pandemic, where individuals may be inclined to emphasize positive experiences (Kawasaki et al., 2021; Marek et al., 2021). Future studies should incorporate larger, more diverse samples and consider longitudinal designs that capture a broader spectrum of experiences and outcomes to enhance the generalizability and rigor of research on technology use in nursing education.

This study aimed to address this gap by focusing on the experiences of nursing educators in Northwestern Ontario, a geographically unique and underserved region that has been underrepresented in existing research on technology integration in nursing education. Utilizing a phenomenological approach, this research provided an in-depth examination of how educators have adapted their teaching practices in response to evolving technological demands. Although not longitudinal in design, the study will provided valuable insights into the challenges and successes encountered by faculty, establishing a foundation for future research.

Changing Pedagogical Approaches

The literature documents a notable shift in nursing education, transitioning from traditional, teacher-centered approaches to student-centered, active learning strategies. This evolution reflects the imperative to cultivate higher-order thinking skills and prepare students for the complexities of contemporary healthcare environments (Franco-Tantuico, 2021; Youhasan et al., 2021). Among the innovative pedagogical methods gaining prominence, the flipped classroom model emerges as a cornerstone of this

transformation. This approach restructures the learning process by moving foundational content delivery outside the classroom, freeing in-class time for active, collaborative learning activities (Wells-Beede, 2020; Youhasan et al., 2022).

Active learning, a central component of the flipped classroom, emphasizes student participation and engagement through methods such as problem-solving, group discussions, and case-based learning (Li et al., 2021). This approach aligns with constructivist learning theory, which posits that knowledge is actively constructed through experiences and interactions rather than passively received (Epp et al., 2021). By integrating these concepts, educators aim to create a dynamic, interactive learning environment that supports critical thinking, fosters knowledge retention, and bridges the gap between theoretical knowledge and clinical application.

Flipped Classroom

One notable innovation in nursing education is the flipped classroom model, facilitated by advancements in educational technology. Youhasan et al. (2021) notes that this approach requires students to engage with instructional materials, such as video lectures and readings, before class, thereby reserving in-class time for collaborative, hands-on activities that promote the application and reinforcement of learning. By transitioning from traditional didactic teaching to interactive and experiential learning, Andargeery et al. (2024) and Youhasan et al. (2021) found that the flipped classroom fosters an educational environment prioritizing critical thinking and problem-solving.

Holman and Hanson (2016) compared flipped and traditional lecture-based approaches in a medical-surgical nursing course. The findings revealed that while

students achieved better outcomes with the flipped model, they perceived it as requiring more effort and favored the passive traditional lecture. However, students in the flipped classroom reported feeling better prepared, more engaged and learning more. Similarly, Du et al. (2022) conducted a meta-analysis of 25 studies involving 2,706 nursing students, which confirmed the efficacy of blended learning, often incorporating flipped classroom principles, in enhancing knowledge acquisition, skill performance, and learning satisfaction. Both studies underscore the potential of flipped classrooms to improve learning outcomes compared to traditional methods.

Elzeky et al. (2022) explored the integration of gamification into a flipped classroom for teaching intravenous therapy to undergraduate nursing students. Their findings mirrored Holman and Hanson's (2016) results, showing a positive correlation between the flipped model and knowledge, skill performance, and confidence improvements. However, including gamified elements further enhanced student engagement and perceptions, suggesting that innovative adaptations to the flipped model may optimize its impact.

Wells-Beede (2020) and Youhasan et al. (2021) both found that nurse educators implementing flipped classrooms consistently report enhanced student engagement and more interactive in-class sessions, reflecting a shift from passive lectures to active, student-centered learning. This pedagogical transformation enables deeper discussions and facilitates the application of theoretical knowledge in practical contexts (Wells-Beede, 2020). For example, Saunders et al. (2017) demonstrated the effectiveness of integrating flipped classrooms with simulated learning in a person-centered care course,

where tutors and clinical faculty observed students exhibiting greater engagement and improved preparedness for clinical placements.

The findings of Saunders et al. (2017) study are consistent with extensive evidence supporting the flipped classroom model as a robust approach for promoting knowledge acquisition, critical thinking, and skill development in nursing education (Battle & Tyson, 2018; Elzeky et al., 2022; Fan et al., 2020; Halasa et al., 2020; Ni et al., 2024; Wells-Beede, 2020). For instance, Kim et al. (2019) conducted a quasi-experimental study in a patient safety course, revealing significant improvements in nursing students' knowledge and self-efficacy when employing a flipped classroom approach. Similarly, Wang et al. (2024) reported positive quantitative outcomes, further underscoring the flipped classroom's potential to enhance student learning experiences and outcomes. Through these examples, it becomes evident that the flipped classroom model provides a dynamic framework for engaging nursing students, encouraging active participation, and fostering essential skills for clinical practice.

Several researchers have found that the flipped classroom model enables educators to address individual learning needs and preferences by leveraging pre-class online materials that allow students to learn at their own pace, revisit content as necessary, and engage with a variety of educational resources (Long et al., 2016; Ni et al., 2024; Wells-Beede, 2020; Youhasan et al., 2021). This flexibility and in-class sessions devoted to answering questions and providing personalized feedback create a more supportive and tailored educational experience. Wells-Beede's (2020) qualitative study of associate degree faculty experiences revealed that participants viewed the flipped

classroom approach as an effective method for fostering active learning and student-centeredness within a concept-based curriculum.

Despite these advantages, Wells-Beede (2020) identified a significant challenge for nurse educators, which lies in the substantial time commitment required to design and curate engaging online materials. This added workload can be especially burdensome for educators managing demanding schedules or operating within resource-constrained environments. Holman and Hanson (2016) found that faculty members perceived the flipped classroom model as requiring considerable preparation time, which may hinder its broader adoption. Similarly, Wells-Beede (2020) documented concerns among educators regarding the time-intensive nature of developing and implementing flipped classroom strategies. These challenges underscore the need for institutional support and streamlined processes to facilitate adoption of this innovative teaching approach.

Researchers concluded that successfully transitioning to a flipped classroom model requires both technological proficiency and access to adequate resources and support (Wells-Beede, 2020; Youhasan et al., 2022). Youhasan et al. (2022) note that nurse educators may face challenges such as video recording and editing, managing online platforms, and assisting students with technical difficulties. Limited institutional support, insufficient training, and inadequate resource access can further compound these difficulties. For instance, a qualitative study by Youhasan et al. (2022) exploring university teachers' perceptions of flipped classrooms in Sri Lanka identified significant barriers, including limited technical support and inadequate hardware and network infrastructure, which hindered the effective implementation of this pedagogical approach.

In addition to technological challenges, researchers identified resistance to change from both students and educators accustomed to traditional teaching methods can impede the adoption of flipped classrooms (Elzeky et al., 2022; Wells-Beede, 2020; Youhasan et al., 2021). Students may prefer passive learning or find the self-directed nature of flipped classrooms difficult to navigate, resulting in dissatisfaction or pushback (Wells-Beede, 2020; Youhasan et al., 2022). A study by Greenwood and Mosca (2017) emphasized the importance of managing student expectations during the transition to a flipped classroom. Greenwood and Mosca (2017) found strategies such as open communication, addressing student concerns, and providing clear guidelines and expectations to mitigate resistance and foster a positive learning environment.

Understanding how nurse educators adapt their teaching methods, such as implementing flipped classrooms, is crucial to addressing the evolving needs of nursing education. By examining their strategies to overcome challenges like workload, technology integration, and change management, this research aimed to uncover how educators refine these innovative approaches to enhance student engagement and learning outcomes.

Active Learning

The increasing complexity of healthcare systems necessitates the development of adaptable nurses equipped with critical thinking and clinical reasoning skills. Epp et al. (2021) note that active learning strategies, such as problem-based, team-based, and case-based learning, enable students to apply theoretical knowledge to real-world scenarios, effectively bridging the gap between theory and practice. Nurse educators report that

these methods positively impact students' communication skills, critical thinking, and confidence in performing nursing interventions (Pivač et al., 2021). Pivač et al. (2021) conducted group interviews with nurse educators in Bosnia and Herzegovina, revealing that active learning methods like Peyton's Four-Step Approach, Mind Mapping, Debriefing, and Objective Structured Clinical Examinations (OSCE) encouraged critical thinking, problem-solving, and self-confidence in students. The study also highlighted the importance of immediate feedback, with both students and educators recognizing its value in improving performance.

Despite the perceived benefits, educators face challenges in implementing active learning. Pivač et al. (2021) identified barriers such as the lack of suitable venues, insufficient training, and concerns about educators' pedagogical skills. These findings underscore the need for professional development to equip educators and clinical mentors with the skills necessary to transition from traditional teaching methods to active, student-centered approaches.

A study by Bristol et al. (2019) explored the extent to which nurse educators utilize lecture versus active learning in prelicensure nursing programs. The findings indicated that most educators blended active learning strategies with traditional lectures, reflecting a gradual shift rather than a complete departure from conventional teaching methods. Of the 438 faculty surveyed, only a small number reported exclusively using active learning or relying on lecturing more than 75% of the time. This integration trend illustrates the growing adoption of student-centered approaches within existing pedagogical frameworks.

Active learning strategies promote student participation, foster deeper understanding, and facilitate knowledge application. Cao et al. (2021) demonstrated the effectiveness of active learning in a study on a Massive Open Online Courses (MOCO)-based blended learning approach, which incorporated active learning principles. Students achieved significantly higher scores in operational performance, theoretical understanding, and final grades in a Fundamental Nursing course compared to traditional face-to-face teaching. Similarly, Pivač et al. (2021) found that active learning methods, including Peyton's Four-Step Approach, Mind Mapping, and Debriefing, were instrumental in fostering critical thinking, problem-solving, and self-confidence among nursing students.

However, the adoption of active learning is not without obstacles. Educators often express a lack of confidence in their pedagogical and technological skills, which hinders effective implementation. Pivač et al. (2021) emphasized the necessity of training for both educators and clinical mentors to ensure the successful adoption of these methods. Similarly, Wells-Beede (2020) found that inconsistent training for nurse faculty on the flipped classroom model contributed to implementation challenges and variability in educators' experiences.

Resource limitations further compound these challenges. Pivač et al. (2021) identified the lack of suitable venues and proper equipment as significant obstacles to active learning. Adequate resources, including technology and financial support, are essential for creating learning environments conducive to active learning. Epp et al. (2021) noted that the high cost of simulation equipment posed a substantial barrier to

integrating simulation-based learning, highlighting the financial constraints that impede the adoption of resource-intensive methods.

Moreover, educators must prepare for active learning sessions, which demands considerable time and effort from educators. The development of engaging activities, the creation of online resources, and the facilitation of in-class discussions add to their already demanding workload. Wells-Beede (2020) found that nurse faculty perceived the preparation for flipped classrooms as particularly time-consuming, underscoring the need for institutional support to enable effective implementation.

The growing complexity of healthcare systems emphasizes the need for nurse educators to adapt their teaching methods, integrating active learning strategies to foster critical thinking, clinical reasoning, and communication skills. By exploring the benefits and challenges of active learning, this study helped to understand how nurse educators are responding to the evolving needs of students, promoting deeper engagement with content, and overcoming obstacles such as resource limitations, inadequate training, and time commitments to prepare nurses for real-world practice better.

Constructivist Learning Theory

Constructivist learning theory has also played a crucial role in this transformation. Many nursing programs are integrating this theory into their curricula, emphasizing the active role of students in constructing knowledge through experience and environmental interaction (Epp et al., 2021). Strategies such as scaffolding and integrated intentional learning guide students through progressively complex educational experiences, fostering more profound understanding and the development of essential skills (Epp et al., 2021).

However, the literature also highlights challenges associated with implementing these pedagogical changes. Educators must adapt to new teaching methods and technologies, necessitating professional development and institutional support (Balcom et al., 2021; Franco-Tantuico, 2021). Resistance to change from both educators and students, coupled with time constraints, can further impede the implementation of innovative curricula (Franco-Tantuico, 2021; Balcom et al., 2021).

Despite these challenges, adopting student-centered, active learning pedagogies is deemed essential for preparing competent and adaptable nurses capable of meeting the demands of evolving healthcare systems. The ongoing incorporation of these approaches reflects a commitment to improving nursing education and aligning it with the dynamic needs of the healthcare landscape (Epp et al., 2021).

Constructivist learning theory is reshaping nursing education by emphasizing active student engagement in knowledge construction. Understanding how nurse educators implement strategies, like scaffolding, highlights both the benefits and challenges of adapting teaching methods to meet evolving healthcare needs, while emphasizing the importance of professional development and institutional support.

Literature Strengths and Limitations

The provided literature offers valuable insights into pedagogical changes in nursing education; however, its applicability to the context of Ontario nursing faculty is limited. Many of the cited studies are conducted outside Canada, where differences in curriculum frameworks, regulatory standards, and institutional structures may impact the relevance of their findings to Ontario (Halasa et al., 2020; Ni et al., 2024; Youhasan et

al., 2022). These regional variations underscore the need for context-specific research to account for the unique challenges and opportunities present in Ontario's nursing education landscape.

Furthermore, the sources lack a focused examination of Ontario nursing faculty experiences with pedagogical changes. While faculty perspectives are addressed in some studies, they do not provide a comprehensive understanding of the specific challenges faced by Ontario educators, such as adapting to provincial regulatory requirements, resource availability, or institutional support mechanisms. The absence of studies tailored to Ontario's context limits the ability to generalize findings and implement evidence-based improvements effectively.

Additionally, the reviewed sources are primarily composed of published research articles and reviews, which may not fully capture the breadth of pedagogical practices and innovations occurring within Ontario nursing schools. The literature does not represent unpublished works, local initiatives, and anecdotal evidence—often critical in understanding grassroots-level educational practices. These omissions suggest that potentially valuable insights from Ontario-specific projects or educator experiences remain unexplored.

Shifting Needs of Students and Accreditation Standards

Nursing education is continuously evolving to address the dynamic needs of diverse student populations, meet accreditation standards, and respond to the increasing complexity of contemporary healthcare. Central to these efforts is preparing graduates to navigate the challenges of modern practice and succeed in the Next Generation NCLEX-

RN (NGN), which emphasizes clinical judgment as a cornerstone of effective nursing care (Spector et al., 2020). Key drivers of these adaptations include evolving student diversity, adopting concept-based curricula, and meeting CASN Accreditation Standards.

Next Generation NCLEX-RN

On April 1, 2023, the National Council of State Boards of Nursing (NCSBN) introduced the NGN to enhance the assessment of nursing candidates' clinical judgment and decision-making skills through innovative item types (National Council of State Boards of Nursing [NCSBN], n.d.-b). Chu et al. (2023) and Rapanta et al. (2020) note that this advancement requires faculty to develop expertise in online pedagogy and leverage technological tools, such as computer-adaptive quizzes and NCLEX-RN preparation courses.

In response to the NGN, nurse educators are refining their teaching methods to better prepare students by incorporating active learning strategies, expanding exposure to NCLEX-style questions, utilizing simulation, and investing in faculty development. Gibbons et al. (2023) found that nursing programs employ diverse strategies, such as requiring students to purchase commercial NCLEX-RN preparation resources, administering computer-based exams, and integrating dedicated preparation workshops or courses. Almasloukh et al. (2023) further identified active learning approaches, including case study discussions, concept mapping, computer-assisted learning, and game-based learning, as the most frequently cited educational strategies. Unfolding case studies effectively teach clinical judgment by fostering student-led discussions, promoting critical thinking, and enhancing content mastery. Game-based learning also

contributes positively to the learning environment, as it encourages critical thinking and clinical judgment, aligning with NGN preparation needs (Almasloukh et al., 2023).

Additionally, active learning strategies have demonstrated efficacy in improving student outcomes. In their integrative review, Shatto et al. (2019) highlighted teaching methods such as flipped classrooms incorporating case studies, videos, and interactive quizzes. Notably, students participating in NCLEX-RN review courses utilizing problem-based learning (PBL) achieved higher first-attempt pass rates than those taught through traditional lectures. While this review focused on strategies for the previous NCLEX-RN format, it underscores the value of active learning in fostering success on licensure exams.

Simulation also emerges as a valuable tool for developing clinical judgment. Camp-Spivey et al. (2024) reported that NGN case study simulations yielded positive student and faculty outcomes. Faculty observed students demonstrating clinical judgment in real-time, while students found the simulations helpful in making decisions, understanding content, and applying knowledge.

Furthermore, faculty development is critical in equipping educators to prepare students for the NGN. Davis (2023) found the need for training programs to help faculty build their clinical judgment skills and gain proficiency in teaching these competencies. Faculty must also familiarize themselves with NGN item types and question-writing techniques. Importantly, Davis (2023) identified that some faculty feel underprepared for these changes, highlighting the necessity of additional training and support to implement new teaching and assessment strategies effectively.

Although much of the literature on the NGN originates from the United States, the National Council of State Boards of Nursing (NCSBN, n.d.-a) underscores that the NCLEX-RN exam serves as the entry-to-practice standard in both Canada and the United States. Consequently, these findings are highly relevant to Canadian nursing educators and can inform strategies to enhance student preparedness for the NGN.

The introduction of the Next Generation NCLEX-RN (NGN) underscores the evolving needs in nursing education, requiring educators to adapt their teaching methods to better prepare students for the new focus on clinical judgment and decision-making. Understanding how nurse educators refine their strategies—such as incorporating active learning, simulation, and faculty development—provides valuable insights into how they respond to these changes and enhance student preparedness for licensure exams.

Student Diversity

The increasing diversity of student populations, encompassing varying life experiences, cultures, and language barriers, requires nurse educators to effectively adapt their teaching methods to address individual learning needs (Balcom et al., 2021; Spector et al., 2020). Statistics Canada (2024) found that international students comprise more than 21% of Ontario's college students, with a significant proportion originating from India. This demographic shift underscores the importance of flexible, inclusive teaching strategies that foster equitable learning environments and support the success of students from diverse cultural and linguistic backgrounds.

Cultural safety has also become essential to nursing education, particularly in response to the Truth and Reconciliation Commission (TRC) mandates and the CASN to

integrate Indigenous health perspectives into nursing curricula (CASN, 2024). CASN (2024) identified that 1,022 students self-identifying as Indigenous were enrolled in Canadian baccalaureate nursing programs, reinforcing the need for curricula honoring Indigenous epistemologies and ontologies. Page-Cutrara and Bradley (2020) note that faculty must engage in cultural safety training, critically reflect on personal biases, and design courses integrating Indigenous knowledge systems to foster culturally safe practices and prepare students to provide care in diverse communities.

Research demonstrates that nurse educators modify their teaching strategies to support diverse student needs. Sommers and Bonnel (2020) found that personalized approaches, such as one-on-one exam reviews, identifying students' unique learning barriers and styles, goal setting, and fostering self-confidence, significantly enhanced student engagement and performance. Active teaching strategies, including culturally relevant assignments, case studies, and simulations, were integral to creating meaningful learning experiences. A participant in Sommers and Bonnel's (2020) study shared how culturally mediated instruction connected theoretical nursing concepts to students' lived experiences. For instance, discussions on conditions such as stroke encouraged students to share their cultural understandings and personal encounters, enriching classroom dialogue and promoting knowledge retention.

Reverse mentoring has also emerged as a powerful tool in bridging cultural and generational gaps within nursing education. In a literature review, Williams (2023) found that reverse mentoring, where students mentor faculty, effectively deconstructs biases, bridges generational divides, and enhances faculty competency in new teaching methods.

This strategy has been shown to foster mutual learning and ensures that educators remain attuned to the diverse needs of their students while promoting intergenerational collaboration.

While these findings highlight innovative approaches to addressing diversity in nursing education, there is a pressing need for further research to explore how nursing faculty are meeting the needs of increasingly diverse student populations. Current studies provide valuable insights but lack a comprehensive examination of how these strategies are implemented and sustained across diverse educational contexts. Expanding research in this area will enhance understanding of effective practices, ultimately enabling nursing education to evolve in ways that better prepare students for the complexities of modern healthcare.

Concept-Based Curriculum (CBC)

Nursing educators increasingly adopt concept-based learning (CBL) to foster a deeper understanding of enduring concepts central to nursing practice and clinical decision-making. Solheim et al. (2021) found that CBL helps students integrate and apply theoretical knowledge across diverse clinical contexts. This shift from content-heavy instruction to a more integrated and learner-centered approach aligns with findings by Balcom et al. (2021), who found the potential of concept-based curricula (CBC) to promote the transfer and application of knowledge, preparing students for varied clinical settings.

Active learning strategies play a pivotal role in the successful implementation of CBC. Almasloukh et al. (2023) scoping review determined that concept-based teaching

enhances students' understanding of complex nursing concepts by encouraging critical thinking and active engagement. Common active learning methods associated with CBC include concept mapping, simulation, group learning, and unfolding case studies (Almasloukh et al., 2023; Pyatt, 2021). For instance, Almasloukh et al. (2023) found that unfolding case studies are particularly effective in teaching clinical judgment, as they encourage rich discussions, foster critical thinking, and improve student performance on standardized exams. Concept mapping is frequently cited as a strategy to enhance students' ability to prioritize nursing care and develop critical thinking and clinical judgment skills (Almasloukh et al., 2023).

While the pedagogical benefits of CBC are well-documented, transitioning to this approach requires significant preparation and adaptation. Pyatt (2021) revealed the extensive planning involved in implementing CBC within a new prelicensure nursing program, noting that initial curriculum development spanned 12 to 15 months, with full implementation occurring three years after planning began. Such efforts underscore the complexity and time-intensive nature of CBC transitions.

Educators also encounter significant challenges during this transition. Balcom et al. (2021) examined the experiences of nurse educators adapting to a competency-based curriculum (CBC) at an eastern Canadian university and found that the shift had profound effects on their professional identities and workloads. In this qualitative study involving 14 nurse educators, participants reported feeling like novices as they navigated the demands of the new curriculum, often questioning their competence and struggling to master unfamiliar teaching methodologies. The transition required educators to learn

innovative instructional techniques and develop new course materials, contributing to feelings of overwhelm. Balcom et al. (2021) emphasized the critical need for robust institutional support, including access to resources, professional development opportunities, and cohesive leadership strategies, to help mitigate these challenges.

Similarly, León et al. (2023) investigated the experiences of clinical nursing faculty in New Mexico transitioning to CBC. This qualitative study involving nine participants found that clinical faculty required additional resources and professional development to adapt their teaching methods to align with CBC principles. The findings underscore that leadership support is critical to help educators overcome the challenges of implementing CBC.

The transition to Competency-Based Education (CBE) represents a significant shift in nursing education, requiring educators to adapt their teaching methods to foster critical thinking, active learning, and clinical judgment. Understanding how nurse educators are navigating these changes, including the need for faculty support and institutional commitment, is crucial for identifying how they are evolving their practices to meet the demands of this transformative pedagogical approach.

CASN Accreditation Standards

The CASN accreditation standards are pivotal in shaping nurse educators' teaching methodologies and influencing curriculum design, faculty development, and assessment strategies across Canada. These standards emphasize a student-centered learning approach to develop critical thinking and clinical judgment skills in nursing students (CASN, 2022). By aligning with the requirements of the NCLEX-RN exam,

which evaluates these competencies, CASN standards encourage nurse educators to integrate active learning strategies into their teaching.

Gibbons et al. (2023) reported that 85.7% of Canadian nursing programs implement one to three strategies to prepare students for the NCLEX-RN, such as utilizing commercial products, computer-based exams, and specialized NCLEX-RN preparation courses. Similarly, Shatto et al. (2019) found various active learning methods such as problem-based learning, case studies, gaming, collaborative testing, flipped classrooms, and Think-Pair-Share activities are effective tools for enhancing critical thinking and supporting student success on the NCLEX-RN. These findings underscore the alignment between CASN standards, innovative teaching strategies, and the competencies assessed in the licensure exam.

In addition to promoting active learning, CASN (2022) standards highlight the significance of faculty development in implementing new teaching and learning strategies. Faculty are encouraged to pursue ongoing education in nursing pedagogy, adult learning principles, and innovative instructional techniques. Almasloukh et al. (2023) conducted a scoping review of strategies supporting NCLEX-RN preparation, identifying faculty coaching and support as central to improving teaching effectiveness and fostering student achievement. These findings suggest that investing in faculty development aligns with CASN's vision of preparing students for the evolving demands of nursing practice and licensure exams.

CASN (2022) standards also advocate for diverse and comprehensive assessment methods to evaluate student learning effectively. Programs are encouraged to incorporate

both formative and summative assessments, particularly on measuring clinical judgment. Lee and Son (2024) demonstrated the efficacy of problem-based learning integrated with the nursing process, significantly enhancing nursing students' clinical reasoning, communication skills, and competency. Furthermore, Buckner et al. (2024) conducted a literature review on concept-based curricula (CBC) and found promising outcomes regarding critical thinking and clinical judgment despite inconclusive results on traditional metrics. These studies highlight a shift toward assessment practices that reflect CASN's focus on clinical judgment and align with the expectations of the NCLEX-RN.

Finally, CASN accreditation standards emphasize the importance of measurable student outcomes, including NCLEX pass rates, retention rates, and employer satisfaction, as indicators of program success (Spector et al., 2020). To meet these benchmarks, institutions must prioritize faculty expertise and satisfaction. CASN advocates for mentorship programs, professional development workshops, and comprehensive orientation processes to support faculty adapting to curricular changes (Boamah et al., 2021; CASN, 2022). Page-Cutrara and Bradley (2020) and Boamah et al. (2021) identified the importance of mentorship programs and faculty workshops to ensure a smooth transition and maintain program quality.

The CASN accreditation standards are key in shaping nurse educators' teaching practices by promoting a student-centered approach that emphasizes critical thinking and clinical judgment. These standards, which align with NCLEX-RN competencies, drive educators to incorporate active learning strategies and invest in faculty development, ultimately supporting the evolving needs of nursing education and licensure preparation.

Understanding how nurse educators adapt their teaching methods to these standards provides insight into how they meet the demands of accreditation requirements and the changing healthcare landscape.

Strengths and Limitations

The literature demonstrates a robust and expanding body of research on active learning strategies and their efficacy in fostering critical thinking and clinical judgment, skills essential for success on the Next Generation NCLEX (NGN) and for effective nursing practice (Almasloukh et al., 2023; Gibbons et al., 2023; Shatto et al., 2019). Additionally, the increasing integration of simulation in nursing education is consistently highlighted as an effective pedagogical tool for developing clinical judgment, with studies underscoring its relevance and applicability (Camp-Spivey et al., 2024; Kerns & Wedgeworth, 2024; Legge et al., 2024). Faculty development is another central theme, with research emphasizing the critical role of training for nurse educators transitioning to innovative teaching strategies, including NGN-style question development and advanced assessment methods (De Lima et al., 2023; Gaudet et al., 2022; Gibbons et al., 2023).

The adoption of concept-based curricula (CBC) is widely discussed, with studies identifying its potential to improve critical thinking and facilitate the transfer of knowledge across diverse clinical contexts (Buckner et al., 2024; León et al., 2023; Owens & Christian, 2021; Solheim et al., 2021; Wilhelm et al., 2019). Furthermore, the literature recognizes the growing diversity of nursing students and the necessity for nurse educators to employ teaching strategies that accommodate varied academic backgrounds, life experiences, and learning styles. Research in this area highlights the importance of

culturally responsive and inclusive teaching practices (Balcom et al., 2021; Page-Cutrara & Bradley, 2020).

Despite these strengths, several limitations are evident within the literature. A significant portion of the research on NGN preparation is conducted in the American context, leaving a gap in understanding the applicability of these findings to Canadian nursing education. The lack of Canadian-specific studies limits insights into the effectiveness of teaching and assessment strategies within the Canadian healthcare system's context and the Canadian NCLEX-RN's unique requirements (Gibbons et al., 2023).

Moreover, much of the existing research focuses on short-term outcomes, such as test scores or student satisfaction improvements, while neglecting the long-term impacts of teaching innovations on nursing education and practice. This lack of longitudinal studies restricts the ability to assess the sustained effectiveness of these strategies. While the literature provides valuable insights into various teaching methodologies and curriculum models, it often lacks practical guidance on implementing and sustaining these changes within nursing programs. Specific gaps exist in research addressing implementation strategies, faculty support, and the resources necessary for successful curriculum reform (De Lima et al., 2023; Solheim et al., 2021).

These limitations show the need for future research to bridge gaps in Canadian-specific evidence, explore the long-term effects of innovative teaching practices, and provide actionable recommendations for implementing and sustaining curricular changes.

By addressing these areas, the literature can better support the evolving needs of nursing education.

Summary and Conclusions

The literature review underscores the significant shifts in nursing education driven by technological advancements, evolving pedagogical approaches, and changing accreditation standards. While these factors have led to widespread adaptations in teaching methods, there remains a notable gap in understanding how nurse educators in Northern Ontario respond to these changes. This study seeks to bridge this gap by exploring the experiences of nurse educators in this underrepresented region and examining how they adapt their teaching methods to meet the evolving demands of nursing education.

To achieve this, a qualitative phenomenological approach was employed, allowing for an in-depth exploration of the lived experiences of these educators. Using semistructured interviews and guided by Lewin's Change Theory, this research aimed to uncover the strategies, challenges, and facilitators that shape their adaptation processes. The following chapter outlines the methodological framework, detailing the research design, participant selection, data collection, and analysis procedures, ensuring a rigorous and comprehensive examination of this critical issue in nursing education.

Chapter 3: Research Method

Introduction

The purpose of this study was to explore the experiences of nursing educators in Northern Ontario as they adapt their teaching methods to meet evolving demands in nursing education. Specifically, this research investigated how educators integrate technological advancements, implement shifting pedagogical approaches, and respond to changing student needs and accreditation standards. By adopting a phenomenological approach, I sought to uncover the lived experiences of nursing faculty and the meanings they ascribe to their adaptations within an evolving educational landscape.

This chapter outlines the research design and rationale, detailing the selection of a phenomenological qualitative approach to explore nursing educators' experiences adapting to evolving educational demands. In the role of the researcher section, I discuss reflexivity, positionality, and strategies to minimize bias. The methodology section covers participant selection, including eligibility criteria and recruitment strategies, followed by data collection methods, which include semistructured interviews, field notes, and a research journal. The data analysis plan describes the use of Saldaña's coding framework and Lewin's change theory to identify themes and patterns. To ensure trustworthiness, the chapter outlines validation strategies, including credibility, transferability, dependability, and confirmability. Finally, the ethical procedures section details Institutional Review Board (IRB) approval, participant confidentiality, and informed consent measures, ensuring compliance with ethical research standards.

Research Design and Rationale

The primary research question guiding this study was the following: What are the experiences of Northern Ontario nurse educators with adapting their teaching methods to meet evolving demands in nursing education? In this inquiry, I sought to explore the central phenomenon of adaptation in teaching methods among nursing educators, focusing on how these professionals respond to the dynamic landscape of nursing education. The central concepts of this study encompass the integration of technological advancements, the implementation of shifting pedagogical approaches, and the consideration of the changing needs of students alongside accreditation standards. By examining these adaptations, I aimed to uncover the lived experiences of nursing educators and the meanings they ascribe to their practices within a rapidly evolving educational context.

The specific research design included a phenomenological approach to address the research questions in this qualitative study. Researchers applying phenomenology seek to understand individuals' lived experiences and how they make sense of specific phenomena (Patton, 2015). In this study, the focus was on understanding how nursing educators perceive and respond to the changing demands in nursing education, including technological advancements, shifting pedagogical approaches, and the needs of students and accreditation standards. This approach was ideal for this research for several reasons. First, phenomenology emphasizes the subjective experiences of individuals, allowing the study to deeply explore how nursing educators personally navigate the challenges and changes in their teaching practices (Patton, 2015). By focusing on their lived experiences,

the study uncovered how educators emotionally, cognitively, and practically adapted to meet these evolving demands, providing a richer understanding of their professional journey.

Phenomenology invites participants to share their experiences in their own words, ensuring that the study captures an authentic and comprehensive representation of their experiences (Patton, 2015). This is essential for understanding not just the actions taken by nursing educators, but also the motivations that shaped those actions. By giving voice to their stories, the research revealed the underlying themes and patterns that guided their adaptations, contributing to a deeper understanding of how educators responded to the evolving landscape of nursing education.

A phenomenological approach is particularly suited to studying adaptation and change. As nursing educators in Northern Ontario have had to adjust their teaching methods to align with evolving demands, phenomenology allowed the study to capture the meaning they attach to these changes. It provided valuable insights into how nursing educators have navigated shifts in teaching methods, technological integration, and other evolving factors within nursing education.

Role of the Researcher

Understanding the role of reflexivity and positionality is critical in qualitative research, as it allows researchers to examine how their experiences, perspectives, and contexts shape their approach to a study (Ravitch & Carl, 2019). In this section, I explore how my professional background, cultural connections, and personal teaching experiences influenced the lens through which I approached this research. By

acknowledging these factors, I aimed to navigate potential biases and ensure a thoughtful and equitable examination of the adaptation of pedagogical strategies in postpandemic nursing education.

Reflexivity

Reflexivity is the active process of critically examining one's beliefs, experiences, and biases to understand how they influence research, teaching, or practice. It involves continuous self-awareness and reflection to ensure objectivity, adaptability, and deeper insight into one's role and impact in a given context (Ravitch & Carl, 2021). Through reflexivity, I acknowledged that my experiences with online teaching, challenges, and growing interest in integrating technology had significantly shaped my perspectives on adapting pedagogical strategies postpandemic. Navigating the abrupt transition to virtual learning reinforced my belief in the importance of flexibility, student engagement, and technological literacy in nursing education. The need to balance interactive, hands-on learning with digital tools prompted me to critically evaluate my teaching methods and explore innovative strategies to support students effectively. My evolving teaching philosophy, rooted in the belief that nursing education must continuously adapt to societal and technological changes, drove my commitment to this research. The pandemic underscored the necessity of technology in bridging educational gaps, prompting me to explore how these tools can be sustainably incorporated into nursing curricula.

My desire to learn from colleagues' experiences, both their successes and struggles, influenced my approach to this study. By engaging with fellow educators and examining diverse perspectives, I aimed to comprehensively understand how nursing

education has transformed and what lessons can be applied moving forward. My reflexive stance allowed me to recognize my positionality in this research, ensuring that I remained open to multiple viewpoints and critically assessed my assumptions (Ravitch & Carl, 2021). This introspective process enhanced the depth of my inquiry and strengthened my ability to contribute meaningfully to nursing education.

Positionality

Positionality refers to recognizing how one's background, experiences, beliefs, and social identity influence one's perspectives, research, and interactions (Ravitch & Carl, 2021). It acknowledges that personal and professional contexts shape how individuals interpret and engage with the world, emphasizing the importance of self-awareness and critical reflection in maintaining objectivity and ethical integrity (Ravitch & Carl, 2021). I teach as a faculty member in a stand-alone Honors BScN program at a Northern Ontario institution and also collaborate with another Northern Ontario institution, where I am an alumnus. My educational journey began at one of these institutions, where I earned my BScN, establishing a strong personal and professional connection to both organizations.

Having been born and raised in a small city in Northern Ontario, I deeply understand its cultural dynamics. This region, with its proximity to Indigenous reserves and a significant population of international students, is a vibrant blend of cultures. This multicultural environment profoundly influences my teaching philosophy, ensuring that inclusivity and cultural competence are central to my approach. My positionality is shaped by my direct experiences with these educational institutions in Northern Ontario

and my connection to the broader community. These relationships give me a nuanced perspective on the local context and the diverse student body I serve. Acknowledging my role as an insider within these educational and community spaces, I remain committed to navigating my responsibilities with an awareness of potential biases and a focus on fostering an equitable and supportive learning environment for all students.

Bias and Positionality

According to Ravitch and Carl (2021), examining biases is an ethical responsibility in qualitative research. Researchers must actively self-reflect to understand and confront the values and beliefs that shape their decisions and approaches. By acknowledging these influences, they can maintain transparency, enhance credibility, and ensure a more ethical and rigorous research process.

To address potential biases and positionality, I remained aware of how my personal experiences, teaching philosophies, and geographical context may influence my interpretations. Acknowledging these factors and actively seeking to understand the perspectives of other nursing educators through open dialogue and reflection was essential. Additionally, maintaining transparency about my positionality and its potential impact on the research process was vital for ensuring rigor and trustworthiness.

Other Ethical Considerations

I recognized the ethical considerations associated with offering a gift card as an appreciation for participants' time. While providing a small token of appreciation is a common practice in qualitative research, it is essential to ensure that this gesture does not compromise the voluntary nature of participation, introduce undue influence, or create

confidentiality risks. To mitigate the risk of coercion, I clearly communicated in the informed consent process that participation in this study was entirely voluntary and that the gift card served solely to acknowledge participants' time and contributions rather than as a form of compensation. The amount selected was modest ($15) to prevent undue inducement while demonstrating appreciation.

Confidentiality remains a critical ethical consideration when providing a gift card, as its distribution may require collecting participants' personal information. To address this, I implemented a secure and confidential method of distribution that minimized the collection of identifying data. Specifically, I used electronic gift cards delivered via email; however, to protect participants' anonymity, I did not collect or store any personal identifiers beyond the email address necessary for distribution. To further safeguard confidentiality, I used a third-party service allowing direct gift card distribution without linking the recipient's email to their survey responses or interview data. Additionally, I deleted any records of email addresses immediately after the gift card had been sent, ensuring that no identifying information was retained within the study records. These measures helped uphold participant anonymity while maintaining the integrity of the research process.

I took steps to ensure that participants did not feel obligated to respond in a particular manner due to the incentive. In both verbal and written communication, I emphasized that the study sought honest and authentic reflections and that receiving the gift card was not contingent on specific responses. In alignment with ethical research practices, I adhered to the guidelines set forth by my institution's IRB and obtained

formal approval for the use of an appreciation incentive. By carefully considering these ethical implications, I upheld the integrity of the research process while fostering a respectful and ethical engagement with participants.

Methodology

Participant Selection Logic

After I had obtained IRB approval (approval # 05-12-25-1167124), the sampling strategy employed in this study was purposive sampling, which was justified as it allowed for selecting participants who possessed specific characteristics relevant to the research question (Ravitch & Carl, 2019). Purposive sampling is particularly effective in qualitative research, as it enables the researcher to focus on individuals with rich, relevant experiences who can provide in-depth insights into adapting teaching methods (Ravitch & Carl, 2019).

To ensure the eligibility of participants in this study, specific inclusion criteria were met. First, participants had to be full-time nursing faculty members who were currently teaching at least one course within a BScN program at a postsecondary institution located in Northern Ontario. Additionally, they had to have at least 3 years of academic teaching experience, including synchronous instruction. This threshold of full-time teaching experience in a BScN program was crucial because it allowed faculty members to develop and implement various teaching methods, adapt to technological advancements and accreditation changes, and demonstrate a commitment to ongoing professional development. With at least 3 years of experience, faculty members would have had the opportunity to refine their pedagogical approaches, integrate new

technologies into their teaching practices, and engage in continuous learning to stay updated with the latest educational standards. This level of experience enabled them to provide insightful and informed responses about the adaptations they had made in their teaching methods. The recent release of the Next Generation NCLEX in June 2023 introduced another critical factor. To fully understand the impact of this new examination format on teaching methods, participating faculty members must have had teaching experience both before and after its implementation. This dual perspective allowed them to reflect on the changes they had made in their teaching approaches in response to the new NCLEX requirements, providing a comprehensive view of how their methods had evolved. By ensuring that participants met these criteria, the study gathered rich, nuanced data that captured the full scope of adaptations made by nursing faculty in response to evolving educational demands.

In addition, nurse educators had experience teaching in a synchronous environment that involved real-time interaction between the learners and the instructor, whether in a physical classroom or online platforms (Suliman et al., 2022). Synchronous in-person or online teaching allows for real-time interaction between instructors and students. Studies have shown that synchronous teaching, particularly e-learning, is more effective in specific domains, such as reactions to learning and learner–learner interactions, than asynchronous methods (Jin & Kim, 2024; Suliman et al., 2022). By prioritizing synchronous teaching in my study, I deeply analyzed how educators had adapted to meet evolving needs while preserving nursing education’s interactive, immediate, and practical nature. Participants' eligibility was confirmed through

verification methods such as institutional faculty directories and the CNO “Find a Nurse” website. These sources ensured that all participants were professionally affiliated with accredited nursing programs in Northern Ontario.

This study excluded participants if they did not meet the criteria for professional affiliation with an accredited nursing program in Northern Ontario, as verified through institutional faculty directories or the CNO "Find a Nurse" website. Individuals without formal teaching or faculty positions within a nursing program, such as practicing nurses, administrators, or students, were also excluded. Furthermore, educators who were not currently or previously employed in Northern Ontario were not eligible to participate, as the study aimed to examine the experiences of nursing educators within this specific geographic region. Given the qualitative nature of the study, individuals who were unable or unwilling to participate in an interview were excluded, as their absence would have limited the depth and richness of the data collected. Additionally, participants needed to have changed their course delivery or teaching methods over the years to ensure that they were able to provide meaningful insights into pedagogical changes and instructional strategies. Educators who exclusively taught in an asynchronous format were not included, as I sought to explore experiences that involved real-time interactions with students.

I aimed to recruit between six and 12 participants, a number that is deemed appropriate for achieving data saturation (Guest et al., 2020). According to Guest et al. (2020), data saturation can often be achieved with approximately six to 12 interviews, making this sample size appropriate for the scope of this qualitative study. Additionally,

data saturation occurs when no new themes or insights emerge from the data, indicating that the sample size is sufficient to capture the breadth and depth of the experiences being studied (Guest et al., 2020). To ensure data saturation, interviews were continuously analyzed throughout the data collection. If saturation had not been achieved within the initial sample, additional participants were to be recruited until no new patterns, themes, or perspectives emerged. This iterative process involved ongoing coding and thematic analysis to assess whether further data collection was necessary. Furthermore, member checking and peer debriefing were utilized to confirm that the themes identified accurately reflect participants' experiences and that saturation had been sufficiently reached.

I used social media platforms relevant to nursing education to recruit participants, including Facebook, Instagram, and LinkedIn. A recruitment poster (Appendix A) was used, which included a QR code linked to an online questionnaire, allowing potential participants to assess their eligibility and consent to being contacted. The poster was shared across my personal social media accounts (Facebook, Instagram, and LinkedIn) and distributed within my network, encouraging recipients to share within their network. Additionally, I intended to post the recruitment materials in relevant groups, including Ontario College Union (OPSEU) and University Union (OCUFA) faculty groups, to reach a broader and more targeted audience; however, privacy restrictions within these groups prohibited it. The union groups that I could not post to included “Ontario College Faculty” and “Ontario Confederation of University Associations (OCUFA) groups on Facebook. I posted recruitment details on the “OntarioNurses United” Facebook group,

which included members who are nurses in Ontario. This approach maximized the potential recruitment pool while ensuring ethical recruitment practices. I used snowball sampling, asking initial participants to refer other qualified colleagues.

The participant recruitment process began with an initial outreach, which included emailing nursing educators who have agreed to be contacted (see Appendix B). The email contained the informed consent form along with a link to schedule an interview. The consent form outlined the interview procedures, potential risks and benefits, confidentiality measures, and participants' rights, emphasizing the voluntary nature of participation and the option to withdraw at any time without penalty. Participants reviewed the informed consent form and consented "yes" on the audio-recorded interview to confirm their understanding and agreement to participate.

At the start of the interview, I verbally reviewed the key aspects of the study, including its purpose, the interview format, confidentiality protections, and the voluntary nature of participation. Participants had the opportunity to ask any questions before confirming their willingness to proceed. Only after this additional confirmation did the interview begin, ensuring that informed consent was ongoing throughout the study.

Participants answered a brief demographic questionnaire, which collected essential details such as age, years of experience, and professional background. Participation in the study was entirely voluntary, and participants were informed that they could refuse to answer any questions and stop the interview at any time. The recruitment process adhered to IRB standards, ensuring ethical participant engagement and compliance with research regulations. All collected data was securely stored in an

encrypted folder on my personal, password-protected laptop to protect participant confidentiality. This structured approach is designed to maximize recruitment reach while maintaining the integrity and ethical standards of the research study.

The relationship between saturation and sample size is critical in qualitative research, as achieving saturation is a key indicator of the adequacy of the sample size (Guest et al., 2020). By carefully selecting participants based on established criteria and employing a purposive sampling strategy, the study aimed to gather rich, meaningful data that reflected the experiences of nursing educators in Northern Ontario, ultimately contributing to a deeper understanding of their adaptations in teaching practices.

Instrumentation

For this study, I conducted in-depth semistructured interviews with nursing educators to explore their experiences adapting teaching methods to meet the evolving demands of nursing education. The primary data collection instrument, the semistructured interview protocol, is a widely accepted qualitative research tool allowing in-depth exploration of lived experiences (Ravitch & Carl, 2021). The semistructured interview format allowed participants to share their experiences while ensuring that key topics related to the research question are addressed. The interview guide was designed to elicit detailed narratives about participants' teaching experiences and adaptations (see Appendix C). The structure of the interview guide draws upon best practices for qualitative research as outlined by Patton (2015), ensuring that the questions are open-ended, straightforward, and designed to elicit rich, descriptive narratives.

To supplement the primary data collection, I utilized field notes and a research journal to document my reflexivity throughout the research process. Field notes, recorded during the interviews, captured the verbal content of discussions, contextual factors, and my immediate impressions (Ravitch & Carl, 2019). These notes enhanced the depth of the data by providing insight into the nuances of participant responses, including tone, pauses, and observable emotional expressions. The use of field notes aligns with qualitative best practices by capturing both verbal and nonverbal participant responses, ensuring a more comprehensive dataset (Ravitch & Carl, 2021).

Additionally, I maintained a research journal as a tool for ongoing self-reflection. I systematically documented my thoughts, feelings, and reactions in this journal throughout data collection and analysis. The research journal provided an additional layer of reflexivity, supporting the credibility and trustworthiness of the study by ensuring transparency in data interpretation. This practice helped me identify potential biases or assumptions that may emerge and assess how these factors influence my interpretation of the data (Ravitch & Carl, 2021). By consistently reflecting on my role and positionality, I maintained transparency and ensured a rigorous, unbiased approach to the study.

To ensure the sufficiency of these data collection instruments in addressing the research questions, I triangulated data from multiple sources; interview transcripts, field notes, and the research journal, to enhance the credibility and dependability of the findings (Ravitch & Carl, 2021). The semistructured interview format allowed for flexibility while maintaining alignment with the research objectives, ensuring that key themes related to adapting teaching methods in nursing education were thoroughly

explored. Including field notes and a research journal provided additional layers of contextual understanding and researcher reflexivity, enhancing the richness and depth of the data. This study generated a robust and comprehensive dataset by employing multiple data collection methods, effectively addressing the research questions and contributing valuable insights into nursing educators' experiences adapting to evolving educational demands.

Procedures for Recruitment, Participation, and Data Collection

This study employed multiple data collection instruments, including semistructured interviews, field notes, and a research journal, to explore the experiences of nursing educators adapting their teaching methods to evolving educational demands. Data were collected from nursing educators who met specific inclusion criteria, which included full-time faculty members teaching in an accredited BScN program at a postsecondary institution in Northern Ontario, with a minimum of three years of synchronous academic teaching experience. Educators who exclusively taught in an asynchronous format, those who did not hold a formal teaching position in a nursing program, and individuals without experience adapting their teaching methods to meet evolving educational demands were excluded. I was responsible for all data collection activities, ensuring consistency and methodological rigor throughout the study.

The semistructured interviews served as the primary data collection instrument, allowing participants to share their experiences in-depth while ensuring alignment with the research questions. Each participant engaged in a single interview, lasting approximately 45 to 60 minutes, conducted via Zoom using a personal account I

purchased. With participant consent, the interviews were recorded using Zoom's audio recording feature to capture detailed verbal responses. After the meeting, only the automatically generated audio file (M4A format) was retained. The audio file was transcribed verbatim using Zoom's integrated transcription tool for an initial draft, followed by manual verification to ensure accuracy. Field notes were taken during each session to complement the interview data to capture contextual elements and participant engagement, providing a richer understanding of faculty adaptation experiences. These notes were handwritten and later organized and manually coded using Saldaña's (2021) coding framework to ensure a systematic and rigorous data analysis. Additionally, I maintained a research journal throughout the data collection and analysis process, documenting personal reflections, emerging themes, and potential biases. This journal served as a tool for reflexivity and transparency, ensuring methodological rigor and trustworthiness in data interpretation.

To establish content validity, the interview protocol underwent review by my committee, who assessed whether the questions comprehensively addressed the research objectives. If the recruitment process were to yield an insufficient number of participants, several strategies were to be employed, including extending the recruitment period, utilizing snowball sampling, leveraging institutional faculty networks, and posting recruitment messages in academic and nursing education professional groups. However, a sufficient number of participants were recruited without implementing these additional strategies.

After each interview, participants underwent a debriefing process, during which they were thanked for their time, provided an opportunity to ask questions, and invited to clarify or expand on any of their responses. To enhance the credibility and dependability of the findings, participants also reviewed their interview transcripts (member checking) and provided feedback on whether their experiences were accurately represented. Participants received a $15 preloaded Amazon gift card as a token of appreciation for their time and contribution to the study.

Confidentiality was strictly maintained throughout the study. All recorded interviews, transcripts, field notes, and research journal entries were stored on a password-protected, encrypted device. Pseudonyms were assigned to all participants to protect their identities, and data will be retained according to the IRB requirements before being permanently deleted. Upon completion of the study, participants who opted in will receive a summary of key findings, ensuring transparency and engagement with the research outcomes.

These data collection procedures were designed to be methodologically rigorous, transparent, and replicable for future researchers. Integrating multiple data sources including semistructured interviews, field notes, and a research journal, ensured triangulation, enhancing the study's findings' trustworthiness, depth, and credibility.

Data Analysis Plan

In this study, I employed Saldaña's (2021) descriptive coding process to systematically analyze qualitative data, ensuring alignment with Lewin's Change Theory. The data analysis followed a structured approach using first cycle and second-cycle

coding to categorize participant responses and identify patterns in how BScN nurse educators in Northern Ontario adapted their teaching methods. To ensure a comprehensive understanding of participants' experiences, each data source, including semistructured interviews, field notes, and the research journal, were manually coded. This approach allowed me to systematically explore the challenges, adaptations, and strategies used by nursing educators in response to evolving educational demands.

During the first coding cycle, I applied descriptive coding, which involved assigning labels to summarize the main topics in the data (Saldaña, 2021). This provided a broad organizational framework for categorizing participants' experiences. I also used In Vivo coding, which captured participants' exact words or phrases, ensuring that their authentic voices are preserved in the analysis (Saldaña, 2021). This is particularly useful in qualitative research focusing on lived experiences. Additionally, process coding, which identified specific actions and sequences of behavior, was applied to recognize key adaptations made by educators (Saldaña, 2021). This method was essential in identifying the strategies educators use to navigate changes in nursing education.

Following first-cycle coding, I conducted second-cycle coding to refine, categorize, and establish relationships between themes. Pattern coding using thematic analysis was used to group similar first-cycle codes into broader thematic categories (Saldaña, 2021). Thematic analysis focuses on identifying overarching themes within the data, and were employed to extract key insights (Saldaña, 2021). These themes were analyzed using the constructs of Lewin's Change Theory, mapping how educators navigated the unfreezing, moving, and freezing stages of change in adapting their

teaching methods. Field notes were analyzed alongside interview transcripts to identify contextual elements that provide deeper insights into participant experiences. The research journal was used throughout the analysis to document the researcher's reflections, methodological decisions, and potential biases, ensuring transparency and rigor in interpreting findings.

By implementing Saldaña's (2021) structured coding approach, I ensured a rigorous and methodical data analysis process that aligns with Lewin's Change Theory. The iterative nature of this approach allowed me to refine findings continuously, ensuring that participant experiences were accurately represented. The manual coding of interviews, field notes, and the research journal provided a holistic understanding of the evolving landscape of nursing education in Northern Ontario, highlighting the challenges and successes of adapting teaching methods in response to change.

Discrepant case responses, if found, that did not align with the dominant themes were carefully examined rather than excluded (Ravitch & Carl, 2021). These cases would be manually coded and analyzed to determine whether they indicate alternative perspectives or significant variations. If discrepancies suggested different patterns, they would be documented separately and discussed in the final analysis to provide a more comprehensive understanding of the diversity of faculty experiences. By employing manual coding techniques, this study ensured a methodical and transparent approach to analyzing data while maintaining alignment with the research questions and theoretical framework.

Issues of Trustworthiness

Strategies were employed to establish credibility, transferability, reliability, and confirmability to ensure the rigor and credibility of this qualitative study. These strategies aligned with the best practices in qualitative research and enhanced the trustworthiness of the findings.

Credibility in qualitative studies refers to the trustworthiness and accuracy of the research findings, ensuring they accurately reflect participants' experiences and perspectives (Ravitch & Carl, 2021). Credibility was maintained through triangulation, prolonged engagement, member checking, saturation, reflexivity, and peer review. Triangulation was achieved by incorporating multiple data sources, including semistructured interviews, field notes, and a research journal, ensuring a comprehensive understanding of nursing educators' experiences. This multisource approach strengthened the study's internal validity by corroborating findings across different data types (Ravitch & Carl, 2021). Prolonged engagement with participants enhanced credibility by allowing sufficient time to build rapport and obtain in-depth, reflective responses. Member checking was conducted by sharing summaries of key findings with participants to verify the accuracy of interpretations and allow them to clarify or elaborate on their responses (Ravitch & Carl, 2021). To ensure data saturation, recruitment continued until no new themes emerged, strengthening confidence in the completeness of the findings. Reflexivity was maintained through continuous self-reflection in a research journal, where the researcher documented biases, assumptions, and potential influences on data interpretation (Ravitch & Carl, 2021). Finally, peer review was conducted by consulting

with my committee to evaluate coding decisions and emerging themes, ensuring the analysis remains objective and methodologically rigorous.

Transferability in qualitative research refers to the extent to which study findings can be applied or generalized to other contexts, settings, or populations (Ravitch & Carl, 2021). To establish transferability, the study employed thick description and variation in participant selection to enhance the applicability of findings beyond the study setting. Thick description was achieved by providing detailed accounts of participant experiences, institutional contexts, and the nuances of faculty adaptation processes. This level of contextual depth allows readers to determine whether the findings apply to their educational settings (Ravitch & Carl, 2021). Additionally, variation in participant selection was ensured by recruiting educators from multiple postsecondary institutions in Northern Ontario, representing different years of teaching experience and diverse professional backgrounds. This sampling diversity enhanced the findings' broader relevance, supporting their potential transferability to similar academic settings.

Dependability in qualitative research refers to the consistency and stability of findings over time (Ravitch & Carl, 2021). It ensures that the research process is logical, well-documented, and traceable, allowing others to understand how conclusions were reached (Ravitch & Carl, 2021). Auditing trails and triangulation addressed dependability, ensuring consistency and transparency in data collection and analysis (Ravitch & Carl, 2021). An audit trail documented all research decisions, methodological choices, coding procedures, and data analysis steps to allow future researchers to replicate the study following the same procedures. This process ensures that findings are

not based on arbitrary decisions but are systematically derived from the data (Ravitch & Carl, 2021). Triangulation strengthens dependability by cross-checking findings from semistructured interviews, field notes, and the research journal to identify consistent patterns and themes. The study ensures that findings remain stable and reliable across different perspectives by utilizing multiple data sources (Ravitch & Carl, 2021).

Confirmability in qualitative research refers to the degree to which findings are shaped by the participants' experiences rather than the researcher's biases or assumptions. It ensures objectivity and neutrality by maintaining transparency in data collection, analysis, and interpretation (Ravitch & Carl, 2021). Confirmability was established through reflexivity, ensuring that findings represent participants' perspectives rather than researcher bias (Ravitch & Carl, 2021). Reflexivity was maintained by documenting my biases, assumptions, and interpretive decisions throughout data collection and analysis in a research journal. This reflective process allowed continuous self-evaluation, minimizing potential subjectivity in interpreting the data (Ravitch & Carl, 2021).

This study established trustworthiness, transparency, and methodological rigor by implementing these rigorous validation strategies, ensuring its findings are credible, transferable, dependable, and confirmable. These measures enhanced confidence in the study's conclusions and contributed to the broader field of nursing education research.

Ethical Procedures

IRB approval was obtained before initiating the study. The IRB application outlined the study's objectives, methodology, and participant protections. Once approval was secured, I included the IRB approval number in all related documentation.

Ethical concerns related to recruitment were addressed through a voluntary, transparent, and noncoercive process. Participants were recruited via social media platforms without any direct pressure to participate. Recruitment materials clearly outlined the study's purpose, inclusion criteria, and participant rights. Individuals who expressed interest and met the inclusion criteria were invited to provide their email address. Informed consent was then provided via email, allowing participants to review a detailed consent form that described the study's objectives, the voluntary nature of participation, confidentiality safeguards, and the right to withdraw at any time without penalty. Consent was confirmed with a "yes" response at the time of the interview.

During data collection, I took steps to protect participant privacy and confidentiality. Since I am a faculty member in nursing education, I ensured that no conflicts of interest influence participation. If any potential participants were any of my colleagues, I emphasized voluntary participation and ensured that responses remained confidential. I ensured that all collected data remained confidential and were not be linked to participants' identities. While anonymous participation is impossible due to the informed consent process, I de-identified all data using unique participant codes instead of names. Any personal identifiers were removed during transcription and analysis. To protect confidential data, all digital records were stored in a password-protected

electronic database, and physical documents were be stored in a locked cabinet in a secure location. Only I have access to the data. Data were not be shared beyond my committee, and all findings were reported in aggregated form to prevent the identification of individuals.

Data dissemination will be conducted ethically and responsibly. Findings, such as conference presentations and peer-reviewed publications, will be used strictly for research and academic purposes. Participants had the option to request a summary of the study findings. Per ethical research guidelines, data will be securely stored for five years poststudy completion. After this period, all data will be permanently deleted from digital storage, and physical copies (if any) will be shredded to ensure complete disposal.

Given that this study involves colleagues in nursing education, I took additional steps to minimize conflicts of interest by ensuring an equal and noncoercive recruitment process. If a participant felt uncomfortable at any point, they had the option to withdraw without explanation, and their decision would not affect their professional relationships or standing. To acknowledge participants' time and contributions, a modest gift card ($15) would have still been provided as a token of appreciation. However, to uphold ethical research standards and avoid undue influence, the gift card was given regardless of the level of participation and was not contingent on completing the study.

I ensured that the gift card distribution did not compromise confidentiality. Gift cards were sent electronically using a secure method that did not link participants' identities to their responses. Personal information, such as email addresses used for distribution, was not retained beyond the necessary period for sending the gift cards,

further safeguarding confidentiality. By adhering to these ethical procedures, I ensured that this study maintained academic integrity, respected participant autonomy, and upheld ethical research standards, fostering transparency, confidentiality, and respect for all participants involved.

Summary

This chapter provided a detailed overview of the research design and methodology used to explore the experiences of nursing educators in Northern Ontario as they adapted their teaching methods in response to evolving educational demands. The study employed a phenomenological qualitative approach to capture the lived experiences of educators, focusing on integrating technology, shifting pedagogical approaches, and accreditation requirements. The role of the researcher section addressed reflexivity and positionality, acknowledging how professional and personal experiences shape the study while outlining strategies to mitigate bias.

The methodology section described purposive sampling to recruit full-time nursing faculty with at least three years of synchronous teaching experience in a BScN program. Semistructured interviews, field notes, and a research journal were selected to collect data to comprehensively understand participant experiences. Data analysis was structured using Saldaña's coding framework, incorporating descriptive, In Vivo, process, and thematic coding to identify key themes, with Lewin's Change Theory as the guiding analytical framework.

To ensure trustworthiness, the study employed credibility measures such as triangulation, member checking, and peer review, while transferability was supported

through thick descriptions and participant variation. Dependability and confirmability were reinforced through audit trails and reflexivity. Ethical considerations, including IRB approval, participant confidentiality, and voluntary informed consent, were implemented to uphold research integrity.

Chapter 4 will present the study's results by highlighting the key themes and patterns from the participant interviews. These findings will offer a deeper understanding of how nursing educators have adapted to changes in their teaching methods, particularly in response to technological integration, shifting pedagogical approaches, and evolving institutional requirements. By examining these adaptations, the chapter will provide insight into the strategies educators have employed to navigate the challenges and opportunities within the changing landscape of nursing education.

Chapter 4: Results

Introduction

The purpose of this qualitative study was to explore the experiences of Northern Ontario nurse educators in adapting their teaching methods to meet the evolving demands of nursing education. The central research question guiding this study was the following: What are the experiences of Northern Ontario nurse educators with adapting their teaching methods to meet evolving demands in nursing education?

This chapter presents the findings of the study and is organized into several sections. First, the setting and participant demographics are briefly described to provide context for the study. This is followed by a summary of the data collection process, including how participants were recruited and how interviews were conducted. Next, the data analysis procedures are outlined, with an emphasis on the second-cycle coding process and the development of four overarching themes. The chapter also includes a section on evidence of trustworthiness, addressing credibility, transferability, dependability, and confirmability. Finally, the results of the study are presented and are organized thematically. Each theme is supported by direct participant quotations and linked to the study's central research question, providing a rich, in-depth understanding of how nursing faculty in Northern Ontario have navigated change within their teaching practices.

Setting

Participants were recruited via social media, with interested individuals completing a SurveyMonkey screening survey. Of the 259 responses received, six

nursing educators in Northern Ontario were verified through CNO registry and institutional websites. These participants scheduled and completed semistructured Zoom interviews (21–35 minutes) between June 9 and June 19, 2025. To maintain confidentiality, participants used coded display names, and cameras were turned on only for brief introductions before being switched off during the recorded portion. Interviews were recorded, transcribed, member-checked, and supplemented with field notes. Ongoing consultation with the dissertation chair and the use of a research journal enhanced credibility, reflexivity, and transparency.

Several personal, organizational, and technological factors present at the time of the study may have influenced participants' experiences and, consequently, the interpretation of the study results. At a personal level, interviews were conducted near the end of the academic semester, a time typically associated with increased workload, grading responsibilities, and preparation for summer leave. These time constraints may have contributed to participant fatigue or limited their availability and reflective capacity during interviews.

Organizationally, many participants were affected by ongoing budget cuts within the Ontario college and university system, which could have created uncertainty around job security and limited access to professional development resources and teaching tools. These constraints were frequently referenced and may have shaped participants' perceptions of institutional support and their ability to implement and sustain innovative teaching practices.

Technological conditions also influenced the study process. In one instance, a portion of an interview was not recorded due to user error. Field notes taken during the session were added to the transcript, and the participant reviewed and verified the content for accuracy. In another case, poor internet connectivity interrupted the interview, requiring it to be restarted on another device. These disruptions may have caused participant anxiety, disrupted the flow of conversation, and potentially impacted the richness or completeness of the data collected.

Finally, although interviews were conducted via video conferencing to ensure accessibility and geographic reach, cameras were only turned on for brief introductions and turned off during the recordings to prioritize participant comfort. While this decision respected participant privacy, it reduced the level of personalization and limited access to nonverbal communication cues, which may have influenced rapport and data depth. These contextual factors should be considered when interpreting the findings, as they may have influenced both the quality and content of participant responses.

Demographics

A total of six nursing faculty members from three different postsecondary institutions in Northern Ontario participated in this study. All participants identified as female. Teaching experience among participants ranged from approximately 5 to over 17 years, reflecting a broad spectrum of professional expertise and insight into nursing education. Participants represented both college-affiliated (n = 4) and university-affiliated BScN programs (n = 2), providing diverse perspectives on teaching practices and institutional contexts within the region. This variation in institutional affiliation and

experience contributed to a rich understanding of how educators across Northern Ontario have adapted to evolving demands in nursing education.

Data Collection

Following IRB approval, participant recruitment commenced through a multiplatform online strategy. The approved recruitment invitation was posted on my personal social media accounts, including Facebook, Instagram, and LinkedIn. Additionally, I shared the invitation in a publicly accessible Facebook group titled Ontario Nurses United. Due to privacy restrictions and group membership limitations, I was unable to post recruitment materials in faculty-specific groups such as the Ontario College Union (OPSEU), Ontario College Faculty, and the Ontario Confederation of University Faculty Associations (OCUFA) on Facebook.

Interested individuals were directed to complete a brief inclusion criteria screening survey hosted on SurveyMonkey. Recruitment strategies yielded 259 responses from individuals self-identifying as meeting the study criteria. To verify eligibility, I used the CNO Find a Nurse registry to confirm each respondent's licensure and affiliation with a postsecondary institution in Northern Ontario. Only six individuals were verified as actively practicing nursing educators within the targeted region. Further verification was conducted by cross-referencing the faculty lists published on institutional websites to confirm current academic appointments. Individuals who could not be verified via CNO registration or institutional affiliation were excluded from the study.

Eligible participants received a personalized email that included a scheduling link allowing them to select an interview date and time. Upon scheduling, an automated Zoom

link was generated and added to their calendars. A copy of the informed consent form was also provided in advance of the interview for participant review.

Six interviews were conducted between June 9 and June 19, 2025, with participants representing college- and university-affiliated BScN programs. All interviews were conducted via Zoom from a private and secure location within my residence. To balance professionalism and participant comfort, cameras were turned on briefly for introductions at the beginning of each session and then turned off during the formal recorded portion of the interview to protect anonymity and reduce social pressure. Each participant changed their Zoom display name to "P" followed by their assigned participant number (e.g., P1, P2) to maintain confidentiality.

Interviews were semistructured, guided by a flexible interview guide aligned with the study's research objectives. This structure allowed for the exploration of key themes while also creating space for participants to expand on areas of personal significance. Interviews ranged from 21 to 35 minutes in duration and were recorded using Zoom's built-in recording feature. Automatic transcription was generated and reviewed for accuracy. Concurrently, I maintained field notes during each interview to document emerging themes, clarify context, and reflect on participant tone and emphasis. Due to cameras being turned off, nonverbal expressions could not be captured and were therefore absent from field note documentation.

At the conclusion of each interview, participants were thanked for their time and engaged in a brief debriefing process. Once the recording was stopped, participants were asked to confirm an email address for the delivery of a $15 Amazon gift card, which was

sent immediately following the call. Audio files and transcripts were downloaded, formatted, and verified against the original recordings for accuracy. Transcripts were then emailed to participants for member checking to support credibility and confirm the authenticity of the data.

Unusual Circumstances Encountered in Data Collection

Several unexpected circumstances arose during data collection. First, after launching the recruitment invitation and SurveyMonkey inclusion form, the survey quickly reached its participant capacity due to the limitations of the free plan, which allowed only 40 responses. Although 259 individuals ultimately completed the survey, I was unable to view the data without upgrading to a paid subscription, which I subsequently purchased to access the full dataset. Despite this high response rate, most individuals did not meet the inclusion criteria ($N = 253$, 97.7%), particularly the requirement of being a current nursing educator.

In terms of technical challenges, one interviewee experienced a recording error due to user oversight. To address this, I incorporated detailed field notes from the session into the transcript and conducted a follow-up with the participant to verify the added content for accuracy. In another case, unstable internet connectivity required the interview to be paused and resumed on a different device. This disruption may have impacted the participant's flow of thought or contributed to minor data loss. These challenges, while addressed to the best of my ability, are important to acknowledge as they may have influenced the depth or continuity of data collection in isolated cases.

Data Analysis

The data analysis process was guided by Saldaña (2021) using first- and second-cycle coding strategies to move inductively from raw data to meaningful categories and themes. Following member checking of the initial transcript, first-cycle coding began using Microsoft Word's comment feature to highlight and code significant segments of the transcript. Three coding methods were used concurrently: in vivo coding (to preserve participants' exact language), descriptive coding (to label basic topics of the data), and process coding (to capture actions and changes over time). Codes were immediately transferred into a coding chart that included the code label, a brief operational definition, and an illustrative quote from the transcript.

The initial transcript yielded 32 unique codes. With each successive transcript, this method was repeated manually by printing, highlighting, and coding on paper, with the updated codes and examples transferred into the master coding chart. After coding the second transcript, the code list expanded to 66, and by the fourth transcript, a total of 79 unique codes had emerged. No new codes were generated during the analysis of the final two transcripts, indicating that data saturation had been achieved. In the second-cycle coding phase, pattern coding was used to group individual codes into broader, conceptually meaningful categories. The 10 categories were then synthesized into four overarching themes that captured the essence of participants' experiences (refer to Appendix D).

There were no discrepant cases identified in the data; however, some participants expressed perspectives that varied from the majority. These instances represent variations

rather than contradictions and are reported as such. Additionally, there were occasions when participants veered off topic and were redirected, with extraneous comments omitted from the analysis to maintain focus on the study purpose.

Evidence of Trustworthiness

Multiple strategies outlined in Chapter 3 were implemented consistently throughout the research process to enhance the credibility of the study. Prolonged engagement was achieved through in-depth, semistructured interviews that allowed participants to share detailed reflections on their teaching experiences. Member checking was used to verify the accuracy of transcript data; participants were invited to review and confirm the content of their interview transcripts. No major revisions were requested, indicating alignment between the transcribed data and participants' intended meanings. Triangulation was employed through multiple data sources, including interview transcripts, researcher field notes, and a research journal. Peer debriefing with an experienced qualitative researcher helped validate the coding process and thematic development. These measures collectively strengthened the authenticity and accuracy of the findings.

Transferability was addressed using thick, rich descriptions of the study context, participant demographics, and emergent themes. As stated in Chapter 3, contextual detail was provided to allow readers to evaluate the relevance and applicability of the findings to other educational settings. The study included participants from various institutions across Northern Ontario, representing varied roles and levels of nursing education. No significant adjustments to transferability strategies were necessary during the research

process. By presenting illustrative quotations and situating findings within a well-defined regional and pedagogical context, the study supports readers in determining potential transfer to similar nursing education environments.

Dependability was ensured by maintaining a detailed audit trail documenting all research process stages, including methodological decisions, coding procedures, and theme development. As outlined in Chapter 3, a reflective research journal and coding memos were used to track decision-making and analytical consistency. Coding procedures were reviewed during peer debriefing sessions to enhance dependability further to ensure stability and agreement in code interpretation. No adjustments to the original dependability strategies were required. These procedures helped establish consistency across the data analysis process and allowed for an accurate reconstruction of the study's progression.

Confirmability was supported through strategies that minimized researcher bias and ensured that findings were grounded in participants' voices. Reflexive journaling was used consistently to document personal assumptions, positionality, and analytic reflections throughout the research. The study adhered to the confirmability strategies described in Chapter 3, and no modifications were necessary. Audit trails, including recorded decisions, coding matrices, and theme charts, were maintained to demonstrate transparency and allow for external review. The integration of direct participant quotes further reinforced that interpretations were derived from the data rather than researcher expectations.

Results

The central research question guiding this study was the following: What are the experiences of Northern Ontario nurse educators in adapting their teaching methods to meet the evolving demands of nursing education? The qualitative interviews with participants generated rich, in-depth data that provided insight into this inquiry. Through a rigorous inductive process of thematic analysis, four overarching themes emerged: (a) recognizing the need to change teaching methods; (b) implementing active and student-centered instructional strategies; (c) adopting contemporary, student-focused pedagogical approaches; and (d) embracing lifelong learning and reflective growth as an educator. These themes collectively illustrate the dynamic and ongoing process by which nurse educators respond to evolving demands of nursing education in Northern Ontario.

Theme 1: Recognizing the Need to Change Teaching Methods

The first theme that emerged, Recognizing the Need to Change Teaching Methods, reflects educators' growing awareness that longstanding teaching methods were no longer effective in meeting evolving demands. Through first-cycle coding using in vivo, process, and descriptive coding techniques as outlined by Saldaña (2021), key codes were generated and later grouped into three overarching categories: *Traditional Teaching Methods (Lecture-style) Ineffective, Student Diversity & Needs, and Systemic & External Pressures* (see Appendix D). These categories reveal how faculty recognized disengagement in lecture-based learning, encountered shifting student demographics and learning preferences, and responded to broader systemic forces such as the COVID-19 pandemic.

A dominant pattern across interviews was recognizing that lecture-based teaching, once a staple in nursing education, no longer aligned with student learning preferences or engagement needs. Several educators described their initial reliance on passive, instructor-led methods and growing awareness of their limitations. For instance, Participant 2 described intentionally shifting "away from traditional teaching and textbook reading" toward more hands-on learning approaches to promote student engagement. Participant 3 echoed this evolution, stating,

> I started off, being very much lecture-based and almost entirely lecture-based to now kind of flipping it a little bit and putting a little bit more of the onus on the student and getting them to engage a little bit more and apply whatever concepts we're teaching.

This transition from content delivery to collaborative learning marked an essential philosophical shift for many educators. Participant 5 reflected on this change because of firsthand classroom experiences:

> I was more heavily focused on lecture-style teaching … I've identified that that's maybe not the best way to engage students sitting there for 3 hours listening to somebody talk … so more engagement with the students … drawing on their own knowledge.

In addition to pedagogical misalignment, participants consistently highlighted the increasing diversity of their student cohorts as a critical factor driving change. They described teaching students who varied widely in age, academic background, cultural context, and familiarity with technology. Participant 4 noted that there are "Quite a mix

of … younger learners … and adult learners. So, they have different learning styles and needs." Participant 3 added, "We have different learners than I've had in the past ... mature students ... international students ... bridge students ..." Participant 5 provided a comprehensive overview of the evolving classroom landscape:

> There were a lot more mature students in my classroom … whereas, you know, when we have the younger students coming in with more of an understanding of technology … having to kind of adjust to that … We also have diversity in terms of … cultural diversity and ethnicity and age, like, there's all different kinds of diversity in the classroom.

Educators also reflected on how their teaching styles had evolved in response to these shifting dynamics. Participant 6 recalled,

> During COVID, speaking to a screen, there was no interaction … when we came back to the classroom … students would be playing on their phones or have a little nap during class … I'm like, oh, I'm becoming boring … I need to change it up … maybe it's their learning style, and I'm not teaching to that learning style … just looking for better ways to teach them, better ways for them to understand the material.

Similarly, Participant 1 observed,

> Students are very different [from when I started teaching] … before … it seemed easy to stand up and just like talk to students … and they would ... be engaged … then it morphed into a nonengaged group that wanted just the content … now they

> want a little bit of bells and whistles, but still don't particularly engage … I feel like I've shifted maybe about 3 times in the last 15 years of teaching.

These reflections highlight how student disengagement often prompts educators to reassess their strategies and seek more inclusive methods of instruction.

In addition to demographic diversity, participants reported a noticeable decline in academic readiness, which required them to devote more instructional time to foundational skill development. Participant 4 observed, "Students need a lot more support, like study skills, test-taking skills … many students aren't coming with those foundational skills." These challenges extended beyond academics to include professional and interpersonal skills. Participant 5 noted, "There's been multiple times that I've had to reteach or redemonstrate various skills," underscoring the increased variability in student capabilities. In response, many educators adopted more flexible, adaptive strategies to accommodate a broader range of learning needs. As Participant 5 shared, "It has kind of opened up my eyes to the various ways that students learn … and helped me adjust how I teach as well."

Generational differences were frequently cited as influencing engagement styles and classroom expectations. Participant 1 explained, "You can just see sort of like this generational difference … they do want a little bit of bells and whistles, but they still don't particularly enjoy engaging as much." This contradiction, between students' desire for stimulation and their reluctance to actively participate, was echoed by Participant 3: "Students want more than just a lecture now … but they just want to show up and be spoon-fed." In addition to these evolving expectations was an increased demand for

technology integration. Participant 3 emphasized, "There's definitely more of an expectation that there's going to be integration of technology in the classroom … that there's opportunities, maybe outside of the classroom, that they're engaging with the content."

Beyond internal reflection and student needs, external forces, notably the COVID-19 pandemic, were pivotal in accelerating pedagogical change. Some participants identified the pandemic as a key disruption that exposed the limitations of traditional instruction and pushed educators to adopt new methods. Participant 2 summarized: "Also COVID was a factor. So, things changed there … Look at COVID and look at what our students had to adapt to." For many, the shift to remote learning was a moment of reckoning. Participant 3 described the upheaval as "Kind of a roller coaster … COVID… rocked my world in terms of what is online teaching? What can it be?" Others shared how online teaching revealed a lack of student participation and meaningful engagement. Participant 6 stated, "Everything was online. There was no participation from students," prompting them to introduce interactive methods after returning to the classroom. While some embraced hybrid approaches, others found new challenges in maintaining student connection. Participant 3 reflected on their HyFlex experience: "We did HyFlex teaching … You taught both in the class and online at the same time … and it was like that pandemic experience of very little participation."

Academic integrity also emerged as a concern during this period, particularly with the rise of AI-assisted tools. Participant 2 noted, "Virtual concepts and academic integrity … created changes," while Participant 6 adjusted their assessments to reduce reliance on

written work: "I removed … [essay] assignments … I found that I was reading the same AI-Ish papers again and again." These external pressures did more than disrupt routines; they fundamentally reshaped educators' perceptions of effective teaching and reinforced the need for sustainable, adaptable pedagogical approaches.

The findings demonstrate a definitive shift away from established teaching practices, marking the onset of pedagogical unfreezing. Educators confronted the ineffectiveness of traditional methods, adapted to shifting student profiles, and responded to powerful systemic disruptions. For many participants, this phase represented both a challenge and an opportunity to reimagine nursing education in a more interactive, student-centered, and resilient way.

Theme 2: Implementing Active and Student-Centered Instructional Strategies

The second theme, Implementing Active and Student-Centered Instructional Strategies, highlights educators' efforts to adopt more interactive and practice-oriented approaches in response to evolving classroom needs. Through first cycle in vivo, process, and descriptive coding techniques outlined by Saldaña (2021), initial codes were identified and subsequently grouped using thematic analysis into three overarching categories: *Pedagogical Innovation, Digital Tools,* and *Challenges and Barriers with Implementation of Teaching Methods*. These categories illustrate how faculty experimented with new instructional strategies to foster engagement, incorporated digital platforms and technologies to enhance learning, and simultaneously navigated obstacles such as workload pressures, resource limitations, and varying student readiness levels. This theme reflects how educators sought to transform classroom practice toward more

active and student-centered approaches, while balancing the realities of institutional and pedagogical constraints.

A central dimension of implementing active and student-centered teaching methods was the intentional pedagogical innovation that educators incorporated into their courses. Participants described moving away from lecture-dominant approaches toward more engaging, application-based strategies emphasizing student participation and practice readiness. For example, Participant 1 explained efforts to embed simulations within research classes: "I'm trying for my new classes this winter and next fall, like in my research classes to also have simulations where they'll be actually doing data collection and analysis, like physically". Beyond simulations, this participant also described modifying lecture delivery to include interactive features: "So yeah, I would generally like, make my blanket … how I normally make my lectures and then go back and like find things that I can add, or things to make it more exciting." Participant 3 emphasized a similar shift through a hybrid flipped classroom model, noting that

> The idea [is] that you took about a 3rd of the class to just review the key readings … not that you're going into them in any depth, the students still need to engage and ideally do the preparatory readings. But at least you're giving them a baseline, and then you're getting more into discussion and building on it and getting the students involved in a discussion.

Likewise, Participant 4 identified implementing "UDL (Universal Design for Learning), open resources, [and] flipped classrooms" as the most significant changes in their

teaching. Collaborative strategies were also highlighted, with Participant 5 explaining the use of student feedback and peer dialogue:

> Students giving feedback in the classroom … or maybe teaching a concept and then presenting a key study and then allowing students to kind of break off into pairs or into small groups and have discussions and share ideas, you know, and then bring it back.

These examples illustrate a shared commitment to pedagogical creativity designed to make learning more interactive, dynamic, and relevant to students' professional preparation.

In addition to simulations, participants described introducing varied and interactive classroom activities to sustain attention and enhance learning outcomes. Participant 3 described dividing class time into review, discussion, and application activities, noting, "I usually use the last kind of 3rd of the class for some kind of application activity of some kind that I generally associate very minimally with marks." Similarly, Participant 4 emphasized integrating flipped approaches, open resources, and guided questions to promote student engagement.

Participants also reported incorporating innovative techniques such as games, escape rooms, and structured review activities to support critical thinking and teamwork. Participant 2 recalled using "various activities and games," while Participant 3 described gamification strategies such as "creating an escape room on teamwork." Participant 3 further explained developing a "family feud"–style review session to encourage participation, while Participant 5 promoted the use of videos and active engagement

through small-group discussions. These methods highlight an effort to diversify instruction and maintain student motivation.

Case-based learning also emerged as a common strategy for enhancing the application of theory to practice. Participant 1 explained: "I used a lot of … case studies … a 5-question case study [where] students can work in groups or by themselves." This participant further described using case studies as a mechanism for assessing preparation: "In that case study … I get to know; did they actually do any reading from their textbook … it's also a way for me to teach that content just like in a different way." Participant 2 reinforced this emphasis on case-based learning using NCLEX-style evolving case studies designed to prepare students for licensure examinations.

Hands-on, practice-based approaches were equally important in participants' pedagogical innovation descriptions. For example, Participant 5 explained, "There's been a lot of demonstration, return demonstration … students' kind of evaluating each other like learning a skill and then one evaluating, the other giving feedback." Participant 1 also highlighted the importance of continuity across assignments to support knowledge translation into practice: "Having overlap and assignments that might build upon each other, that might be helpful in translating that knowledge too." These strategies underscored educators' efforts to connect classroom learning with professional practice, reinforcing nursing education's applied nature.

Alongside broader pedagogical innovations, participants described how integrating digital tools has reshaped their teaching practices, particularly in fostering engagement and participation. These tools ranged from interactive classroom

technologies to online resources embedded within learning management systems (LMS). Participant 1 explained using electronic applications such as "Kahoot game [and] Poll Everywhere" and described experimenting with Mentimeter for interactive activities like word clouds and ranking exercises. Similarly, Participant 3 reflected on this evolution of digital engagement tools over time: "I've tried different things too … like prior to Mentimeter, we used to have clickers." This progression demonstrates how faculty adopted new technologies as they became available, gradually shifting from older hardware-based systems to web-based platforms that were easier to access and integrate into classroom instruction.

Participants also emphasized how such tools enabled diverse forms of participation and dialogue. Participant 4 highlighted the effectiveness of Mentimeter for open-ended questions: "I use Menti … for open-ended questions … allows for varying viewpoints … more open and honest … allows for a more fruitful discussion." In addition, Participant 5 described incorporating interactive surveys that allowed students to respond in real time via mobile devices: "… do surveys, where the students can answer or have questions up on the screen … they can scan a QR code or type in a number … able to answer these questions [on their phones]." These examples illustrate how digital tools provided opportunities for more equitable and immediate feedback, enabling quieter students to contribute and promoting inclusive classroom dialogue.

Beyond audience response systems, participants also described using multimedia resources and simulations to diversify instruction. Participant 5 explained,

> Well, I think like, with the inclusion of you know, different resources being now, like … our textbooks now being eBooks … in a classroom, I may introduce a video or something like that, to like help students that maybe don't want to like listen to me the whole time.

Participants 2 and 5 noted using short videos to supplement learning and maintain student interest. Simulation-based digital resources were also described as powerful teaching tools. For example, Participant 1 referenced using "the Can Sims, like those virtual Sims in the classroom," while Participant 3 explained employing H5P Studio to "create drag and drop [activities]… to embed in [the] LMS."

In several cases, digital tools were embedded into course structures in hybrid or online formats. Participant 2 noted that "online modules may be utilized" and described working across "asynchronous … hybrid… [and] in person" settings. Participant 3 similarly described setting up "workstations … in person and online … some stations were online … used drag and drop [questions]." Educators also adapted gamification strategies into the digital space. For instance, Participant 6 introduced Blooket: "A coworker gave me some ideas with gamification … I started using Blooket … students really enjoyed that." These examples demonstrate how digital tools expanded the repertoire of active and student-centered teaching strategies.

While participants demonstrated significant commitment to innovating their teaching practices, they also described various challenges and barriers that complicated implementation. A recurring issue was the extensive preparation time required to design and execute active learning strategies. Participant 1 noted, "To set up a lot of them … it's

a lot of prep behind the scenes," emphasizing that "you're going to have to go through them first … it's not like you just play it and go right." Similarly, Participant 3 explained the hesitation to invest in resource-intensive innovations:

> I kind of look at, and I'm like, you know what, for the energy that I'd have to put in, I don't know that I really want to … because I feel like for the amount of work I feel I would have to put in to generate something …

Workload demands compounded these challenges, as Participant 4 described: "No time left in the tank after committee work, teaching hours, and scholarship expectations." These accounts highlight how competing professional responsibilities often constrain faculty capacity to experiment with new methods.

Financial and institutional barriers were also frequently reported. Professional development (PD) opportunities were limited due to both funding and time constraints. As Participant 3 stated, "There's not a whole lot of financial support to attend," while Participant 4 explained, "They'll offer PD, but you have to figure out how to fit it into the 45 other things we need to do." Participants described having to rely on grants or "creative funding sources" (Participant 3) and, at times, paying out of pocket to support their learning needs (Participant 6). Institutional budget cuts further reduced access to teaching tools, as noted by Participant 4: "Menti [Mentimeter] institutional account was cut due to budget." For those working in Northern contexts, geographical and financial constraints compounded these barriers. Participant 5 reflected: "We are so Northern … expensive to get to conferences … a little bit more reservation from sending many

faculty." Collectively, these examples illustrate how systemic and financial pressures restricted faculty development and experimentation.

Participants also encountered barriers related to technology access and reliability. Participant 6 described, "Technology was a problem … drawing on paper when tech fails … camaraderie in the struggle." Limited internet access posed challenges for faculty and students, as Participant 2 explained, "[students state] I don't have enough stable Internet. So, my response is, well, come to the school." Faculty also expressed concern about equity and accessibility. Participant 1 noted, "So like, even like from an equity standpoint, sometimes using the tech … doesn't go as we plan, because students just might not have it or have access to it." Similarly, Participant 3 reflected on shifts in expectations: "Students weren't expected to have a laptop … now we have that as a requirement." These challenges illustrate how uneven access to resources and digital infrastructure hindered the consistent use of innovative tools.

Another barrier frequently raised was student readiness and engagement. Participants reported difficulty sustaining participation when students arrived unprepared for flipped or discussion-based activities. Participant 1 explained,

> I feel like a flipped classroom … I've always wanted to try those a little bit … but then I'm like scared. Because if the students don't read the book …, are they just going to like Chat GPT …, did I not catch that they taught something wrong?

Participant 3 echoed this concern: "I always found it really challenging to flip the classroom when the students hadn't done that initial preparation." Even during in-class activities, educators observed disengagement. Participant 3 described "… asking them to

do, you know, answer these questions in small group discussion. And then you're walking around the room. Half of them are shopping. Half of them are maybe doing an assignment for another class …" Participant 1 similarly reflected, "They're like watching shows or being on YouTube … technology has really distracted them, because it's hard for them to turn off the personal aspect of technology versus using it like in a professional sense." These accounts demonstrate how student preparedness, distractions, and reliance on technology presented obstacles to implementing interactive teaching approaches.

This theme illustrates both the opportunities and complexities of pedagogical change. Participants described adopting creative strategies, digital platforms, and practice-based learning activities that fostered engagement and professional readiness. At the same time, they encountered significant barriers related to workload, financial and institutional support, technology access, and student preparedness. These findings reveal that while faculty are motivated to transform teaching toward more interactive and student-centered approaches, sustainable change requires systemic support and equitable access to resources.

Theme 3: Adopting Contemporary, Student-Focused Pedagogical Approaches

The third theme, Adopting Contemporary, Student-Focused Pedagogical Approaches, reflects how educators advanced their teaching practices by aligning instructional methods with evolving technologies, contemporary learning preferences, and student-centered principles. Using thematic analysis, first-cycle codes were organized into two overarching categories: *Evolved Teaching Approaches and Student-Centered Teaching Strategies*. These categories capture how faculty integrated modern

tools and innovative pedagogical models into their instruction while prioritizing strategies that foster student confidence, engagement, and readiness for professional practice.

Participants described adapting their teaching to include contemporary tools and methods that reflect the changing educational landscape. Participant 4 noted that they presently "typically use Menti … and sometimes Prezi," underscoring the integration of digital platforms to enhance interactivity and presentation delivery. This participant reflected on the permanence of technology in education and practice, stating, "Technology isn't going away … even if we wanted to hide from it, we couldn't … using those types of tools will always be a part of practice." Similarly, Participant 2 highlighted the broader shift to digital formats and flexible delivery, emphasizing the importance of "moving more virtual and adapting."

Several participants emphasized the role of blended and flipped classroom models in evolving their approaches. Participant 3 explained, "I would say my main go-to is the hybrid flipped classroom … integration of the application activities … kind of gone back to that." Participant 4 similarly identified "UDL, open resources, [and] flip classrooms" as the most significant changes made in their teaching. For Participant 6, embedding in-class assignments was particularly effective for student accountability and preparation: "They really learned from those in-class assignments … students came prepared and looked for sources."

An emerging element of evolved approaches was exploring artificial intelligence (AI) in teaching practice. Participant 2 described a shift in perspective from resistance to adaptation, stating, "Instead of fighting AI … [I] started embracing it … making them

challenge AI … do more personal type assignments." Participant 4 echoed this exploration theme, noting, "Exploring AI … still trying to navigate like, what is the role of AI in education?" This participant also explained how AI was a supportive tool in course design: "I might get AI to help me refine [assignments] … help develop rubrics … get ideas … case study development." These reflections illustrate how faculty engaged with technological change, leveraging established and emerging tools to strengthen instructional delivery and better align education with current realities of practice.

Alongside adopting contemporary methods, participants emphasized strategies that explicitly placed students at the center of the learning process. Participant 4 reflected on how these changes enhanced instructional quality, stating, "Absolutely, I think … they've improved my teaching practice … made things more efficient … added to the quality of teaching … supporting UDL." This sense of permanence and value was reinforced by Participant 5, who observed, "They have become permanent … it works well … students seem more engaged."

Participants also described revising assignments to better meet student needs and foster engagement. Participant 6 explained, "I removed essay assignments … had them answer questions from the textbook in class instead," describing how this adjustment encouraged more active participation. Beyond coursework, several participants described intentional strategies to build student confidence and a sense of support. Participant 2 reflected,

> If we can foster that confidence early on … I truly feel we'll have more confident students … so that when they get to 4th year … they feel ready. Not necessarily

> from a skill set point … I'm speaking more of like a they're supported … we have your back, etc.

Similarly, Participant 4 emphasized the role of student-centered approaches in professional preparation: “I think it helps build their confidence level … professionalism … prepare for clinical … set them up for success.”

Adapting to student feedback was also highlighted as central to fostering a student-centered environment. Participant 5 explained, "I kind of learned from talking to students and understanding their needs … adapting to kind of what works for them." This responsiveness underscores the emphasis participants placed on relational teaching approaches, ensuring that pedagogy aligned with their learners' evolving needs, expectations, and circumstances.

This theme highlights how educators moved beyond traditional methods by embracing new technologies, adopting flipped and blended models, and exploring the use of AI in education. At the same time, they prioritized strategies that placed students at the center of learning, whether by revising assignments, fostering confidence, or adapting based on feedback. Participants described some of these changes as permanent and beneficial, noting improvements in engagement, efficiency, and preparedness for practice. This theme illustrates how faculty actively reshaped their pedagogy to remain relevant in a rapidly evolving educational environment, demonstrating a commitment to innovation and student success.

Theme 4: Embracing Lifelong Learning & Reflective Growth as an Educator

The fourth theme, Embracing Lifelong Learning & Reflective Growth as an Educator, captures how faculty viewed their teaching practice as dynamic, evolving, and shaped by continuous reflection and professional development. Using thematic analysis, first-cycle codes were grouped into *Evolving Educator Identity* and *Commitment to Professional Development.* Together, these categories illustrate how educators recognized the importance of reflective practice, adaptability, and collaboration in refining their pedagogy while remaining responsive to changes in nursing education and student needs.

Participants described their teaching as a process of experimentation, reflection, and growth rather than a fixed or static practice. Participant 2 emphasized the role of trial and error, noting, "It's all trial and error." Similarly, Participant 3 described adapting activities based on student responses, sharing, "Just kind of experimenting. See how the students respond … thought family feud was going to be an absolute hit … but not the case." Intentional documentation of these changes was also common. Participant 3 explained, "I always make notes in like my teaching and learning plan each year of little changes I want to make," later adding, "So I feel like I did some good things this past semester. And then I'm looking to build upon them for the next semester … I've already started making notes for changes for next winter."

Reflection was central to these evolving identities. Participant 3 observed, "Nurses and reflective practice … always reflecting on my teaching practice and kind of looking at what I can do to improve it each year," describing this process as "Reflective practice in action … looking at what you can do better." Others highlighted humility and

openness in teaching. Participant 2 explained, "You do not have to know everything. Don't pretend you know everything," and "Don't be afraid to ask for help. Ask for feedback from your students—that's also critical." This willingness to learn alongside students was reinforced when Participant 2 stated, "Let's learn together." Most participants emphasized student feedback as a tool for improvement, though one participant suggested not routinely receiving it. This variation may have stemmed from how the question was phrased, and in hindsight, could have been clarified during member checking.

Participants also linked their evolving teaching identities to staying current with best practices and trends. Participant 3 reflected, "I try to be experimental … I try to use best practices," and "Trying to keep up with evidence-informed practice and keep on pace with some of the changes." The influence of broader educational trends was noted when Participant 3 added, "Different trends in education … shape what I do in the classroom." Others emphasized adaptability to technological change. Participant 6 explained, "I feel like it's dynamic … technology evolves … we have to move with them," while cautioning, "We can't become comfortable … people might not update their slides … things change." These accounts reveal how educators conceptualized their identity as a process of continual reflection, experimentation, and responsiveness to change.

Participants also underscored the importance of professional development (PD) and collegial collaboration as essential to growth. Participant 1 explained how teaching innovations were often learned informally, stating,

> I always will get them from if I attend some sort of workshop … or somebody tells me like, “Oh, I'm using like zip grade to mark my exams” … like, Oh, cool! I've never heard of that. Tell me about it.

Participant 1 further highlighted the importance of collaboration and professional learning, noting, "What I found really helpful is just to like chat with people that I work with and attending PD that's on new ways to teach and technology."

Collegial exchange was a strong theme. Participant 2 described the value of teamwork: “My team [faculty], we share a lot … having that good connection like, 'Hey, what do you think of this?'" Participant 5 reinforced this collaborative attitude, stating, "We're not in competition … share what works … team that works together." Participant 5 also emphasized advocacy for more structured collaboration, reflecting, "Advocating for yourself … not being afraid to collaborate with other teachers … would be lovely to have a brainstorming session."

Faculty emphasized PD as critical for maintaining best practices and integrating new strategies. Participant 3 reflected, "PD or things that I've familiarized myself with … many opportunities to integrate different strategies." Participant 1 described the importance of evidence in informing teaching, explaining,

> We need more data on … how these students are learning … what's the best way to teach them and to help them engage … not just memorizing and passing a test but actually learning the information because they're going to be using it to critically think.

Similarly, Participant 5 emphasized self-directed PD, sharing, "I've reviewed myself prior to coming into the classroom and identifying that maybe that's a helpful way of presenting something … I do my own kind of research," and "Evaluate your own teaching to see if it's working or not."

This theme highlights how participants embraced lifelong learning and reflective growth as essential to their professional identity. Through trial and error, experimentation, and reflective practice, participants described themselves as dynamic educators committed to continual improvement. At the same time, professional development and collegial collaboration were seen as necessary for adopting new strategies and supporting best practices. This theme demonstrates that nursing educators view their teaching as a constantly evolving process shaped by reflection, collaboration, and a sustained commitment to lifelong learning.

Summary

This study sought to answer the central research question: What are the experiences of Northern Ontario nurse educators in adapting their teaching methods to meet the evolving demands of nursing education? The findings revealed that participants experienced a dynamic and iterative process of change shaped by personal reflection, student needs, and systemic pressures. Educators first recognized the limitations of traditional lecture-based instruction and acknowledged shifting demographics, learning preferences, and external disruptions such as the COVID-19 pandemic. In response, they implemented more active and student-centered strategies, often leveraging digital tools, simulations, and case-based approaches to foster engagement and practice readiness.

Participants further advanced their pedagogy by adopting contemporary, student-focused methods, including blended and flipped models, universal design for learning, and exploratory use of emerging technologies such as AI. These changes reflected a commitment to aligning teaching with current educational realities and preparing students for professional practice. Underpinning these transformations was a strong orientation toward lifelong learning and reflective growth, with participants emphasizing the importance of trial and error, collegial collaboration, and professional development in shaping their evolving educator identities.

Altogether, the experiences of Northern Ontario nurse educators illustrate a continuous process of adaptation and renewal. This process is underscored by resilience, innovation, and reflective practice. The findings provide a foundation for further interpretation in the final chapter on Discussion, Conclusions, and Recommendations.

Chapter 5: Discussion, Conclusions, and Recommendations

Introduction

The purpose of this qualitative study was to explore the experiences of Northern Ontario nurse educators who adapted their teaching methods to meet the evolving demands of nursing education. Through semistructured interviews and analysis guided by Saldaña's framework and supported by Lewin's change theory, this study explored how nurse educators navigated pedagogical shifts driven by technological advancement, evolving student expectations, and institutional pressures within geographically remote and resource-constrained settings.

The findings revealed that nursing educators significantly shifted their professional identity and instructional approaches, moving from traditional lecture-based delivery to more interactive, student-centered methods. Nurse educators described adopting simulations, flipped classroom models, streamlined digital tools, and collaborative teaching strategies to enhance student engagement and improve instructional efficiency. Despite these successes, participants also highlighted persistent challenges, including inadequate institutional support, limited access to professional development, and the broader underfunding of postsecondary education in the Northern Ontario region of Canada. This study contributes valuable insight into how educator-led innovation can occur under constrained conditions and offers practical, evidence-informed implications for educator development, institutional support, and policy advancement in nursing education.

Interpretation of the Findings

The findings of this study both confirm and extend the current body of knowledge in the field of nursing education, particularly concerning how educators adapt to evolving pedagogical demands in the context of technological advancement, shifting student demographics, and institutional reform. Using Lewin's change theory as a guiding theoretical framework, it offered a lens through which to structure an interpretation of the dynamic change processes experienced by nurse educators in Northern Ontario. The results align with the existing literature and reveal new insights into the contextual, emotional, and philosophical dimensions of pedagogical adaptation in underrepresented educational settings.

Confirmation of Existing Literature

This study explored the lived experiences of nursing educators in Northern Ontario as they adapted their teaching methods to meet evolving demands in nursing education. The findings from this study exhibited a strong alignment with global literature on technological integration, changing pedagogical approaches, shifting student needs, and accreditation requirements, while also extending current knowledge by situating these trends within the unique regional realities of Northern Ontario.

Participants described technology as central to adaptation, particularly during and after the COVID-19 pandemic. Videoconferencing platforms such as Zoom and interactive tools including Poll Everywhere, Mentimeter, Kahoot, Blooket, and H5P were integrated to increase engagement and diversify learning activities. These tools supported participation and improved accessibility for students in remote areas. Educators also

observed that digital platforms promoted equitable participation, especially for quieter students who preferred polls and interactive response systems. Limitations were highlighted, including unreliable internet, technological challenges, loss of institutional licenses, and inequitable access to devices.

The findings confirm that literature positions technology as transformative in nursing education. Leidl et al. (2020) and Sáiz-Manzanares et al. (2020) demonstrated that blended learning enhances flexibility, engagement, and outcomes while promoting feedback use and teacher–student interaction. These patterns mirror broader trends in which LMS platforms and videoconferencing became integral during and after the pandemic (De Gagne et al., 2023; Vandenberg & Magnuson, 2021). De Gagne et al. (2023) reported that educators regarded LMS and videoconferencing as "indispensable," noting that they sustained instruction and expanded engagement. Northern Ontario educators similarly leveraged these technologies to foster collaboration and accessibility, aligning with evidence that blended and online modalities deepen learning and improve flexibility (Elliott, 2020; Li & Conway, 2024).

Participants also noted that technology introduced new challenges. While literature often emphasizes its potential to enhance engagement, some tools encourage multitasking and distraction, reducing learning. Martin et al. (2025) found that digital distractions such as non-class device use, notifications, and multitasking were linked to shallow learning, reduced comprehension, and lower retention. Deng et al. (2024) further showed that push notifications and device proximity triggered off-task behaviors that are difficult to regulate. Together, these findings underscore the dual nature of technology; it

can enrich engagement and accessibility but can threaten attention and learning if not carefully managed.

Educators in my study also reported moving away from lecture-dominant models toward active, student-centered approaches such as flipped classrooms, simulations, case-based learning, gamification, and group discussions. Assignments were revised to reduce reliance on essays and embed application-based tasks and in-class activities that foster practice readiness. Despite these innovations, participants described extensive preparation time, heavy workloads, limited institutional support, and student disengagement when learners failed to complete preparatory work. To overcome these barriers, educators collaborated with colleagues, adapted activities to be less resource-intensive, and relied on creativity and reflective practice to sustain student-centered learning.

The literature supports these pedagogical shifts. Active learning and flipped classrooms have been linked to improved critical thinking, clinical preparedness, and student satisfaction (Du et al., 2022; Pivač et al., 2021). Case-based learning and simulation are well documented as effective for bridging theory and practice (Camp-Spivey et al., 2024; Shatto et al., 2019). However, consistent with research noting their time-intensive nature (Holman & Hanson, 2016; Wells-Beede, 2020), Northern Ontario educators cited underfunding, workload, and limited professional development as barriers. Holman and Hanson (2016) found that implementing flipped classrooms required significant preparation and adjustment, while Wells-Beede (2020) reported that they demanded creativity and consistency. These findings highlight the dual reality that

while active, student-centered approaches enrich learning, their sustainability depends on institutional support and faculty development.

Amid these challenges, educators in Northern Ontario adopted collaborative, low-cost practices that advanced student learning. These strategies reflect constructivist learning theory, emphasizing the co-construction of knowledge through interaction and reflection (Epp et al., 2021). Participants described lifelong learning and reflective growth, suggesting they were also transformed through adopting student-centered pedagogies. By situating global trends within regional realities, this study illustrates how innovation can be adapted and sustained in resource-constrained contexts.

This study adds nuance to existing evidence. While literature often presents student-centered approaches as universally effective, Northern Ontario educators observed that disengagement undermined flipped classroom or discussion-based sessions when students arrived unprepared. Similarly, technologies often framed as supports for active learning were sometimes perceived as distractions. These findings suggest that the effectiveness of student-centered methods depends on both student readiness and institutional conditions, challenging assumptions of universal success.

Participants in my study also described increasingly diverse student populations, including mature learners, international students, and those with varied academic preparedness. Many reported spending more time addressing foundational skills such as study strategies, test-taking, and professional behaviors. Generational differences shaped dynamics, with students demanding more interactive methods but often reluctant to

engage fully. While students expected technology, it was frequently experienced as a distraction.

The results of my study align with literature recognizing the diversity of nursing cohorts and the need for inclusive, culturally responsive teaching. CASN (2024) emphasizes inclusive strategies in Canadian nursing programs, particularly given the growing number of international and Indigenous students (Statistics Canada, 2024). Prior studies have highlighted mentorship, culturally relevant assignments, and reverse mentoring as strategies for promoting equity and engagement (Sommers & Bonnel, 2020; Williams, 2023). However, whereas much literature emphasizes the benefits of diversity, participants in my study from Northern Ontario highlighted how it compounded challenges such as declining academic readiness and inconsistent professional skills, increasing educator demands. Moreover, while interactive methods are often portrayed positively, participants reported a disconnect between student expectations and meaningful engagement. These findings suggest that while student diversity enriches learning, it also introduces challenges requiring additional support and resources.

Participants in my study adapted teaching in response to licensure requirements, particularly the NGN-RN. Strategies included embedding NCLEX-style questions, case studies, and simulations. Educators rarely identified accreditation standards as the explicit driver; instead, they framed adaptations as part of their professional duty to prepare safe, competent practitioners. Many reported feeling underprepared and unsupported in meeting these expectations, citing heavy workloads and limited professional development.

These findings align with literature documenting the influence of accreditation standards on curricula. CASN (2024) emphasizes inclusivity and responsiveness, while NGN preparation has been associated with greater use of active learning and simulation (Almasloukh et al., 2023; Camp-Spivey et al., 2024; Shatto et al., 2019). Research also highlights that educators often feel underprepared when adapting to curricular changes without leadership or resources. Balcom et al. (2021) and Davis (2024) underscored the importance of professional development and organizational support to ensure successful implementation. Together, the findings from my study and literature indicate that while accreditation standards shape priorities, implementation depends on institutional support and educator commitment.

The results of my study confirm that local constraints and broader national and international pressures shape nursing education in Northern Ontario. While systemic underfunding, limited professional development, and resource shortages remain significant barriers, educators demonstrated resilience and innovation by adopting adaptive, collaborative practices. In doing so, they reflect global trends in technological integration and student-centered pedagogy and contribute regionally specific insights into how these approaches can be implemented in underresourced and geographically isolated contexts. My study affirms the importance of localized educator-led change while contributing to broader conversations on the future of nursing education.

Extension of Knowledge in the Discipline

While confirming several existing trends, my study contributes novel insights by extending the literature to a geographically distinct and underrepresented context,

Northern Ontario. Participants emphasized that budget constraints, geographic isolation, and limited access to professional development further complicated their ability to innovate in their teaching practices. As one participant explained, "We are [located] so Northern ... expensive to get to conferences ... a little bit more reservation from sending many faculty ...," underscoring the compounding effects of distance and funding limitations.

Although Ontario's broader postsecondary funding crisis has received extensive media attention, its implications remain largely underexamined within the provincial and national nursing education literature. The Ontario Confederation of University Faculty Associations (OCUFA, 2024) strongly documents the chronic underfunding of Ontario universities, particularly in the North, and notes that such financial limitations "often have negative impacts on the ability of contract faculty even to pursue research and scholarship that is valuable to universities and to their own professional careers" (p. 11). Similarly, the Ontario Public Service Employees Union (OPSEU, 2025) reports that provincial funding for colleges has fallen from 75% to below 30% of operating costs, resulting in program cuts, increased dependence on precarious faculty, and diminished institutional capacity to support innovation. While these union documents represent the perspectives of faculty associations and labor organizations, their claims are supported by provincial statistics and demonstrate how funding shortfalls affect the working conditions of full-time nursing educators. They highlight how union advocacy intersects with job security, workload, and access to professional development, underscoring the systemic pressures faced across the sector. The experiences shared by participants in my study

reflect these challenges, revealing how geographic isolation and fiscal constraints limit access to professional development and stifle pedagogical creativity. By documenting how educators in Northern Ontario navigated these challenges through peer collaboration, resourcefulness, and self-directed learning, the result of my study extends the field's understanding of how adaptive capacity functions in resource-constrained educational environments.

Additionally, my study contributes to the literature on educator identity development. While prior studies have acknowledged the importance of professional development and reflective practice (Balcom et al., 2021; De Lima et al., 2023), the current findings emphasize the internal transformation that occurs when educators move from a content-expert identity to one grounded in facilitation, co-learning, and adaptability. This evolution was not described as a discrete endpoint but rather as an ongoing process of reflective adjustment, thereby expanding the conceptual scope of the "freezing" phase within Lewin's framework to include continuous professional growth and philosophical realignment.

Nuanced Divergence From the Literature

While the findings generally support existing research, they also provide essential nuance. For example, while the flipped classroom model is widely endorsed for its benefits in enhancing student outcomes (Andargeery et al., 2024; Elzeky et al., 2022; Fan et al., 2020), several participants in my study expressed skepticism regarding student readiness and the practical viability of such approaches in their specific teaching contexts. Concerns were raised about students' lack of preparation for in-class activities,

inconsistent motivation, and poor time management skills, factors that have received relatively limited attention in much of the published literature, which often presents active learning models in idealized terms. These concerns highlight the conditional success of pedagogical innovations, contingent on instructor capacity and student engagement, and suggest the need for more integrated student and educator support models.

Analysis Through Lewin's Change Theory

Applying Lewin's three-stage change theory (unfreeze, moving, freezing) provided a useful analytic lens to interpret the experiential progression of pedagogical transformation. Figure 2 presents a thematic overview, visually mapping the experiences of Northern Ontario nursing educators across the three stages of Lewin's framework. To complement this summary, Appendix E provides a detailed chart that aligns each stage of Lewin's model with the study's four emergent themes and integrates illustrative participant quotations.

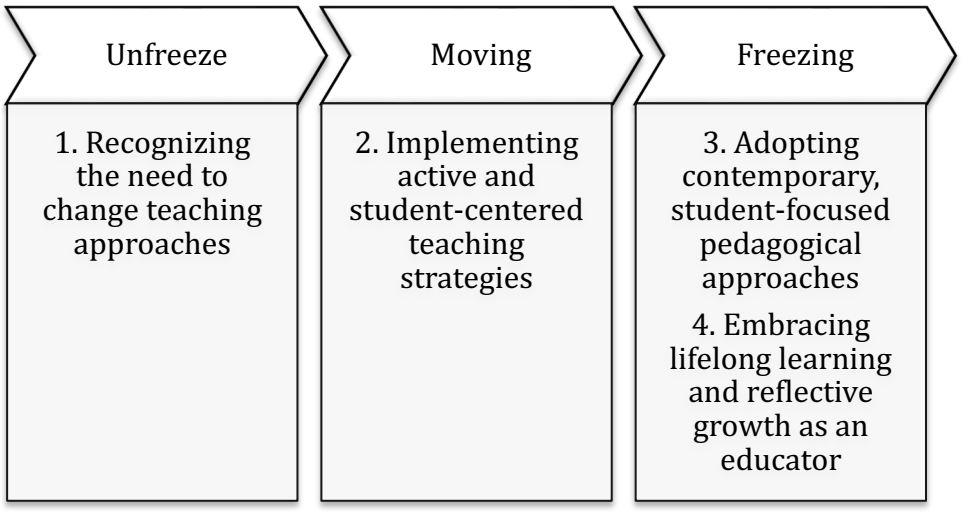
In the unfreeze stage, educators described an increasing awareness that traditional teaching strategies no longer met the needs of students or the evolving expectations of nursing education. This stage was catalyzed by external disruptions, such as the COVID-19 pandemic and generational shifts in student learning styles, aligning with Lewin's premise that disconfirming evidence is essential to disrupt the status quo (Burnes, 2020).

The moving stage was characterized by experimentation with new instructional strategies and technologies. Educators described a trial-and-error process as they explored simulation, flipped learning, digital platforms, and case-based teaching. This

phase reflects Lewin's "locomotion" concept, where individuals transition toward new behaviors while navigating internal and external barriers (Lewin, 1947). The findings of my study also align with Burnes' (2020) interpretation of this stage as requiring support, feedback, and adaptability.

Figure 2

Themes of Experiences of Northern ON Nursing Educators' Adaptations in Teaching Methods Presented in Lewin's Change Theory



The final phase, freezing, was evident in educators' accounts of embedding these new practices into their regular course design and teaching philosophy. However, this stage was not described as static. Instead, participants in my study viewed their roles as continually evolving, reflecting an iterative and reflective approach to stabilization. While Lewin's model has been critiqued for its linearity (Burnes, 2020), my study suggests that freezing often involves ongoing recalibration rather than a fixed endpoint in nursing education. As such, my study supports contemporary reinterpretations of Lewin's

model as cyclical and dynamic, particularly in high-change environments such as nursing education.

Limitations of the Study

Several limitations to the trustworthiness of this study emerged during its execution. First, while the goal was to recruit nursing educators from a broad range of institutions across Northern Ontario, participants worked at three of the nine total institutions in Northern Ontario. Despite snowball sampling and social media outreach, it was challenging to reach a wider pool of participants across the region. This may have constrained the diversity of institutional perspectives and introduced sampling bias, potentially limiting the transferability of the findings. The study also faced challenges related to sample size. The number of full-time nursing educators in the region is inherently limited. While data saturation was achieved, the small sample size may not capture the full breadth of experiences among nurse educators in similar roles or settings.

Recall bias presented another potential limitation. Although participants had taught within the past three years, many reflected on teaching changes that occurred several years prior. Some participants noted difficulty recalling specific details about their earlier teaching practices and the timeline of pedagogical changes. Structured interview prompts and member checking were employed to support accurate recall, but the influence of time on memory remains a consideration.

Additionally, interviews were conducted virtually via Zoom, with video turned off once recording began following brief introductions to maintain participant comfort and confidentiality. This may have limited the researcher’s ability to observe nonverbal cues

or contextual nuances that could have further enriched the data. While confidentiality was rigorously maintained through the use of pseudonyms, secure data storage, and the removal of identifying details, the small and regionally concentrated sample heightened ethical concerns about participant anonymity. Despite these limitations, multiple strategies were implemented to enhance trustworthiness, including triangulation through interview transcripts, field notes, and reflexive journaling; peer debriefing to ensure analytic rigor; and a detailed audit trail to support transparency and confirmability. These efforts contributed to a balanced, credible, and contextually grounded interpretation of participants' experiences.

Recommendations

Building on the strengths and limitations of this study, several recommendations are proposed for future research to deepen the understanding of how nursing educators adapt to evolving pedagogical demands. Future studies should consider expanding the geographic scope beyond Northern Ontario to include diverse regions across Ontario or Canada. This would help determine whether the themes identified in this study, such as pedagogical innovation, reflective practice, and institutional constraints, are consistent across varied educational and institutional contexts. Given the limited number of institutions and participants in the present study, broader sampling could provide a more comprehensive picture of educator experiences provincially and nationwide.

While this study focused on the experiences of nursing educators, participants consistently emphasized the centrality of student engagement and readiness in shaping the success of pedagogical adaptations. Future research should explore the student

perspective, examining how learners perceive and respond to teaching strategies such as active learning, flipped classrooms, and technology-enhanced instruction. Understanding student attitudes and experiences will contribute to a more holistic view of the teaching–learning relationship and support evidence-informed improvements in nursing education.

Given the influence of institutional and structural factors reported in this study, further research should investigate how organizational leadership and culture facilitate or hinder pedagogical change. Comparative studies across institutions with varying levels of administrative support and investment in educator development may uncover best practices for fostering innovation and adaptability. These findings could inform leadership strategies that promote sustainable teaching excellence in nursing education.

A final area for future exploration involves how nursing educators develop digital competence and pedagogical confidence over time, particularly in underresourced or rural settings. The present study revealed significant variability in how educators use digital tools and adapt their teaching approaches. Longitudinal or mixed-methods studies could shed light on the developmental trajectories and support structures needed to enhance digital fluency and instructional resilience.

These research directions offer a pathway toward building a more comprehensive and equitable understanding of how nursing educators respond to pedagogical change. By addressing current gaps in the literature, future studies can contribute to developing more inclusive, innovative, and adaptive nursing education systems. These efforts are crucial to ensuring that nursing programs remain responsive to the evolving demands of healthcare and educational expectations.

Implications

This study provides insights into how nursing education can promote positive social change at individual, institutional, and policy levels, particularly in geographically isolated and underresourced regions such as Northern Ontario. By capturing the lived experiences of nurse educators navigating evolving pedagogical expectations, limited resources, and technological demands, the findings highlight practical, sustainable strategies for adaptation that have the potential to inform broader improvements within the nursing education system.

Participants described a significant shift in their professional identity at the individual level, marked by increased confidence, pedagogical flexibility, and a renewed sense of purpose. As participants transitioned from traditional lecture-based approaches to more interactive, student-centered methods, they reported stronger connections with their students and peers as well as enhanced self-efficacy in using educational technology. These developments align with CASN's accreditation standards, which call for evidence-informed teaching strategies that foster student learning and faculty growth (CASN, 2022). By embracing reflective practice, peer collaboration, and experimentation with active learning, educators experienced a form of professional revitalization that improved instructional quality and contributed to personal well-being, an essential outcome in a profession susceptible to burnout (Lovern et al., 2024).

At the institutional level, the findings emphasize the impact of low-cost, scalable innovations in enhancing educational quality. Educator-led initiatives such as shared active learning templates, affordable simulation activities and digital tools, and flipped

classroom models contributed to more efficient teaching practices and enhanced student engagement. When supported and sustained, these strategies offer institutions a practical approach to address accreditation standards, which emphasize ongoing program evaluation and quality improvement (CASN, 2022). However, the study also revealed that such innovations often occurred despite, rather than because of, institutional support. This highlights the need for formal structures and dedicated resources to empower educators to respond to students' complex learning needs in diverse and often underresourced environments.

At the federal and provincial policy levels, my study presents region-specific evidence that underscores the urgent need for targeted investment in Northern postsecondary education. Participants' experiences reflect the consequences of long-standing underfunding, as documented by organizations such as the Ontario Confederation of University Faculty Associations (OCUFA, 2024) and the Ontario Public Service Employees Union (OPSEU, 2025). With declining public funding and increasing reliance on private revenue, institutions in rural and Northern regions face significant barriers in delivering high-quality education and supporting educator development (OCUFA, 2024). Rather than calling for sweeping system reform, the findings support implementing small, consistent funding strategies, such as investments in broadband infrastructure, simulation tools, and micro-credentialing for measurable improvements in educational delivery. Aligning these targeted supports with national accreditation expectations ensures that institutions can meet quality standards while addressing regional inequities.

Beyond these applied contributions, the study carries theoretical and empirical implications. Conceptually, it supports and refines Lewin's Change Theory by illustrating that the "freezing" stage is not a fixed endpoint but a dynamic state of ongoing reflection and instructional recalibration. Methodologically, it affirms that rigorous, credible qualitative research is possible in small-sample contexts through virtual interviews, member checking, and audit trails, tools particularly useful in rural or underresourced research settings. Empirically, the findings invite future longitudinal and mixed-methods research to evaluate whether the instructional shifts documented here translate into improved clinical outcomes, licensure success, or graduate readiness, and to explore how student factors such as motivation, preparation, and access mediate the success of active-learning models.

This study is relevant because it captures a critical moment in the evolution of nursing education in Northern Ontario and presents evidence-based, achievable recommendations that can inform educator development, program improvement, and policy decisions. Its potential to contribute to positive social change lies not in transformative overhauls but in its illumination of the small yet impactful ways that educators, institutions, and systems can adapt and respond to the complex realities of 21st-century nursing education. For example, the adaptation to low-cost simulation tools can impact social change by increasing equitable access to experiential learning for students in underfunded and geographically remote programs. Similarly, the adaptation to collaborative teaching practices and resource-sharing among faculty can impact social change by fostering professional renewal, reducing burnout, and sustaining innovation in

resource-limited contexts. Finally, the adaptation to the use of synchronous technologies such as video conferencing can impact social change by expanding access to nursing education for students in remote and underserved communities, thereby strengthening the local healthcare workforce.

Conclusion

This study contributes to the ongoing conversation about the evolving pedagogical transformation in nursing education by capturing the lived experiences of nursing educators working in geographically isolated and underresourced institutions in Northern Ontario. Through the lens of Lewin's Change Theory, the findings illuminate how nursing educators navigated disruption, embraced innovation, and developed adaptive teaching practices in the face of systemic barriers such as underfunding, limited institutional support, and constrained professional development opportunities. While the challenges were substantial, educators demonstrated resilience and creativity through low-cost, collaborative innovations such as shared active learning templates, simulation activities, and streamlined digital tools. These practices enhanced student engagement and teaching efficiency and fostered a sense of professional renewal. Ultimately, this study affirms that meaningful and sustainable change in nursing education can emerge from the ground up through localized, educator-led action that is context-sensitive, evidence-informed, and aligned with national accreditation standards. Its central message is clear: *small, well-supported shifts in teaching practice can lead to powerful impacts on educator identity, institutional quality, and policy development, contributing to a more equitable and responsive nursing education system.*

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Appendix A: Recruitment Poster

Calling All Nursing Educators in Northern Ontario! Share Your Experience in Adapting to Changing Educational Needs

This study explores how nursing educators in Northern Ontario adapt their teaching to evolving educational demands, including technology, pedagogy, and accreditation standards. Your insights will help bridge research gaps, guiding faculty development, resource allocation, and policy improvements. By participating, you contribute to evidence-based strategies that enhance teaching support, technological access, and interprofessional collaboration, fostering positive social change in nursing education. Your voice matters—help shape the future!

About the study:

- One 45-60-minute Zoom interview that will audio and video recorded.
- To protect your privacy, the published study will not share any names or details that identify you.

Volunteers must meet these requirements:

- 18 years old or older.
- Employed full-time as a BScN educator in a Northern, ON institution approved by CNO
- Taught synchronously in a BScN program for the last three years (minimum).
- Experience with adapting course delivery or teaching methods over the years.

This interview is part of the doctoral study for Julianna Panontin, a Ph.D. student at Walden University. Interviews will take place during TBD.

Interested in participating? Scan the QR code to complete a brief survey to confirm eligibility.

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Please contact Julianna Panontin, for more details on this study at julianna.panontin@waldenu.edu.

Appendix B: Email Invitation

Subject: Invitation to Participate in Research Study on Nursing Education Adaptation

You are invited to share your views for a study titled: Experiences of Northern Ontario Nurse Educators in Adapting Teaching Methods

- One 45–60-minute interview that will be audio recorded (no video recording)
- You would receive a $15 Amazon gift card as a thank you
- To protect your privacy, the published study will not share any names or details that identify you

Interviews will take place during the month of June 2025.

Volunteers must meet these requirements:

- 18 years or older
- Employed full-time as a Bachelor of Science in Nursing (BScN) educator in a Northern, ON institution approved by the College of Nurses of Ontario (CNO).
- Taught synchronously in a BScN program since 2023.
- Experience in adapting course delivery or teaching methods over the years.

Interested in participating? Scan the QR code on the poster to complete a brief survey to confirm eligibility.

Thank you,
Julianna Panontin, RN, MN, BScN
PhD Candidate, Walden University

Appendix C: Interview Guide

Introduction:

- Thank you for participating in this study. The purpose of this interview is to explore your experiences as a BScN nurse educator in Northern Ontario and how you have adapted your teaching methods to address the evolving demands of nursing education. Your responses will remain confidential, and you may withdraw from the study at any time. The interview is expected to last approximately 45-60 minutes. This interview will be recorded and transcribed for accuracy.
- Your consent is required for this process. Have you had the opportunity to review the consent form? (Review with participant). Please confirm that you consent before we proceed.
- Do you have any questions before we begin?

Demographic Questions:

- To begin, can you tell me which institution you're currently employed at as a nursing educator?

  Please note that your institution's name will remain anonymous in all reporting. This information is being collected solely for sampling purposes to ensure the study includes perspectives from a variety of institutional contexts across the region.
- How do you identify in terms of gender?

  Feel free to answer in your own words or let me know if you prefer not to respond.

- Approximately how many years have you been teaching in a nursing education setting—either at a college or a university?

  An estimate is completely fine if you're unsure of the exact number.

Interview Questions:

1. Can you describe the changes in your teaching methods over the years? *(Unfreezing → Moving → Freezing)*
    - What factors influenced these changes? (educational demands) *(Unfreezing)* For example, did advancements in technology, shifts in pedagogy, accreditation requirements, or student needs play a role?
2. How did you approach making these adjustments in your teaching? *(Moving)*
    - Were there specific strategies, tools, or resources that helped?
3. What challenges did you face while adapting your teaching methods, and how did you address them? *(Moving)*
    - (Potential prompt) For example, common challenges in the literature included limited digital literacy, technical issues, lack of institutional support, student engagement, professional development, time constraints, lack of mentorship
4. Have these changes become a permanent part of your teaching practice? Why or why not? *(Freezing)*
5. What kind of support—whether institutional or personal—has helped sustain these adaptations? *(Freezing)*
6. How do you feel these changes impacted student learning and preparedness for clinical practice? *(Freezing)*

7. What do you see as the next steps or future changes needed in the delivery of nursing education? *(Freezing → Future Adaptation)*
8. Based on your experience, what advice would you give to other nurse educators adapting to evolving educational demands? *(Freezing)*

Conclusion:

- Is there anything else you would like to share about your experiences adapting to changes in nursing education?
- Would it be okay if I contact you to review your transcript for accuracy?
- Would you like to be contacted about the results of the study?
- May I reach out to you if I have any additional questions?
- Thank you for your time and valuable insights. Your contributions will help further our understanding of how nurse educators in Northern Ontario are adapting to the evolving educational landscape.

Appendix D: Overarching Themes

Theme	Categories	Codes
Theme #1: **Recognizing the Need to Change Teaching Methods**	*Traditional Teaching Methods (Lecture-style) Ineffective*	• Recognizing the need for change • "Need to change" • Response to change • "Not the best way to engage" • Lack of engagement • "Move away from traditional teaching" • Moving beyond traditional methods • "Bells and whistles"
	Student Diversity & Needs	• Diverse learners • Student expectations • Generational shift in learning • Student changes
	Systemic & External Pressures	• Adapting to external pressures • “COVID” • “changed after COVID” • “roller coaster” • Academic integrity
Theme #2: **Implementing Active and Student-Centered Teaching Methods**	*Pedagogical Innovation*	• Change in pedagogy • Flipped classrooms • NCLEX-style questions • Active learning • Guest speakers • Experimental learning • In-class activities • Integrated curriculum design • Case-based learning
	Digital tools	• AI • Technology integration • Simulation • Multimedia/Video • Blended learning • Gamification

	Challenges and Barriers with Implementation of Teaching Methods	• PD funding cuts • Time constraints • Time-consuming prep • Faculty collaboration gaps • Tech challenges • Lack of support • “paid out of my own pocket ” • Reliance on tech • Tech as a barrier • Institutional barrier • Tech equity • Barriers to learning • Technology as a distraction • Student barriers • Concerns about student accountability • Student reliance on slides • Resistance to adopting new pedagogy • Lack of feedback
Theme #3: **Adopted Contemporary, Student-Focused Teaching Methods**	*Evolved Teaching Approaches*	• Technology integrated • Embracing AI • Flipped classroom models • Changed pedagogy
	Student-Centered Teaching Strategies	• In-class activities • "critical thinking" and "application" • “Hands on” learning • “foster.. confidence” • “set up for success” • Student-centered • Learner-centered
Theme #4: **Embracing Lifelong Learning & Reflective Growth as an Educator**	*Evolving Educator Identity*	• Reflective practice • Increased teaching confidence • “trial and error” • “own research” • Professional growth

Commitment to Professional Development	• Peer collaboration • Faculty development needs • Professional development • Best practice • “trends” • Student feedback

Appendix E: Themes Mapped to Lewin's Change Theory

Theory	Theme	Supporting Quotes
Unfreeze	**(1) Recognizing the Need to Change Teaching Methods**	"I moved away from away from traditional teaching and textbook reading to more hands-on learning" (P2) "I started off, being very much lecture-based and almost entirely lecture-based to now kind of flipping it a little bit and putting a little bit more of the onus on the student and getting them to engage a little bit more and apply whatever concepts we're teaching." (P3) "I was more heavily focused on lecture-style teaching… I've identified that that's maybe not the best way to engage students sitting there for 3 hours listening to somebody talk… so more engagement with the students… drawing on their own knowledge." (P5) "Quite a mix of… younger learners… and adult learners. So, they have different learning styles and needs." (P4) "We have different learners than I've had in the past... mature students... international students... bridge students..." (P3) "There were a lot more mature students in my classroom… whereas, you know, when we have the younger students coming in with more of an understanding of technology… having to kind of adjust to that… We also have diversity in terms of… cultural diversity and ethnicity and age, like, there's all different kinds of diversity in the classroom." (P5) "During COVID, speaking to a screen, there was no interaction… when we came back to the classroom… students would be playing on their phones or have a little nap during class… I'm like, oh, I'm becoming boring… I need to change it up… maybe it's their learning style, and I'm not teaching to that learning style… just looking for better ways to teach them, better ways for them to understand the material." (P6) "Students are very different [from when I started teaching]… before… it seemed easy to stand up

		and just like talk to students… and they would... be engaged… then it morphed into a nonengaged group that wanted just the content… now they want a little bit of bells and whistles, but still don't particularly engage… I feel like I've shifted maybe about 3 times in the last 15 years of teaching." (P1) "Students need a lot more support, like study skills, test-taking skills… many students aren't coming with those foundational skills." (P4) "There's been multiple times that I've had to reteach or redemonstrate various skills" (P5) "It has kind of opened up my eyes to the various ways that students learn… and helped me adjust how I teach as well." (P5) "You can just see sort of like this generational difference… they do want a little bit of bells and whistles, but they still don't particularly enjoy engaging as much." (P1) "Students want more than just a lecture now… but they just want to show up and be spoon-fed." (P3)" " There's definitely more of an expectation that there's going to be integration of technology in the classroom… that there's opportunities, maybe outside of the classroom, that they're engaging with the content." (P3) "Also COVID was a factor. So, things changed there… Look at COVID and look at what our students had to adapt to." (P2) "Kind of a roller coaster… COVID… rocked my world in terms of what is online teaching? What can it be?" (P3) "Virtual concepts and academic integrity… created changes" (P2)
Moving	**(2) Implementing Active and Student-Centered Teaching Methods**	“I'm trying for my new classes this winter and next fall, like in my research classes to also have simulations where they'll be actually doing data collection and analysis, like physically" (P1) "So yeah, I would generally like, make my blanket… how I normally make my lectures and then go back and like find things that I can add, or things to make it more exciting" (P1)

	"the idea [is] that you took about a 3rd of the class to just review the key readings… not that you're going into them in any depth, the students still need to engage and ideally do the preparatory readings. But at least you're giving them a baseline, and then you're getting more into discussion and building on it and getting the students involved in a discussion." (P3)
	"UDL (Universal Design for Learning), open resources, [and] flipped classrooms" (P4)
	"Students giving feedback in the classroom… or maybe teaching a concept and then presenting a key study and then allowing students to kind of break off into pairs or into small groups and have discussions and share ideas, you know, and then bring it back". (P5)
	"I usually use the last kind of 3rd of the class for some kind of application activity of some kind that I generally associate very minimally with marks". (P3)
	"Other teaching methods used in addition to case studies include various activities and games." (P2)
	"So I created like an escape room on like teamwork. And the whole idea was that they're working in teams and focusing on different theory areas of like to work on the escape room. But then, after we debrief and we reflect on their participation in their group work while they did the escape room. So it's kind of a twofold site. I try to be experimental, and I try to use best practices." (P3)
	"But for gamification, so doing like a family feud to do, organize like a review day or even using some access to some databases online in order to apply those in class." (P3)
	"So like in a classroom, I may show a video or something like that, to help students that maybe don't want to listen to me the whole time." (P5)
	"I used a lot of… case studies… a 5-question case study [where] students can work in groups or by themselves" (P1)
	"In that case study… I get to know, did they actually do any reading from their textbook… it's also a way for me to teach that content just like in

	a different way". (P1) “I have integrated NCLEX style questions like evolving case studies.” (P2) “There's been a lot of demonstration, return demonstration… students’ kind of evaluating each other like learning a skill and then one evaluating, the other giving feedback" (P5) "Having overlap and assignments that might build upon each other, that might be helpful in translating that knowledge too" (P1) “like using electronic means of like testing. So maybe like a Kahoot game, or a Poll Everywhere, or doing things that is more like showy and not just talking. Like lots of different clips or videos. Yeah, more than just like a standing up and lecturing.” (P1) “"I've tried different things too… like prior to Mentimeter, we used to have clickers". (P3) "I use Menti… for open-ended questions… allows for varying viewpoints… more open and honest… allows for a more fruitful discussion.” (P4) "…do surveys, where the students can answer or have questions up on the screen… they can scan a QR code or type in a number… able to answer these questions [on their phones]" (P5) "Well, I think with the inclusion of different resources being now, like… our textbooks now being eBooks… in a classroom, I may introduce a video or something like that, to like help students that maybe don't want to like listen to me the whole time". (P5) "the Can Sims, like those virtual Sims in the classroom" (P1) “H5P Studio… to create drag and drop [activities]… to embed in [the] LMS" (P3) "online modules may be utilized" and described working across "asynchronous… hybrid… [and] in person" (P2) "workstations… in person and online… some stations were online… used drag and drop [questions]" (P3) "A coworker gave me some ideas with gamification… I started using Blooket… students really enjoyed that" (P6)

	"To set up a lot of them… it's a lot of prep behind the scenes", emphasizing that "you're going to have to go through them first… it's not like you just play it and go right" (P1)
	"I kind of look at, and I'm like, you know what, for the energy that I'd have to put in, I don't know that I really want to… because I feel like for the amount of work I feel I would have to put in to generate something…" (P3)
	"No time left in the tank after committee work, teaching hours, and scholarship expectations". (P4)
	"There's not a whole lot of financial support to attend [PD]" (P3)
	They'll offer PD, but you have to figure out how to fit it into the 45 other things we need to do" (P4)
	"I've been trying to get creative with some of the funding piece to like using our joint stability reserve fund to try and pay for like some online courses or things like that." (P3)
	"I have paid for things out of my own pocket in the past [for PD]" (P6)
	"Menti [Mentimeter] institutional account was cut due to budget" (P4)
	"We are so Northern… expensive to get to conferences… a little bit more reservation from sending many faculty" (P5)
	"Technology was a problem… drawing on paper when tech fails… camaraderie in the struggle" (P6)
	"So like, even like from an equity standpoint, sometimes using the tech… doesn't go as we plan, because students just might not have it or have access to it" (P1)
	"Students weren't expected to have a laptop… now we have that as a requirement" (P3)
	"I feel like a flipped classroom… I've always wanted to try those a little bit… but then I'm like scared. Because if the students don't read the book… are they just going to like Chat GPT… did I not catch that they taught something wrong?" (P1)

Freeze	**(3) Adopted Contemporary, Student-Focused Teaching Methods**	"I always found it really challenging to flip the classroom when the students hadn't done that initial preparation". (P3) "They're like watching shows or being on YouTube… technology has really distracted them, because it's hard for them to turn off the personal aspect of technology versus using it like in a professional sense." (P1) "typically use Menti… and sometimes Prezi," (P4) "Technology isn't going away… even if we wanted to hide from it, we couldn't… using those types of tools will always be a part of practice." (P4) "moving more virtual and adapting." (P2) I would say my main go-to is the hybrid flipped classroom… integration of the application activities… kind of gone back to that." (P3) "UDL, open resources, [and] flip classrooms" [most significant changes in their teaching] (P4) "They really learned from those in-class assignments… students came prepared and looked for sources." [embedding in-class assignments] (P6) "Instead of fighting AI… [I] started embracing it… making them challenge AI… do more personal type assignments." (P2) "Exploring AI… still trying to navigate like, what is the role of AI in education? I might get AI to help me refine [assignments]… help develop rubrics… get ideas… case study development." (P4) "Absolutely, I think… they've [enhanced structural design] improved my teaching practice… made things more efficient… added to the quality of teaching… supporting UDL." (P4) "They [interactive activities] have become permanent… it works well… students seem more engaged." (P5) "I removed essay assignments… had them answer questions from the textbook in class instead" (P6) "If we can foster that confidence early on… I truly feel we'll have more confident students… so that when they get to 4th year… they feel ready. Not

	necessarily from a skill set point… I'm speaking more of like a they're supported… we have your back, etc." (P2)
	"I think it helps build their confidence level… professionalism… prepare for clinical… set them up for success." (P4)
	"I kind of learned from talking to students and understanding their needs… adapting to kind of what works for them." (P5)
	"It's all trial and error." (P2)
	"Just kind of experimenting. See how the students respond… thought family feud was going to be an absolute hit… but not the case." (P3)
	"I always make notes in like my teaching and learning plan each year of little changes I want to make… So, I feel like I did some good things this past semester. And then I'm looking to build upon them for the next semester… I've already started making notes for changes for next winter." (P3)
	"Nurses and reflective practice… always reflecting on my teaching practice and kind of looking at what I can do to improve it each year… Reflective practice in action… looking at what you can do better." (P3)
(4) Embracing Lifelong Learning & Reflective Growth as an Educator	"You do not have to know everything. Don't pretend you know everything… don't be afraid to ask for help. Ask for feedback from your students—that's also critical." (P2)
	"Let's learn together." (P2)
	"I try to be experimental… I try to use best practices… Trying to keep up with evidence-informed practice and keep on pace with some of the changes." (P3)
	"Different trends in education… shape what I do in the classroom." (P3)
	"I feel like it's dynamic… technology evolves… we have to move with them… We can't become comfortable… people might not update their slides… things change." (P6)
	"I always will get them from if I attend some sort of workshop… or somebody tells me like, 'Oh, I'm using like zip grade to mark my exams'… like, Oh, cool! I've never heard of that. Tell me about it." (P1)

	"What I found really helpful is just to like chat with people that I work with and attending PD that's on new ways to teach and technology." (P1) "My team [faculty], we share a lot… having that good connection like, 'Hey, what do you think of this?" (P2) "We're not in competition… share what works… team that works together." (P5) "Advocating for yourself… not being afraid to collaborate with other teachers… would be lovely to have a brainstorming session." (P5) "PD or things that I've familiarized myself with… many opportunities to integrate different strategies." (P3) "We need more data on… how these students are learning… what's the best way to teach them and to help them engage… not just memorizing and passing a test but actually learning the information because they're going to be using it to critically think." (P1) "I've reviewed myself prior to coming into the classroom and identifying that maybe that's a helpful way of presenting something… I do my own kind of research," and "Evaluate your own teaching to see if it's working or not." (P5)