A PHENOMENOLOGICAL STUDY OF LIVING ON THE EDGE

~ A CO-CREATED TEACHING-LEARNING JOURNEY

DISSERTATION

by

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A Dissertation Submitted in Partial Fulfillment
of the Requirements for the Degree of

Doctor of Philosophy

in the Graduate Academic Unit of Interdisciplinary Studies

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This dissertation is accepted by the
Dean of Graduate Studies

THE UNIVERSITY OF NEW BRUNSWICK

June 2022

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ABSTRACT

The purpose of this study was to describe living on the edge for nursing student participants engaged in the teaching-learning journey. The humanbecoming paradigm provided the philosophical stance that informed the methodology and provided the discipline-specific context for the process. Giorgi's (1985, 2009) descriptive phenomenological method was used to describe the lived experience of living on the edge in teaching-learning. The central findings or general structural description of living on the edge in teaching-learning for these nursing student participants emerged as: acquiescing to ambiguity in the paradoxical rhythms of moving moment-to-moment coming to know something of value; dignifying the journey by vigilantly exploring unknowns of the everchanging; risking venturing forth with quieting-disquieting regard amid diverse alliances in anticipation of cherished endeavors; persevering with novel experiences amid potentiating-restricting opportunities in realizing cherished endeavors; venerating words, wisdom, and images of others in considering-composing cherished choosings; and discovering anew cherished priorities as possibilities emerge. These research findings enhance the existing but limited knowledge of nursing students' lived experiences and offer new insights into these experiences. These research findings describe the lived experience of living on the edge in teaching-learning to which may facilitate the refinement of teaching-learning practices and strategies.

DEDICATION

I dedicate this work to my husband (Chris), family and friends, whose continued love, friendship, and support have inspired me to persevere, follow my passions, and complete this dissertation and my degree.

I dedicate this research investigation to past, present and future nursing students at the University of New Brunswick. I would like to thank my students for being so open and sharing of their learning experiences and challenges on their cocreated journey of teaching-learning whether we were in classrooms, working with clients, or engaging in alternative delivery methods (during COVID). I firmly believe that this journey is a paradoxical pattern of teaching and learning, often shifting roles in our lifelong learning adventure. I thank my colleagues at the University of New Brunswick for their openness and support as we have connected and collaborated along the way.

I firmly believe that we all learn from each other on this cocreated journey creating new meanings, and your insights have guided me to improve in my various roles, recognizing that we are each on a journey of becoming in living quality.

Finally, I dedicate this work to my mother (Ruby) and to the memory of my late father (Albert: 1929 – 2008), who as homesteaders settled on the prairies and instilled in me the values of passion, perseverance, commitment, and hard work. They imparted an appreciation for the value of life, learning, and experiences as never-ending opportunities in life.

ACKNOWLEDGEMENTS

It is with heartfelt appreciation I acknowledge my dissertation committee for their unwavering commitment, guidance, thoughtful critiques, and the scholarly wisdom. I want to acknowledge each committee member for encouraging me to persevere, remain committed, and enjoy the process. Dr. Catherine Aquino-Russell, I thank you for mentoring me and providing support throughout the dissertation process shaping my development as an academic and professional writer. I thank you for introducing me to Dr. R. R. Parse, the humanbecoming paradigm, and to Giorgi's descriptive phenomenological method. Together we were able to envision how the Parse's humanbecoming paradigm, and Giorgi's descriptive phenomenological research method were appropriate for exploration of the lived experience of "Living on the Edge in teaching-learning." Dr. Steven Baumann, I thank you for guiding my development as a Parse scholar and for respecting my intentions and fortifying my commitment through our discussions in relation to the emerging and everchanging humanbecoming paradigm. Dr. John Grant McLoughlin, I thank you for encouraging me to embrace ambiguity, and explore new ways of thinking and being with students. You encouraged me to consider new possibilities, and I will continue to be guided by your wisdom as I journey with students on our cocreated journey of lifelong learning. Finally, I would like to thank the nursing student participants in this study for making it a reality, and to the students I have had the honour of guiding on their learning journeys. Their participation in this study further illuminates student perspectives and contributes new knowledge to the growing body of literature on nursing specific pedagogies that support interdisciplinary teaching-learning practices in the development of resilient, self-directed, lifelong learners.

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CHAPTER 1 – INTRODUCTION TO PHENOMENON OF INTEREST

"Knowledge is an unending adventure at the edge of uncertainty." (Jacob Bronowski)

Researcher's Perspective

Early in my academic career, I found it challenging to create a learning environment where clients, their families, students, and staff felt valued, honoured, and respected. Over the course of these early clinical practicums, several challenges became apparent. Through the lens of the humanbecoming theory and teaching-learning model, my students and I engaged in the humanbecoming teaching-learning processes and provided care guided from the individual's perspective (Ursel & Aquino-Russell, 2010). The students experienced ambiguity in terms of the application of nursing theory to nursing practice as what they had learned in terms of patient-centered care was not what they were witnessing in the clinical setting. I observed that with support, they persisted in their approaches of applying theory to their patient-centered care, feeling uncertainty in the staff members' responses to their nursing care. They practiced patient-centered care aware they were risking potential disregard by others for their actions.

It is my belief that everyone is an expert in their own learning, knowing what knowledge they bring to their teaching-learning situation from previous personal and professional experiences. In the teaching-learning relationship, the students and I would move through situations identifying knowledge gaps or concepts they wanted to learn. This was intentionally very different from my previous personal teaching-learning experiences of didactic teaching to objectives or the focus on skills and the meeting of abilities or outcomes.

Letcher and Yancey (2004) shared that when reflecting on the teaching–learning process of *living with ambiguity*, "the students' journaling suggested that it is an

experience of living on the edge of knowing and not knowing, of being sure, yet not sure" (p. 38). Subsequently, my way of being with nursing students has evolved into a cocreated journey of teaching-learning focusing on the learners' understanding and their critical reasoning processes as they express their own learning needs, which recognizes the learner as "indivisible, unpredictable, and everchanging…. From a humanbecoming perspective, teaching-learning is a never-ending journey of giving-receiving in coming-to-know" (Parse, 2004a, p. 34). "It is everchanging with the *becoming visible-invisible becoming* of the emerging now as individuals assume responsibility for learning in living quality as truth for the moment" (Parse, 2021c, p. 180). *Becoming visible* is the coming to know something of importance, while *invisible becoming* is knowing as it moves into the future or beyond the horizon. "Cocreating is co-inventing the becoming visible-invisible becoming of the emerging now as it is appearing. Ways of co-inventing in teaching-learning arise with *pattern-seeing* and *see changing*" (Parse, 2021c, p. 180). For Parse (2021c), "pattern-seeing is the knowing that arises as different illimitable experiences are in dialogue with a personal frame of reference" (p. 180). Pattern-seeing is demonstrated in the ability to incorporate knowledge from our experiences into a personal frame of reference which is our belief structure based on our current values, beliefs, and experiences. "See-changing is the explicit-tacit knowings that arise with discerning insights that shift perspectives. Perspectives are shifted as the familiar is seen in a new light, transforming the meaning with the becoming visible-invisible becoming of the emerging now" (Parse, 2021c, p. 180). In healthcare today, there are no enduring absolutes with the explosion of medical and technical discoveries and advances. Students have more content to learn, more healthcare technologies to master, and access to more

information through technology. This can both assist and hinder how they learn. “The teaching-learning journey unfolds in pushing-resisting as the risk of changing surfaces with certainty and uncertainty while not conforming to some traditions and all-at-once conforming to others” (Parse, 2021c, p. 180). I have endeavored to highlight advancements in knowledge, practice, and beliefs, which have occurred, and have drawn attention to areas of focus for potential change or debate likely to occur in the future. Initially, this has created a great deal of discomfort and uncertainty for the students who generally preferred to be provided with the essential facts and information that would be required on tests or examinations. However, as the semesters have progressed, students have come to accept the idea that healthcare is continuing to evolve and there are few absolutes. As teachers in 21st century academic and healthcare environments, we strive to prepare our students to be responsive to the changing demands of the future in healthcare, by inspiring inquisitive minds and encouraging a culture of lifelong learning.

As a nurse educator, I have endeavored to guide students to evaluate, interpret, and transfer theory to practice, which I believe is at the heart of the teaching-learning journey for nursing students practicing/living the art and science of nursing. Based on my own teaching-learning experiences, I have had fleeting glimpses into various students’ experiences as we moved along our teaching-learning journeys. It is being with students in the teaching-learning relationship and living the values and beliefs of the humanbecoming paradigm that inspired me to explore students’ teaching-learning experiences and the teaching-learning process. There is so much more to explore, understand, and appreciate about these experiences and how we as educators can be responsive to and supportive of teaching-learning needs. This need to understand has

compelled me to search the literature to further appreciate the theoretical or curricular, teacher, and student perspectives on teaching-learning.

The theoretical perspective chosen for this research is Parse's humanbecoming school of thought (Parse, 1981, 1987, 1992, 1997, 1998), because there is congruence amidst the themes within my reflection on experiences, my search for "something more," and the humanbecoming theory. This revelation began my journey to live and communicate my values and beliefs based on the humanbecoming school of thought. The complexity of the humanbecoming language was challenging but I was captivated by the exquisiteness of the humanbecoming school of thought. My journey to understanding the humanbecoming paradigm has been like looking into a multi-faceted crystal; discovering new facets with each viewing depending on the light and circumstances, each discovery deepening my appreciation of the theory, school of thought, and evolution into a new paradigm, with its explicated philosophical underpinnings (Parse, 2013).

Teaching-Learning Perspectives

Initial examination of the literature and ongoing dialogues with colleagues have not adequately satisfied my perceived knowledge gap in coming to understand the meaning of the nursing students' experiences as they transition from learning theory to practicing or living the art and science of nursing. The general education literature has demonstrated a shift from the traditional teaching paradigm (i.e., teaching as telling or "sage on the stage") which was my previous experience, with some movement toward a more learner-centered approach to teaching-learning (Weimer, 2013).

In my experience as a nursing student and most recently as an educator, the environment of nursing education is essentially teacher directed. The teacher is seen as

the expert imparting knowledge believed to be important and the student is expected to absorb this information and is prepared to regurgitate as required on the test that would confirm effective knowledge transfer. Parse (2021c) recognized this view as the traditional approach and described it as follows:

> Teaching-learning happens in the context of teacher-learner values and formal settings' and institutional values. The traditional teaching-learning perspective based on teacher-learner and institutional values considers the individual a biopsychosociospiritual organism and defines teaching as telling (face-to-face or electronic) and learning as destination….The focus is on learning objectives or outcomes to be achieved by the learner, and the teacher is held responsible for that learning….The approach is teacher-centered no matter how the objectives or outcomes are stated, and the goal is for conformity according to developmental stages; the process is linear and static, leading to pre-determined absolute truths. (p. 180)

This pedagogy focused on outcomes- or competency-based education continues as the predominant pedagogy of today. It is a daunting responsibility that the educator is accountable for being the "expert" with the duty to impart all knowledge that nursing students need to practice.

Parse (2004a, 2014b, 2021c) identified teaching-learning as sciencing and [performing] art. "The sciencing refers to the never-ending coming-to-know, and the art refers to the aesthetic creative endeavor of respecting knowing as changing" (Parse, 2021c, p. 180). This view recognizes that we are always learning and changing within our

day-to-day experiences. This knowing is incorporated into our existing framework of experiences, values, and beliefs.

The curriculum revolution in Canada of the 1980's and 1990's was initiated to shift from the behavioural objectives (or outcomes-based curricula models) to a more humanistic paradigm concerned with caring, creative, and critical thinking learning processes, to be informed by theories (Doane, 2002; Paterson, 2007). During the same period in the United States (U.S.), the National League for Nursing (NLN) Curriculum Revolution called for changes to outcomes- and competency-based curricula models and significant reform in the teaching process (Diekelmann et al., 2005; Forbes, & Hickey, 2009; Tanner, 2007). These initiatives set the stage and provided the impetus for nurse educators to initiate changes in curricula, student-teacher relationships, and the nursing community. In the face of this call for change, nursing curricula continued to become more "content-heavy" and focused on outcomes-based learning rather than making the huge shift to the process of student-centered learning or the cocreated learning journey.

In the extant literature on teacher-learner pedagogies in nursing education, there is a growing awareness of the significance of teacher-learner relationships in the cocreated learning journey (Tanner, 2007). Nursing education has continued to be defined in terms of learning objectives, which are focused on what the teacher was required to provide in course content (teacher-focused performance). The most common pedagogy today remains focused on outcomes-, competency-, or abilities-based nursing curricula, valued by the professional organizations as concrete or objective evidence that students are safe to practice according to professional standards (learner-focused performance). Over the past decade, nursing curricula have shifted somewhat to incorporate relational practice

methodologies focused on teacher-student interactions and meaningful learning experiences (Doane & Brown, 2011; Doane & Varcoe, 2008, 2015). Following an in-depth study of nursing education, Benner et al. (2010) challenged nurse educators to consider significant changes in their approaches to student learning.

Views on the Students' Perspectives

Teaching-learning paradigms have different views of the students and their involvement in the teaching-learning process. In conventional teaching, the students responded to teaching as telling, the focus was on the teacher providing content and students reacted by being able to repeat this information in various test situations that demonstrated their knowledge to meet outcomes. In the learner-centered approach, teachers have explored more active learning strategies where students reflected on what and how they are learning. The emphasis was on the students and their decisions about their learning to engage with them in their learning.

Benner et al. (2010) recommended that we develop teaching methods that keep students focused on patients' experiences, through role-play and simulation exercises where they could rehearse the appropriate approaches to care for patients and their families. In Parse's (2004a) humanbecoming teaching-learning theory "humans are always on a teaching-learning journey of giving-receiving in mutual process with predecessors, contemporaries and successors in cocreating becoming" (p. 34). This view identified that students come with knowledge and past experiences that they bring to the teaching-learning situation. It is through dialogue with the student that the different experiences, perspectives, and values related to the current specific context are articulated

and may shift with new knowledge “transforming meaning for the moment” (Parse, 2004a, p. 34).

From my perspective, understanding the meaning of the students’ experience is critical to an effective teaching-learning relationship. It offers an opportunity for students to share current experiences, knowledge, and values they bring to the current situation. This explication enables the teacher and learners to move in rhythm with one another, cocreating learning as the teaching-learning journey unfolds for students building a foundation of new knowledge to draw from in future situations. My research focus is teaching-learning from students’ perspectives in terms of *living on the edge* within their teaching-learning journey. Exploring the students’ responses as to what they would need or want to know in becoming professional nurses is an area that requires more in-depth study. This shift of responsibility to students and their identification of personally unique learning needs and desires to know requires a significant paradigm shift.

In nursing education, we are challenged to make changes to the way we educate and prepare our nursing students for professional practice. I have utilized the humanbecoming teaching-learning model as a framework to organize the review of the literature and the theoretical lens of the human becoming paradigm (Parse, 2014b, 2021c). This dissertation includes an exploration of extant literature to uncover the theoretical perspectives and research contributions from the disciplines of philosophy, education, and nursing to teaching-learning pedagogy, and specific article selections will be presented in the literature review.

Comparison Between Natural Science and Human Science

Cody and Mitchell (2002) traced the origins of human sciences back over 250 years to Giambattista Vico (1668 –1744) and subsequently Wilhelm Dilthey (1833-1911) who is more commonly recognized in North America as the originator of human sciences. “Vico believed that human science is concerned with truths that human beings themselves make true through their creation of societies, cultures, and histories, truths that reside at the root of everyday discourse and common sense” (Mali, 1992, as cited in Cody & Mitchell, 2002, p. 5).

> Dilthey’s concern is that natural sciences applied to human living do not capture the meaning of life… His focus is on the interconnectedness of humans with the world, and he propose[d] developing the human sciences to enhance the understanding of experience as humanly lived. Dilthey believe[d] that the human sciences should illuminate meanings, values and relationships. (Parse, 1998, p. 9)

“Human science nursing means learning how to care for people in a context in which a primary value is honouring and upholding individuals’ and groups’ rights to think, feel, and act out of their own lived experiences in relation to health and quality of life” (Cody & Mitchell, 2002, p. 8). “Human science nursing offers a way of growing comfortable with uncertainty in confronting the very real mysteries of life in research and practice” (Cody & Mitchell, 2002, p. 11). In 1985, Giorgi proposed that a discipline, (such as nursing), is created by the development of its own unique knowledge base that is developed from within its theories. Nurse scholars such as Newman (1994), Rogers (1970, 1992) and Parse (1981, 1998, 2014b, 2021c) have offered alternatives to the totality paradigm and presented other theoretical perspectives in the human science

tradition. When the discipline of nursing is viewed as a human science, value is placed on the belief system or *nature of existence*, which includes the assumptions, postulates, and principles, concepts and paradoxes of the humanbecoming theory (Parse, 1981, 1990, 1994, 1998, 2007b, 2011a, 2011b, 2014b, 2021c). "The essence of Parse's humanbecoming theory is embedded in meanings, patterns of relationships, and in hopes and dreams" (Parse, 1992, p. 37), which are consistent with the essence of human science.

Parse (1987) identified the discipline of nursing as a basic science with its own body of distinct knowledge built on paradigms and theories from within the discipline of nursing. This paradigmatic shift offered me an invitation to reconsider my way of being as a nurse educator. This extends to exploring the unique perspectives of people I have had the privilege to "be with" during their hospital experiences whilst I was moving towards the human sciences, the simultaneity paradigm, and the humanbecoming school of thought.

Mitchell and Cody (1992) originally defined the ontological and epistemological tenets for human sciences based on their hermeneutical analysis of the literature while remaining true to the works of Dilthey and Giorgi. In 2002, Cody and Mitchell reaffirmed these ontological tenets:

1. Human beings are unitary wholes in continuous interrelationship with their dynamic, temporal, historical, cultural worlds.
2. Human experience is preeminent and fundamental, and reality is the whole complex of what is experienced and elaborated in thinking, feeling and willing.

3. Human beings are intentional, free-willed beings who actively participate in life continuously.
4. The researcher is inextricably involved with any phenomenon investigated.

And the epistemological tenets

1. Research and practice focus on the coherent experience of the person's meanings, relations, values, patterns, and themes.
2. Lived experience is the basic empirical datum, as gleaned from the participant's description free of comparison to objective realities or predefined norms.
3. The person's coparticipation in generating knowledge of lived experience is respected, and no more fundamental reference that what is disclosed by the person is sought.
4. The researcher seeks knowledge and understanding of lived experience and is cognizant of the other's lived reality as a unitary whole. (Mitchell & Cody, 1992, p. 56)

Mitchell and Cody (1992) confirmed that the humanbecoming school of thought has "remained consistent with the fundamental ontology and epistemology of the human science tradition" (p. 59).

The simultaneity paradigm shifted the focus from the view of human as merely the sum of bio-psychosocial-spiritual parts, to human who is "interrelating with the environment while cocreating health" (Parse, 1981, p. 13). The assumptions of human and becoming within the humanbecoming school of thought ontology were grounded in

the human sciences, consistent with Martha E. Rogers' (1970) work (Parse, 1981, 1987, 1998), and focus on "meaning, rhythms, and moving beyond" (Parse, 2000, p. 275). I will expand further upon the assumptions and principles in the upcoming section on ontology.

> The simultaneity view is of the human as unitary...the unitary perspective is a view that the human is irreducible in mutual process with the universe. Health is a process of changing value priorities. It is not a static state, but rather ever changing as the human chooses ways of living. (Parse, 1999, p. 275)

Parse (1999) further highlighted that

> nurses living the beliefs of the simultaneity paradigm hold as primary, persons' perspectives of their health situations and their personal desires to change. Thus, there are no specific regimes and goals established to meet societal norms. Nurses focus on knowing participation (Madrid & Barrett, 1994; Rogers, 1992) and bearing witness, as persons in their presence choose ways of changing health patterns. (p. 275)

Parse has refined the humanbecoming school of thought over the years (Parse, 1981, 1996, 2004b, 2010b, 2011b). Parse's humanbecoming paradigm has evolved from the humanbecoming theory or school of thought previously located within the simultaneity paradigm to its own metaparadigm within the discipline of nursing. Cody (2012) reflected "Parse has been on the leading edge of nursing theory development, meta-theory, and nursing theory-guided practice and research for three decades.... She was the first theorist to articulate a suite of fully developed, uniquely conceptualized research and practice methodologies" (p. 8). The humanbecoming school of thought is

composed of the nature of existence (2021c), epistemology, and methodology underpinned by guiding values, philosophical beliefs, and ideals as set forth by the theorist in the postulates, principles, concepts, and paradoxes (Parse, 1981, 1998, 2007b, 2010b, 2014b, 2021c). Cody (2012) elaborated on the power of humanbecoming theory within the human sciences:

> It has changed my understanding of what it is like to be human, what we consider health, and how what we do as nurses contributes to human betterment. As a nurse I have yet to experience the nurse-person relationship in which a strong understanding of Parse's concepts and principles did not provide meaningful guidance to my practice. (p. 8)

This incorporation of the simultaneity view and the humanbecoming paradigm into my practice created an uncomfortable tension between the traditional, natural science context and my way of being with others as it evolved. Affirmation of the inherent value of the human sciences tenets, and acceptance of the humanbecoming paradigm as a guide to my way of being required a change and trust that as I continued to practice in the same-yet-different way (Mitchell, 1990), clarity, and understanding would come. Mitchell's work (1990, 1995) provided a rich and more in-depth exploration and discussion of the pushing-resisting that occurs with this transcendence to humanbecoming school of thought and a new way of being.

Mitchell (1990) described this challenging journey in changing a nurse's traditional practice to Parse's theory-based approach, the existing discomfort and tensions in practice, and how changing views of health, quality of life, and nursing practice evolved. She identified that this shift in paradigms "requires a transforming of values,

beliefs and ways of being" (Mitchell, 1990, p. 176) and that it was not an easy process. In 1995, Mitchell completed an evaluative study of the implementation of humanbecoming theory in an acute care environment; she explored and described the changes in the nurses' values, beliefs, and perspectives, which shifted from 'patient as a problem" to patient as a human being and resulted in changes in practice. She noted similar struggles and frustrations occurred with learning and implementing the humanbecoming theory as it is "all-at-once, simple and complex, concrete and abstract, understandable and elusive" (Mitchell, 1995, p. 393). However, 4 years after completion of this study, staff continued their theory-based practice and to request further education, "because Parse's theory made a meaningful difference for nurses in practice and in their relationships with clients and families" (Mitchell, 1995, p. 396).

Living "humanbecoming theory" referenced living the three principles of meaning, rhythm, and transcendence. The humanbecoming school of thought as it was known encompassed the theory, original ontology (human, universe, health), epistemology (human patterns) and methodologies, situated within the simultaneity paradigm. Parse's humanbecoming school of thought has evolved, as knowledge within the nursing discipline has advanced through sciencing, informing the most recent changes in the ontology and epistemology. With recent updates, Parse (2013) has made explicit that humanbecoming is a paradigm with its own unique ontology, epistemology, and methodologies, and no longer fitting within the simultaneity paradigm. The humanbecoming paradigm will be discussed in more detail within the context of explicating the theoretical perspective. Parse (2021c) further explicated the

humanbecoming paradigm belief system as the nature of existence which is comprised of the philosophical assumptions, postulates, concepts and paradoxes.

Theoretical Perspective and Research Method

The humanbecoming paradigm has continued to guide my nursing practice as it has added a richness to my professional experiences as a nurse and teacher. The humanbecoming paradigm has added a new dimension to my nurse-with-other relationships. Parse's humanbecoming teaching-learning model, underpinned by the humanbecoming paradigm is the theoretical lens for this research as it honours my beliefs about humanuniverse, human dignity, living quality, and considers the importance of values, beliefs, and relationships. The humanbecoming paradigm continues to enrich my life and enhance day-to-day nurse with person relationships. The humanbecoming paradigm, the humanbecoming teaching-learning model, and the essences, paradoxes and processes are explicated in Chapter 2.

My research interest is focused on students' experiences with teaching-learning in nursing education (not a universal experience, or something experienced by everyone) and on the meaning of living on the edge for nursing students within this context, to generate a general structural description (Giorgi, 1985, 2009) of living on the edge for nursing students, and to build on the humanbecoming paradigm teaching-learning model (Parse 2004a, 2014b, 2021c). I have employed Giorgi's (2009) descriptive phenomenological research method to uncover the meaning of nursing students' experiences.

In summary, the findings of this study illuminate the meaning of the nursing students' experiences of living on the edge in a teaching-learning situation. These

teaching-learning experiences were analyzed through the lens of the humanbecoming teaching-learning model which is underpinned by the humanbecoming paradigm and is discussed in detail within the research findings. Understanding the phenomenon of living on the edge as experienced by students will be of value when considering future teaching-learning approaches as we guide nursing students in their preparation for the 21st century.

Phenomenon of Interest

The phenomenon of interest for this study was the lived experience of living on the edge for nursing students in the teaching-learning context. Living on the edge is a lived experience, in that people have experienced this phenomenon in their own personal ways. Living on the edge is a phenomenon inherent in our day-to-day living, in the choices and decisions we make about how we are going to be with a situation. There is no unique definition for this ubiquitous phrase in our society; however, common usage suggests that risk, ambiguity, change, and challenge with no guarantee of reward or success are elements of living on the edge.

On my journey of lifelong learning, each step has been precipitated by a sense of needing to live life to the fullest, an adventure, a sense of risking success or failure, and a powerful sense of achievement and accomplishment. In my experience the more challenging the project, the greater the sense of accomplishment and reward. Reflection on my experience has revealed an attraction to living on the edge, yet the explicit focus in the phenomenon emerged while pursuing my doctoral education.

As a nurse educator, I regard the students as experts in their learning, previous personal lived and learning experiences. These students set goals, identify their knowledge gaps or areas of discomfort, and share these, so in partnership we can move

together on the teaching-learning journey. The teaching-learning journey is not always comfortable, as we identify the unknowns and the uncertainty of not knowing what we need to know.

My journey in coming to know the humanbecoming paradigm has evolved from an initial focus on clinical teaching to integration into my skills lab, simulation, and classroom teaching-learning activities (Ursel, 2012, 2020). With each new endeavor, the values and beliefs of the humanbecoming paradigm guided by the humanbecoming teaching-learning model resonate as I continue to develop a deeper appreciation for the students' perspectives in the teaching-learning journey.

Motivation and Significance of This Study

Along my teaching-learning journey with nursing students, I have had the privilege to share in many students' teaching-learning experiences while practicing the art of humanbecoming. The humanbecoming paradigm (Parse, 2011b, 2014b, 2021c) has provided a valuable lens for my exploration of new ways of guiding students through a variety of ongoing "challenges," seeking to understand the teaching-learning experience from the students' perspectives, and connecting with them, which has been a key theme woven throughout my teaching-learning experiences. There has been limited research available on the students' teaching-learning experiences to inform academic practice. Student experiences have been drawing increased attention in the literature recently, and this will be explicated in detail in the Chapter 3.

In my teaching-learning experiences, personalized, meaningful encounters with others, being open, honest, and available; listening to concerns; honouring students with a desire to work with them on their teaching-learning journeys have been essential to the

teaching-learning experience. I believe these ways of being are congruent with the humanbecoming paradigm, teaching learning model, and ethical tenets.

In reflection on students' descriptions of their teaching-learning experiences, through course reflections and evaluations, it has been clear that each of the students responded in a unique way to learning situations as they have unfolded. Research in human sciences has provided a special way of focusing on humans to increase understanding of experiences as they are lived by the person, "thus, the human science nursing frameworks and theories are those that have as their focus a concern for the meanings, values and relationships of the human-universe process" (Parse, 2002, p. 3).

Over the past 2 decades, there has been a shift to incorporate humanistic, narrative, or interpretational practice models focused on the teacher-student interaction and facilitating meaningful experiences for the students through partnerships (Anthony & Landeen, 2009).

More recent research has focused on various teacher-learner pedagogies in nursing (Tanner, 2007; Weimer, 2013) and this study provided an opportunity to uncover new ways of being, not just in terms of sharing knowledge, addressing content issues, assessing outcomes or abilities, but also in the unique engagement of students in lifelong learning. There is a growing awareness of the significance of teacher-learner relationships in the cocreated teaching-learning journey.

For the shift to learner-centered teaching to occur there is a need to understand what it means and how/if it can be accomplished. Over the past decade Social Sciences and Humanities Research Council (SSHRC) has invested 8% of total research resources in education-related research projects (2016, p. 4). Although there has been limited

nursing education research completed in Canada, this situation has provided a tremendous opportunity to explore the lived experience of living on the edge as nursing students navigate their teaching-learning journey. In 2015, SSHRC's *Imagining Canada's Future* identified six challenge areas where research resources would be focused to help Canadians adapt and evolve over the next 20 years: teaching and learning in higher education was identified as one of these priority challenges. SSHRC embarked on a series of collaborative activities, "engaging with researchers, sector leaders and graduate students in pursuing clarity on emerging ways of teaching and learning" (2016, p. 4). In 2016, SSHRC's *Leveraging Knowledge for 21st Century Teaching and Learning* report, findings and key themes from various collaborations in relation to challenge areas were shared. In follow-up to challenge area "What new ways of learning, particularly in higher education, will Canadians need in order to thrive in an evolving society and labour market?" (SSHRC, 2016, p. 4), several key themes and insights emerged and were shared to guide future research. These themes included

1. Traditional teaching and learning techniques are challenged in technology-mediated environment….
2. New technologies can increase the access to – flexibility of – learning, while also bridging the gap between knowledge and community….
3. Appropriate teacher training and tools, flexibility and incentives support educators at all levels in immersing themselves in innovative, student-centered and collaborative approaches….
4. Applying a diversity lens to teaching approaches is integral to achieving successful learning outcomes….

5. A better understanding is needed on what constitutes “culturally relevant” programming and delivery methods….
6. More research on experiential learning is needed to develop better pedagogical, curricular, and educational policy…. (SSHRC, 2016, p. 3)

Overall these findings and themes identified a need to support the disciplines “using theory and research to guide teaching and learning, and vice versa” (SSHRC, 2016, p. 3). New insights are emerging “as the pedagogical focus moves from acquiring isolated, discreet skills (‘learning outcomes’), to nurturing the learner’s capacity to understand, adapt and apply knowledge and concepts (‘learner outcomes’), to establishing broader *competencies* integrated and measurable within individual fields and professions” (SSHRC, 2016, p. 4).

The findings for this research study are presented through the theoretical lens of the humanbecoming paradigm (Parse, 2014b, 2021c) and more specifically the humanbecoming teaching-learning model (Parse, 2014b, 2021c). This research illuminates student perspectives and contributes new knowledge to the growing body of literature on nursing specific pedagogies envisioned to enhance understanding of the phenomenon of living on the edge in teaching-learning from the students’ perspectives and offers recommendations for teaching-learning that support interdisciplinary teaching-learning practices in the development of resilient, self-directed, lifelong learners.

Research Question

The research question for the study is What is the general structural description (or meaning) of the lived experience of living on the edge for nursing students? The interrogatory statement guiding students' responses is "Please write about a teaching-learning situation or experience in your nursing program that depicts what living on the edge is like for you"

Objectives of This Study

The objectives of this study were to

1. describe the meaning of the lived experience of living on the edge in a teaching-learning situation from the perspective of nursing students practicing the art and science of nursing;
2. generate a general structural description of the lived experience of living on the edge for nursing students in a teaching-learning situation while practicing the art and science of nursing;
3. inform Parse's (2004a, 2014b, 2021c) humanbecoming teaching-learning model; and
4. contribute to the ongoing development of the teaching-learning knowledge which will in turn guide nursing education and practice.

Summary

I have introduced living on the edge in the teaching-learning context as my phenomenon of interest and explored the significance to nursing as a lived experience in teaching-learning. The purpose of this study was to uncover the general structural description (or meaning) of living on the edge for nursing students engaged in the

teaching-learning journey, contribute to teaching-learning knowledge, and explicate the humanbecoming teaching-learning model in relation to living on the edge from the students' experiences. These research findings offer insights into student lived experiences of living on the edge in teaching-learning and contribute new knowledge to the refinement of teaching-learning practices and strategies.

Humanbecoming theory, as it has evolved, has provided a unique language for experiences of tacit-explicit knowing and a lens through which to practice the art and science of nursing. The humanbecoming school of thought continues to inspire and guide my way of being with others. With the recent evolution to the humanbecoming paradigm, I remain committed to "living" this philosophy, which informs my way of being in everyday life experiences, professional practice, and guides my teaching activities and research endeavors.

In this chapter, I have introduced my phenomenon of interest, shared my perspectives on teaching-learning, and defined the focus of this research. I have introduced humanbecoming paradigm and the humanbecoming teaching-learning model (Parse, 2004a, 2014b, 2021c), as the theoretical perspective, which will be further explicated in Chapter 2 and will influence every aspect of the research process. I have identified Giorgi's (2009) descriptive phenomenological research method as the research method employed for this research, which will be discussed further in Chapter 3.

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CHAPTER 2 - THEORETICAL PERSPECTIVE

The humanbecoming paradigm provided the philosophical stance that will inform the methodology and provide the discipline-specific context for the process (Crotty, 1998). The rationale for choosing the humanbecoming paradigm as the lens to guide this research process was presented in the introduction. As the humanbecoming paradigm has continued to evolve in response to our dynamic and changing world, it has become increasingly abstract utilizing unique terms and language. This chapter includes a discussion of the nature of existence (2021c) of the humanbecoming paradigm (*humanuniverse, ethos, and living quality*), and the evolution of the assumptions, themes, postulates, principles, and concepts (Parse, 2014b, 2021c) to the time of this study. The humanbecoming teaching-learning model underpinned by the humanbecoming paradigm was the lens through which new insights and understandings came to light from the findings. These findings enhance existing knowledge of nursing students' experiences of living on the edge and offer new insights to refine approaches to teaching-learning situations.

Theoretical Lens of the Humanbecoming Paradigm

Parse's humanbecoming paradigm (2013, 2014b, 2021c) has guided my way of being with others (family, friends, nursing students, patients, and their significant others) and the foundational belief system or nature of existence (humanuniverse, ethos, living quality) is congruent with my values and beliefs regarding honouring human dignity through living quality. Parse (2012, 2014b, 2021c) has described humanbecoming as a unique humanuniverse paradigm, a school of thought with ontology (2014b), epistemology, and methodologies. Parse (2012, 2013, 2014b, 2021c) has explicitly set

forth the humanbecoming paradigm, with the conceptualizations that have been surfacing in her writings over time. The evolution of the humanbecoming theory and school of thought (Parse, 1981, 1987, 1998) to the humanbecoming paradigm (Parse, 2010a, 2012, 2013, 2014b, 2021c), its ontology or nature of existence, underpinned with the philosophical assumptions, postulates, principles, concepts, and paradoxes are illuminated in this chapter.

"Basic human science posits methodologies directed toward discovering the meaning of phenomena as humanly experienced" (Parse, 2021c, p. 5). The humanbecoming theory is grounded in the human sciences and Parse has drawn from the tenets and concepts of existential-phenomenology in the creation of the original ontology of the humanbecoming theory and school of thought which has evolved into the humanbecoming paradigm (2010a, 2012, 2014b, 2021c) to provide a solid foundation and linkage to the past scientific work (1981, 1987, 1998). Parse drew from the works of Martha E. Rogers, Heidegger, Sartre, and Merleau-Ponty, in the creation of the ontology of human becoming school of thought (Parse, 1998). The original nine enduring philosophical assumptions of the humanbecoming theory were based on Rogers' (1992) principles (helicy, integrality, and resonancy) and postulates (energy field, openness, pattern, and pandimensionality) about humans and becoming. The fundamental tenets (intentionality, human subjectivity) and concepts (coconstitution, coexistence, situated freedom) of existential-phenomenology are considered essential to a nursing paradigm situated in human sciences (Parse, 1981, 1998) Humanbecoming has moved beyond a theory and a school of thought to a more philosophical level than the traditional nursing metaparadigms of person, environment and health, to become its own distinct paradigm

(Parse, 2013). "The ontology of the humanbecoming school of thought is specified in its philosophical assumptions and principles" (Parse, 2001, p. 165), as shown in Table 1.

Table 1

Original Ontology of Humanbecoming

Assumptions	Synthesized Assumptions	Postulates	Principles	Concepts and Paradoxes
The human with universe is coexisting while coconstituting rhythmical patterns. The human is open, freely choosing meaning with situation, bearing responsibility for decisions. The human is continuously coconstituting patterns. The human is transcending illimitably with possibles. Becoming is human-living-health. Becoming is rhythmically coconstituting humanuniverse. Becoming is the human's value priority patterns. Becoming is transcending with possibles. Becoming is the human's emerging.	Humanbecoming is structuring meaning, freely choosing with situation. Humanbecoming is configuring rhythmical humanuniverse patterns. Humanbecoming is cotranscending illimitably with emerging possibles. Humanbecoming is humanuniverse cocreating a seamless symphony.	Illimitability is the indivisible unbounded knowing extended to infinity, the all-at-once remembering-prospecting with the emerging now. Paradox is an intricate rhythm expressed as a pattern preference. Freedom is contextually construed liberation. Mystery is the unexplainable, that which cannot be completely known unequivocally.	Structuring meaning is the imaging and valuing of languaging. Configuring rhythmical patterns is the revealing-concealing and enabling-limiting of connecting-separating. Cotranscending with possibles is the powering and originating of transforming.	**Imaging:** explicit-tacit; reflective-prereflective **Valuing:** confirming–not confirming **Languaging:** speaking–being silent; moving–being still **Revealing-concealing:** disclosing–not disclosing **Enabling-limiting:** potentiating-restricting **Connecting-separating:** attending-distancing **Powering:** pushing-resisting; affirming–not affirming; being-nonbeing **Originating:** certainty-uncertainty; conforming–not conforming **Transforming:** familiar-unfamiliar

Note: Retrieved from "Human Dignity: A Humanbecoming Ethical Phenomenon" by R. R. Parse, 2010a, *Nursing Science Quarterly*, *23*(3), p. 258. https://doi.org/10.1177/0894318410371841

These assumptions capture the fundamental beliefs about the phenomena central to the discipline of nursing and "the epistemology and methodologies congruent with humanbecoming all evolve from this ontology" (Parse, 2001, p. 165).

Original Nine Assumptions

These original nine philosophical assumptions about humans and becoming provide the basis for the humanbecoming school of thought and are the beliefs that underpin the principles from Parse's inception of the theory back in 1981. The minor changes in language reflect updates in the theory to maintain ontological consistency and streamlining of language for increased clarity without changing meanings (R. R. Parse, personal communication, June 2, 2010). The philosophical assumptions underpinning the humanbecoming ontology are identified in Table 1. Each assumption is a synthesis of the antecedents of Roger's postulates and principles (helicy, resonancy, integrality, energy field, openness, pattern, and pandimensionality) with the existential-phenomenological tenets of intentionality and human subjectivity, and concepts coconstitution, coexistence, and situated freedom (Parse, 1998). The first four assumptions "specify the human as an open being in mutual process with the universe, cocreating patterns of relating with others" (Parse, 1992, p. 37). As humans determine meanings of situations, they choose their becoming in response to these situations based on their values, beliefs, hopes, and dreams. The remaining five assumptions "specify health as a process of becoming, experienced by the person, coconstituted through human-universe process, and incarnated as patterns of relating value priorities. Moreover, becoming is an intersubjective transcending with possibles in the process of unfolding" (Parse, 1992, p. 37).

With this evolution in thinking, Parse revisited the foundational elements of humanbecoming paradigm that "refer to the philosophical assumptions underpinning the theory and the major concepts of the theory. These [assumptions] are written at an abstract level and are the theorist's beliefs about the phenomenon of concern to the discipline, the human-universe-health process" (Parse, 2005, p. 135).

Assumption 1: The Human with Universe Is Coexisting While Coconstituting Rhythmical Patterns. "The assumption means that the human – living with predecessors, contemporaries, and successors all-at-once – cocreates rhythmical patterns in cadence with the universe" (Parse, 2021c, p. 18-19). It represents their unique ways of being with others based on their understandings and experiences (with predecessors and contemporaries), as well as current and future possibilities (successors), which simultaneously influence their illimitable patterns of relating as human with universe. This assumption incorporates the concepts of coexistence and coconstitution (Parse, 1998, 2014b, 2021c). "Patterns of relating are created through the mutual rhythmical human-universe process…. Patterns of relating are the individual's unique way of being recognized" (Parse, 1998, p. 20).

Assumption 2: The Human Is Open, Freely Choosing Meaning With Situation, Bearing Responsibility for Decisions. "It means that the human, open with the universe, chooses ways of becoming with situations and is accountable for choices" (Parse, 2021c, p. 19-20). This assumption represents the freedom to choose meanings in situations experienced and take responsibility for the decisions made even when all is not known. This assumption incorporates "the concept of situated freedom and the postulates of openness and energy field" (Parse, 2021c, p. 19).

Assumption 3: The Human Is Continuously Coconstituting Patterns. Humans are continuously changing, representing "a synthesis of the postulates of energy field and pattern, and concept of coconstitution" (Parse, 2021c, p. 20). Continuously moving with and choosing in situations ultimately defines their uniqueness. "The pattern of the human emerges with unique patterns of relating that are cocreated and changing, and distinguish one human being from another" (Parse, 2021c, p. 20).

Assumption 4: The Human Is Transcending Illimitably With Possibles. This "means that human with universe chooses to move on with the possibilities arising with contextual situations" (Parse, 2021c, p. 20-21). There are endless possibilities available as individuals make choices in the living of their day-to-day lives. "This assumption is a synthesis of the postulates of pandimensionality and openness and the concept of situated freedom" (Parse, 2021c, p. 20)

Assumption 5: Becoming Is Human-Living-Health. With becoming "there is a continuous movement that both enables and at once limits becoming" (Parse, 2021c, p. 21). The values, beliefs, and previous experience uniquely known to the individual guides their choices of how to be in a specific situation. Each unique choice influences future choices and opportunities as the human lives personal becoming. This assumption is "a synthesis of the postulate of openness and the concepts of situated freedom and coconstitution" (Parse, 2021c, p. 21).

Assumption 6: Becoming Is Rhythmically Coconstituting Humanuniverse. Individuals are continually connecting and separating with others, situations and environments as they evolve into who they are becoming. "It is the humanuniverse connecting-separating that coconstitutes the emergence of being uniquely

human. The human is always changing; in connecting-separating, the human dwells with particular situations as new ways of becoming emerge unique to that coming together-moving apart" (Parse, 2021c, p. 22). The concepts and postulates synthesized in this assumption are coconstitution, pattern and pandimensionality (Parse, 1998, 2014b, 2021c).

Assumption 7: Becoming Is the Human's Value Priority Patterns. "This assumption means that becoming is the human's style of living chosen cherished ideals, which are value priorities" (Parse, 2021c, p. 22). The individual's choices affirm value priorities and influence ways of becoming. "Assumption 7 is a synthesis of the concept of situated freedom and the postulates of pattern and openness" (Parse, 2021c, p. 22).

Assumption 8: Becoming Is Transcending With Possibles. "It means that becoming is moving with humanuniverse possibilities" (Parse, 2021c, p. 22). The individual's choices impact decision-making, future choices and unique ways of becoming. Becoming is continually choosing, moving and changing with transcending with possibles (Parse, 2014b, 2021c). This assumption is the "synthesis of the postulate openness and the concepts of situated freedom and coexistence" (Parse, 2021c, p. 22).

Assumption 9: Becoming Is the Human's Emerging. This "assumption means that becoming is the human's illimitable changing with the universe…. The human is continuously transforming as diversity changes with experiences, and the human, at any given moment, is different" (Parse, 2021c, p. 23). This belief reinforces the notion that humans are uniquely and continuously changing. "The concept and postulates synthesized in this assumption are coexistence, energy field and pandimensionality" (Parse, 2021c, p. 23).

Synthesized Assumptions

The original (1981) synthesized assumptions from Parse's *Man-Living-Health* were revised in 1992 "in keeping with the name change of the theory" (Parse, 1992, p. 37) to Parse's

human becoming theory. These revised synthesized assumptions were

1. Human becoming is freely choosing personal meaning in situations in the intersubjective process of relating value priorities.
2. Human becoming is cocreating rhythmical patterns of relating in open interchange with the universe.
3. Human becoming is cotranscending multidimensionally with the unfolding possibilities. (Parse, 1992, p. 38)

These synthesized assumptions are woven throughout the humanbecoming paradigm. The most significant changes to the humanbecoming school of thought were presented in 2007 by Parse in her article, "The Humanbecoming School of Thought in 2050" with humanbecoming and humanuniverse were joined to be one word and the separation with a hyphen removed.

Evolution of Conceptualizations

Humanbecoming. Humanbecoming was joined to be one word "to make explicit the idea of indivisible cocreation" (Parse, 2007b, p. 308), following this evolution the original nine philosophical assumptions about the human and becoming were revisited and recently updated in 2013 (Parse, 2021c, p. 18), their evolution and linkages to changes in language will be explained.

When the nine assumptions were synthesized, Parse (1998) situated the unitary human as indivisible, unpredictable, everchanging. In 2004, Parse recognized that many meanings and interpretations of unitary had come to exist in common parlance, and in order to avoid confusion and provide clarification; she stopped using the word unitary and moved to indivisible, unpredictable, everchanging (Parse, 1998, 2004b, 2014b, 2021c) to describe being human.

Parse revisited the three synthesized assumptions about humanbecoming (Parse, 1992, 1998, 2010a). The original language of these synthesized assumptions was streamlined for clarity, and the fourth assumption was added (Parse, 2010a):

1. Humanbecoming is structuring meaning, freely choosing with situation.
2. Humanbecoming is configuring rhythmical humanuniverse patterns.
3. Humanbecoming is cotranscending illimitably with emerging possibles.
4. Humanbecoming is humanuniverse cocreating a seamless symphony.

(Parse, 2013, p. 113)

With this synthesis, Parse emphasized the notion that there are no direct hierarchical linkages between the assumptions and synthesized assumptions, consistent with the underpinning notions of "all-at-onceness" (Parse, 1998, 2012, 2013), and that the "human as mystery is indivisible, unpredictable, everchanging" (Parse, 1998, 2007b, 2013) all the while living "a seamless symphony of becoming" (Parse, 1998, 2007b, 2010a, 2012). Parse made more explicit the idea of indivisibility of the person with universe by specifying humanbecoming as one word and humanuniverse as one word. These language changes set the stage for the refining of the humanbecoming paradigm

ontology comprised of humanuniverse, ethos of humanbecoming-dignity, and living quality that will follow.

Humanuniverse. "Humanuniverse is indivisible, unpredictable, everchanging cocreation" (Parse, 2016b, p. 272). "With humanuniverse, individuals choose from the many options emerging with living experiences in constructing a personal reality" (Parse, 2021c, p. 28). While the fourth assumption was inherent in the theory, it needed to be articulated and fully integrated into the ontology (R. R. Parse, personal communication, June 2, 2010). From a humanbecoming perspective, all persons are becoming with their own individual histories, experiences, and value priorities that they choose in living health and cocreating their own quality of life (Parse, 1998). Parse (1996) provided an analogy of human reality as being like a symphony of becoming, there is no separateness, as we keep changing, moving, and becoming, which portrays our uniqueness and changing life situations. Each person's reality is their personal symphony and the nurse, may represent only one musical note in this "cocreating reality as a seamless symphony of becoming" (Parse, 2021c, p. 28). "Thus, reality as a seamless symphony of becoming, a central thought of the ontology, is cocreated illimitably with living paradox in the contextually construed freedom of the impenetrable mystery of the universe" (Parse, 2007b, p. 309).

Becoming Visible-Invisible Becoming of the Emerging now. In 2012, Parse set forth "emerging now" as a new humanbecoming conceptualization placing it at a higher level of abstraction, embedded in the ontology at the level of cocreating reality as a seamless symphony level. "The emerging now, a humanbecoming conceptualization, is the indivisible, unpredictable, everchanging remembering-prospecting unfolding with

fleeting moments in the ebb and flow of human existence" (Parse, 2012, p. 49). The emerging now is the living moment, which situates the idea that "meaning changes with each unfolding experience" (Parse, 2012, p. 49). The becoming visible-invisible becoming of the emerging now is the all-at-onceness removing the delineated past-present-future context which creates congruence with humanuniverse and "reality as the seamless symphony of becoming" (Parse, 2007b, p. 308). "*Becoming visible-invisible becoming of the emerging now* is the living moment that brings to the fore the idea that meaning changes with each unfolding living experience incarnating the remembered with the prospected all-at-once" (Parse, 2012, p. 44).

In 2010a, Parse articulated the ethos of humanbecoming, which underpins the humanbecoming paradigm, and encompasses reverence, awe, betrayal, and shame which were embedded in the ontology, but not previously brought to the forefront. The ethical tenets undergirding the ontological beliefs as Parse has defined in the ethos of human dignity will be presented in this next section, setting the stage for the paradigm shift.

Ethos of Human Dignity

The ethical tenets of the humanbecoming ontology defined in the ethos of human dignity serves to guide being with others in terms of personal and professional values. The articulation of human dignity reinforces through practice, the honouring the dignity and freedom of all people (Parse, 2007b). Parse (2010a) defined and explicated the ethics of human dignity as follows:

> The ethos of human dignity is embedded in ontological beliefs. From the ontology of the humanbecoming school of thought, human dignity is august presence, a noble bearing of inherent uniqueness. August presence is

> honorable being, and noble bearing is a standing of worth. Inherent uniqueness is immanent distinctness. Human dignity is the noble presence of worth inherent in being a distinct unfolding seamless symphony of becoming. (pp. 257-258)

This meaning of human dignity is grounded in the ontology of the school of thought.

Four ethical tenets (enduring truths) emanating from the humanbecoming ontology about human dignity are elaborated here:

1. Reverence is solemn regard for humanuniverse presence.
2. Awe is beholding the unexplainable of humanuniverse existence.
3. Betrayal is violation of humanuniverse trust.
4. Shame is humiliation with dishonoring humanuniverse worth. (Parse, 2018, p. 259)

Parse (2010a, 2018) proposed that individuals live with reverence, awe, betrayal, and shame in their emerging now or seamless symphony of becoming. Parse put forth the notion that individuals live their chosen values that create unique humanuniverse experiences and relationships. The four ethical tenets of reverence, awe, betrayal, and shame within the belief system of the humanbecoming ontology constitute the experience of human dignity, as individuals live day-to-day. “Human dignity is always present, and we cannot make it more or less, it cannot be measured, or fixed as it cannot be broken” (R. R. Parse, personal communication, June 1, 2010). Individuals interpret each situation and encounter in the moment of the experience, choose whether to accept or acknowledge the words or actions, and determine or experience their impact on our human dignity. In

contemplation of a deeper appreciation for the ethos of humanbecoming-dignity (Parse, 2014b, 2021c), definitions for the concepts of august presence, venerate, and immanent (not imminent) will follow.

Parse (2010a) defined "*August presence* is honorable being, and noble bearing is a standing of worth. Inherent uniqueness is immanent distinctness" (p. 257). The 9th edition of the *Concise Oxford Dictionary* (Thompson, 1995) defined *august* as "inspiring reverence and admiration; venerable, impressive" (p. 82), and *venerate* is to "regard with deep respect" (p. 1554). Within the context of humanbecoming ontology, veneration reflects a deep respect and recognition that the person does know the way. Thompson (1995) defined *immanent* as "indwelling or inherent; of the supreme being something within (p. 678). Parse described immanent is an intrinsic appreciation for what is inside and invokes reverence and awe in understanding of others (R. R. Parse, personal communication, June 3, 2010). Initially, when individuals contemplate relationships with others, it is much easier and more comfortable to consider reverence and awe as an integral part of human dignity than it is to consider the tenets of betrayal and shame.

Reverence Is Solemn Regard for Humanuniverse Presence. Reverence is shown with insightful awareness of the inherent differences, deep appreciation for ambiguity, and penetrating trust in human wisdom (Parse, 2010a, 2018). As nurses living humanbecoming, one honours or reveres others in relationships, "holding dear the precious gift of humanness with devout acknowledgement of uniqueness" (Parse, 2010a, p. 258). "Acknowledging uniqueness with reverence arises in bearing witness with others, connecting and at once separating with speech, silence, movement and stillness" (Parse, 2010a, p. 258). In relationships, this is lived out in respecting others' hopes and

dreams, and their unique ways of being. “Being with the reality of others as they structure personal meaning, configure patterns, and cotranscend with possibles is living reverently in honoring human dignity” (Parse, 2010a, p. 259).

Awe Is Beholding the Unexplainable of Humanuniverse Existence. Awe is the insight one experiences when being with others, it is the light or awareness that surfaces out of the shadows. It is beholding the unexplainable, “the wonders of human existence” (Parse, 2010a, p. 259). It occurs when individuals recognize that not all can be known or explained about being human, in that the human is indivisible, unpredictable, everchanging (Parse, 1981, 1998, 2007b, 2010a); it is insight, like a glimpse of enlightenment or understanding. Awe arises from the postulate of mystery, in recognition that there are questions that are not answerable, and it is acknowledgement that individuals do not know everything, that they can experience wonder and appreciation (Parse, 2010a, 2018). “Human dignity is honored when human beings are looked upon with awe and appreciated for their humanness, regardless of their unique ways of being known to others. Human existence is awe-filled and inherently worthy of honor” (Parse, 2010a, p. 259). In the learning situation, it may be expressed as those “aha” moments when a situation or aspect of knowledge becomes clear to the student. It is the recognition that all cannot be known about another, and the uniqueness of each person’s response to the situation, their previous history, the context, and their values and beliefs needs to be considered. Betrayal and shame are words that come with stigma. Parse (2010a, 2018) draws attention to the fact that these words are neither positive nor negative. In my experience, reverence and awe are very pleasant and comfortable discussion topics. Initial thoughts of awe go to experiences of awesome versus awful, while betrayal and

shame are uncomfortable tenets that conjure up situations where human dignity was compromised in some way and bring back all the feelings associated with the interaction or event.

Betrayal Is Violation of Humanuniverse Trust. Betrayal is very different from the first two tenets of reverence and awe, and betrayal has many facets. It is an "unexpected breach of confidence... causing crushing pain or bewilderment and rejection" (Parse, 2010a, p. 259). In betrayal, the trust-mistrust rhythm shifts the relationship to a different light. With this deception there is loss with an uneasy discomfort eroding pride and confidence in the nurse with person relationships (Parse, 2010a, 2018). In certain situations, a person may feel betrayed, while from the other's perspective they might be unaware, or the betrayal may be unintentional. Parse (2010a, 2018) explained betrayal does not have to be with another, it can be with humanuniverse, such as a catastrophic natural disaster. An example was when Hurricane Sandy hit the eastern coastline of the United States and overwhelmed healthcare system resources. As a result, this incident eroded the trust of the nurses in their administration to respond and the public's trust in their healthcare system's ability to respond to the crisis (Baumann, 2014). It might be a situation where one betrayed another, in terms of what the instructor or student imaged possibilities in this situation to be, experienced in terms of unspoken expectations of another. Another example of betrayal is the "going along" with something that one does not believe in or understand. Betrayal involves deceit such as withholding information from another, which would be a betrayal of trust (Parse, 2010a). In a teaching-learning relationship, it is required that nursing students have instructors observe them carrying out all medication administration tasks. On occasion, students

have proceeded to administer medication independently or under the guidance of a registered nurse, they respect, which has resulted in a sense of unease and betrayal that eroded trust and confidence in the students to practice within their scope of practice. "*Revering-betraying* is a paradox, a rhythmical pattern unfolding with the possibility of choosing a pattern preference for the moment. Revering-betraying is an all-at-once honoring-dishonoring, respecting-disrespecting" (Parse, 2018, p. 261). These situations have created opportunities to examine how information regarding scope of practice was communicated and reflection on the teaching-learning relationship with the student. From the students' perspective, there may have been a sense of betrayal in that the instructor was unable to keep a commitment to supervise the medication administration skill, which resulted in a missed learning opportunity that the students valued highly on their learning journey.

Shame Is Humiliation With Dishonoring Humanuniverse Worth. Shame is a sense of failure, disgust, or dishonored feelings that "arise with a strong desire to escape" (Parse, 2010a, p. 259). Feeling shame is a decision we make about ourselves, when we feel humiliated, embarrassed in situations where we "feel a deep sense of not conforming to valued personal expectations and expectations of others" (Parse, 2010a, p. 259). This shame is a powerful feeling, it can occur at the time of an event, and /or be re-lived when reflecting on or remembering the experience. Shame may be confirming non-being; when shame is felt, the individual feels humiliated (Parse, 2018). The "turning away" which was referred to in the article by Mitchell and Bunkers (2003) entitled "Engaging the Abyss*"* may have caused an element of shame for the nurse after she turned away after observing the family's distress. "Aweing-shaming is a paradox, a rhythmical pattern

unfolding with the possibility of choosing the pattern preference most valued at the moment. Aweing-shaming is an all-at-once wondering-recoiling, an approaching-escaping phenomenon" (Parse, 2018, p. 261). This shame occurs when one expects more of oneself, and then has lingering thoughts of what could or should have done or could have done differently. Shame, whether imagined or real, can be associated with a simple gaze from another, resulting in a drawing away or "saving face" (Mitchell & Bunkers, 2003).

From the humanbecoming paradigm perspective, contemplation of humanuniverse presence, humanuniverse existence, humanuniverse trust, and humanuniverse worth is key when reflecting on professional and personal ethic. Within each of the ethical tenets outlined, there are concepts and paradoxes that play out in our emerging now.

In 2013, Parse moved beyond the language of *quality of life* and *health* which can be viewed as static personal perceptions from other paradigms. In order to be consistent with the humanbecoming paradigm and in recent conceptualizations, Parse embraced the phenomenon of *living quality*, which is the "ongoing incarnating of moment-to-moment indivisible, unpredictable, everchanging meaning arising with the becoming visible-invisible becoming of the emerging now" (Parse, 2013, p. 112).

Living Quality

> Living quality as described by individuals is their truth for the moment that incarnates all choosings as shown in their patterns of speech, silence, movement, and stillness. In the depth of penetrating silence is the inevitable embracing of whatness of living. The unutterable of the illimitable spawns there – with the

> silence where the awesomeness of becoming penetrates living quality. (Parse, 2013, p. 114)

With living quality defined, the terms health and quality of life are no longer be part of the humanbecoming paradigm as these ideas are static representations, which no longer fit. “Living quality is what the individual is living at the moment; it is becoming visible-invisible becoming of the emerging now. It is the now moment and that *is* all there *is*” (Parse, 2021c, p. 30). Living quality does not replace health or quality of life as it is a different phenomenon of living patterns that may include health and quality of life but moves beyond these static notions. “The construct of living quality expresses the notion that quality or whatness is everchanging, thus cannot be measured by labels that reflect only a moment in time” (Parse, 2021c, p. 30).

“Living quality has three inherent core knowings, fortifying wisdom, discerning witness, and penetrating silence” (Parse, 2021c, p. 30). A recent teaching-learning experience will serve to explicate living quality and these core knowings. In returning a standardised dosage calculation exercise to students, I chose to convey the potential impact(s) of dosage errors on the patients in place of sharing the formulae or correct answers. The nursing students as humanuniverse freely choosing how they would use the feedback from this exercise were demonstrating living quality in their teaching-learning context. As humanuniverse, the students were “indivisible, unpredictable and everchanging cocreation(s)” (Parse, 2013, p. 112). They cocreated their own teaching-learning reality in their rhythms of sharing quiz results, patient responses to medication errors, and re-solving and checking calculations of their dosage calculation exercise with peers as they chose calculation methods best suited to their thinking and moved toward

achieving numeracy proficiency. In living quality, the students decided what was important based on their values, to choose or not choose to address their numeracy challenges (or planning to use a calculator in practice) in order to ensure safe patient care. Living quality for me as teacher, was moving with the flow of dialogue and activity, choosing not: to rely only the past traditions; to define the present; nor to try to predict the future, but through the living of rhythmical patterns of teacher with students in the moment. I was attentive to moving with the students' dialogue, questions, and concerns, in unanticipated and unexpected ways along the teaching-learning journey "that cocreated reality as a seamless symphony of becoming" (Parse, 2007b, p. 308). These three core knowings of living quality (*fortifying wisdom*, *discerning witnes*s, and *penetrating silence*) will be explored further in this teaching learning situation.

Fortifying Wisdom. "Fortifying wisdom is invigorating sagacity with the individual as community who is cocreating what is important in the moment" (Parse, 2021c, p. 30). The students and I lived our explicit-tacit knowings with meanings and understandings changing in the moment-to-moment of tentative questions, answers, observations, silence, and participation. Students explored their numeracy challenges with their peers, identifying and putting into words the ambiguity they were experiencing in their efforts to master numeracy skills. Working together, they discovered a variety of strategies from one another that would assist with their numeracy challenges. In choosing to provide novel feedback to the dosage calculation quiz, the focus shifted to ensuring safe patient care for the students who had an immediate focus on the challenge of achieving 100%. The students were caught up in the technical aspects of dosage calculations and ultimately passing the quiz. "It was the individual's wisdom that

inspires, pushes, and configures patterns that fortify the climbing, immersing, drifting, soaring and swingshifting as ways of moving on with what is the becoming visible-invisible becoming of the emerging now" (Parse, 2013, p. 114).

Discerning Witness. Discerning witness is cautiously attending to and distancing from that which enables and limits opportunities in choosing the whatness of personal living (Parse, 2013, p. 114). Discerning witness was experienced in the moving-being still, silently observing students as they reviewed their feedback and then worked together reviewing their dosage calculation exercise, learning from and being with each other. "Individuals show their living quality with or without words with reverence for what is significant in the becoming visible-invisible becoming of the emerging now" (Parse, 2013, p. 114). In place of structured individual feedback, a rich, valuable, and dynamic group learning experience was cocreated. Students spoke of their plans to utilize a calculator once they had graduated as a solution to reducing or eliminating their need to learn numeracy skills. With this strategy identified, the students chose to do the same dosage calculation quiz 1 week later with calculators. The results of the second quiz were less than favorable, with an even smaller number of students attaining 100%. While it was thought the calculator would be enabling, it was indeed limiting to the practice of the students for a variety of reasons, which they readily identified in discussion. When reviewing their results, it became clear to the students that the calculator may neither be an optimal or reliable solution. The students determined that to ensure patient safety they would do their initial calculations with a paper and pencil and felt most comfortable with the strategy of double-checking their work with a calculator, or a colleague. The instructor observed that the students' focus had shifted from the achieving of 100% on

the dosage calculation quiz to developing strategies to ensure patient safety and enhancing their numerical competence. Learning to carry out dosage calculations independently became highly desired by the individuals. “With discerning witness the individual as community is living a chosen quality with what comes up with the becoming visible-invisible becoming of the emerging now” (Parse, 2013, p. 114).

Penetrating Silence. “Penetrating silence is piercing quiet in solemn stillness…. Penetrating silence incarnates the pondering and at once shaping of living quality” (Parse, 2013, p. 114). The students quietly and thoughtfully considered new approaches to their numeracy challenges comparing methods, trying out alternative strategies, and moving forward in their unique ways of learning to enhance their numeracy skills. This was evident as students shared their first quiz results with each other, discussed the calculation processes used, and patient implications of wrong calculations. “With pondering-shaping the individual as community is living chosen quality while contemplating and at once configuring anew in poised quietude” (Parse, 2013, p. 114).

> Living quality as described by individuals as their truth for the moment that incarnates all choosings as shown in their patterns of speech, silence, movement, and stillness. In the depth of penetrating silence is the inevitable embracing of whatness of living. The unutterable of the illimitable spawns there – with the silence where the awesomeness of becoming penetrates living quality. (Parse, 2013, p. 114)

With the numeracy challenges identified, it was important to honour the students and their responses. The priority was “respecting that the person knows the way and not labeling or criticizing the person’s choices but, rather, bearing witness as the person

cocreates becoming" (Parse, 2013, pp. 114-115). This articulation of the three core knowings of living quality served to guide teaching-learning processes, expanding our view of individuals as "indivisible, unpredictable, and everchanging cocreation" (Parse, 2007b, 2010a, 2013, 2014b, 2021c). "It exposes the idea that becoming invisible-invisible becoming of the emerging now *is* the whatness or quality that the human is living at the moment with the inherent core knowings of fortifying wisdom, discerning witness and penetrating silence" (Parse, 2013, p. 115).

The refinement of the original nine assumptions and four synthesized assumptions with the recent conceptualizations provide the context for the evolution of the humanbecoming paradigm and emergence of the new assumptions (humanuniverse, ethos, and living quality), themes (meaning, rhythmicity, and transcendence), and postulates (illimitability, paradox, freedom, and mystery) which will be described within the humanbecoming paradigm.

Humanbecoming Paradigm

With the conceptualizations of humanbecoming, humanuniverse, becoming visible-invisible becoming of the emerging now, and living quality articulated; the humanbecoming paradigm assumptions, themes, and principles with concepts and paradoxes will be explicated in the following sections.

Assumptions

The humanbecoming paradigm assumptions incorporate the conceptualizations of humanuniverse, humanbecoming, becoming visible-invisible becoming of the emerging now, ethos, and living quality. The ethos of humanbecoming informs the enduring truths of the humanbecoming paradigm and is clearly embedded in the nature of existence

(2021c). Parse (2021c) explicated the meaning of the humanbecoming paradigm assumptions embedding the postulates of illimitability, paradox, mystery, and freedom as follows:

> These assumptions mean that *humanuniverse* is a cocreation that cannot be divided. It is not a static entity, but rather continuously moving in unrepeatable, unforeseeable ways without a wrinkle, like a musical rendition, with consonant, concordance shifting what is coming to be known explicitly-tacitly all-at-once with the unbounded unexplainable choosing of the apparently contradictory rhythms of living quality. The *ethos* of humanbecoming is the sentiment and straight thinking that informs the enduring truths of reverence, awe, betrayal, and shame, in venerating treasured presence. *Living quality* is the all-at-onceness of the truth for the moment, which is all there *is*. The moment is shifting meaning, rhythms, and transcending with living the inherent core knowings of living quality in manifesting the incomparable unforeseeable that is embedded with the ethos of humanbecoming. All the assumptions permeate the postulates, themes, and principles of humanbecoming. (p. 33)

Reflection on the reconceptualised assumptions and their meaning has reaffirmed their continued congruence with my values and beliefs in my professional life and nursing philosophy. The humanbecoming paradigm continues to enrich my life and enhance day-to-day nurse with person relationships. Living quality recognizes one's freedom to make choices, consider personal goals, hopes, dreams, and wishes, and to live with dignity where "humanuniverse is indivisible, unpredictable and everchanging" (Parse, 2007b, p. 310). With this evolution in thinking, the humanbecoming paradigm

assumptions have evolved from the previous assumptions and synthesized assumptions to reflect humanbecoming, humanuniverse, becoming visible-invisible becoming of the emerging now, the ethos and living quality, providing further clarity and internal consistency within the paradigm. The postulates of the humanbecoming nature of existence (2021c) will now be defined and explicated. These postulates are inextricably woven throughout the humanbecoming paradigm and undergird the principles.

Postulates

For a true appreciation of the humanbecoming paradigm, a meaningful understanding of the four postulates illimitability, paradox, freedom, and mystery is necessary (shown in Table 2). Although abstract in their conceptualizations, the postulates make explicit the foundational truths and beliefs, as outlined by the theorist (Parse, 2007b). Definitions for each of these postulates and teaching-learning scenarios will be provided to exemplify each of the postulates. Parse (2007b) introduced the first postulate illimitability to express "indivisible, unpredictable and everchanging, much more clearly than multidimensionality" (p. 308).

Table 2

The Humanbecoming Nature of Existence

Assumptions	Postulates	Principles	Concepts and Paradoxes
Humanuniverse is indivisible, unpredictable, everchanging. Humanuniverse is cocreating reality as a seamless symphony of becoming. Humanuniverse is an illimitable mystery with contextually construed pattern preferences. Ethos of humanbecoming is dignity. Ethos of humanbecoming is august presence, a noble bearing of immanent distinctness. Ethos of humanbecoming is abiding truths of presence, existence, trust, and worth. Living quality is the becoming visible-invisible becoming of the emerging now. Living quality is the everchanging whatness of becoming. Living quality is the personal expression of uniqueness.	Illimitability is the indivisible unbounded knowing extended to infinity, the all-at-once remembering-prospecting with the emerging now. Paradox is an intricate rhythm expressed as a pattern preference. Freedom is contextually construed liberation. Mystery is the unexplainable, that which cannot be completely known unequivocally.	Structuring meaning is the imaging and valuing of languaging. Configuring rhythmical patterns is the revealing-concealing and enabling-limiting of connecting-separating. Cotranscending with possibles is the powering and originating of transforming.	**Imaging:** explicit-tacit; reflective-prereflective **Valuing:** confirming–not confirming **Languaging:** speaking–being silent; moving–being still **Revealing-concealing:** disclosing–not disclosing **Enabling-limiting:** potentiating-restricting **Connecting-separating:** attending-distancing **Powering:** pushing-resisting; affirming–not affirming; being-nonbeing **Originating:** certainty-uncertainty; conforming–not conforming **Transforming:** familiar-unfamiliar

Note: Retrieved from *The Humanbecoming Paradigm: An Everchanging Horizon* by R. R. Parse, (2021c), a Discovery International Publication, p. 34.

Illimitability. "Illimitability is the indivisible, unpredictable, everchanging unbounded knowing extended to infinity, the all-at-once remembering-prospecting with the becoming visible-invisible becoming of the emerging now" (Parse, 2021c, p. 35). One cannot express all one knows, nor can one know all there is to know; illimitability refers to the limitless or endless possibilities. In choosing patient assignments for students in a

practicum experience, there are limitless possibilities for student learning. The choosing of a patient assignment is intended to provide a learning opportunity to meet a definable learning goal. As the patient-student-instructor relationship unfolds with certainty-uncertainty there will be shifting priorities of the emerging now in the coming to know the patient. The unexpected or unanticipated teaching-learning experiences highlight the limited ability to predict what will unfold, what learning opportunity will occur, if we choose or are available to participate. In response to not changing the patient assignment for the next clinical day, the student immediately voiced disappointment. This dissatisfaction was expressed as the desire to have a "more challenging (different) patient assignment." As the day unfolded, this patient's surfacing symptoms of a major and unanticipated complication became apparent. At the end of the day, the student expressed, "I am so glad I had the opportunity to be with this patient today as he went through this difficult time." This student described the pleasure of with being able to care for this same patient and the value of this unfolding learning experience. The new learning opportunities and challenges flowed from this continued student-patient-instructor relationship. The established relationship provided the opportunity for the student and patient to journey together through the identification and evolution of symptoms, the resulting tests and treatments, at a higher level of understanding of the patient's goals, dreams, and wishes.

Paradox. "Paradox is an intricate rhythm expressed as a pattern preference" (Parse, 2021c, p. 35). Paradoxes occur all-at-once, they appear as opposites, but they are not opposites in that they coexist in living rhythms (Parse, 2014b, 2021c). A paradox would be when one feels certain, but at the same time feels uncertain when trying

something new. “Paradox is the living moments surfacing with insightfulness that can only unfold with the contradictory” (Parse, 2021c, p. 35. In clinical teaching-learning there are aspects of a patient’s situation and experience that are known, while there many facets that remain unknown or are not explicit. This paradoxical relationship of knowing-not knowing is fluid and always changing as individuals move along their lifelong teaching-learning journey.

Freedom. “Freedom is contextually construed liberation” (Parse, 2021c, p. 36). “Freedom is a humanuniverse coconstitution inherent in personal choosings that give birth to meaning” (Parse, 2021c, p. 36). One has choices and makes choices while living value priorities in day-to-day activities. One is free to choose meaning in each situation, while living quality moment-to-moment in the emerging now (Parse, 2012). “Living intentionally is inherent and arises with continually choosing becoming. Intention in a situation arises as uniqueness bounded only by earlier choosings emerging with the contextual construction of historicity and facticity” (Parse, 2021c, pp. 36). Students and instructors freely make choices. The student or instructor chooses whether, where, when, or how to engage in the teaching-learning process. As a reflective activity unfolds, teaching-learning is expressed from the perspective of the person’s value priorities; as certain aspects are highlighted and become clear other aspects that remain unknown. In the sharing process, the storyteller attaches interpretations of meaning to the situation. The meanings that were present in living the teaching-learning situation may change upon reflection during the storytelling.

Mystery. “Mystery is the unexplainable, that which cannot be completely known unequivocally. It is a puzzlement, an impenetrable” (Parse, 2021c, p. 36). As the

description of the teaching-learning experience unfolds it is “the everpresent mystery of the unexplainable becoming-visible - invisible-becoming of the emerging now” (Parse, 2012, p. 44). Mystery is just beyond one’s grasp of understanding completely and moves into the future. Parse (2012) elaborated

> the unfolding situation cocreates a shifting of value priorities (like the shifting of the landscape) with the certainty-uncertainty present in conforming–not conforming with personal expectations and expectations of others. With changing value priorities, disclosed and undisclosed opportunities and restrictions emerge, as community decisions both enable and at once limit possibilities. (p. 45)

Changing value priorities determine what becomes visible for individuals, but they do not know how, when, or where it will be. “Mystery is the veiled, that which cannot be known clearly or at all” (Parse, 2021c, p. 36). No person can be completely known. The students demonstrate certain ways of being that the instructor may not understand, providing an opportunity to engage with these students to enhance understanding.

> Mystery is inherent in all dialoging-listening, in that what is said and what is explicitly intended may not be heard or interpreted as such. It is always apprehended with presence, either actually in the same locale or felt. The explicit-tacit knowing of the becoming visible-invisible becoming of the emerging now is not accessible to the whole knowing by another. (Parse, 2021c, p. 36)

In teaching-learning relationships, language, tone of voice, and unique mannerisms are uniquely perceived by others (patients, peers, staff, and instructor) in the situation. A nursing student was perceived as being flippant, superficial, and uncaring when working

within the student-patient-instructor relationship and group conferences. In observing this student with peers, the peers chose not to attach significance to this cavalier approach, respecting her knowledge and collaborating with her in a variety of clinical activities. When observed from a distance in a student-patient relationship, the student was attentive, caring, and totally engaged in being with the patient. In relating to the unit staff, she was professional in her approach, prioritizing the information and highlighting changes in the patient's condition and keeping the nurse informed. Recognizing the discordance between the behaviours perceived and teacher observations, the observations of this student's caring relationships with the patients and professional relationships with the staff were in sharp contrast to the occasions where she would appear flippant and uncaring. When approached, the student indicated that this perception was not a surprise. She indicated she was aware of these "behaviours" and stated, "This is just how I am." When the student was asked, "In light of the examples, do these perceived uncaring behaviours really portray how/who you are?" For the teacher, following this dialogue there remained so much that was unknown about this student's situation. Near completion of the clinical rotation, the student shed new light on the perceptions previously acknowledged by sharing some of the challenges she was experiencing in her personal life, and her questioning if being a nurse was really the right decision for her. At the end of the practicum, the student indicated that she was thankful for the support. The student expressed that through this teaching-learning experience it became clear, "I really was questioning my decision to be a nurse, but during this rotation for the first time I really felt like a nurse, and that I was expected to be a nurse. I knew this really was for me." Much about this student and her experiences will remain a mystery. However,

through living my value priorities as an instructor, certain aspects of this student and her experiences became visible on this journey.

In the sharing of information, experiences, and observations, students come to discover and understand there are unlimited interpretations (illimitability) of a situation and these interpretations may not be at all what was envisioned. Individuals come with their own frame of reference, experiences, values, and beliefs all central to the mystery of their humanbecoming (mystery). Individuals are free to interpret and integrate information into their frames of reference and those interpretations become part of their way of being (freedom). Individuals can never fully understand another, so to some degree are always living the tension of being understood-misunderstood in relationships with others (paradox). Hence, teachers need to consider their words and actions carefully because words are so important to how others may interpret what is said and done. With an appreciation of the postulates of illimitability, paradox, freedom, and mystery, the stage is now set for the explication of the humanbecoming themes, principles, and associated concepts and paradoxes.

Themes

Parse identified three major themes that surfaced from the original philosophical assumptions of meaning, rhythmicity, and transcendence. These three themes are inextricably woven through the humanbecoming paradigm (Parse, 1981, 1987, 1992, 1998, 2010a, 2013, 2014b, 2021c). These themes each lead to one of the three principles which are "statement[s] explaining … ideas by joining two or more concepts written at the theoretical level" (Parse, 1987, p. 2).

Meaning. "Meanings are the remembering-prospecting valued images languaged in the becoming visible-invisible becoming of the emerging now with or without words, with or without movement" (Parse, 2021c, p. 37). Meaning is an interpretation given to a word, image, text, event, or action which can be explicitly stated or imagined in an interpreted glance which occurs in our day-to-day living. "Meaning moments change with new experiences that shift imaged values, shedding a different light with the becoming visible-invisible becoming of the emerging now" (Parse, 2021c, p. 37). Meanings change as individuals gain experience, develop new perspectives and shift value priorities. "Meaning is the becoming visible-invisible becoming of the emerging now expressed as living quality" (Parse, 2021c, p. 37).

Rhythmicity. "Rhythmicity is the unrepeatable rhythmical patterns that are revealed-concealed all at once in the ebb and flow, as cadence changes with new experiences arising with diversity (Parse, 1998, 2014b, 2021). "The patterns are paradoxical in that they are not opposites but rather living rhythms arising with the becoming visible-invisible becoming of the emerging now" (Parse, 2021c, p. 37). "The rhythmical patterns are recognizable configurations of humanuniverse emerging with connecting and all-at-once separating with others, ideas, objects, and situations that enable and at once limit the opportunities and restrictions inherent in all choosings" (Parse, 2021c, p. 37).

Transcendence. "Transcendence is moving with the possibles that are the hopes and dreams envisioned with illimitable experiences. The possibles arise with humanuniverse options from which to choose personal ways of living the becoming visible-invisible becoming of the emerging now" (Parse, 2021c, p. 37). Transcendence

refers to personal ways of becoming as the individual experiences of sureness-unsureness or certainty-uncertainty in day-to-day of living quality and making choices in the face of new ventures, which create new opportunities and possibilities to be transcended.

> These three themes – meaning, rhythmicity, and transcendence – each permeate one of the principles. Meaning is the central theme of the principle on structuring meaning. Rhythmicity is the central theme of the principle on configuring rhythmical patterns, and transcendence is the central theme of cotranscending with possibles. (Parse, 2021c, p. 38)

Each of these themes leads to a humanbecoming principle and these principles embody the values and beliefs articulated in the assumptions and postulates. Together the "assumptions postulates and themes permeate all of the principles" (Parse, 2021c, p. 38) and will be further explicated in the following section.

Principles

Humanbecoming theory, which is located within the humanbecoming paradigm, is referred to when making specific reference to the principles. From the refinements of the original nine philosophical assumptions the meanings were not changed, and the assumptions reflect the following three themes: meaning, rhythmicity, and transcendence (Parse, 1981, 1987, 1992, 1998, 2010a, 2012, 2014b, 2021c). These new assumptions respond to the evolution in language of the humanbecoming paradigm and continue to reflect the postulates previously discussed and themes embedded within the paradigm. The three principles with associated concepts and paradoxes are as follows:

1. Structuring meaning is the imaging and valuing of languaging,

2. Configuring rhythmical patterns is the revealing-concealing and enabling-limiting of connecting-separating, and
3. Cotranscending with possibles is the powering and originating of transforming. (Parse, 2007b, 2010a, 2012, 2014b, 2021c)

Principle 1: Structuring Meaning Is the Imaging and Valuing of Languaging. In this first principle, Parse (2007b) updated the language as follows:

> This principle means that in humanuniverse there is a structuring of personal meaning in cocreating reality illimitably with paradoxical rhythms: the explicit-tacit and reflective-prereflective of imaging, the confirming-not confirming of valuing, and the speaking-being silent and moving-being still of languaging. Meaning arises with inherent freedom in the impenetrable mystery of being (p. 309).

The concepts of structuring meaning are imaging, valuing and languaging (Parse, 2014b, 2021c). In this principle, one lives the imaging paradoxes of explicit-tacit, reflective-prereflective knowing in the emerging now. It is important to explore the meaning and understandings that students attach to their learning, and what is known-not known or understood-not understood in paradoxes of the explicit-tacit and reflective-prereflective of *imaging* (Parse, 2014b, 2021c). “In the explicit-tacit paradox, explicit knowing is articulated logically and reflected on critically…. Tacit knowing is quiet and vague and lies hidden from reflective awareness, somewhat anonymous” (Parse, 2021c, p. 42). It is by engaging students in dialogue that they can explore their explicit-tacit knowings. “*Valuing*, the second concept of structuring meaning, is all-at-once confirming-not confirming cherished beliefs in light of a personal worldview” (Parse,

2021c, p. 43). The students' valuing is reflected in their continuous examination of their knowledge, values, and beliefs, as they seek to confirm certain aspects of knowledge and practice while choosing not to confirm other aspects. "*Languaging*, the third concept of structuring meaning, is signifying valued images with speaking-being silent and moving-being still" (Parse, 2021c, p. 45). Students communicate so much with facial expressions, gestures and silences in their teaching-learning relationships. "Languaging is not just the content of what an individual says with words, but it is how the whole message is uncovered in the context of the situation" (Parse, 2021c, p. 45). One can never fully understand the personal meaning to the student or the context of their experience they are sharing. Each student is unique in the tacit and explicit personal knowing and is choosing what to share or not share in the teaching-learning process, as the confirming-not confirming of shared values by the other surfaces. The sharing and not sharing may not be intentional but related to what is significant from the person's perspective within their opportunity to share.

Principle 2: Configuring Rhythmical Patterns Is the Revealing-Concealing and Enabling-Limiting of Connecting-Separating. In the streamlining of the language of the principles, the intent is unchanged. Parse (2007b) identified that

> this principle means that with humanuniverse there is configuring rhythmical patterns in cocreating reality illimitably with paradoxical rhythms: the disclosing-not disclosing of revealing-concealing, the potentiating-restricting of enabling-limiting, and the attending-distancing of connecting separating. Patterns of relating arise with inherent freedom to choose with the impenetrable mystery of

> humanuniverse. Configuring is living humanuniverse rhythms with the becoming-visible-invisible becoming of the emerging now. (p. 309)

The concepts of rhythmical patterns are revealing-concealing as disclosing-not disclosing, enabling-limiting as potentiating-restricting, and connecting-separating as attending-distancing (Parse, 1998, 2007b, 2014b, 2021c). With the second principle configuring rhythmical patterns, the student is a mystery, unique in experiences, values, knowledge, aspirations, and configuring unique rhythmical patterns in the teaching-learning relationship. With the development of the teaching-learning relationship the rhythms within the relationship evolve, "cocreating ever-diverse patterns in that the individuals have moved on with each other experiences since their last meeting" (Parse, 2021c, p. 48). The choosing of what the student *reveals-conceals* in the process of disclosing-not disclosing shapes the teaching-learning relationship. "There is always more to an individual than what the other experiences in the immediate situation; there is always that which is all-at-once concealed with the inherence of humanuniverse as illimitable mystery" (Parse, 2021c, p. 49). The student may choose among a variety of presenting learning opportunities at any given time.

> "*Enabling-limiting* is potentiating-restricting all-at-once; it is living the opportunities-restrictions present in all choosings. In choosing, the individual moves in one direction, which restricts movement in another, and there are illimitable opportunities and restrictions in what is chosen and opportunities and restrictions in what is not chosen. (Parse, 2021c, p. 49)

Unable to take advantage of all learning opportunities, the student makes choices based on their perceived learning needs and interests on a moment-to-moment basis. In

considering their learning needs, a student chooses to pursuit a specific learning opportunity, in making this commitment they are enabling learning, but at the same time are limited from other opportunities that may present at the same time through the process of potentiating-restricting. In the teaching-learning relationship, the paradox of *connecting-separating* through the process of attending-distancing defines how one lives out this relationship. "Connecting-separating is attending-distancing; it is living being with and apart from others, ideas, objects, and situations all-at-once" (Parse, 2021c, p. 50). In all relationships the rhythm of *connecting-separating* is always there. "Connecting-separating is the communion-aloneness source of humanuniverse emergence. Connecting-separating incarnates various intimacies of attending-distancing arising with the becoming visible-invisible becoming of the emerging now in living quality" (Parse, 2021c, p. 50). With the paradox *becoming visible-invisible becoming of the emerging now* some ideas are becoming clearer and moving into focus while other ideas are slipping away and thus there is always an ongoing sense of mystery and expectation in our day-to-day living.

Principle 3: Cotranscending With Possibles Is the Powering and Originating of Transforming. This third and last principle Parse (2007b) define as follows:

> This principle means that humanuniverse is the grounding for cotranscending with possibles in cocreating a seamless reality illimitably with paradoxical rhythms: the pushing-resisting, affirming-not affirming, and being-nonbeing of powering; the certainty-uncertainty and conformity-nonconformity of originating; and the familiar-unfamiliar of transforming. The possibles arise with illimitable

> experiences where inherent freedom abides with the impenetrable mystery of being. (p. 309)

In *cotranscending with possibles,* conversations and experiences unfold as individuals are moved to a new place, unable to go back, and with this new knowledge they shift the ideas and the focus of the discussion. They are each changed by the sharing of ideas, stories, and experiences on this journey. There are limitless possibilities "in risking being-nonbeing with the certainty-uncertainty of conformity-nonconformity in pushing resisting the affirming-not affirming of the familiar-unfamiliar" (Parse, 2007b, p. 309) as the student strives to move beyond what is currently known or experienced.

> Individuals exist with others and continue to cocreate new possibles that surface from contextually construed situations as opportunities from which alternatives are chosen. Contextually construed situations are present from prior choosings and cocreate other possibles with the becoming visible-invisible becoming of the emerging now. In this way, the individual continuously invents ways of becoming with cotranscending with possibles. (Parse, 2021c, p. 51)

In this principle, the concepts are powering, originating and transforming. "*Powering* is the pushing-resisting of affirming-not affirming being in light of nonbeing" (Parse, 2021c, p. 52). The students through their intentions and actions demonstrate powering as they engage in the teaching learning journey toward their goals, hopes, and dreams. Opportunities present to challenge or clarify what is known in day-to-day learning experiences and make choices on what is integrated into their personal knowledge. "Nonbeing is the not-yet known explicitly, the unthought known, thus there is the potential risk of losing something of value" (Parse, 2021c, p. 52).

> Pushing-resisting pattern preferences emerge with humanuniverse and are present in every engagement, creating tension and sometimes conflict. Possibles arise with the tension and conflict that create alternatives from which to choose. Tension is the struggling surfacing with pushing and all-at-once resisting while engaging with others, issues, ideas, desires and hopes in striving to discover new possibles. In struggling, individuals cotranscend with the becoming visible-invisible becoming of the emerging now. (Parse, 2021c, pp. 53)

The second concept *originating* speaks to the individual uniqueness of the students and their choices and relationships with others, which affect their personal teaching learning journey. "Originating is inventing new ways of conforming-not-conforming with the certainty-uncertainty of living" (Parse, 2021c, p. 54). Students live the rhythmical paradoxes of certainty-uncertainty and conforming-not conforming as they engage in their learning and make choices and decisions.

> Conformity-nonconformity surfaces with humanuniverse as individuals seek to be like others, yet all-at-once, not to be like others. Seeking to be like others is to focus on commonalities, while seeking to be different is to focus on that which is uniquely distinct. Certainty-uncertainty surfaces with humanuniverse as individuals make clear their choices with situation, yet all-at-once living the ambiguity of the consequences that are not yet known explicitly; the sure-unsure exists all-at-once. (Parse, 2021c, p. 54)

Students make choices moment-to-moment regarding their learning, unsure of what the future holds in terms of future learning opportunities. In the clinical setting, students are often presented with two or more learning opportunities occurring near each other

making it impossible to participate in both at the same time. These situations call for the student to make decisions based on their interests and personal learning needs, which leads to them recognizing that the choice made will preclude their being available for the alternate opportunity.

The third concept of this principle is *transforming*. As students make discoveries and are seeing things from a new perspective as their knowledge deepens and changes. "The individual's continuous transforming is a personal creative endeavor. When an individual has chosen a shift to a new view, the individual cannot return to viewing the situation in the old way but can only move with other possibles" (Parse, 2021c, p. 57).

> Unique possibilities emerge with struggling to incarnate the unfamiliar at once with the familiar. Diversity arises with incarnating new discoveries as threads of consistency become apparent, shedding light on the all-at-once presence of the becoming visible-invisible becoming of the emerging now. (Parse, 2021c, p. 56)

As students engage in new learning opportunities from the illimitable possibilities and struggle with new challenges, they achieve higher levels of understanding as they move towards their learning goals, transforming their foundational knowledge.

> Transforming is shifting the view of the familiar-unfamiliar, the changing of change in coconstituting anew in a deliberate way with the unexplainable mystery of humanuniverse. With humanuniverse emergence, change is ongoing; this emergence arises with the becoming visible-invisible becoming of the emerging now. Deliberate innovative discoveries and shifts in worldview are coconstituted as individuals attend to discoveries, and phenomena are available to be discovered. (Parse, 2021c, p. 56)

The three principles of humanbecoming theory situated within the humanbecoming paradigm have been presented with their essential concepts and paradoxes to complete the humanbecoming nature of existence (2021c), as it exists to the time of this study. The humanbecoming teaching-learning model, and the essences, paradoxes and processes will now be explicated.

Humanbecoming Teaching-Learning Model

The humanbecoming teaching-learning model is comprised of essences, paradoxes and processes that illuminate the cocreated teaching-learning journey (shown in Table 3). "These essences, paradoxes, and processes of the humanbecoming model for teaching-learning in which pattern-seeing and see changing all-at-once shift understanding in the never-ending journey of coming to know" (Parse, 2021c, p. 182).

Table 3

The Humanbecoming Teaching-Learning Model

Essences...	**Paradoxes...**	**Processes...**
Semantic cohering is living with ambiguity in rationaling-intuiting amid clarifying-obscuring in appreciating mystery.	**Rationaling-intuiting** is coming-to-know something that informs human understanding. **Clarifying-obscuring** is struggling with the utterable and unutterable in glimpsing illuminating moments.	**Living with ambiguity** is moment-to-moment moving with the vague. **Appreciating mystery** is apprehending with awe the unfathomable.
Synergistic patterning is potentiating integrity in warping-woofing amid the ebbing-flowing of weaving illimitably.	**Warping-woofing** is shaping fabrics of meaning. **Ebbing-flowing** is gliding with the emerging now.	**Potentiating integrity** is strengthening a oneness of purpose. **Weaving illimitably** is unbounded interlacing.
Aesthetic innovating is honoring wisdom in considering-composing amid beholding-refining in witnessing unfolding.	**Considering-composing** is pondering possibles. **Beholding-refining** is cautiously cultivating.	**Honoring wisdom** is revering sagacity. **Witnessing unfolding** is profoundly attending with the everchanging.

Note: Retrieved from *The Humanbecoming Paradigm: An Everchanging Horizon* by R. R. Parse, 2021, a Discovery International Publication, p. 181

Pattern-seeing is the integration of new knowledge within an existing frame of reference. See changing is the shift in understanding or perspective with this new knowledge. The teaching learning essences are further explicated with the associated paradoxes and processes.

Semantic Cohering

The first essence, semantic cohering encompasses the processes of seeking to understand as ideas or concepts become clear and new questions come to light. "*Semantic cohering* is living with ambiguity in rationaling-intuiting amid clarifying-obscuring in appreciating mystery" (Parse, 2021c, p. 181). "*Rationaling-intuiting* is coming-to-know something that informs understanding. The rationaling-intuiting rhythm is an all-at-onceness, an inseparable. In all teaching-learning, the rational informs the intuitive and the intuitive informs the rational in a rhythmic fashion" (Parse, 2021c, p. 181).

> *Clarifying-obscuring* is struggling with the utterable and unutterable in glimpsing illuminating moments. Individuals live illimitably, and thus all knowings are explicit and tacit all-at-once; not all that is known can be uttered. With teaching-learning, messages are given and taken: some can be uttered, others first glimpsed, and still others are unutterable. (Parse, 2021c, p. 182)

This first essence draws attention to the uncertainty associated with the teaching-learning process.

The first teaching-learning process underpinning the essence of semantic cohering is living with ambiguity.

> *Living with ambiguity* is moment-to-moment moving with the vague. It is being patient with what is not yet clear in coming-to-know something in the becoming

> visible-invisible becoming of the emerging now. There is always some uncertainty accompanying the certainty of any knowing. (Parse, 2021c, p. 182)

"Living with ambiguity is the experience of not knowing explicitly all the consequences of decisions, yet moving on with executing details" (Parse, 2014a, p. 5).

Appreciating mystery is the second teaching-learning process underpinning the essence of semantic cohering. "Appreciating mystery is apprehending with awe the unfathomable. Individuals are mysteries, and with all revealing there is all-at-once concealing. In teaching-learning, wonder and awe arise with discovery and with the knowing that nothing can be fully understood" (Parse, 2021c, p. 182). With appreciation of the uncertainty of the limitless possibilities for learning that arise from the essence of semantic cohering, the second essence of synergistic patterning will be explicated. This second essence explicates these teacher-learners' relationships as they explore possibles in situation.

Synergistic Patterning

The second essence encompasses the teaching-learning processes of potentiating integrity and weaving illimitably. "*Synergistic patterning* is potentiating integrity in warping-woofing amid the ebbing-flowing of weaving illimitably (Parse, 2021c, p. 182). The paradoxes of this second teaching-learning essence are warping-woofing and ebbing-flowing.

> *Warping-woofing* is shaping fabrics of meaning. Teacher-learner dialogue is interwoven with the unfolding of meanings that shape new thinking. *Ebbing-flowing* is gliding with the emerging now. There are only moments in the

teaching-learning journey and these are the illimitable rhythmical movements from knowing to knowing" (Parse, 2021c, p. 182).

The first process of synergistic patterning is potentiating integrity. "*Potentiating integrity* is strengthening a oneness of purpose. The teaching-learning process is fortified when intentions are respected" (Parse, 2021c, p. 182). In potentiating integrity, the teacher is open to understanding the learners' goals in order to support them in their professional development and reaching their potential. The teacher appreciates the students' unique learning styles, needs, and experiences.

The second process of synergistic patterning is weaving illimitably. "*Weaving illimitably* is unbounded interlacing with what is emerging now. The unbounded interlacing is the unique infinite patterning that happens in the teaching-learning journey" (Parse, 2021c, p. 182). Weaving illimitably is moving with the student in the moment-to-moment with learning opportunities and experiences. The teaching-learning processes of potentiating integrity and weaving illimitably bring to the fore the rhythmical patterns of constructing knowledge and the movement of the teacher with learners on their cocreated learning journey. With this acknowledgment of the teacher-learner relationship, the third essence aesthetically innovating will be explicated.

Aesthetically Innovating

The third essence encompasses the teaching-learning processes of honoring wisdom and witnessing unfolding. Aesthetic innovating is lived through creating novel teaching-learning activities whilst dialoguing teacher with learner and learner with teacher. *"Aesthetically innovating* is honoring wisdom in considering-composing amid beholding-refining in witnessing unfolding. *Considering-composing* is pondering

possibles…. Contemplating already brings images to reality, enhancing knowing, and thus changing meaning as what is emerging in the now moment shifts pattern preferences" (Parse, 2021c, p. 182). In creating images, learners connect what is being learned with their pre-existing perceptions, contexts, values, and knowledge to create a new understanding or way of being with this knowledge. "*Beholding-refining* is cautiously cultivating. The careful polishing of knowing happens in savoring what is highly valued while enhancing precision by sacrificing what is not" (Parse, 2021c, p. 182). In this information-laden age, it is important to be able to discern what is important within a specific context while discarding extraneous information, which is an important ability in today's world.

The first process of aesthetically innovating is honoring wisdom. "*Honoring wisdom* is revering sagacity. The wisdom of all present on the teaching-learning journey is respected as each is an august presence and all individuals have unique inherent wisdom. Trust and worth are living-teacher with learner" (Parse, 2021c, p. 182). In the cocreated learning journey, it is important to respect and understand the goals, values, and experiences of learners in order to respond to their unique learning needs in the moment.

> Honoring wisdom is respecting the concerns of those involved in innovation. Wisdom arises with the imaginings of forging a path of change. Honoring wisdom is recognizing that the prism through which others view a situation is uniquely their perspective, and they may not necessarily be clear on the intent or benefit of the innovation. (Parse, 2014a, p. 5)

Learners are the experts in their learning experiences, values, and perspectives of learning situations which serve to guide learning as it is lived through the second process of aesthetically innovating which is witnessing unfolding.

In the teaching-learning relationship, it is important to be respectful, caring, and authentically engaged with students facilitating meaningful connections to support their learning. "*Witnessing unfolding* is profoundly attending with the everchanging. Attending is listening intently in teaching-learning dialogue as new meanings are co-invented in the becoming visible-invisible becoming of the emerging now" (Parse, 2021c, p. 182). Parse (2016c) further explicated witnessing as

> the unconditional loving presence with another. Unconditional loving presence is a recognizable availability to be with another. It is up close and personal delving into the abyss. The abyss is the clear-obscure mist of living on the edge of not knowing explicitly what will surface in the becoming visible-invisible becoming of the emerging now. Witnessing, then, is risking the comfort of the quiet to engage with the calm-turbulent whole-in-motion of another. It is standing with in testimony to the other's unfolding truth for the moment. (p. 1)

The humanbecoming teaching-learning model shifts our gaze and reveals opportunities to move beyond the traditional pedagogical assumptions to facilitate the preparation of nursing professionals to be self-directed, lifelong learners able to navigate the dynamic and changing health care landscape. The essences and themes of living on the edge thread throughout the humanbecoming teaching-learning model, and with this congruence, the processes of humanbecoming teaching-learning model were chosen to explore the literature.

In this chapter the evolution of the humanbecoming paradigm and nature of existence (2021c) have been explicated. The humanbecoming paradigm provided the lens for the interpretation of the findings that arose from this study. While the boundaries around these essences, paradoxes, and processes are commingled within the teaching-learning model, a selected review of various disciplinary perspectives will be presented within this framework. With this explication of the humanbecoming teaching-learning model, the teaching-learning processes will frame the literature review in Chapter 3 and situate this research and what is known about the students' experiences in the teaching-learning experiences.

CHAPTER 3 – LITERATURE REVIEW

A review of extant literature was conducted on the phenomenon of living on the edge. While living on the edge has been explored from many disciplinary perspectives, there were no identified studies considering living on the edge from a teaching-learning perspective. Investigating the students' experiences of living on the edge in nursing education is a study to understand the participants' lived experiences, actions, meanings, perceptions, values, and goals from their perspectives. This study was designed to enhance understanding of the meaning of living on the edge from those students who have lived it. With no previous literature focused on living on the edge from a teaching-learning perspective, the humanbecoming teaching-learning model, specifically the teaching-learning processes provided the framework for this literature review with the intention of synthesizing prior research, identifying gaps in existing knowledge and providing direction for this research to extend discipline-specific knowledge of teaching-learning processes in nursing academia.

The syntheses of prior research provided a perspective for identifying gaps in nursing education research, why this field of inquiry is of value, its practical significance, and its potential contribution. The chapter closes with a summary of common themes and concepts that surfaced, a synthesis of the literature based on the humanbecoming teaching-learning model, and the identification of challenges and opportunities that were identified for the future advancement of nursing education.

Selection Process for Literature

This literature review included a search of the University of New Brunswick Library catalogue (QUEST) for books written on related phenomena and a search of

databases containing articles related to teaching-learning, ambiguity, and student's "lived experiences" through the following databases: Cumulative Index to Nursing and Allied Health Literature (CINAHL), Education Resources Information Center (ERIC-EBSCO), Digital & Thesis Dissertations, Scopus, and Philosophers Index. The search terms used in the literature search process included, but were not limited to living on the edge, edgework, ambiguity, risk taking, lived experience, nursing student, baccalaureate nursing, teaching, learning, andragogy, pedagogy, metagogy, student nurses, clinical experience, relations / relationships, simulation, and Canada. The search process included locating literature, reading and checking relevance of literature, organizing the literature selected, and writing the review. Some sources were recommended by various nursing and education professionals while others were identified using the ancestry approach.

The teacher-student-client-knowledge relationship has become a concern to educators and the focus of nursing education research. There has been little research on the students' experiences in these relationships and teaching-learning processes. My interest is on the phenomenon of living on the edge as talked about by nursing students. This literature review is focused on the nursing students' experiences of teaching-learning through the lens of the teaching-learning model processes.

Only one article (PetersonLund, 2014) was located with a nursing (humanbecoming) perspective which explored the universal human experience of living on the edge. This research was completed using the Parse research method, to expand understanding of this universal lived experience as lived by persons in the American West. The themes that were identified included human mystery, infinite possibilities, and engaging the unknown. The structure of living on the edge was: "persevering with

pioneering ventures amid perilous remoteness surfaces vacillating sentiments with diverse affiliations" (PetersonLund, 2014, p. 49). This study identified the concepts of struggling with uncertainty, the experience may or may not be welcomed, shifting emotions, and the importance of relationships or alliances which provided a unique perspective of living on the edge. As there is little research on students' experiences in teaching-learning, it was important to explore if the concepts of ambiguity, uncertainty, and relationships arise in the students' reflections on their teaching-learning experiences.

In further exploring living on the edge, a group of studies focused on edgework and risk taking surfaced from a sociological perspective that revealed a wide range of activities (street criminals, high performance athletes, financial managers, academic scholars, etc.) all with the common attraction of "exploring the limits of cognition and capacity in search of new possibilities of being" (Lyng, 2005, p. 4). This collection of studies pointed to the limits of knowledge and capacity as challenges, opportunities, and possibilities for transcendence as participants voluntarily sought to experience the risk, ambiguity, and the uncertainties of the edge. The first teaching-learning process to be explicated from the humanbecoming teaching-learning model is living with ambiguity.

Humanbecoming Teaching-Learning Processes

Living with Ambiguity

This first teaching-learning essence draws attention to the uncertainty and complexity of the teaching-learning context, as well as teaching-learning processes. There are many challenges in nursing education today with the ever-increasing amount of information for nursing students to learn. With the recognition of content heavy curricula, a paradigm shift has occurred from traditional curricular frameworks to concept-based

curricula in some nursing programs with the goal of shifting the student focus from rote memorization to more meaningful learning of concepts which have the potential to promote higher-level thinking and life-long learning (Brussow et al., 2019).

There is a greater complexity in practice settings with increased acuity of clients, increased pressures to reduce clinical teaching hours, limited clinical settings, and an increased use of simulation in nursing education. Most recently, there has been tremendous growth in web-based instruction (through use of Zoom™ and MS Teams™, etc.), use of simulation, and virtual simulations (Shin et al., 2019) which can affect teaching-learning relationships and how meaningful learning can occur (Sinacori, 2020).

It has been written that a persistent knowledge and theory-to-practice gap has resulted in new graduates feeling stress and anxiety, and unprepared to think critically, or communicate effectively and provide safe competent care (Hickerson et al., 2016). Clinical learning experiences are filled with ambiguity and uncertainty; as they remain complex and unpredictable in an environment of increasing patient acuity. This has necessitated a shift in focus to understanding the students' perspectives and to exploring the other aspects of the learning process. Students need to feel "comfortable thinking from multiple perspectives amidst the ambiguity and uncertainty of evolving health care situations" (Scheckel & Ironside, 2006, p. 160). In response to these pressures, nursing faculty strive to make the most of the teaching-learning opportunities that occur via distance (Jowsey et al., 2020), in the classroom, skills lab, simulation lab, and clinical settings, "to ensure students develop a clear understanding of what nursing is, the values and beliefs inherent in nursing and the meaning of the phenomenon of concern to nursing" (Yancey, 2015, p. 275).

In Canada, Doane (2002) invited nursing colleagues to consider a pedagogy of interpretive inquiry that came to light through teaching experiences as "a process of intense reflection on events and experiences in which the inquirer is part of a relational process of interpreting" (Doane, 2002, p. 403). This was a shift in focus away from the student nurses' individual performance of skills or behaviours in the clinical setting to their relational experiences and practices with their patients. This "pedagogy of inquiry serve[d] to open learners to the mystery of being human and to the fears and vulnerabilities that lie within relational nursing practice" (Doane, 2002, p. 403). As an example of this concept, nursing students expressed uncertainty in their ability to provide person-centred care to their patients (e.g., what to say to patients or how to be with them) (Doane & Varcoe, 2015; Ursel & Aquino-Russell, 2010). There was a perceived disconnect between nursing theory, what students saw in practice, the challenges of time management, and task-based nursing as they anticipated the transition from student to professional nursing practice (Curtis et al., 2012; Ursel & Aquino-Russell, 2010). Nursing students need to practice in fluid situations and to learn to identify the most relevant issues for the patient in their unique context (Benner et al., 2010). In guiding students, this ambiguity provided the opportunity to confront new information and experiences; for dialogue, and reflection as students practiced; and for discovery of new meaning in their practice and way of being, as they gained insight into what their future practice could hold for them (Ursel & Aquino-Russell, 2010). "Without ambiguity, there might be little reason to seek understanding in one's own thinking or in discussions with others" (Mitchell & Pilkington, 2000, p. 31). Doane and Varcoe (2015) identified that uncertainty, ambiguity and discomfort are catalysts for learning and that learning is risky.

The literature on the phenomenon of ambiguity in teaching-learning experiences dates to Socrates, in Athens. From Plato's (ca. 375 B.C.E./1993) teachings and writings, we learn that Socrates worked hard to make others do their own thinking; he continually questioned the men of Athens, any place they would meet or congregate, always seeking to understand, looking for universal rules, which undergird their specific domains of knowledge. Socrates' teaching style of asking questions was significantly different from the teachers of the time; who were viewed as experts pouring their knowledge into their students. There are many situations when there will be no clear guidelines to inform decision-making and actions in unfolding, complex and unpredictable patient situations. As developing nurses, students will need to become comfortable with varying degrees of uncertainty and ambiguity in their practice.

In this digital age today, students are accustomed to having information readily accessible on demand. As Flyvbjerg (2001) demonstrated in presenting the Meno dialogue, that Socrates did not share knowledge with others to passively receive and as a result, he refused to take the title of teacher. Rather, Socrates helped his students and the men of Athens, including Plato, Meno, and Euthyphro recognize on their own what was real, true, or suspect by his undaunted questioning approach to education. He was known for perplexing his students through persistent probing which caused uncertainty and critical questioning of his students into the unpleasant experience of realizing their ignorance, which created ambiguity and at times stimulating genuine curiosity. There are many clinical situations when rationale for the patient's response to treatments or prescribed medications are not readily apparent, and the student with teacher embark on a journey of discovery. Although we may anticipate the patient response to treatment, we

need to remain open to recognizing and identifying the unexpected responses that may occur within each unique patient experience.

> Heidegger (1926/1962) describes the kind of everyday ambiguity that leaves people believing they have understood something until they try to articulate the precise meaning of the thing they believe understood, and then find themselves not sure at all of their understanding. (as cited in Mitchell & Pilkington, 2000, p. 32)

There are many unknowns within the clinical environment, and it is important to recognize that the clinical practicum is a pivotal experience for students as they come to know and respond to their patients and their unique wishes and needs.

> Self transformation does not occur when ordered according to some grand plan articulated in sets of detailed objectives pre-specified independently of the teacher-learner interplay. The teacher must intend change without knowing in advance precisely what this change should or will be [living with ambiguity]. Essentially the teacher's task is to provide *occasions* for change by seeking opportunities to challenge pupils to take up the risk and responsibility for their own lives and to lend what support she may as pupils strive to do this. (Bonnett, 2009, p. 28)

In their exploration of ambiguity in the nurse-person process, Mitchell and Pilkington (2000) uncovered three paradoxical rhythms: comfort-discomfort, sureness-unsureness, and confirming-not confirming on their journey. Letcher and Yancey (2004) concluded that living with ambiguity was an "experience of living on the edge of knowing and not knowing, of being sure, yet not sure" (p. 38) for their nursing students. Yancey (2018)

further identified that “it is essential for teacher and learner to be patient and to recognize the multiple layers of ambiguity surfacing in the emerging now” (p. 229). Living with ambiguity provides opportunities to explore unknowns, while appreciating mystery on their journey of coming to know.

Appreciating Mystery

Doane (2002) identified that “a pedagogy of inquiry serves to open the learner to the mystery of being human and to the fears and vulnerabilities that lie within relational nursing practice” (p. 403). In appreciating the uniqueness of each individual, their values, beliefs, and experiences, we never completely know the other’s experience. Appreciating mystery is at the core of the journey as the teaching-learning relationship unfolds. In appreciating mystery, hooks (2010) identified

> enthusiasm for lifelong learning is promoted by critical thinking. Embedded in this understanding is the practiced wisdom that helps us remember that ideas are not fixed states but always subject to change. Hence there is the capacity of ideas to illuminate and heighten our senses of wonder, our recognition of the power of mystery. (p. 188)

It is this openness to the unique, real, yet mysterious nurse-patient experience that allows for learning to occur. Appreciating mystery enables discoveries, and the wonder and awe of teaching-learning opportunities within each of these unique teacher-learner-client relationships.

hooks (2010) acknowledged that

> the vital link between critical thinking and practical wisdom is the insistence on the independent nature of theory and fact coupled with the awareness that

> knowledge cannot be separated from experience, and ultimately there is an awareness that knowledge rooted in experience shapes what we value and as a consequence how we know what we know as well as how we use what we know. (p. 185)

In learning, the challenge is being open to the unknown, setting aside the urge for consistency or standard responses, which removes the most enchanting feature of appreciating mystery in the teaching-learning process. Teaching-learning is the complex weaving together of disciplinary knowledge, teaching skills, learning styles, and personal attributes of all involved in the process.

Students seek to reduce the degree of uncertainty by wanting to know exactly what they need to know to obtain the best grades, and resist learning that is not rote memory work or predictable, well-defined assignments. hooks (2003) identified "they are not interested in learning. But the student who longs to know, who has awakened a passion for knowledge is eager to experience the mutual communion with teacher and student that makes for profound engagement" (p. 30). This research interest came to light when observing the students' rhythms of relating in practice with peers, clients, instructors, and other professionals within the healthcare community and their surfacing uncertainty in the unfolding mysteries of the teaching-learning process, "the unexplainable, that which cannot be completely known unequivocally" (Parse, 2007b, p. 309). From the humanbecoming perspective, the teaching-learning process is an art and science.

> The sciencing refers to the never-ending coming-to-know, and the art refers to the aesthetic creative endeavor of respecting knowing as changing…. The perspective

> offers a different view of humanuniverse, dignity, and living quality thus; a different view of teaching-learning as a humanuniverse endeavor. (Parse, 2021c, p. 180)

In co-creating the teaching-learning journey guided by the humanbecoming school of thought the students discovered that each person was unique and unpredictable, and all could not ever be known, in addition there was always a potential risk of being disregarded while participating on the interdisciplinary health team while practicing person-centered care (Ursel & Aquino-Russell, 2010).

All students-teacher relationships have the potential to construct knowledge through their joint discovery, critical thinking, clinical reasoning, and judgement. However, students differ in their previous learning, experiences, and way of thinking or learning styles, which has created a need for a variety of teaching-learning approaches to facilitate deep learning. “No one knows precisely how to fashion an education that will yield individuals who are disciplined, synthesizing, creative, respectful, and ethical” (Gardner, 2008, p. 19). The learner ultimately is responsible for learning and the identification of meaning, based on their own perspective, past experiences, interests, capacities, and needs. Vygostky (1978) proposed that ideas have inherent meanings, created by the person in a specific context, and these ideas are fluid, complex, and unique to that person. The student-teacher relationship is of critical importance in responding to these unique learning needs. Dewey (1938/1997) identified that students use tacit knowledge in their knowing-in-action and reflection-on-action in their practical learning. Grand theories in nursing have emerged to reflect nursing as a maturing discipline, clarified the role of the nurse, and established the nursing profession as a unique

contributor to health care. At this time, many curricula have used nursing theory as a foundation and were referred to as concept-based (Giddens et al., 2012). Today concepts may be drawn from many theories and reflect the current practice trends in nursing (Giddens et al., 2008). “Fundamentally the patient experience is grounded in the language of nursing and nursing theory, and that theory should provide the organizing framework for understanding the therapeutic and relational foundation of our profession” (Kavanagh & Szweda, 2017, p. 61). Nursing and other theories are essential tools in the development of the art and science of nursing practice. When theory guides practice, knowledge acquisition, and experience, knowing-in-action can be achieved. “From a humanbecoming perspective, teaching-learning is a never-ending journey of giving-receiving in coming-to-know. It is everchanging with the becoming visible-invisible becoming of the emerging now as individuals assume responsibility for learning in living quality as truth for the moment” (Parse, 2021c, p 180). These teaching-learning perspectives have evolved from a very prescriptive and structured framework.

Historically nursing education was defined in terms of behavioural learning objectives and skills performance, which have focused the responsibility on the teacher as expert providing the content. This approach is focused on outcomes- and competency-based education, which remains predominant in nursing academia today. Heidegger (1954/2008) offered a different approach, a constructionist in that

> teaching is even more difficult than learning…. Not because the teacher must have a larger store of information, and have it always ready. Teaching is more difficult than learning because what teaching calls for is this: to let learn. Indeed, the proper teacher lets nothing else be learned than – learning. His conduct,

> therefore, often produces the impression that we really learn nothing from him, if by "learning" we now automatically understand merely the procurement of useful information. The teacher is ahead of his apprentices in this alone, that he has still more to learn than they – he has to learn to let them learn. The teacher must be capable of being more teachable than the apprentices. (pp. 379-380)

Over the past 2 decades, there has been some shift to incorporate constructionist, humanistic, narrative pedagogies focused on the teacher-student interaction and cocreated meaning for the students through partnerships (Anthony & Landeen, 2009). Katznelson et al. (2018) concluded "academic knowledge can only be applied and put into practice in interaction with the right personal qualities" (p. 115). They add that "both teachers and employers are well aware of and often indicate that [these] personal qualities such as maturity, flexibility, creativity, empathy, social understanding, commitment, drive, etc., …are at least as important and indispensable as the academic qualities" (Katznelson et al., 2018, p. 114). In a systematic literature review, Hills and Levett-Jones (2017) identified that "there as a lack of understanding of the exact nature of the students' experiences, in particular lecture and group work" (p. 16). Swart (2017) explored students' perspectives on inclusion of technology-enhanced learning in critical thinking instruction. These students identified that the classroom response system and online discussion forums were beneficial in meeting their needs and preferences by offering varied ways to actively participate in learning. The research has not adequately identified or validated the "best" approach to teaching in the art and science of nursing and the "preferences among generational groups were not consistent indicating that the results

could also be cultural, situational, or contextual, but there are sufficient indicators to warrant further research in this area" (Hills & Levett-Jones, 2017, p. 15).

In a review of interpretive or narrative strategies, Brown et al. (2008) identified a shift, from the teacher-centered to the student-centered teaching approach, speaking to the limitations of the conventional pedagogy and acknowledging that, "limited research exists about the effectiveness of narrative pedagogy and how its use actually strengthens the learning experience" (p. 285). Bowen (2012) identified that to develop critical thinking, there is a need to shift focus to the application of knowledge in a variety of contexts (i.e., live with ambiguity), stimulate intellectual curiosity (i.e., appreciate mystery), challenge personal values and beliefs, structure meaning, and facilitate the connection of information across disciplines. The development of critical thinking and clinical judgment supports the teaching- learning process of potentiating integrity.

Potentiating Integrity

Effective teachers focus on what the students want to know and connect with them in ways that respond to their individual learning styles (Bain, 2004). This rhythm of theory to practice and practice to theory, as Dewey (1938/1997) appreciated,

> is satisfied only as the educator views teaching and learning as a continuous process of reconstruction of experience. This condition in turn can be satisfied only as the educator has a long look ahead and views every present experience as a moving force in influencing what future experiences will be. (p. 87)

Attention to the unpredictable teaching-learning rhythms is the attentive moving with the learner as new meanings unfold and the learner shifts the focus with each new experience.

Gardner (2008) described ongoing learning as "synthesizing the current state of knowledge, incorporating new findings and delineating new dilemmas is part and parcel of the work of any professional who wishes to remain current in her craft" (p. 6). In this environment the "interacting relationships of education and practice lead to self-reflection, growth, and human flourishing" (Larson et al., 2013, p. 138). The students need to feel safe and accepted, understanding both the risks and rewards of seeking new knowledge and integrating this understanding into their evolving practice expertise. As MacMillan (2013) identified in the proceedings of a think tank on nursing education there is a need to develop a new pedagogy that recognizes that the undergraduate nursing education is only foundational knowledge or the first step on the journey to professional formation. Another theme identified was the need to explore how undergraduate programs assist graduates to develop a strong professional identity. This professional identity reflects adherence to consistent moral and ethical principles and values which are demonstrated in the personal and professional integrity (Bebeau & Monson, 2012).

McCaslin and Snow (2010) described leadership as "the human art of *potentiating the relationships* between the *potentiator* (leaders, teachers, parents…) and those seeking actualization of their unique potential (associates, students, children…) who collectively intend to build a *synergistic society*" (p. 8). McCaslin and Snow (2010) described the practice of teacher as the potentiator as follows:

> Potentiators tend to not lock on to some momentary truth constructed only from what they can perceive as if it were some point of arrival or as a final destination. Truth for them is fluid, emerging and malleable. What is real for them is the potential that might be revealed by employing these malleable truths towards a

> greater understanding and appreciation of the actualizing soul. They seem more interested in the opportunities for learning than in the demonstrations of knowing. As such they naturally embrace the practices that would hold the space for the full actualization of human potential to occur. They appear to hold a grand honesty that understands that everyone is searching for their greatest potential no matter how lost they currently appear or how far they have come. The journey remains the same-we are all seeking our greatest potential. (p. 24)

In approaching professional identity formation, it is important that the change is motivated from within the student and integrates personal and professional values to reach the potential of authentic professionalism where professional responsibility is woven into the fabric of the curriculum to build a synergistic society. Educators should respect that students are striving to reach their maximum potential no matter how tentative they currently appear in their way of being or how far they currently have come in their professional development and ethical practice.

Marck (2004) identified several kinds of integrity, "the personal integrity of practitioners, the professional integrity of their practices, and the ecological or systemic integrity of their practice environments are all requisites for safe, healing and morally sufficient nursing care" (p. 235).

> Matters of integrity refer to both cultural integrity (individual-personal, individual-professional, collective-professional, communal, organizational, system, and societal) and ecological integrity (of local surroundings, larger ecosystems, and the earth)….Integrity in this sense is necessary for health and

> healing throughout interwoven cycles of human-ecological life. (Marck, 2013, p. 217)

In teaching-learning, potentiating integrity is a complex process of formation of personal and professional identity within various practice environments as well as everyday life.

In the 2017 *Code of Ethics for Registered Nurses* integrity is defined as the "adherence to moral norms that is sustained over time. Implicit in integrity is soundness, trustworthiness and the consistency of convictions, actions and emotions" (Burkhart et al., 2015, as cited in Canadian Nurses Association, 2017, p. 23). In their research on students' lived experiences of ethics and moral professional personhood, Lemonidou et al. (2004) uncovered that the nursing students living out ethical practices in the clinical setting "risked being profoundly traumatized by an opposing clinical culture. Indeed, moral compromise, distancing, fatigue and negative emotions have been identified in students exposed to suboptimal ethics" (p. 134). The authors concluded that there is a need to support these students as they move along their learning journey to professional practice. Therefore, in the process of developing an ethical nursing awareness and practice, students need to envision what ethical care is and discuss their concerns regarding the complexity and ambiguity within various contexts. In their research, Doane et al. (2004) reported the types of educational opportunities that the students valued as they explored their professional comportment, developed their professional identity, and determined what good ethical practice meant in terms of their care of clients.

> Educators can smooth the road to an ethical mind by drawing attention to other connotations of goodness. Students need to understand why they are learning what they are learning and how this knowledge can be put to constructive uses.

> As disciplined learners, it is our job to understand the worlds. But if we are to be ethical human beings, it is equally our job to use that understanding to improve quality of life and living and to bear witness when that understanding (or misunderstanding) is being used in destructive ways…. When students see that knowledge can be put to constructive use, they are most likely to gain pleasure from schoolwork and to find it meaningful in itself – there by achieving the other facets of goodness. (Gardner, 2008, p. 142)

In teaching-learning situations, living value priorities and role modeling ethical values are key to students grasping what professional practice should look like. Doane et al. (2004) concluded, "of primary importance was providing the opportunity for nurses [and students] to become aware of how central their person is to their professional role and, ultimately, their ability to practice ethically" (p. 251).

> Practicing integrity is essentially a way towards cultivating and sustaining the authentic self…. integrating our inward and outwards selves. Through this practice our thoughts, words, and deeds come into alignment…. Integrity is fundamentally a skill centered upon self-exploration and emotional intelligence. Integrity requires a setting of intentions. It asks: Are you ready to become in reality what you appear to be? (McCaslin & Snow, 2010, p. 23)

The teaching–learning process of potentiating integrity (Parse, 2004a, 2014b, 2021c) requires that the teacher maintain an openness to learn as a way of connecting with and relating to the learner within the context of the situation. It is the recognition that not all is known or can be known about the learner, client, or teaching-learning context. This requires an ongoing curiosity utilized in a very creative way.

> Buber (1965) wrote that teachers must practice "inclusion"; teachers must, that is, take on a dual perspective: their own and that of their students. They must try to see the world as their students see it in order to move them from a less to a more satisfactory view. Good teachers do not reject what students see and feel but, rather, work with what is presently seen and felt to build a stronger position for each student. To do this effectively requires the creation and maintenance of a trusting relationship. (as cited in Noddings, 2005, p. 107)

This support is not limited to the teacher but extends to the clinical team. Levett-Jones et al. (2009) demonstrated in their research findings "that positive staff-student relations are crucial for students to feel accepted, included and valued…The sense of belonging experienced in environments that facilitate positive placement experiences allows students to progress in their learning with confidence and motivation" (p. 323). "Knowing is transformative – it can change who we are" (Dall'Alba & Barnacle, 2007, p. 682). Doane and Brown (2011) specified that they have oriented their educative processes toward students' personal and professional transformation. This shift is similar to Benner et al.'s (2010) description of formation which is moving the student from "acting like a nurse to being a nurse" (p. 176). In the teaching-learning context, the student needs to feel safe to practice being with clients in the clinical or classroom environment to facilitate learning.

Dall'Alba and Barnacle (2007) identified that "a focus on knowledge acquisition leaves the students the difficult task of integrating knowledge into practice" (p. 680). There is renewed focus on how "ethical practice is imbued with the everyday complexities of nursing work, where values, emotion, experience, and relationships

underpin ethical challenges and moral deliberations in contemporary health care contexts" (Brown & Allison, 2013, p. 302). Based on their research and experience, Brown and Allison (2013) identified the need to consider that for "learning to 'be' ethical requires that as educators we carefully and critically consider now to create educated spaces imbued by similar complexities" (p. 302). It is "the lived space between teacher and learner, nurse and patient, where new knowledge is constructed. Such knowledge 'resounds bodily' and is always under construction" (Bergum, 2003, p. 121). Dewey (1938/1997) expanded on the view that education comes through experience, and students need to be engaged in identifying the objectives that are specific to their learning needs. Failure to adapt to unique learning needs and styles will result in the failure of the learner to connect and adapt to the information. Dewey (1938/1997) stated, "in a certain sense every experience should do something to prepare a person for later experiences of a deeper and more expansive quality. That is the very meaning of growth, continuity, reconstruction of experience" (p. 47). Students should be free to pursue their own personal and professional growth, based on their unique learning needs and this should be the approach taken educators. "But students must also accept responsibility for communicating their needs to teachers. They must understand that their responses enliven or dampen their teachers' enthusiasm. Students have tremendous effects on their teachers, the relationship is marked by reciprocity" (Noddings, 2005, p. 108).

Concerns over the present educational practices have led to growing acknowledgment and increasing interest in the teacher-student relationship as a holistic experience (Friere, 2009; hooks, 2003; Palmer, 2007). There is a need to develop a fuller appreciation for the student-teacher relationship as a part of the educational experience.

"When education is based upon experience and educative experience is seen to be a social process, the situation changes radically. The teacher loses the position of external boss or dictator but takes on that of leader of group activities" (Dewey, 1938/1997, p. 59). In seeking to understand, individuals draw on knowledge and experience to make meaning of current and future situations. The teaching-learning process of weaving illimitably depicts the weaving of experience and perceptions with the integration the new information into a new interwoven pattern of knowledge.

Weaving Illimitably

All social aspects of life are educational experiences. True learning has both longitudinal and lateral dimensions like the warping and woofing of a weaver's loom.

> As good teachers weave the fabric that joins them with the students and subjects, the heart is the loom on which the threads are tied, the tension is held, the shuttle flies, and the fabric is stretched tight.…so that the teacher, student and subject can be woven into the fabric of community that learning and living require. (Palmer, 2007, pp. 11-12)

It enriches experiences in a dynamic way, but only to the degree that the learner can connect to or enhance their view, attitude or skill by discovering the connections or patterns that exist within the past, current and future experiences.

Diekelmann (2001) developed a nursing-specific teaching-learning method entitled narrative pedagogy. Her view of narrative pedagogy articulated a role for the teacher as co-learner and guiding partner in the learning activity, the educator and student shared responsibility for learning. This partnership provided the opportunity for educator and student to connect in a way that allowed for identification of learning needs and

enabled the learners to achieve their goals. In the analysis, Diekelmann (2001) found that various degrees of innovation in nursing education were underway in the organizations included in the study, although these initiatives were isolated, often program and site-specific, but the processes of thinking or evolution and implementation of the new pedagogies were generalizable. By defining "Concernful Practices," Diekelmann (2001) offered a language for ongoing discussion and preparation to take the next steps of "creating a future of possibilities for nursing education. Abandoning old ideas and risking new ways are possibilities that are evoked" (p. 67).

From Diekelmann' s original work, other smaller studies followed validating the use of the narrative pedagogy or interpretative pedagogies. These studies looked at the lived experiences of teachers and students in terms of narrative pedagogy (Ironside, 2003b, 2005a); teaching thinking abilities (Ironside, 2003a, 2005a, 2006); and exploring excellence in nursing education where teachers create partnerships in which they explore the meaning of experiences they co-create with students (Diekelmann, 2005b; Ironside, 2005b; Ironside et al., 2005a).

In learning experiences, Paterson (2007) concluded there is a need to engage with the student to find meaning: "Those connections occur by making the relationships between the isolated content and the relevance to the practice of the profession explicit, using a variety of teaching strategies" (p. 545). In relating with others, we discover new meanings, understandings and insights that help define the individual we are becoming. Dall'Alba and Barnacle (2007) acknowledged "knowing is always situated within a personal, social, historical and cultural setting, and thus transforms from merely intellectual to something inhabited and enacted; a way of thinking, making and acting.

Indeed, a way of being" (p. 682). Illeris (2009) identified five main types of learning spaces those of everyday life; formal, directed learning; workplace learning; interest-based learning; and net-based learning. "People today are involved in all or most of these main types of learning spaces, the transition between them becomes increasingly essential and complex, … important transfer problems occur in connection with transitions between these five main learning spaces" (Illeris, 2009, p. 140).

Dewey (1938/1997) identified that the challenge of moving with learners living the experience of learning is the business of the educator,

> to see in what direction an experience is heading… to help organize the conditions of the experience…. Failure to take the moving fore of an experience into account so as to judge and direct it on the ground of what it is moving into means disloyalty to the principle of experience itself. (p. 38)

Further, Doane and Varcoe (2008) highlighted the complexities of translating nursing knowledge into practice, expanding on this challenge. They suggested

> seeing competent nursing practice as involving more than application of theory and evidence, as an embodied process of critical inquiry and translation, one that draws on theory and evidence to enlarge and imagine possibilities for action in particular moments, situations and contexts offers a *way of being* in which the interconnection of theory, evidence and practice is lived. (Doane & Varcoe, 2008. p. 294)

"The learning strategy becomes that of inquiring into one's way of being and how the proscribed intelligibility including knowledge, ideology, and normative practices and structures are shaping, limiting, and enhancing action" (Doane & Brown, 2011, p. 24).

There is an openness, curiosity, and connectedness between past and present experiences that can be utilized in future experiences that the student actively engages in. Learning becomes a more enjoyable experience and stimulates the desire to continue exploration and to integrate this knowledge into their values, beliefs, and skills repertoire.

Building on Socrates teachings, Plato sought to develop a perfect balance between the person's moral virtue or values and his or her acquired skill or expertise (techne) that would provide for full expression of these values. In Plato's (ca. 375 B.C.E./1993) *Republic*, techne was defined as a kind of expertise that may or may not be joined with a person's natural gift or excellence. If technical expertise is not grounded in and subsequently enhanced by moral virtue, it could lead to unfair or immoral conduct. Flyvbjerg (2001) provided an interpretation of Aristotle's three intellectual virtues associated with knowledge: episteme, techne, and phronesis. The virtue of *episteme* is pure theory or scientific knowledge and *techne* is the practice of an art or a craft itself, and which includes episteme because it is a practice based on some form of theoretical understanding, while *phronesis* encompasses common sense, ethics and the analysis of values in reference to praxis which is developed with experience. Benner et al. (2008) highlighted the importance of "the skills of phronesis (clinical judgment that reasons across time, taking into account the transitions of the particular patient/family/community and transitions in the clinician's understanding of the clinical situation)" (p. 108) are necessary for the practice of nursing weaving together episteme, techne, and phronesis. In weaving illimitably there is an intertwining of theoretical knowledge with the nurse's values and skills (personal and professional), in being with the client and making sense of client's experience(s).

Dewey (1938/1997) identified a philosophy of experience that required theoretical preparation and an enriched learning environment where the student can relate and reflect on experiential learning, which provides opportunities for clarification and extension of knowledge around this learning. McCaslin and Scott (2012) described this experience as metagogy which is "the art and science of interdependent growth through teaching and learning motivating and motivated by creativity, spirituality and empowerment of the individual and the community" (p. 5). In congruence with this idea, experiential learning provides students the opportunity to demonstrate sensitivity and empathy to their patients' feelings and concerns. In a rich clinical experience, students can respond to the care needs in unique and novel ways and are moved by these experiences when linking theory to practice (Solvoll & Heggen, 2010, Ursel & Aquino-Russell, 2010). Yancey (2018) acknowledged that "nurse educators are responsible for creating opportunities for students to become inquisitive learners, knowledge seekers, and competent professionals" (p. 228).

Wimmers and Mentkowski (2016) concluded that competencies are not mastered in any one way, but rather,

> competencies are multi-dimensional and interconnected [making] it highly unlikely that a single approach to teaching or assessment will be sufficient for their acquisition and multiple methods for teaching and learning are necessary for the acquisition of competencies. Clinical competence takes place at the intersection of a lot of different learned abilities and skills. (p. 451)

Csíkszentmihályi (2008) identified that the most effective learning takes place when learners reach a personal state referred to as "flow." This experience is one of

intrinsic motivation and engagement where the learner is so focused that time passes without recognition. In this state, the brain makes connections and sees patterns in information with result in a powerful illumination, which comes from new understanding. This experience is deeply motivating, and the learner feels pleasure in achievement of deep learning. This learning weaves a foundation of knowledge within the context of a conceptual framework and connects knowledge in ways it can be retrieved and applied in the future. In the humanbecoming teaching-learning model, Parse's (2021c) third essence of aesthetically innovating focuses attention to the teaching-learning processes of honoring wisdom and witnessing unfolding as learners move with the paradoxes of considering-composing and beholding-refining.

Honoring Wisdom

Honoring wisdom must occur from various perspectives in the learner-teacher-client-healthcare team relationship within the teaching-learning experience. Lave and Wenger (1991) identified the importance of creating a [learning] environment that recognizes practice as an important source of knowledge, theory application, and engagement with a community of practice as a basic source of learning. While, Holopainen et al. (2014) utilized Ricoeur's hermeneutics methodology to further understand the essence of the nurse-patient caring encounter. They questioned what this caring encounter might look like in the efficient, technological environment of today. They concluded that the philosophers illuminated the essences of this encounter as

> being present means being here, I am here and you are here, we are both here; we see the door to a space of something. I recognize something in you and you recognize something in me. We recognize something of ourselves in each other. It

> is possible for each of us to open the door. Availability means that we open the door; me being here for you and you being here for me as human beings. In mutuality, we are just human beings beyond all the circumstances around us. Being together in the space between us, we understand ourselves and each other being in the world, being in the past and being in the future. That is the mysterious moment. That is being in the glimpse of a mutual existence. (Holopainen et al., 2014, p. 191)

In the nurse-patient connection, "the quality of clinical reasoning thus depends on the ability to flexibly choose from a rich array of strategies and change the strategy(ies) based on the reaction of the patient or on other features in the environment" (Rencic et al., 2016, p. 216). In the development of the nurse-patient connection, the nursing student honours the patient perspective and incorporates this wisdom into their approach to providing care. Professional knowledge and skills are acquired by observing a teachers, peers, or nurse role-models practice choosing what to integrate or not integrate into their professional practice (Ursel & Aquino-Russell, 2010). In education we often create challenges to learning through our communication, hooks (2003) observed,

> the messages students receive is that everything that they learn in the classroom is mere raw material for something that they will produce later on in life. This displacement of meaning into the future makes it impossible for students to fully immerse themselves in the art of learning and to experience immersion as a complete, satisfying moment of fulfillment. (p. 166)

Educators need to create an immediacy and guide students to honor wisdom and discover the value of learning theory in a way that provides an opportunity to connect to

practice. In their study, Ironside et al. (2005a, 2005b) sought to understand undergraduate nursing students' experiences of listening and responding to patients highlighted the significance of "something more" occurring than merely application of content or theory to the practice setting. They identified that knowing and connecting required an open mind to learn about the client, the situation and their experiences and future possibilities of caring where upon reflection the students' experiences "making a difference." Parse (2021c) described the something more or the nurse's way of connecting with the client as true presence:

> True presence is a powerful humanuniverse whole-in-motion connection, a special way of *being with* others, attentive to the moment-to-moment changes in meaning with the becoming visible-invisible becoming of the emerging now. It is *bearing witness* and *being with* others in their changing pattern preferences attuned to the rhythms, hopes, and dreams as shown in the sounds and silences, the visions and blindnesses available with the illimitable mystery of humanuniverse. (p. 119)

Nurses need to be truly present, honour the wisdom of their clients, and be supportive of their hopes, dreams, and wishes in the context of their situations. The essential elements of the nurse-patient encounter that exist within nursing care are

> that which sparkles, lights up and creates the encounter, that which is part of nursing care, making it easier and more bearable, providing strength to meet that which is difficult to bear. These encounters arise, they exist and fade away, but both the patient and the nurse carry them within themselves into the next encounter that awaits. (Holopainen et al., 2014, p. 192)

With each learner-patient clinical encounter the learner continues to develop their way of being with clients that facilitates a deeper connection within a meaningful and supportive relationship.

Vygotsky believed that collaborative dialogue in the process of teaching-learning is grounded in theories that propose personally meaningful knowledge is socially constructed through shared understandings (Vygotsky & Cole, 1978). The zone of proximal development accounts for how learning new knowledge or skills occur in interactions. Learners may already possess knowledge and skills to be performed with guidance or in collaboration with another until mastered independently. Co-planning and co-reflecting with an instructor, nurse, or capable peer, honours wisdom and enables learners to perform at levels beyond the level of dependent performance. Knowledge and skills that exist in the interaction between the student and capable other are eventually internalized by the student. Rencic et al. (2016) summarized clinical reasoning as

> *the cognitive and physical processes by which a health care professional consciously and unconsciously interacts with the patient and environment to collect and interpret patient data, weigh the benefits and risks of actions, and understand patient preferences to determine a working diagnostic and therapeutic management plan whose purpose is to improve patient well-being* [italicized in original]. (p. 211)

Providing all the information or telling the learners the process is unfathomable until the learners work out what they need to understand with respect to their previous experiences in order to make sense of their own learnings. Honoring wisdom is being with clients in a way that respects their uniqueness and complexity, in concert with the ambiguity and

uncertainty of their situation as it unfolds, creating novel learning opportunities. Being responsive to the clients' needs, values, and desires respects the dignity of individuals in a creative and unique way, which is the essence of aesthetically innovating. As the learners explore new experiences, they reflect on their past knowledge and experiences. When engaging with learners it is important to honor their wisdom in terms of their learning, and to engage in authentic collaborative activities. Yancey (2019a) reflected on honoring wisdom of diverse perspectives in collaborative activities:

> In teaching-learning of nursing the inherent wisdom of each collaborator must be honored, no matter the personal, educational, disciplinary, or experiential differences. However, this requires a realistic self-awareness and other-awareness, welcoming and honoring similarities, but more importantly being clear about and honoring distinctions. (p. 280)

Honoring wisdom is to listen with intention to what the other has to offer. "One of the inevitable outcomes of seeking to understand experiential learning is recognizing that we learn more than we consciously know, for this is about tacit knowledge (Polanyi, 1967) and wisdom finds its place here" (Jarvis, 2011, pp. 85-86). It is respecting others, and is the ability to learn from, with, and about the ways of the learner.

Lifelong learning is an individual process and as such is an individual responsibility. "Much wisdom, however, is not learned intentionally – it is acquired as an element in our learning from our own lives, often incidentally, and even almost unconsciously, in the process of daily living. In this sense, it is tacit" (Jarvis, 2011, p. 92). Wisdom is being aware of knowledge and gaps – it is impossible for a nurse to know everything. A wise nurse acknowledges limitations and seeks more information before

engaging and taking responsibility for something new. Honoring self-reflection and self-assessment are key in the educational process. Authentic appreciation for the insight and creativity of another through their self-reflection provides the opportunity to reach a deeper meaning that may not be explicit.

> Experiential learning allows for the growth of practical wisdom. This is true of all learners, but educators need to be trained to help learners reflect on their experience. There is, therefore, space in the educational process for learners to grow in wisdom, but it is space best created by experienced teachers. (Jarvis, 2011, p. 90)

In 2012, McCaslin and Scott presented their work on metagogy to address the challenge of instilling the practice of lifelong learning. This approach moves from an outcome focus to an orientation on potential self-transformation through experience. This approach speaks to individual learning priorities based on the learners' unique experiences. Parse (2014b, 2021c) explicated this transformative teaching –learning process as pattern-seeing. It acknowledges that learning is "a dynamic and synergistic relationship contributing to the creation of opportunities… inspiring the cultivation of wisdom" (McCaslin & Scott, 2012, p. 4). In a review of the literature, Bunkers (2014) identified the following concepts of living wisdom:

> Living wisdom is a cocreated community encounter involving the seen-unseen and the expressible-inexpressible; (b) living wisdom is powering with the pushing-resisting of unfolding value priorities; (c) living wisdom surfaces with explicit-tacit knowings with questioning and wrestling with what is known and

> unknown; (d) living wisdom is envisioning anew humanuniverse flourishing. (p. 10)

Mentkowski and Wimmins (2016) observed, "professional schools are now expected to graduate students who can evaluate their own work, continuously improve their performance, engage in lifelong learning, and also work at cross-professional problems" (p. 2). Yancey (2019b) suggested the "shared journey of teaching-learning supports the recognition of the unique knowledge, understandings, values, and responsibilities of the co-sojourners, while honoring the wisdom of both teacher and learner" (p. 111). These conceptualizations of living honouring wisdom bring to light the complexity of wisdom in the challenging and dynamic healthcare system of today where there is always new knowledge to be discovered. Educators need to honour student reflections on their knowing and acknowledge their wisdom as they continue learning in their relationships with patients, peers, nurses, role-models, and teachers. Honouring student wisdom of their knowing on the cocreated teaching-learning journey involves the teaching learning process of witnessing unfolding which guides this unique learning journey.

Witnessing Unfolding

On this journey the teacher-learner relationship is key in that the teacher is attentive to the students' learning. This is paramount if the students are going to risk advancing to the edge of the unknown and engaging in something new. Noddings (1984), and Thayer-Bacon (2011, 2012) have focused their research on caring personal relations in education as an important dimension in the activities of the learner which focus on the concept of partnership. Noddings (1984, 2005) identified that caring is rooted in receptivity, relatedness, and responsiveness: "The special gift of the teacher, then, is to

receive the student, to look at the subject matter with him. Her commitment is to him, the cared-for and he is – through that commitment – set free to pursue his legitimate projects" (Noddings, 1984, p. 177). Thayer-Bacon's (2012) experiences have led her to trust her students' desires to learn. She provided them with choices, and they chose what they want to explore. "Self-directed learning is the most powerful in terms of engagement, motivation and retention for the learner" (Thayer-Bacon, 2011, p. 494). Thayer-Bacon (2012) maintained that the teaching-learning relationship is as an equal to her students, co-participating in learning activities, and it was this "selves-in-relation-with-others, that relies on a both/and logic to describe individuals and others as influencing and affecting each other" (p. 157). Hill and Watson (2011), in their Caring Science curriculum for nursing, identified that "students also have authority in their own knowing and experiences that can be shared and jointly critiqued for deeper knowledge, understanding, integrative insights and wisdom, ultimately, resulting in transformation of consciousness" (p. 17). Building on this premise, they described emancipatory relational pedagogy as "interested in the cocreation of knowledge as we together investigate our understandings and meanings as we experience them in the world" (Hill & Watson, 2011, p. 57). Kear's (2013) study reinforced the significant impact of human interaction on nursing students' learning, highlighting that, "the participants discussed human interactions as key to their learning and in some recounted stories, the interactions resulted in changed meaning perspectives for the participant" (p. 1086). These caring interactions were pivotal in the nursing students' involvement and socialization during learning experiences. "The participants spoke about learning that occurred through interactions with faculty, peers, patients, healthcare workers, and members of the

community. The students recounted stories that focused on the realization that understanding nursing is a process that requires reading, hands-on experiences, assistance and support" (Kear, 2013, p. 1085). McCaslin and Scott (2012) brought to the fore the ideas of discovery, curiosity, and motivation for learning in their description of how metagogy unfolds:

> Metagogy seeks to inductively catalyze open-ended inquiry in a community of learners in such a way that the synergistic flow of learning inductively discovers the questions appropriate to reach correspondingly appropriate truths for each community member and thereby, for the community as a whole. Catalytic teaching (metagogical inquiry) potentiates "ah-ha!" understandings, stimulating the learner to make a quantum leap (borrowing a term from physics), a stepping straight up in moving to a higher understanding of a new concept. Once that new understanding is attained, the learners' perspectives are broadened, clarified, fitting more puzzle pieces together. At the same time, they become metamotivated to intrinsically reflect on their learnings to more fully understand their own potential and to extrinsically share their transformations with others to expand the potential of the collective. (p. 4)

Metagogy as described explicitly supports the transformative experiences in lifelong learning. Parse (2021c) highlighted the implications for the teacher on this cocreated journey of teaching-learning:

> In dialogue, meaning is co-invented in languaging the reality of values, as teachers and learners are enabled and at once limited in revealing and all-at-once concealing who they are becoming in the emerging now, while connecting-

> separating with phenomena. The teaching learning journey unfolds in pushing-resisting as the risk of changing surfaces with certainty and uncertainty while not conforming to some traditions and all-at-once conforming to others. (p. 180)

As the teaching-learning journey unfolds, Parse (2014b, 2021c) draws attention to the importance of considering these paradoxes. The work of O'Mara et al. (2014) in their Canadian study of 54 undergraduate students identified the importance of listening to students, attending to relationships and contexts influencing their learning. Grobecker's (2016) study supported the need for a sense of belonging to have a positive influence and impact on student learning, motivation and confidence, which speaks to the importance of understanding the students' teaching-learning experience. In shifting the teaching-learning approach, these studies have highlighted the significance of honouring the students' wisdom and witnessing unfolding with the creation of a safe supportive environment as they advance with uncertainty to something new. In the empiric study of vulnerable voices, "becoming what you want to be," Batchelor (2006) concluded

> the process of becoming is unique for each student…[it] is demanding, yet central to the experience of being a student. Faithfulness to its demands brings with it a difficult and exacting freedom. Developing an ontological voice invites students to let their being and becoming as students enter fully into their ideas and actions, and vice versa. (p. 794)

The recognition of the students' unique teaching-learning experiences involved their moving purposefully while immersed in the experience, open and receptive to the learning as it occurs (Csíkszentmihályi, 2008). In a rich, authentic learning experience the

students are committed to continual lifelong learning in their professional practice and enrichment of day-to-day lives.

> To learn means to make everything we do answer to whatever addresses itself to us as essential…. It is important above all that on the way on which we set out when we learn to think we do not deceive ourselves and rashly bypass the pressing questions; on the contrary, we must let ourselves be admitted into questions that seek what no inventiveness can find. Especially we moderns can learn only if we always unlearn at the same time…. To do that, we must at the same time come to know. (Heidegger, 1954/2008, pp. 373-374)

As we learn in nursing there is also a need to unlearn, relearn, and change practices as new knowledge becomes available. It is imperative to instil in students the need to move away from the rooted ideas of "that's not what we were taught" or "we have always done it this way" and to be open to explore and confirm practices in a dynamic and everchanging healthcare environment.

Summary of Research

There were three predominant themes that surfaced within the literature review. The first theme was how students are or are not able to meaningfully incorporate information and concepts into their unique conceptual frameworks for effective knowledge acquisition. Through the processes of honoring wisdom and witnessing unfolding, integration of new knowledge and translation into future experiences occurs (*structuring meaning*). The second theme focused on making connections (seeing patterns within concepts) and developing relationships through the processes of potentiating integrity and weaving illimitably, which create a safe environment for

learning. These concepts and patterns are dynamic, based on the everchanging values, beliefs, and experiences of the learner, and are intended to close the theory-to-practice gap by enhancing critical thinking, clinical reasoning, and clinical judgment (*configuring rhythmical patterns*). The final theme involved the creation of an optimal learning environment, through the processes of living with ambiguity and appreciating mystery. This ongoing spirit of inquiry, lifelong learning, and evaluation enhances personal and professional transformation (*cotranscending with possibles*). These themes mirror the three principles in the humanbecoming paradigm of structuring meaning, configuring rhythmical patterns, and cotranscending with possibles.

In their study, Toothaker and Taliaferro (2017) found that millennial nursing students wanted to be present in class and engaged in learning with more hands-on experience supporting the first principle of structuring meaning. These students needed professors or clinical experts to be passionate about the topic. Smith et al. (2018) studied nursing students' satisfaction with learning, and how satisfaction shaped the learning journey, and concluded

> nursing students are satisfied with their learning when they shape a valued learning journey. To shape the journey students effectively and efficiently identify learning of value, engage with valued learning experiences and acknowledge valued achievement…. Student satisfaction with learning is a journey that ebbs and flows, with flashes of intense joy, irritation, fear and hope. Each student shapes a unique undergraduate nursing journey and in doing so their unique experiences of satisfaction, dissatisfaction or ambivalence with learning. (p. 179)

As a result, the use of a blend of active and traditional strategies, and a more collaborative teaching-learning environment were recommendations with an emphasis on positive relationships, honoring wisdom, and witnessing unfolding.

With the second principle of configuring rhythmical patterns, students seek to develop their personal and professional identities in the process of increasing their academic knowledge and skills through their interactions with peers, clients, client's families, faculty, and expert practitioners in response to their own learning needs, desires, and future career prospects. This unique learning journey can be summarized as

> individuals are mysteries no other person, idea, object or situation is every fully known explicity or understood by even two persons in the same way. All new experiences are incarnated with an individual's unique personal belief system, and these experiences are, continually shaping the fabric of meanings in an individual's life. Fortifying the intention of unbounded freedom to learn shows reverence for changing perspectives. In formal teaching-learning events where semantic cohering, synergistic patterning, and aesthetic innovating are valued, the humanbecoming perspective calls for living with the ambiguity of appreciating mystery, potentiating integrity in weaving illimitably, and honoring wisdom in witnessing unfolding. (Parse, 2021c, pp. 183)

As teachers, we can be academically competent and have pedagogical skills, but as Trondman (2018) identified in his research, students need to be engaged in a sharing relationship if learning is to occur and the teacher needs to create this relationship as a joint endeavour in a safe and accepting culture of learning. As a result, learning is a

personally unique journey requiring an attentive, supportive, and creative approaches of potentiating integrity and weaving illimitably.

The third principle of cotranscending with possibles is evident in *The Future of Nursing: Leading Change, Advancing Health,* (Institute of Medicine [US] Committee on the Robert Wood Johnson Foundation Initiative on the Future of Nursing [Institute of Medicine], 2011) which concluded that "new models of education are needed to ensure that competencies required to do the work and improve the work of nursing and health care are embedded in nursing education programs" (p. 511). Benner et.al., (2010) in the Carnegie study called for a transformation to occur in nursing education. With nursing education research being limited, there is a growing body of research in learning from other disciplines, which supports the need to actively engage the learners (Weimer, 2013) and a need to focus on deep learning of discipline-specific knowledge (Parse, 2014b, 2021c). Nursing academia must conduct more research and the national research initiatives (Benner et.al., 2010; Institute of Medicine, 2011) urge nursing to examine current practices, teaching-learning effectiveness, and students' learning experiences. There remain gaps in the literature related to understanding the students' meaning of their learning experiences; how they prefer to engage and learn; the complexities of the environment that influence teaching and learning in preparation for professional practice and lifelong learning; living with ambiguity; and appreciating mystery. This research study explicates various aspects of teaching-learning from the students' perspective and responds to some identified challenges and opportunities.

Challenges and Opportunities

There remains an ongoing knowledge preparation to practice gap in nursing, and in their integrative literature review, Hickerson et al. (2016) concluded this gap remains a challenge which results in a high turnover of new nurses, increased "costs" to the organization, as well as issues around patient safety. Research conducted by Muntean from National Council of State Boards of Nursing (NCSBN), revealed that employers found that half of newly licensed nurses were adequately prepared to enter practice; 50% of novice nurses were involved in errors related to nursing care; and 65% of errors were due to poor clinical decision making skills (Muntean, 2012). Muntean (2012) concluded, "the literature reviewed made it clear that nursing students are inadequately trained in critical thinking and decision-making – at least decision-making in real life settings (p. 20). More recently, Kavanagh and Szweda (2017) measured entry level clinical judgment of thousands of new graduates and discovered that only 23% were at the level needed for safe patient care (which was down from 35% reported by del Bueno in 2005). Kavanagh and Szweda concluded after assessing 5,000 newly graduated and licensed nurses from more than 140 programs across the U.S. that curricular changes have not occurred to the magnitude needed. Kavanagh and Szweda (2017) reiterated the calls to develop new pedagogies focused on patient experience and concluded: "fundamentally, the patient experience is grounded in the language of nursing and nursing theory and that theory should provide the organizing framework for understanding the therapeutic and relational foundation of our profession" (p. 61).

In my experience, nursing students today articulate that they see completion of their formal education as the end goal. This perspective is confirmed by others.

"Corporate capitalism encourages students to see education solely as a means to achieve material success. Such thinking makes acquiring information more important than gaining knowledge or learning how to think critically" (hooks, 2010, p. 16). With this thinking, there is a need to revisit pedagogy to ensure the bridging of the theory-to-practice gap. Handwerker (2012) completed a review of current curricular practices in relation to Benner et al. (2010)'s work and identified that there remains a need to continue to make a shift in curricular practices and pedagogies. There is a need to revisit current pedagogies and teaching-learning approaches to be "guiding students to 'be' nurses through rich and authentic experiences" (Handwerker, 2012, p. 12). Paterson (2007) identified that approaches that are more student-centred are difficult to quantitatively assess outcomes creating immediate challenges in evaluation. Paterson (2007) suggested, "the measure of effective teaching in this model is students doing well in their licensing exams and assessed by employers as clinically competent. The students' part in such achievements is not acknowledged" (p. 549).

> There is a need for further study about what factors inspire and support nurse educators' intention to teach in a student-centered manner, to develop the skills to learn, to be open to new ways of doing and being as practitioners, to embrace uncertainty, and to form partnerships with others in learning. Such nurses will advocate for the contextual shift that is required to transform the context of nursing education so that student-centered teaching becomes an expectation and a reality. (Paterson, 2007, p. 555)

For the shift to a learner-centered and engaged learning to be successful, educators need to develop an understanding of the processes of learning and the students' experiences.

Bain's (2004) 15-year study concluded that engaged and active learning is the result of teachers' understanding their students, and the teachers in this study concluded

> students must learn the facts *while* learning to use them to make decisions about what they understand or what they should do. To them 'learning' makes little sense unless it has some sustained influence on the way the learner subsequently thinks, acts, or feels. So they teach the "facts" in a rich context of problems, issues and questions. (p. 29)

Based on their ongoing research, Benner et al. (2014) envision opportunities for transformation in professional education to include learning professional practice through the cognitive and ethical practice which

> calls for teaching from the engaged stance of practice, where learning to clinically reason and make context-specific judgments follows the logic of practice and, consequently, prepares the learner for situated cognition by developing the habits of knowledge use and skillful performance of good clinicians. As a result, the clinician learns to think, be and act like an excellent knowledge worker and care provider. (p. 545)

There has been limited nursing education research completed on teacher-student pedagogies utilizing nursing theory as a foundation due to a variety of factors, which include but are not limited to lack of instructor incentive, funding, resources, and motivation to move to a new pedagogy (Diekelmann, 2005a). Lack of evidence for, and the difficulty in validating that a nursing theory-based pedagogy continues to put professional nursing education and the public served "at risk" which is a very real and ongoing challenge (Diekelmann, 2005a). The intent of Benner et al.'s (2014) work was to

assist and inspire educators to use “innovative pedagogical strategies that integrate knowledge acquisition, knowledge use, and engaged attuned reasoning as the situation changes across time” (p. 545).

With a better understanding of the students’ perspectives through researching and analysing the meaning of their lived experiences, through the lens of a teaching-learning model, teachers may respond more individually and effectively. The Canadian Association of Schools of Nursing (CASN, 2016) identified that

> nursing education programs must constantly incorporate new knowledge and be responsive to the changing needs of students and the health care environment. Graduates must be prepared to work safely in increasingly complex environments in the context of the constantly changing and growing body of knowledge on which nursing practice is based. (p. 3)

There is an ongoing need to advance nursing knowledge and identify effective strategies to provide professional education in an environment of ever-increasing knowledge content, decreasing faculty numbers, changing student needs, and increasing demand for more nurses in the healthcare field.

All the while “there is a growing skill gap between students’ level of preparedness after finishing school and demands from the workforce…As a result, employers have difficulty in finding appropriate candidates while many graduates cannot find jobs” (Wimmers & Mentkowski, 2016, p. 447). This exploration of the research and knowledge in nursing, philosophy, and education situated this study by providing a solid foundation which complements and enhances understanding of the humanbecoming paradigm and its relevance to teaching-learning experiences.

The primary focus of this study was to uncover the meaning of the lived experience of *living on the edge* for nursing students in a teaching-learning context utilizing Giorgi's (2009) descriptive phenomenological research method as viewed through the lens of Parse's (2004a, 2010c, 2014b, 2021c) teaching-learning model which is underpinned by the humanbecoming paradigm Parse's (2014b, 2021c). The findings of this descriptive phenomenological research study illuminate teaching-learning experiences, offer new perspectives, and enhance understanding of the complexities of students' experiences in teaching-learning. The research findings of this study are framed within the nursing-specific pedagogy to inform nursing educators and expand nursing knowledge within the academy.

CHAPTER 4 - METHODOLOGY

The research question for this qualitative inquiry arose from a growing interest in enhancing understanding of the teaching-learning processes within the art and science of nursing. In Chapter 1, my teaching-learning experiences, underlying values and beliefs, and the phenomenon of interest were presented. With the purpose, motivation, and significance of this study explicated, the chapter concluded with the research question: "What is the general structural description (or meaning) of the lived experience of living on the edge for nursing students?" A phenomenological methodology was chosen as the most appropriate method to investigate lived experiences to discover the essential truths unbiased by preconceptions (Spiegelberg, 1982). To uncover what the students' lived experiences were like living on the edge in teaching-learning, Giorgi's descriptive phenomenological method (Giorgi, 1985, 2009, 2012; Giorgi & Giorgi, 2003, 2008) enabled a greater depth of exploration into their unique experiences. The theoretical perspective chosen to guide the research process and the analysis/synthesis of the findings was Parse's (2004a, 2014b, 2021c) teaching-learning model, underpinned by Parse's (2014b, 2021c) humanbecoming paradigm. This chapter includes a discussion of Giorgi's (2009, 2012) descriptive phenomenological approach, the rationale for this choice, a description of the research method, design, and processes. Ethical considerations include a discussion of participant selection and informed consent to ensure protection of participants' rights. The challenges of this research are acknowledged, and related strategies are discussed. The chapter closes with a discussion of methodological integrity and rigour (Lincoln & Guba, 1985).

Nature of Existence

Through the lens of the humanbecoming paradigm and the depiction of teaching-learning experiences in Chapter 2, I have explicated personal and professional values and beliefs which are congruent with Parse's (2014b, 2018, 2021c) ethos of human dignity. Instances from my teaching-learning experience have illustrated my journey in coming to know the humanbecoming paradigm and the teaching-learning model. In Chapter 3, using the teaching-learning model as a framework, I have provided a synthesis of relevant articles and literature supportive of this research topic, with identification of gaps in current knowledge. The humanbecoming paradigm, specifically the teaching-learning model provide the philosophical perspective or discipline-specific lens for this research and the explication of epistemology or *what it means to know* provides the theoretical basis, which informed the choosing of the methodology (Crotty, 1998) that follows.

Epistemology

The epistemological focus or phenomenon of interest for this research was the investigation of the general structural description (or meaning) of the lived experience of "living on the edge in teaching-learning" through an in-depth analysis of nursing student participants' descriptions of their teaching-learning experiences. From the constructivist perspective epistemology includes the view that truth varies from moment-to-moment and is subjective. Maynard (1994) explained, "epistemology is concerned with providing a philosophical grounding for deciding what kinds of knowledge are possible and how we can ensure that they are both adequate and legitimate" (as cited in Crotty, 1998, p. 8). According to Crotty (1998), constructionism epistemology is "the view that all knowledge, and therefore all meaningful reality as such is contingent upon human

practices, being constructed in and out of interaction between human beings and their world, and developed and transmitted within an essential social context" (p. 42). From the humanbecoming ontological perspective this is reflected in the principle of structuring meaning which is congruent with the constructionist's view, meaning is constructed, not discovered or uncovered, and that "meanings are constructed by human beings as they engage with the world they are interpreting" (Crotty, 1998, p. 43). According to Samuels-Dennis and Cameron (2013), "constructivists value subjectivity (personal knowing) versus objectivity (quantified knowing) inasmuch as the aim of this form of research is to create an understanding of people and their life experiences from their point of view" (p. 29). "Context is important, and description of the experience is vital" (Samuels-Dennis & Cameron, 2013, p. 30). My focus was the lived experience of living on the edge within the teaching-learning context and to gain a deeper understanding of the lived experiences from the students' perspectives.

When reflecting on the humanbecoming nature of existence (2021c), epistemology, research method choices, the phenomenon of interest, and research question the following reasoning was applied. The research question for this study was "What is the general structural description (or meaning) of the lived experience of living on the edge in teaching-learning for nursing student participants?" as viewed through the lens of the Parse's teaching-learning model. This question focused on discovery of the phenomenological meaning of the participants' lived experience and highlighted a descriptive versus an interpretative process, making phenomenology was the most appropriate method to attain this understanding. "The special contribution and strength of phenomenology is the way it can capture the richness, poignancy, resonance and

ambiguity of lived experience, allowing readers to see the worlds of others in new and deeper ways" (Findlay, 2009b, p. 480). A written response to the interrogatory statement was used to explore the phenomenon of interest, which provided the participants the opportunity to write their personal descriptions of teaching-learning experiences with as much detail as they chose to share in response to the question.

Methodological Foundation

Overview of Phenomenology as a Philosophy and a Science or Method

Phenomenology is an overarching term encompassing a philosophy, a discipline, a movement (Spiegelberg, 1982) and a range of research approaches. The central concern of phenomenological research is a return to embodied, experiential meaning, to seek fresh, complex, vivid descriptions of a "phenomenon" (human experience in all its complexity) as it is concretely lived (Findlay, 2009a). A phenomenological research approach provided a fuller appreciation of the essences of the phenomenon of living on the edge from nursing students' perspectives and was an opportunity to capture the richness of this human lived experience in the various ways that the students perceived or lived their teaching-learning journey.

> The reason the descriptions of experienced situations by others are so critical, on a pragmatic level, is… that a description of an experience and analysis of it by the same person (the researcher) is simply not acceptable because of the fear of "subjective bias"… that the description may be directly or unconsciously be in the service of the theory of the researcher, and thus he proves his own biases. (Giorgi, 1985, pp. 47-48)

It was of utmost importance to capture the lived experience of living on the edge in teaching-learning from the students' perspectives and not my perceptions or preconceived notions.

Phenomenology in Nursing. Numerous studies have demonstrated the successful integration of Giorgi's (1985, 2005, 2009, 2012) method with the humanbecoming paradigm (Doucet & Bournes, 2007); however, I was unable to discover any teaching-learning research studies within the nursing literature, that utilized a descriptive phenomenological approach. Giorgi (2005, 2009, 2012) specified that this research methodology is generic enough to be used with any of the human sciences disciplines. Early research studies utilizing the humanbecoming theory drew upon methodologies from a variety of disciplines including Giorgi's research methodology (Doucet & Bournes, 2007). Human science focuses on the human being's participative experience with the world (Parse, 1981).

The phenomenological approach "demands a mode of data collection and data analysis that will present the participants' experience precisely from their particular perspective, i.e. [*sic*] in terms of the significance it has for them personally" (Crotty, 1996, p. 19). Critiques of previous nursing research provided an opportunity to consider past approaches and to take these reviews into consideration.

Critiques of Phenomenology in Nursing. Phenomenological approaches require an understanding of the underlying phenomenological philosophy, which can be challenging to understand with complex concepts, language, and demanding or exacting methodologies. The implications of two significant critiques of nursing phenomenological research (Crotty, 1996; Paley, 1997) and the counter-critique of these

positions by Giorgi were considered in identifying "the steps required to make (this) research both scientifically and phenomenologically valid" (Giorgi, 2000a, p. 15).

From Crotty's (1996) perspective the terms experience, phenomenon, reduction, bracketing, and intentionality have taken on different meanings than those from within the original philosophical phenomenological movement. In summary, the key messages taken away from this provocative critique were to 1) understand the philosophical roots back to original sources; 2) identify whether the type of phenomenology the phenomenological method chosen arises from Husserl (descriptive) or Heidegger (interpretive); 3) provide definitions for all terms used to ensure clarity regarding the nature and relationship of terms such as phenomena and experience, as well as reduction, bracketing and intentionality; and finally, 4) be clear in the methods of data collection used and finally to adhere to the steps laid out in the methodology to ensure authentic descriptions of the subjective experiences.

The philosophical roots of this research method reach back to the evolution of the human sciences. I have intentionally chosen Giorgi's descriptive phenomenological method which has been demonstrated to be scientifically rigorous and fruitful (Giorgi et al., 2017). In the following sections the definitions for all terms will be explicated and the methodology will be clearly laid out to ensure transparency and a commitment to being true to the participant's lived experiences.

Descriptive Phenomenological Research Method

"The guiding theme of phenomenology is to go 'back to the things themselves' (Husserl, 1970/1900, p. 252)… one interpretation of that expression means to go to the everyday world where people are living through various phenomena in actual situations"

(Giorgi, 1985, p. 8). Giorgi (1985, 2000a, 2000b) made a clear distinction between philosophical (Husserlian) and scientific phenomenology. The goal was to move beyond what was expressed in the description to what was implicitly revealed pre-reflectively in the sharing of the experience. The "phenomenological philosophy is a foundation for scientific work; it is not the model for scientific practice" (Giorgi, 2000b, p. 4). Giorgi argued, "one cannot just do 'phenomenology' and forget its origins as a philosophy" (2000a, p. 12). This descriptive phenomenological method was modified from the philosophical phenomenology to make it accessible or usable as a scientific phenomenology in the human sciences disciplines. Phenomenology is interested in subjectivity, intentionality, and activities of consciousness (Giorgi, 2012), which is congruent with humanbecoming and humanuniverse (Parse, 2014b, 2021c), where phenomena cannot be reduced. Giorgi (1985, 2009, 2012) invited researchers to assume the attitude of one's discipline (nursing) and to utilize this phenomenological method.

To position the phenomenological method, a discussion of the philosophical phenomenological method developed by Husserl and Giorgi's descriptive phenomenological research method will follow. Giorgi and Giorgi (2003) identified that Husserl's philosophical phenomenological method was comprised of three steps. First, the researcher assumed "the attitude of transcendental phenomenological reduction" (Giorgi & Giorgi, 2003, p. 245), which means bracketing where the researcher puts aside past knowledge concerning the phenomena of interest and considers the phenomena as it presents without the automatic assumptions that might normally take place (Giorgi, 2005). Mitchell and Cody reiterated that "the researcher views the participant as the expert on the lived experience being explored and remains focused on the phenomenon as

it is revealed by the person" (1992, p. 60). This "reality as perceived by the person is not compared to an 'objective' reality but is respected" (Mitchell & Cody, 1992, p. 61). The researcher remained open and actively sought to understand the phenomenon and the lived experience from the perspective of the participant.

The second step was the procedure of using imaginative variation. That is, the "parts of the object are systematically varied until its essence is determined" (Giorgi & Giorgi, 2003, p. 246). The final step was to "describe the invariant aspect of the object or its essence" (Giorgi & Giorgi, 2003, p. 247). These steps are presented in the explication of Giorgi's research method and research process that follows.

Giorgi's (1985, 2009; Giorgi & Giorgi, 2003) descriptive phenomenological method facilitates exploration of unique individualized experiences and "situations lived through by persons in everyday life" (Giorgi & Giorgi, 2008, p. 27). According to Giorgi (1985) these descriptions from the persons who have experienced them, each in their own unique way are used to explore a shared phenomenon such as the nursing students' descriptions of living on the edge in teaching-learning experiences.

> This means that, to study a particular phenomenon, a situation is sought in which individuals have first-hand experiences that they can describe as they actually took place in their life. The aim is to capture as closely as possible the way in which the phenomenon is experienced within the context in which the experience takes place. (Giorgi & Giorgi, 2008, p. 28)

This research process allowed for a detailed of exploration into the nursing students' uniquely lived experiences. Giorgi's research method flows logically from Husserl's work "but in a different context and for different purposes" (Giorgi, 2000b, p.

10). For Husserl (1983, as cited in Giorgi, 2009), the first step is to assume a *phenomenological attitude*, which is decidedly different from a natural attitude. Giorgi described phenomenological attitude is a way of viewing or relating to the content of another's description of a lived experience.

> The natural attitude of everyday life, the attitude that one displays in the everyday world, where most things are simply taken for granted. To assume a phenomenological attitude means to regard everything from the perspective of consciousness, that is to look at all objects from the perspective of how they are experienced regardless of whether or not they actually are the way they are being experienced. (Giorgi, 2009, p. 88)

This phenomenological attitude relies on the practices of epoché, reduction, and imaginative variation in the search for the essential structures. As the researcher, I was interested in the explicit-tacit meanings in the lived experiences and to make these meanings explicit without judging the accuracy of the description.

This phenomenological concept is that consciousness is *intentional* and is foundational in this investigation of the nursing students' open and knowing presence to the world, which are their descriptions. "Husserl's concept of experience is far more comprehensive than the one bequeathed to us from empiricism. We not only experience concrete and particular objects, but abstract and universal ones as well" (Zahavi, 2003, p. 37). Husserl (as cited in Zahari, 2003) explained intentionality is the coexistence of consciousness and its object, which implies that consciousness is always conscious of something beyond itself. "Intentionality does not presuppose the existence of two different entities – consciousness and the object. All that is needed for intentionality to

occur is the existence of an experience with the appropriate internal structure of object-directedness" (Zahavi, 2003, p. 21). Zahavi provided an additional explanation of Husserl's analysis of the structure of experience:

> Husserl pays particular attention to a group of experiences that are all characterized by being conscious of something, that is, which all possess an object-*directedness*. This attribute is also called intentionality. One does not merely love, fear, see or judge, one loves a beloved, fears something fearful, sees an object, and judges a state of affairs. Regardless of whether we are talking of a perception, thought, judgment, fantasy, doubt, expectation, or recollection, all of these diverse forms of consciousness are characterized by intending objects and cannot be analyzed properly without a look at their objective correlate, that is, the perceived, doubted, expected object. (2003, p. 14)

Based on this explication of intentionality, each experience displays intentionality whether the object of the experience exists in terms of space, time, and causality, or is in the abstract and does not exist but can be imagined, remembered, or anticipated. "Not every type of consciousness is an intentional consciousness. Apart from sensations, which are non-intentional, one could also point to a variety of other experiences that also lack an intentional object, for instance happiness, dizziness, nausea, anxiety, and so forth" (Zahavi, 2003, p. 27). When considering consciousness, Giorgi's (2009) descriptive phenomenological research method was a good choice for the exploration of the nursing students' teaching-learning experiences. The intentional and non-intentional acts of consciousness must be considered to fully understand the complexity of the experience in the natural context as experienced by the nursing students.

In Giorgi's (1985) research on learning, he identified in the discussion of findings that

> all of these descriptions referred to situations that were spontaneously lived through by the subjects without their realizing that they might later become data for psychological analysis…they [the subjects] obviously had to scan their past experience and see what situation stood out for them as a learning one. (p. 64)

Giorgi pointed out that the participants had an everyday understanding of what learning was and that they "had the freedom to choose their own example of learning probably accounts for the fact that most examples are highly significant for the subjects in a personal sense" (1985, p. 65).

It is important to understand intentionality, epoché, bracketing, and reduction in the research process. According to Giorgi (1985, 2005, 2012; Giorgi & Giorgi, 2008), Husserl meant that intentionality is the essence of consciousness and that consciousness is directed toward the world, others or even to ourselves. "This means that consciousness is, among other things, a principle of openness" (Giorgi, 2005, p. 76), highlighting the importance of being open to the students' experience as described to capture meanings, as "the data may transcend what the researcher thinks he/she knows about the phenomenon, and in fact the researcher wants to suspend pre-understandings in order to discover the meaning of the phenomenon" (Englander, 2012, p. 19). As Giorgi and Giorgi (2008) pointed out, "Husserl was aware that description is a tricky matter. Achieving careful descriptions is much harder to do than to say. Unexpected biases lurk everywhere, especially in everyday life or with the 'common-sense' attitude" (p. 33). The first step is to assume a *phenomenological attitude*. "One attitudinal shift is called 'epoché' or

‘bracketing’, and the other is called phenomenological reduction” (Giorgi & Giorgi, 2008, p 33).

Epoché specifically refers to putting aside any presuppositions, which will lead to a phenomenological attitude, allowing the researcher to truly experience the instance of its occurrence in the moment (Giorgi & Giorgi, 2008).

> To bracket does not mean to be unconscious of these other sources but rather not to engage them so that there can be no influence from them on the instance being considered. In addition, bracketing other instances of the same phenomenon possibly helps the researcher to notice different nuances or new dimensions of the phenomenon. (Giorgi & Giorgi, 2008, p. 33)

Having engaged in teaching-learning relationships with nursing students, it was important not to generalize these experiences, compare one student to another, or to bring these previous experiences forward to descriptions presented, but to be open to each student’s description of their experience with the intention of seeking to understand their perspectives and meanings more completely.

> Reality as perceived by the person is not compared to an “objective” reality but is respected, as is the free will of the person, in choosing ways of becoming. Parse’s theory is thus congruent with yet goes beyond the ontology and epistemology of human science…that uncompromisingly incorporates the beliefs of human science into nursing research and practice. (Mitchell & Cody, 1992, p. 61)

To conclude, phenomenology is a method to study the meaning of lived experiences and is an appropriate method as it values human phenomena and lived experiences.

Phenomenological *reduction* means accepting the student-participant experience as it is presented, not taking the depictions as "real" or evaluating the accuracy of the specific experience. "We never actually know what 'really' happened because the subject's entire perspective and the experimenter's total presence to the situation are not brought in as legitimate data" (Giorgi, 1985, p. 41).

> The researcher still considers what is given to her but she treats it as something that is present to her consciousness and she refrains from saying that it actually is the way it presents itself to her. In addition, she refrains from bringing in non-given past knowledge to help account for whatever she is present to. She concentrates on the given as a phenomenon and everything that is said about the phenomenon is based upon what is given. (Giorgi, 2012, pp. 4-5)

From the humanbecoming paradigm perspective, what is uncovered in the literature, known and believed about the lived experience was explicated in the foreknowings (Parse, 2016a) which are found in Chapters 1, 2, and 3. As a humanbecoming scholar, I was interested in bearing witness to the unfolding uniquely lived experiences and meanings as lived within the humanuniverse process.

The focus of this research was "on the nature of the experience and the manner in which it was experienced" (Giorgi, 2000a, p. 14), and not on the cause or context (natural science view of cause-effect) contributing to the student's living on the edge experience, but on the essential structures of the experience. Teaching-learning is much more than a skills-based process and a focus on values, beliefs, thoughts, feelings, perceptions, interpretations, and understandings must be considered in the analysis. Giorgi identified

four dimensions of learning in his phenomenological psychological research, the first dimension being

> that in order for a situation to be experienced as a learning one, the subject has to make a discovery about himself or his way of relating to the world in such a way that all future situations of that type will be handled in a more adequate way. (1985, p. 66)

The second dimension is that situations we experience "are always broader and more intricate than our conscious presence to them and it seems that we meet this vastness of the world in part with a set of assumptions built up from past experience" (Giorgi, 1985, p. 66). The third dimension is the importance of social context, "the very constitution of learning as an experienced phenomenon depended upon the presence of others" (Giorgi, 1985, p. 68). "The fourth and final dimension is the results of phenomenological research provide us with a sense of learning as it is experienced" (Giorgi, 1985, p. 68).

In summary, Giorgi's (2009) descriptive phenomenological research method is a discovery-oriented approach, where I (the researcher) must be open, curious, and focused on what was in the experience rather than on validating a teaching-learning experience, as there was no hypothesis. In the analysis process, I applied phenomenological reduction, and described the experience exactly as it presented. The intent was to describe the structure of living on the edge in a teaching-learning situation, so it is understood in a deeper more holistic and meaningful way. With imaginative variation, I arrived at the core of the analysis that is the discovery of the essences of the phenomenon and its invariant features viewed from a humanbecoming perspective. It was the first person meaning(s) of the experiences that were the focus rather than the mere interpretation of

teaching-learning processes, and for this nursing students needed to be engaged as participants in this investigation.

Research Design

The research question determined the method used to collect data (Creswell, 2011). I considered face-to-face interviewing and email data description collection with the provision of the question and possible follow-up questions. Use of follow-up questions was not congruent with this methodology as there is a risk of cocreating meaning with participants and guiding their thought processes. The decision to take advantage of ubiquitous on-line technologies available to the nursing students within the academic community was a pragmatic one as it ensured up-to-date and accurate email addresses within this environment and drew on the participants' technology-savvy skills (Mason & Ide, 2014). Key considerations used to determine the most appropriate data collection method were the unobtrusiveness and friendliness of asynchronous communication to participants, provision of an opportunity for the shy or quieter students – creating a comfortable space on-line to share experiences (Fritz & Vandermause, 2018; Hershberger & Kavanaugh, 2017; James & Busher, 2007; Meho, 2006; Neville et al., 2016), and convenience, as students could respond when and how they felt with time to reflect on their responses. The participants drew on reflective skills they have utilized within the nursing program, as they reflected on their learning through guided reflection activities at various times throughout the program. The use of asynchronous communication technology (Limesurvey) allowed the nursing students to explore and revisit their insights when developing their responses, allowing them to move back and forth through their narrative descriptions thinking about their responses, drafting and re-

drafting what they wanted to include and highlight (Mann & Stewart, 2000; Neville et al., 2016). When using an electronic media to provide the link to LimeSurvey, one of the initial challenges was to skilfully communicate and engage the students in the research initiative.

Participant Selection. Wendler and Grady (2008) identified three aspects of understanding for participation in research: research contribution, research relationship, and research benefit. The participants needed to understand what their contribution of their lived experience would be to the enhancing of nursing knowledge. The research relationship needed to be clearly and carefully defined, as I "rely on participants' efforts to gather generalizable knowledge to benefit others" (Wendler & Grady, 2008, p. 206). The research impact included sharing the risks and benefits of participating and how it will enhance understanding of the nursing student's teaching-learning experiences.

Participants for this research were nursing students from the University of New Brunswick (UNB), Faculty of Nursing, who chose to respond to an invitation: "Please write about a teaching-learning situation or experience in your nursing program that depicts what living on the edge was like for you." The main criterion for inclusion was that the participants were willing to share their experiences of living on the edge in their teaching-learning journey, respecting their autonomy by freely choosing to participate. All nursing students at UNB (all sites), were invited to participate. Utilizing this method, the students self-selected to participate and as a result, the participants may not be representative of student population (Haber & Singh, 2013b; Neville et al., 2016).

Inclusion Criteria. The criteria for inclusion in this research was nursing students who have a UNB email address and had a memorable experience of living on the edge in

their learning journey they were willing to share. Robley (1995) suggested that the selection of participants should be inclusive to all relevant participants, in this case nursing students. The *Tri-Council Policy Statement* (Canadian Institutes of Health Research [CIHR], Natural Sciences and Engineering Research Council of Canada, & Social Sciences and Humanities Research Council of Canada, 2018) stated in addition to respect for persons and their autonomy, a second core principle is justice referring to

> the duty to treat people fairly and equitably. Fairness entails treating all people with equal respect and concern. Equity requires distributing the benefits and burdens of research participation in such a way that no segment of the population is unduly burdened by the harms of research or denied the benefits of the knowledge generated from it. (CIHR et al., 2018, p. 8)

By limiting the participants to alternate UNB campuses (Fredericton [F] & Saint John [SJ]) would have removed the choice and opportunity for the students at my teaching site (Moncton). For recruitment, all nursing students were sent an invitation /e-posting to participate (see Appendix A) via email with the detailed explanation within the letter of invitation (see Appendix B). The use of electronic recruitment provided a neutral environment, which supported the student's choice to participate, not participate, or withdraw from the project, while promoting feelings of control and reducing power differentials as it shifts power to the participants (Lippe et al., 2019; Mason & Ide, 2014). The letter of invitation was one of the most important aspects of the recruitment strategy, as it identified the researcher, what the researcher was doing, the benefit to the participant, and encouraged participation (Heath et al., 2018; Hunter al., 2013). The invitation to participate contained other information about the participants' rights, time

commitment, risks, and benefits. The nursing students responded anonymously, if they chose to participate (via the anonymous LimeSurvey site), which shifted the balance of power to the student. Sending in a description was considered consent to participate. No formal signed consent form was used.

Sample Size. Haber and Singh confirmed, that "in qualitative research, no power analyses are conducted apriori to determine sample size requirements" (2013b, p. 278). Morse (1994) recommended about six participants for phenomenological studies. While seeking students with various teaching-learning experiences, there was added value to exploring the diversity of experiences, to include the experiences of part-time and full-time students, direct entry students from high school or mature students to the 4-year Baccalaureate program (at UNBF and UNBSJ) in addition to those students in the Advanced Standing Baccalaureate program located in Moncton. Parse (1987) suggested that an acceptable number of participants for this type of research method are two to 10 persons who are living the experience. Giorgi (1985, 2009) suggested that the sample size does not need to be large. The desire was to have sufficient participants who have experienced the phenomenon to discover the meaning of living on the edge in a teaching-learning situation. Giorgi (2009) recommended that

> at least three subjects are required because it is important to have variations in the raw data. There is a trade-off between the amount of data collected per subject and the number of subjects required. The greater the amount of data obtained from each subject, the fewer subjects required, but there should always be at least three. (p. 198)

What Giorgi (2009) and Morse (2000, 2015b) have identified, is the richer the experiential data and the number of instances of the phenomenon present in the descriptions, the fewer the number of participants required. Morse concluded that "the number of participants required in a study is one area in which it is clear that too many factors are involved, and conditions of each study vary too greatly to produce tight recommendations" (2000, p. 5).

With the flexibility of electronic responses, the nursing students chose their environment to reflect more deeply, recall their experiences, write, and rewrite until they were satisfied that they had included all the aspects that they considered significant. "The researcher's sensitivity and experience, knowledge of theory, and the literature and ability to interpret data and to see what is in these data" (Morse, 2015b, p. 588) is key. "Excellent analysts use their theoretical frame to ask questions of the data" (Morse, 2015b, p. 588) as part of the methodical process, this was achieved using the teaching-learning model underpinned by the humanbecoming paradigm.

In the humanbecoming paradigm, the notion of saturation does not exist, the postulate of *illimitability* speaks to unbounded knowing. Parse described knowing as,

> climbing beyond with a deep apprehension of the surfacing meanings that are woven with and transfigure the scholar's explicit-tacit knowing of the phenomenon alive in the texts and artforms – yet there remains a knowing that the vessel of inquiry can never be filled. There is always the veil of mystery, the barely seen, as the scholar-text and scholar artform dialogues move beyond the immediate contact in the emerging now, as a lingering presence continues transfiguring the scholar. (2016a, p. 129)

While saturation is considered an important component of rigour in other types of studies, it was not a consideration in this data collection as it is incongruent with the humanbecoming paradigm (Parse, 2014b, 2021c). As Giorgi (2009) pointed out statistics are not involved in phenomenological evaluation of findings in relation to number of participants. The researcher was interested in the phenomenon of interest and discoveries made regarding the content of the lived experience which may transcend the researcher's preconceived understandings. In the analysis stage what is noted is the varied aspects of the phenomenon contained in the concrete descriptions.

Recruitment Process. Participants were invited to participate in this study (see Appendix A) through electronic recruitment strategies available at UNB (email invitation, and University homepage: News & Events) which were circulated on my behalf. The introductory or welcome email included the invitation to participate (see Appendix B), provided a brief overview of what was expected, the submission process, and the use of a link to an anonymous LimeSurvey.org website. Mann and Stewart (2000) identified that to establish trust the researcher should be as open as possible about the purpose and processes of the research. Confidentiality and anonymity needed to be guaranteed to the participants, as it was important for them to feel safe enough to respond and freely write about their experiences, values, beliefs, and feelings (Ardalan et al., 2019; James, 2016; Lippe et al., 2019). Students were informed of procedures undertaken to ensure confidentiality as reflective data descriptions were entered into an anonymous website prior to faculty analysis, thus maintaining student confidentiality (Ardalan et al., 2019; Ferguson, et al., 2006). The student participants typed the descriptions of their experiences of living on the edge in a teaching-learning situation and submitted them

through an anonymous link to a LimeSurvey site. A Cochrane Review of Qualitative Research identified that setting of a deadline resulted in an increased the response rate (Edwards et al., 2010). The submission of a reflection to the anonymous website on living on the edge indicated presumed consent, so no formal consent would be required.

Consent. Anonymity can be more successfully protected if students are not required to disclose their identities with the submission (Lippe et al., 2019; Neville et al., 2016). This was accomplished with the utilization of the LimeSurvey site which allows for anonymized responses. LimeSurvey site was set to anonymize responses, with a caution flag that indicated

> **There will be no way to connect answers and participants**. Even the admin will not be able to link response data and participant data. However, you will always be able to specifically view each response entered by your participants in the survey (Limesurvey.org, 2019, Introduction section, para. 4).

The Tri-Council Policy Statement requires "free, informed and ongoing consent" (CIHR et al., 2018, p. 7). This research design observed these principles for consent. A concern for inviting nursing students from my teaching site was that as a researcher there is a need to keep this role separate from my current teaching role, anonymity maintains the power balance with the students. *The Tri-Council Policy Statement* suggested, research ethics boards "(REBs) may need to consider the power relationship that might exist between researchers and participants" (CIHR et al., 2018, p. 138). In this case, participants submitted their reflections of living on the edge in a teaching-learning situation anonymously and "consent can be demonstrated solely by the actions of the participant" (CIHR et al., 2018, p. 47).

Data Collection. Data collection was a written description of a first-person, subjective account of the experience of living on the edge in a teaching-learning situation, as it was lived and understood by the participant in his or her everyday way of being and understanding of the situation (Giorgi, 2009). The students chose the teaching-learning experience that was most significant or memorable in a personal sense, "and what is sought is simply a description that is as faithful as possible to the actual lived-through event" (Giorgi, 2009, p. 96). These lived experiences were unique to the participants as experienced at the time and in the living of the memory in the telling or writing of the experience (Giorgi, 2009). The participants were free to refine their responses until they were satisfied. There are no perfect descriptions, as one can never capture all the subtle nuances of what was experienced in any situation, but sufficient or adequate descriptions filled with meanings are attainable for analysis (Giorgi, 1985, 2009, 2012; Giorgi & Giorgi, 2003, 2008). These written descriptions were then uploaded to Limesurvey.org, anonymously.

The use of an on-line data collection strategy increased accessibility for students to participate in this convenience sampling. The descriptions could be written directly within the LimeSurvey.org website or copied from a Word document. A summary of the literature on use of an on-line strategy for data collection is presented in Table 4, and outlines the various facets of an on-line strategy, the advantages, disadvantages, and challenges that were considered and needed to be addressed. Use of this web-based strategy eliminated the opportunity to seek additional information. Meho (2006) identified "attempts to reduce ambiguity and improve specificity while avoiding the narrowing of participants' interpretations and constraint of their response" (p. 1290)

present a methodological dilemma to be considered. Students are unique in their comfort levels various forms of technology (Mason & Ide, 2014). Most nursing students are comfortable with reflecting and e-writing (or handwriting) about their experiences. Giorgi (2009) indicated that the written descriptions tend to be more concise. This approach allowed students "to move back and forth through their narratives, thinking about their responses drafting and redrafting what they want to write" (James, 2016, p. 153).

Table 4

Advantages and Disadvantages of Web-Based Strategy

Facets	Advantages of Web-based Strategy	Disadvantages / Challenges
Venue for researcher & participants	• Allows access to nursing students who are often difficult to access due to diverse schedules across nursing programming. (Hershberger & Kavanaugh, 2017) • Inclusion~ allows access to nursing students overcoming geographic challenges of multiple sites. (Fritz & Vandermause, 2018; Hershberger & Kavanaugh, 2017; Neville et al., 2016) • Allows nursing students who do not express themselves well in talking to do so in writing. • Allows nursing students who prefer online interaction to face-to-face communication (Cope, 2014; Heath et al., 2018).	• Students have access to email and internet at the university as well as off-site, it is preferable not to use a UNB or workplace email address as organizations can track email & Websites accessed. (Neville et al., 2016) • Requires online communication skills – students are comfortable with the technology of the internet, email and learning management systems. • Requires expertise in technology from both researcher and nursing students (Cope, 2014) – these skills are required within the nursing program.
Cost	• Eliminates the cost of calling, setting up interview, or travelling. (Fritz & Vandermause, 2018; Hershberger & Kavanaugh, 2017) • Eliminates the costs of transcription. • Decreases cost of recruiting nursing students from dispersed sites.	• No additional costs anticipated. • Limesurvey is a free open access website.
Time	• Eliminates time for transcribing. • Eliminates need to schedule appointments for interviews. • Provides access to all participants at the same time, and the nursing students can respond in their own time (asynchronous responses). (Heath et al., 2018).	• May take an indeterminate time to receive a response from interested students – will need to set an acceptable deadline for response.
Recruitment	• My Portal at UNB has a message board to provide notices to students. • All students have a current UNB email within the IT system (to receive the invitation. (Hunter et al., 2013)	• Message on notice board may be ignored by students. • Invitations by email may be deleted before they are read. Nursing students tend to have multiple email addresses and are inundated with messages. • Need to construct an email for eliciting quality data, presenting an authentic voice with written language. (Fritz & Vandermause, 2018)
Anonymity	• The use of Limesurvey allows the opportunity for students to access an anonymous site for their reflections which they can revisit and update once they have created a "token".	• Need to ensure anonymity. The perception of lack of anonymity may limit responses. Ensure method acceptable to participants. (Ardalan et al., 2019)

Facets	Advantages of Web-based Strategy	Disadvantages / Challenges
Participation / Engagement	• By email-students must take deliberate action to participate. • Voluntary participation, as there is an ability to not participate without providing any reason. (Neville et al., 2016)	• Email could be taken for spam and could be deleted or unopened. (Hunter et al., 2013) • Unsolicited emails ignored especially if high volume of daily emails. (Hunter et al., 2013)
Temporality (email or internet)	• Allows nursing students the opportunity to respond to the research question in the comfort of their chosen environment and convenience. Fritz & Vandermause, 2018; Hunter et al., 2013) • Allows nursing students the opportunity to take their time in responding to the question. (Neville et al., 2016) • Allows nursing students to share their teaching-learning situations and feelings more honestly (because of anonymity). (Ardalan et al., 2019) • No active involvement of researcher at point of data collection. (Neville et al., 2016) Minimizes power differential. • Minimizes interruptions that may take place in face-to-face or telephone interviews. • Eliminates transcription errors. • Eliminates researcher/ participant effect resulting from visual and nonverbal cues or the status/ power differential. • Cues and emotions can be conveyed through use of symbols emoticons or text.	• Participants control of the timing and the amount of content in the response. • Students comfort with email /internet communication. (Mann & Stewart, 2000) • Does not allow for direct probing. • Requires the research question to be self-explanatory to avoid misinterpretation. • Loss of visual and nonverbal cues due to inability to read facial expressions, body language or hear vocal tones. • May narrow the participant's interpretation and understanding and as a result limit their response. • Requires meticulous attention to communication due to lack of verbal tone and non-verbal behaviors. • Internet can be distracting. (Hunter et al., 2013)
Data quality	• Allows participants to construct their own experiences without influence from researcher. • Facilitates a closer connection with the nursing student's personal values, beliefs, feelings and experiences. • Data collected is focused on the interview question asked. Shorter transcripts. (Fritz & Vandermause, 2018) • Depth and detail of response may increase due to participant ability to respond at later time with thoughts are well formed. (Fritz & Vandermause, 2018)	• One dimensional (based on text only). • In-depth information is not always attainable. • Concern with quality, depth, and richness of data (James & Busher, 2007).

Note: Adapted from "E-mail Interviewing in Qualitative Research: A Methodological Discussion by L. I. Meho, 2006, *Journal of the American Society for Information Science and Technology, 57*(10), p. 1292.

Security of Data Descriptions. Descriptions were downloaded and archived on a password protected computer. As part of the data collection process, all identifying information that might reveal the identity of the participant or other persons, places, or things within the reflection were removed, and nonbinary pseudonyms or other fictitious representations were utilized. With the process of capturing the raw data described, the process of data analysis will be explicated.

Data Analysis. Giorgi's descriptive phenomenological method (1985, 2009, 2012; Giorgi & Giorgi, 2003, 2008; Giorgi et al., 2017) is a five-step methodology of data analysis. Each step is described with the supporting philosophical concepts. While the steps may appear sequential, they are not and require reading and rereading throughout the process to reach the final general structural description (Giorgi, 2012). The participants' descriptions consisted of the participant's naïve or natural description of living on the edge in a teaching-learning situation prompted by the open-ended question

1. The researcher first reads the whole description in order to get a sense of the whole experience. The phenomenological approach is holistic, and I sought to gain an understanding of what the data are like.
2. The researcher then goes back to the beginning of the description and begins to reread it. It was important at this point that I assumed a *phenomenological attitude*, setting aside any preconceived notions or presuppositions. For the second characteristic was *reduction*, accepting the situation as described without questioning or analysis, and I accepted the presentation of the student's experience as presented without question. According to Giorgi (2009, 2012), there are two aspects to reduction. In first sense, "the very fact that a concrete

situation that was lived through prior to any thought about being studied or analyzed indicates reduction" (Giorgi, 1985, p. 69). The second sense, reduction was employed to understanding the meaning of the student's lived experience as presented. "This means that the objects that emerge within the description are taken to be phenomena or simply objects that present themselves to the consciousness of the experience" (Giorgi et al., 2017, p. 186). Every time I experienced a transition in meaning I placed a slash (/) in the description. Giorgi recognized (Giorgi, 2009; Giorgi et al., 2017) that most descriptions are often too long to be easily analyzed. The identification of meaning units is useful and it is also recognized that different researchers will identify different meaning units. These meaning units are arbitrary and carry no theoretical weight.

3. In the next step, in uncovering focal meanings, the data were transformed to a higher level of discourse, still essentially in the words of the subject. Humanbecoming paradigm / teaching-learning model language was used. This language valued what the subject had written and made meanings explicit. The use of the method of free imaginative variation was critical for the completion of this step. The third characteristic of *essences or structures* and free *imaginative variation* played a necessary role in the search for meaning (Giorgi, 1985), and in describing the structures of the lived experience from the perspectives of the humanbecoming teaching-learning model and humanbecoming paradigm. I "practice[d] imaginative variation on the transformed meaning units to see what is truly essential about them. Then one

carefully describes the most invariant [unchanging] connected meanings belonging to the experience and that is the general structure" (Giorgi & Giorgi, 2003, p. 253). Each of the meaning units, which were identified within the participants' written descriptions, as perceived by me were organized at the disciplinary level and presented side by side. The findings are presented as structures or essences. This step was the heart of the method and involved seeing the meaning units through the lens of the humanbecoming paradigm/teaching-learning model.

4. Each meaning unit was then reviewed carefully and individually, in dwelling with it the humanbecoming-focused re-expression was transformed in a descriptive way and placed next to it. "These essences or structures are not universal, or eternal, because they were not pursued at that level (Giorgi, 1985, pp. 70-71). The structure is intended to be general or typical (Giorgi & Giorgi, 2003). "One discovers the fittingness of the later meaning through the process of free [imaginative] variation" (Giorgi, 1985, p. 71) as the participant's language is shifted into the language of the humanbecoming paradigm (Parse, 2014b, 2021c). Husserl's intellectual procedure of imaginative variation is to determine essence of the phenomenal structure of the experience (Giorgi, 2009; Giorgi et al., 2017). The final characteristic was *intentionality* which "refers to the fundamental fact that a human being is always directed toward or oriented toward something that is not himself" (Giorgi, 1985, p. 71).

5. The essential structure was then used to help clarify and interpret the raw data of the research. In this final step of the analysis, the synthesis of the general structural description (or the essence) of the lived experience of living on the edge, was presented as a descriptive paragraph, that lays out the lived experience through the lens of the humanbecoming paradigm / teaching-learning model as experienced by the participants. This structure is the outcome (or meaning) of the analysis. As the researcher, I remained open to the surprises and 'ah-ha's that arose as I sought to develop a fuller appreciation for the participants' lived experiences in uncovering their personal meanings.

In summary, the philosophical phenomenological characteristics of description, reduction, essences or structures, and intentionality have been presented within the methodological steps of Giorgi's (1985, 2005, 2009, 2012) descriptive phenomenological research method as they were employed to make transparent the systematic and rigorous approach to this scientific analysis. This research investigation was also attentive to the ethical considerations and responsibilities that arise when completing research with human subjects.

Ethical Considerations

The purpose of this study was to gain a deeper and richer understanding of what it is like to experience living on the edge in a teaching learning situation. "As an ethical tenet or truth that has implications for research, all of human life is a mystery and all can never be known about a phenomenon of interest" (Milton, 2013, p. 22). Giorgi acknowledged that when someone describes a situation there is always more meaning in

what is said that has been shared or the speaker is aware of, these "descriptions are given by ordinary persons within the natural attitude" (Giorgi, 2009, p. 96). There is always something more and different to be understood as truth for the moment; it is the person's meaning of the situation (Parse, 2008) and "nurse researchers bear witness to others [sic] descriptions and patterns of relating with an abiding appreciation for their humanness" (Milton, 2013, p. 22). It was important to maintain the participants' voices as much as possible. "It is with awe that the nurse researcher should appreciate the humanly lived experiences…as described by others without judgment (Milton, 2013, p. 22).

The Canadian Nurses Association (CNA, 2017) *Code of Ethics for Registered Nurses* and *Ethical Research Guidelines for Registered Nurses* (CNA, 2002) called for nurses to conduct themselves with compassion and to be respectful in their interactions with others, preserving human dignity. The ethical research guidelines and ethical statements set out by the CNA guide research, education, and practice activities for the Canadian nurse. As Robley (1995) pointed out, the nurse researcher needs "to be acutely aware of the unique ways ethics, both nursing and research ethics, affect all phases of the qualitative research process" (p. 45). There are many ethical considerations that arise from the qualitative research processes which have implications for the researcher-nurse-teacher such as the emergent and unpredictable nature of the unfolding story of the lived experience in the researcher-participant relationship (Eide & Kahn, 2008; Houghton et al., 2010).

> Nursing ethics is not a separate component that is to be added as part of scholarly inquiry…. the ethos or straight thinking in choosing various avenues of formal inquiry is grounded in the ontology, epistemology, and methodologies of the

> theories and belief system that undergrid and guide the science. (Milton, 2013, p. 20)

The Research Ethics Board on the UNBF campus in keeping with the *University Policy on Research Involving Humans* reviewed the research study proposal to ensure it complied with the *Tri-Council Policy Statement* (2014) in the protection of participants rights.

Protection of Participants' Rights

The five following rights of participants outlined in the CNA*'s Ethical Research Guidelines for Registered Nurses* (2002) are linked to the *Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans* (CIHR et al., 2018) principles of respect for research participants. The right to self-determination, privacy and dignity, anonymity and confidentiality, fair treatment, protection from discomfort or harm (Haber & Singh, 2013a). These participant rights will be explicated within the context of this research study.

Self-Determination. Students were free to determine if they wished to participate after being informed of the purpose of the study. "Integrity may be reflected upon as a commitment to truthfulness. Truthfulness in all research endeavors should be evident and transparent to all those who participate in the formal inquiry process" (Milton, 2013, p. 21). At any time, the students could change their minds or withdraw from the study. "Honoring research participants also included appropriately withdrawing participants from study when they change their minds and chose to not continue participating in a study" (Milton, 2013, p. 22). As a nurse researcher, it was important to inform students

that they could withdraw from the study at any time, they were free at any time to either not complete the reflection or to submit it if they wished.

The *Tri-Council Policy Statement* (CIHR et al., 2018) indicates that in a situation of undue influence such as a teacher-student relationship, the process for voluntary consent is critical. “The voluntariness of consent should be judged from the perspective of prospective participants, since the individuals being recruited may feel constrained to follow the wishes of those who have some form of control over them” (CIHR et al., 2018, p. 28). All UNB nursing students were invited to participate via email and use of an e-posting (see Appendix A). There was a *Letter of Invitation* (see Appendix B) which outlined the purpose of the study, how students could voluntarily participate if they so chose, and how their information will be protected. In the situation of dual roles researchers are reminded “of the ethical duties that govern real, potential or perceived conflicts of interest as they relate to the consent or participants” (CIHR et al., 2018, p. 96) and the researcher should separate their roles as researcher from teacher in this study. The *Research Study Invitation* (see Appendix B) was written at the Flesch-Kincaid Grade level of 7.5 as determined by Microsoft Word Office 365.

Privacy and Dignity. As the researcher, I must respect and preserve the dignity for those who chose to participate, those who chose not to participate, or those that may have withdrawn during the research process.

> As nurse researchers choose avenues of formal inquiry consistent with chosen ontological beliefs and frames of reference, reverence arises while acknowledging the uniqueness of each person in the research community whose ever-changing,

> unfolding lives and experiences are precious to the researcher. (Milton, 2013, p. 22)

Facilitating anonymous online submissions allowed each student to be in total control of what information is submitted, revised, and when this would occur, within the timeframes provided. If upon reflection students did not wish their description to remain in the study, the student could withdraw their reflection from the website, and this would remain unknown to me. There are many reasons why students may or may not wish to participate; my focus was on those descriptions of experiences submitted for this study. Anonymous submissions of descriptions enabled me to separate research and teaching roles during the process.

Anonymity and Confidentiality. Using a signed consent process does not allow for anonymity, and anonymity may not be guaranteed through website submissions, as there are mechanisms available today to uncover users' identities through their internet addresses. "Anonymity of research participants is completely achieved if the researcher cannot link data to any specific participant" (Ferguson et al., 2006, p. 402). To protect students' anonymity, students' submissions were submitted without any identifying information (to Limesurvey.org). For the students who chose to participate in the study, and as participants of this research they

> ought to be respected and revered for their contributions to the advancement of nursing science. Participants will be informed of where and how findings will be disseminated. They should be honored by researchers who dedicate themselves to safeguarding privacy and confidentiality. (Milton, 2013, p. 22)

Privacy and confidentiality were maintained throughout the research processes related to use, access, collection, and disclosure. The submissions were downloaded from LimeSurvey and placed in a Word document on a password protected computer where the information remains secure behind the university firewall. “Emphasizing to participants that certain measures will be adopted to maximize confidentiality is necessary…use of pseudonyms and …[removing] any other personal identifiers that may occur in the descriptions when publishing or storing [descriptions] data” (Meho, 2006, p. 1289) is key. Pseudonyms were assigned to each participant’s description as they were not chosen by the participant.

Fair Treatment. To ensure that nursing students could participate in this research, the study was designed with flexibility and provided an opportunity for the nursing students to reflect on their current academic workload and other commitments and make an informed decision about participation. The online asynchronous technology of Lime Survey provided students with the flexibility to reflect on their experiences in a time and place of their choosing and write their descriptions of living on the edge in a teaching-learning situation within the nursing program.

Protection From Discomfort or Harm. In the student-teacher relationship, the students are perceived to be in a vulnerable position and may be uncomfortable participating or choosing not to participate. Considering this possibility, I chose to have the invitation sent to the students using university email on my behalf and invited students to respond via the anonymous limesurvey.org website. To safeguard potential participants, this study proposal was submitted to the Research Ethics Board at UNB for review and approval. Students were made aware that in their reflections, should

something emotionally difficult should surface, there are support services for students available through UNB. For many students there may have been benefits to the reflective activity involved in this research, as they may have gained new insights into their learning and professional practice.

Challenges and Strategies.

In the data collection phase, the challenges anticipated included a recognition of the increased stresses and demands on the students in terms of workload as we transitioned to alternate delivery methods from in-person classes during the COVID-19 pandemic. Deadlines needed to be flexible to accommodate this situation, as students needed time to consider and respond to the research request. With asynchronous communication through online technology, the students were able to reflect and write their description at their own individual pace at a convenient time for them. The advantage of asynchronous communication was that the participants could respond from their own environment, and it offered more flexibility in responding (James, 2016). Boshier (1990) suggested that online asynchronous technology

> appears to provide a context for a kind of non-coercive and anti-hierarchical dialogue that Habermas claimed constitutes an "ideal speech situation", free of internal or external coercion, and characterized by equality of opportunity and reciprocity in roles assumed by participants. (p. 51)

The study relied on collecting the descriptions of students' experiences in their own words, and the power remained with the students to respond if or when they chose.

In data analysis, one of the challenges was to maintain intentionality and ensure that I remained open in seeking to understand the students' lived experiences. As this is

my first Giorgi method study, it was important to have advisors with methodological expertise. An important aspect of the data analysis was the application of the phenomenological method as outlined and adhering to the philosophical principles behind this phenomenological approach as described. This required a transparent and systematic documentation of the research process. It was important to review the descriptions carefully to get a feel for the richness of the data, and to complete the methodical steps, which provided an intimate working knowledge of the data descriptions collected.

Trustworthiness and Authenticity

The basic approach to rigour in qualitative research is to demonstrate a commitment to trustworthiness in the methodological research design, data collection, interpretation, and communication (LoBiondo-Wood et al., 2013; Morse, 2015a, 2018). This research study was a journey of discovery rather than a verification of the students' lived experiences. While there have been glimpses into the students' experiences as demonstrated by research articles chosen and presented in Chapter 3, my commitment was to gain a deeper and richer understanding of the meaning of living on the edge. "The scientific rigour and credibility along with the coherency of synthesized research findings are reflective of an essential ethic of research for a scientific discipline" (Milton, 2013, p. 21). For me, the students' descriptions of their experiences of living on the edge in a teaching-learning situation, were of the utmost importance to advancing knowledge personally, professionally, and for the discipline.

Giorgi's descriptive phenomenological research method provided the framework for this systematic rigour. Giorgi (1985) stated

> to be scientific means that one wants to approach the phenomenon one is interested in investigating in a methodological, systematic, and rigorous way, each defined according to how the very appearance of the phenomenon invites the researcher to be methodological, systematic and rigorous. (p. 26)

In the early 1980s, Lincoln and Guba (1985, 1986; Guba & Lincoln, 1989) identified four criteria for evaluating the trustworthiness of qualitative research that demonstrate the researcher's dedication to rigour in the research process: credibility, dependability, confirmability, and transferability.

Credibility is an interpretation that is understandable, and the researcher has confidence in the accuracy of the findings. It is an accurate, open and honest depiction of the student's lived teaching-learning experiences. "Research participants need to be made to feel that the researcher has no agenda other than hearing and understanding their experience" (Nelms, 2014, p. 21). Those readers who share similar experiences should recognize the experiences and be able to relate to them (Johnson & Rasulova, 2017; Sandelowski, 1986). Techniques to be used to establish credibility include prolonged engagement, extensive dwelling with the phenomena or participant data, with documentation and verification of each step of interpretative process to ensure that the date represents the phenomenon to the degree that outers may instantly recognize it (Morse, 2015a). Meanings need to "be detected, drawn out and elaborated" (Giorgi, 2009, p. 131). This was achieved by using reflexive journaling where I documented all aspects of the analysis: factors of influence which impacted my thoughts, experiences, opinions, and feelings to provide a further degree of transparency to the research process and to all efforts taken to illuminate themes and descriptors. Credibility depended on my

ability and commitment to reflexivity. “Reflexivity means that the researchers actively engage in critical self-reflection about their potential biases and predispositions that they bring to the qualitative study. Through reflexivity, researchers become more self-aware and monitor and attempt to control their biases (Cypress, 2017, p. 259).

Dependability is the process of consistent data collection and analysis which must be understandable to the reader (Johnson & Rasulova, 2017). The reader must be able to follow each step of the research method in a logical fashion, from examples of raw data to interpretations and synthesis. This was accomplished through maintenance of journal which incorporated an audit trail of processes and briefings with my supervisor. Audit trail logs systematically documented activities that occurred during the study and decisions about various aspects of the study. This allows for an independent researcher not involved in the initial process to examine the research process, findings, interpretation, and conclusions supported by the data and processes utilized (Lincoln & Guba, 1985, 1986; Morse, 2015a).

Confirmability is the degree to which findings are consistent, unbiased, and repeatable (Johnson & Rasulova, 2017). Confirmability was established through ongoing daily reflexive journaling of insights, activities, ideas, and methodological decisions (Morse, 2018). This audit trail included an examination of the raw data, data reduction, analysis, synthesis, and interpretations that were made as well as process notes (Lincoln & Guba, 1985; Morse, 2015a, 2018; Nelms, 2014). Upon reflection, the audit trail provided documentation of what was happening during the research process, my thoughts, decisions, and processes of conceptual and theoretical formulations, as well as

any shifts in my insights, assumptions, and ways of viewing things as the research process unfolded (Morse, 2018).

Transferability is the extent to which the findings are useful to others in a teaching-learning context (Lincoln & Guba, 1985). Transferability is achieved with rich, detailed, and accurate descriptions of the context, location, and participants studied (Johnson & Rasulova, 2017). The researcher is immersed in the phenomena to come to know, describe and understand as fully as possible: reading for a sense of the whole, seeking engagement with the phenomena, then gradually focusing on phrases or passages or "meaning units" as meanings become refined (Giorgi, 2009). The challenge is to elicit excellent raw descriptions, adhere to the steps of the method to create a description that as accurately as possible to represent the phenomenon. (Morse, 2018). Research descriptions and findings should be detailed enough to allow the reader to draw similarities with other contexts and enable the reader to judge applicability to his/her own settings (Lincoln & Guba, 1985).

Lincoln and Guba (1986) published authenticity criteria for consideration when further assessing trustworthiness of qualitative studies. These five criteria were adapted for this research method, and include fairness, ontological authenticity, educative authenticity, catalytic authenticity, and tactical authenticity (Guba & Lincoln, 1989). "Authenticity involves an assessment of the meaningfulness and usefulness of inquiry processes and social change that results from these processes" (Shannon & Hambacher, 2014, p. 1). The principle of authenticity is an opportunity within qualitative research to portray fully the deep meaning of the phenomenon under study and enhance reader's understanding, it is critical yet unique to qualitative inquiry (Shannon & Hambacher,

2014). Authenticity enables questions to be asked about how interpretations were made and how the process has evolved (Schwandt et al., 2007).

It was important to honour the participants' descriptions and to be as objective and unbiased utilizing the processes identified above. "Fairness was thought to be a quality of balance; that is, all stakeholder views, perspectives, values, claims, concerns, and voices should be apparent in the text. Omission of stakeholder or participant voices reflects, we believe, a form of bias" (Lincoln et al., 2011, p. 122). It was important to uncover the meanings of the lived experiences that were implicit in the students' descriptions of their teaching-learning experiences, and to make these meanings explicit by being intentional in the research design, adhering to the research methodology, ensuring the integrity of the process, and disseminating the research findings.

"Ontological and educative authenticity were designed as criteria for determining a raised level of awareness, … [for those] they come into contact for some social or organizational purpose" (Lincoln et al., 2011, p. 122). These research findings are intended to provide an increased appreciation of the complexities of the learners' experiences that are not well understood.

> Phenomenology was more than just a philosophy – it is a way of seeing…a way of relating to the other, because in the context of research, it is a very specific way of relating to the content of the other's description of his or her lived experience. (Giorgi, 2011, as cited in Applebaum, 2011, p. 524)

From an educative authenticity perspective there was an opportunity for me to convey to the reader a more in-depth appreciation and understanding for the experiences of the participants. As Applebaum (2011) wrote "we are the empathic witnesses of the

other's account of their experience, seeking to unfold its essential, intersubjective meanings" (p. 524).

Catalytic and tactical authenticities refer to the ability of an inquiry to prompt action (Lincoln et al., 2011, p. 122). New knowledge that emerged that will stimulate action by readers and reviewers based on new understandings and stimulate strategic change within nursing academia through dissemination of these findings.

Research Process

The approach to this research inquiry was guided by a desire to develop a more in-depth understanding of the phenomenon of living on the edge in teaching-learning as experienced by participants through their reflections and to generate insightful findings that answer the research question and inform practices within academia while ensuring methodological integrity. Methodological integrity is a concept underlying the methodological basis of trustworthiness with two inherent processes (Levitt et al., 2017). The *Task Force on Resources for the Publication of Qualitative Research* identified the evaluation processes to focus on "(a) fidelity to subject matter..., and (b) utility in achieving research goals" (Levitt et al., 2017, p. 2). Within the data collection process, the utility is reflected in considerations of context and participants' reflections while fidelity to the study phenomena was enhanced with adequacy in terms of diverse responses, and management of the researcher's perspective. These concepts were applied to maintain integrity of data collection process to demonstrate the rigour and trustworthiness of this research and will now be explicated. Contextualization is focused on the situatedness of the research in terms of human experiences and is addressed from various perspectives: "*the context of the investigators* themselves …the *context within*

which a phenomenon or study topic is being construed …[and] *the contexts of their data sources*" (Levitt et al., 2018, p. 29).

Methodological Integrity of the Data Collection Process

Context. This qualitative research study was carried out at an Atlantic Canadian University, Faculty of Nursing Program located on three distinct sites over three academic terms during the COVID-19 pandemic, which was a period of great transition for the nursing students as they moved from in-person learning to learning in an alternate delivery format. Upon receipt of ethics approval, the first open invitation was posted to My UNB News webpage (https://blogs.unb.ca/myunbnews), accessible to all university students with three follow-up email invitations to nursing students only at the various sites. Teaching-learning settings included classroom, alternate delivery methods (online), online and in-person skills lab experiences, online and in-person simulation lab experiences, as well as, clinical practicums: each provided a different perspectives, experiences, and concerns. I continued with my teaching responsibilities at one of the university sites, during the data collection phase.

Participants. Participants were nursing students enrolled in the UNB, Faculty of Nursing, who chose to respond to an invitation: "Please write about a teaching-learning situation or experience in your nursing program that depicts what living on the edge was like for you." The invitation was to all nursing students at UNB – in the traditional 4-year program as well as the Advanced Standing Program (ASP), were invited to participate. As a result of this open invitation, one response was received from a nursing student who was at UNB but no longer in the program, a nursing student population not originally considered. The main criterion for inclusion was that the participant was willing to share

their experiences of living on the edge in their teaching-learning journey in the undergraduate nursing program.

Adequacy. The first email invitation was sent to all nursing students during the fall term of the program (October 9, 2020). The LimeSurvey site remained open for 90 days, which provided students with the opportunity to plan their participation based on their various commitments. Nine individuals went to the LimeSurvey site and reviewed the invitation, but only one participant submitted a reflection during this period. The second invitation was sent to all nursing students near the end of fall term as some students made this request to me personally for an extension which would provide them with an opportunity to consider participation (November 16, 2020), the LimeSurvey site was once again left open for 90 days to provide flexibility for students to participate. Another nine individuals visited the LimeSurvey site and reviewed the invitation, and another participant submitted a reflection. The third and final email invitation (May 28, 2021) was sent to all nursing students who were in the summer term of their program for an additional 90 days. Five more potential participants visited the LimeSurvey site and one more reflection was received. The unique and diverse lived experiences obtained through this process shed light on lived experience variations in the phenomenon of living on the edge in the teaching-learning context.

Researcher's Perspective. During my academic career, I have had teaching-learning experiences with numerous nursing students over the years. I may have had contact with the students who participated in the research, but this was not recognized in the anonymous student submissions. Throughout the research process all research invitations were made through a third party, the administrative team reviewed, approved,

and posted the research invitation to “UNB News” for the entire university population, as well the administrative team forwarded the subsequent email research invitations to only nursing students. Various nursing faculty were asked by the researcher to draw the nursing students’ attention to this nursing research (May 28, 2021) and the opportunity to participate. This approach was used to limit the researcher’s potential influence, perspective, and expectations on student reflections in terms of the phenomenon of living on the edge. During the data collection process reflexive journaling and discussions with dissertation supervisor helped to identify assumptions and ways that I might have potentially influenced the research analysis process.

The LimeSurvey site tracked the number of individuals who visited the site and anonymously stored the reflections that were submitted. This data collection process was open, flexible, and provided participants the opportunity to submit at their convenience to facilitate opportunity for rich reflection. When the participants successfully submitted their reflections, they received an acknowledgment that the document was successfully submitted.

I enlisted the guidance of a mentor with experience with Giorgi’s methodology to ensure the steps of the method were adhered to and to ensure the integrity of the process. Demonstration of analysis provided transparency and allowed the reader to understand the ways in which interpretations were made. This process increased the trustworthiness of the findings reported (Levitt et al., 2017, 2018). The interpretations and perspectives that influenced the analysis of findings that follow will be explicated. This transparency will demonstrate how I remained open to the phenomenon and lived experiences of others. In ensuring the methodological integrity of the research analysis phase the

concepts of fidelity to research topic were maintained through management of my perspective and groundedness, "when findings are based within data that support understanding" (Levitt et al., 2017, p. 11). I have described the processes of data collection within the research process that were used to ensure integrity of the research methodology within the context of the researcher, participants, and data collection. To ensure continued methodological integrity the concepts of utility in the analysis of findings will now be explicated.

Methodological Integrity of the Data Analysis Process

Methodological integrity in the data analysis phase includes groundedness, meaningfulness, coherence, and consistency (Levitt et al., 2017, 2018). This section will include a reflection on the fidelity concept of perspective management in terms of groundedness, and the utility concepts of meaning, contribution, and coherence (Levitt et al., 2017).

Perspective Management in Analysis. Preconceived notions brought to the analysis could have greatly influenced what was seen and once satisfied with the analysis, could have stopped further reflection. These preconceived ideas could have resulted in a loss of openness, curiosity, and maintenance of the unknown stance required when allowing the process to unfold.

> Researchers tend to use two main strategies to manage their own perspectives and preserve fidelity. In the first approach, researchers act to limit the effects of their prior knowledge and theories upon the analysis by developing self-awareness and acting to suspend or challenges these prior conceptions…these approaches orient the researcher to better draw forth understandings that are presented in the data and

> might be obscured by the researchers' perspectives. A second approach is for the investigators to use theoretical frameworks as the vehicle for their analysis … to analyze the data. These approaches permit researchers to observe dynamics that are marginalized, inaccessible to participants, or that are masks within dominant narratives. (Levitt et al., 2017, p. 13)

The use of intuition involved being present to the description and to what meanings were embedded or unfolding in what presented during the analysis. Reduction was used to read the descriptions with an openness to the meanings that were embedded in the descriptions as they unfolded in the analysis. With the past knowledge and experiences held in obeyance, it was important to be intentional and to remain open to the entire description provided ensuring that the experience was being fully understood as it was perceived or experienced. It was important not only to uncover the meanings of what was being shared, but also what the participant was trying to say, not saying, or simply could not put into words. Reflective journaling and obtaining expert feedback on findings deepened the understandings that came forth from the analysis. Perspective management involved assuming a phenomenological attitude (bracketing) and phenomenological reduction to enhance perceptiveness in analysis and demonstrated fidelity to subject (Levitt et al., 2017, 2018).

Groundedness. Groundedness became transparent when findings within the data supported my understanding demonstrating fidelity to the subject (Levitt et al., 2017, 2018). Through explication of the analysis process and the use of tables to facilitate transparency in the process that led to the findings allow the reader to judge the fidelity of the process and results. "Fidelity is enhanced when findings are based within the data that

support understanding. Groundedness refers to the degree to which the meanings identified in the analysis are rooted in data of good quality" (Levitt et al., 2017, p. 14). Direct quotations from the descriptions were linked to the meanings uncovered in the analysis to support findings and deepen contextual understanding. "Utility is maximized by selecting a process of analysis that organizes data so that some aspects become more central in response to the research question" (Levitt et al., 2017, p. 14).

> Data can enable deeper understandings that evocatively draw out aspects of a phenomenon that have not been considered previously. Alternatively, the data collected may bring a wider systematic analysis to bear upon the understanding of a topic and place into play new considerations. (Levitt et al., 2017, p. 16)

This was achieved using a series of tables making explicit the intentional dialogue with the humanbecoming paradigm and teaching-learning model.

Meaning Contribution. Meaning contribution was demonstrated in terms of findings contributing to the identified research goals and objectives. "Researchers work to draw forth and shape the insights afforded by the data so that findings will be meaningful in addressing the analytic goals (Levitt et al., 2017, p. 16). In this research the purpose was to shed new light on the nursing students' experience of living on the edge in teaching-learning. Findings serve to advance humanbecoming theory and understanding of the teaching-learning model, while deepening understanding of the student experiences.

Finally, coherence is the concept of utility was demonstrated when the findings were explored in terms of similarities and difference and how they related to one another, which enhanced the coherence within the findings and their utility (Levitt et al., 2017,

2018). Explanations were provided for the similarities and differences occurred highlighting the paradoxes that were uncovered in these findings. Methodological integrity is the foundation of rigour and trustworthiness which may be assessed for fidelity and utility in relation to the research question, objectives, methodological approach with Giorgi's descriptive methodology, and interpretation guided by the disciplinary lens of the humanbecoming teaching- learning model, underpinned by the humanbecoming paradigm.

This chapter has provided an overview of the methodological considerations for this research study. Parse's (2014b, 2021c) humanbecoming teaching-learning model underpinned by the humanbecoming paradigm was the ontological basis for the study which is consistent with the human sciences tradition. Giorgi's (1985, 2005, 2009, 2012) descriptive phenomenological research method was explicated and determined to be the suitable method from a human sciences approach with rationale for this choice. The epistemological focus was to uncover the general structural meaning of the lived experience of living on the edge for nursing students in a teaching-learning situation. The methodological steps and phenomenological considerations were reviewed and the significance of adhering to research steps explicated to ensure methodological integrity. The research procedure was described including ethical considerations and a discussion of trustworthiness and authenticity, followed by a discussion of methodological integrity in terms of data collection and analysis phases of the research process. The presentation of findings that follow outlines the steps of analysis, documents the audit trail to ensure transparency, provides evidence that supports interpretations, recognizes the researcher perspective, and provides authentic descriptions while ensuring methodological integrity.

CHAPTER 5 – PRESENTATION OF RESEARCH FINDINGS

In this chapter the analytic research processes utilized to arrive at the research findings will be identified with linkages from these findings to direct participant quotations and excerpts of the participants descriptions. The findings are presented in a series of tables to facilitate transparency in the process from the participant descriptions as received, identification of meaning units, and transformation to focal meanings with a situated structural description for each participant. The chapter concludes with the synthesis of the general structural description of living on the edge in teaching-learning.

Identification of Meaning Units

The following three descriptions were provided by nursing student participants. The first step of the phenomenological process was to dwell with the description as it was presented, reading in a natural everyday attitude for a sense of the whole (Giorgi, 1985, 2009) teaching-learning experience (see Tables 1, 3, 5 - Column 1). The meanings were moments within the lived experience so they could not stand alone but were considered within the context presented. It was important to be present with participants' descriptions to uncover the meanings that were expressed, neither adding to nor taking away from what was given (Giorgi, 2009).

> To accept the demand to be scientific means that one wants to approach the phenomenon one is interested in investigating in a methodological, systematic, and rigorous way, each defined according to how the very appearance of the phenomenon invites the researcher to be methodological, systematic and rigorous. (Giorgi, 1985, p. 26)

My approach to uncovering meaning of the lived experience for the nursing student participants of living on the edge in a teaching-learning experience and the descriptive processes employed are depicted in the following series of tables.

In the process of dwelling with, I was "analyzing the experiences of others, so in order to avoid the fusion between the researcher and the participant's experiences, all first person statements are changed into third person statements [using nonbinary pseudonyms] – but otherwise remain the same" (Giorgi et al., 2017, p. 180). Any descriptors that might identify participants were replaced with generic terminology. The intention was to discover "as accurately as possible the meanings lived by the participants insofar as such meanings are expressed in the data" (Giorgi et al., 2017, p. 187). This required an intentional reading of the description. A descriptive analysis "does not try to go beyond what is given…[but] attempts to understand the meaning of the description based solely upon what is presented in the data" (Giorgi, 2009, p. 127). The first step is to assume a *descriptive phenomenological attitude,* which was accepting the description as presented, neither adding to nor taking away from regardless of how it was presented (Giorgi, 2009). "One attitudinal shift is called 'epoché' or 'bracketing', and the other is called phenomenological reduction" (Giorgi & Giorgi, 2008, p. 33). In *phenomenological reduction* it is not a matter of forgetting the past; bracketing means that I did not let past knowledge be engaged while describing the present lived experience (Giorgi, 2009).

Giorgi (2009) "found that students had a strong tendency to identify with the experience of the describer if the descriptions were left in first-person expressions, and that is not the proper attitude to adopt" (pp. 153-154). In Tables 1, 3, and 5, I have repeated the words of the participant changing everything into third person expressions

instead of first-person expressions. “This makes it clear that the researcher is doing an analysis on another’s experience rather than one’s own” (Giorgi, 2009, p. 153). In making this transition to third person, I was able to immerse myself more completely into the lived experience of another, minimizing the making of comparisons to previous knowledge or own experiences. The first step of identification of meaning units made the analysis of the description of the lived experience more manageable.

Table 5

Identification of Meaning Units for Participant 1

LOTE Reflection ~ Sense of the Whole	**LOTE Reflection (Reilly)** pseudonym **Meaning Units**	**Dwelling with…**
When I attended nursing school (a BN program) I learned a lot about how stressful nursing school could be. I have had several moments in nursing school that were particularly difficult for me, where I ended up questioning whether I had it in me to become a nurse (spoiler alert--- I didn't have it in me, but I did manage to find my path in life which is different from what I imagined on my first day of nursing school.) I remember there was a moment in my first year of the nursing program when one of my professors said something that was very unkind towards me and absolutely astonished me that somebody that was a nurse and a teacher could say that to somebody. She told me outright to my face that "it would be best off if you left the program willingly. You don't have what it takes to become a nurse."	Reilly – MU-1 - When I attended nursing school (a BN program) I learned a lot about how stressful nursing school could be./	Reilly learned a lot about the demands of nursing program.
	Reilly – MU-2 - I have had several moments in nursing school that were particularly difficult for me, where I ended up questioning whether I had it in me to become a nurse /	There were several disquieting moments that led to Reilly re-examining the career choice of nursing and the potential of becoming a nurse.
	Reilly – MU-3 - (spoiler alert--- I didn't have it in me, but I did manage to find my path in life which is different from what I imagined on my first day of nursing school.)/	Reilly determined that they did not have the capacity and was able to choose a different path in life from what was first imagined when entering the nursing program.
	Reilly – MU-4 - I remember there was a moment in my first year of the nursing program when one of my professors said something that was very unkind towards me and absolutely astonished me that somebody that was a nurse and a teacher could say that to somebody. She told me outright to my face that "it would be best off if you left the program willingly. You don't have what it takes to become a nurse."/	Reilly recalled a moment in the first year of the program when one of the professors opening declared “it would be best if you left the program willingly. You don’t have what it takes to become a nurse.” Reilly perceived this statement as very unkind and was astounded to hear this from a nurse and teacher.

LOTE Reflection ~ Sense of the Whole	**LOTE Reflection (Reilly)** pseudonym **Meaning Units**	**Dwelling with…**
(and there was an aspect to this that the professor didn't know--- at the time in my first year I was being severely bullied and harassed by my cohort which was causing me severe distress to begin with). It left me devastated and ended up throwing me into a severe state of depression that never resolved until after I left nursing school. It also fuelled me into trying my best to make it in the program in order to spite that professor. Towards the start of my third year of university, I was still in a very depressed state from having the experience that I mentioned where one of my professors told me that I didn't have it in me to become a nurse. I was still being bullied and harassed by my cohort.	Reilly – MU-5 - (and there was an aspect to this that the professor didn't know--- at the time in my first year I was being severely bullied and harassed by my cohort which was causing me severe distress to begin with). It left me devastated and ended up throwing me into a severe state of depression that never resolved until after I left nursing school. /	This professor was not aware during this first year that Reilly was being tormented and harassed by classmates which was causing severe anguish that remained throughout nursing school.
	Reilly – MU-6 - It also fuelled me into trying my best to make it in the program in order to spite that professor /	Reilly reflected on the heightened desire to perform at their best despite this professor's view.
	Reilly – MU-7 - Towards the start of my third year of university, I was still in a very depressed state from having the experience that I mentioned where one of my professors told me that I didn't have it in me to become a nurse. I was still being bullied and harassed by my cohort. /	Nearing the start of third year, Reilly remained in a very dispirited state from reflection on the professor's comment and was still being bullied and harassed by the cohort.
The stress got to me (from nursing school and personal life difficulties) and it ultimately led up to me being hospitalized overnight because I was brought to the hospital after class (on a skills lab day) by a friend of mine from outside the nursing program because I ended up nearly attempting to end my life. I was hospitalized overnight but ultimately discharged because they couldn't admit me to the psychiatric unit because it was at capacity. I had a lab the day I was discharged from the hospital and went to the second day of skills lab that week directly after discharge (literally walked from the hospital to the nursing faculty building).	Reilly – MU-8 - The stress got to me (from nursing school and personal life difficulties) and it ultimately led up to me being hospitalized overnight because I was brought to the hospital after class (on a skills lab day) by a friend of mine from outside the nursing program because I ended up nearly attempting to end my life. I was hospitalized overnight but ultimately discharged because they couldn't admit me to the psychiatric unit because it was at capacity. I had a lab the day I was discharged from the hospital and went to the second day of skills lab that week directly after discharge (literally walked from the hospital to the nursing faculty building). /	Reilly reflected that the stress of life (academia and personal challenges) resulted in considering suicide and an overnight hospitalization. A friend from outside the nursing program brought Reilly to the hospital by after class on a lab skills day. Upon release from hospital, Reilly went to the skills lab upon release, literally walking from the hospital to the nursing building.

LOTE Reflection ~ Sense of the Whole	**LOTE Reflection (Reilly)** pseudonym **Meaning Units**	**Dwelling with…**
My skills lab professor was so concerned. She told me that I looked very unwell physically and mentally, and she took me to her office to talk in private. We ended up having a heart-to-heart on how nursing school was really destroying my mental health and that I should consider whether I wanted to persist in nursing school. I ultimately decided to persist and stayed in nursing school for so much longer than I should have. She was so compassionate towards me and that compassion changed me and helped guide me to the path in life that I was actually meant to be on; the path that I ended up pursuing was working to help other people with their mental health -- I ended up eventually switching majors to another health discipline and am so much happier and healthier and my own self views shifted from feeling worthless to seeing myself as a hardy, resilient person. That same professor is someone who I view as a mentor and someone who I became very close with, and we ended up working on other projects together outside of nursing school. She helped me find my place in life and I am so thankful for that. For me, when I hear "living on the edge" in nursing school, I think of how a lot of the issues and experiences are very black and white and I think a lot of the dialectics that exist in nursing school.	Reilly – MU-9 - My skills lab professor was so concerned. She told me that I looked very unwell physically and mentally, and she took me to her office to talk in private. /	Reilly's skills lab professor was concerned and informed Reilly that they looked very unwell physically and mentally.
	Reilly – MU-10 - We ended up having a heart-to-heart on how nursing school was really destroying my mental health and that I should consider whether I wanted to persist in nursing school. I ultimately decided to persist and stayed in nursing school for so much longer than I should have. /	Reilly and this professor had a candid, matter-of-fact conversation in private about how nursing program was destroying their mental health. As a result, Reilly reconsidered the desire to persist in nursing school, but ultimately persisted longer than should have.
	Reilly – MU-11 – She was so compassionate towards me and that compassion changed me and helped guide me to the path in life that I was meant to be on; the path that I ended up pursuing was working to help other people with their mental health -- I ended up eventually switching majors to another health discipline/	This professor's compassionate approach helped guide Reilly to the path in life they were intended to be on, working to help other people with their mental health. Reilly switched majors to another health discipline.
	Reilly – MU-12 - and am so much happier and healthier and my own self views shifted from feeling worthless to seeing myself as a hardy, resilient person. That same professor is someone who I view as a mentor and someone who I became very close with, and we ended up working on other projects together outside of nursing school. She helped me find my place in life and I am so thankful for that. /	Reilly was happier and healthier, and self-views have shifted from feeling worthless to seeing themselves as a hardy, resilient person. Reilly viewed this same professor as a mentor, and they have remained very close and have continued working on projects together. This professor facilitated Reilly's discovery of their place in life and Reilly was so thankful.
	Reilly – MU-13 - For me, when I hear "living on the edge" in nursing school, I think of how a lot of the issues and experiences are very black and white and I think a lot of the dialectics that exist in nursing school.	For Reilly, 'living on the edge' encompassed several issues and experiences that were very black and white. Reilly has reflected on the contradictory processes that existed in the nursing program.

Identification of Focal Meanings and Transforming Meaning Units

In this next step of uncovering focal meanings, meaning units were transformed to a higher level of discourse. The words of the participants were shifted into expressions that are more directly relevant to the humanbecoming paradigm and teaching-learning model. Elevation to this new level of abstraction, provided the opportunity to generalize the experience so it was not longer situation specific. In seeking focal meanings, free imaginative variation and reflection were critical to determining those key characteristics of the lived experience of living on the edge in teaching-learning within the participant descriptions. The focal meanings were expressed more directly in the researcher's language with respect to the relevancy for the phenomenon of living on the edge in teaching-learning making visible the implicit meanings that unfolded in the teaching-learning lived experiences for each participant (see Tables 2, 4, and 6). These transformed meaning units or focal meanings provided the foundation for the writing of the situated structural description of the lived experience of living on the edge in teaching-learning for each participant, and they are specific to the participant.

Table 6

Transformation of Meaning Units to Focal Meanings for Participant 1

LOTE Reflection (Reilly) Meaning Units	Focal meanings
Reilly – MU-1 - When I attended nursing school (a BN program) I learned a lot about how stressful nursing school could be.	Reilly – FM-1 – Reilly experienced disquiet with the explicit-tacit uncertainty in pursuing the cherished goal.
Reilly – MU-2 - I have had several moments in nursing school that were particularly difficult for me, where I ended up questioning whether I had it in me to become a nurse.	Reilly – FM-2 – There were paradoxical rhythms of explicit-tacit and reflective-prereflective moments unfolding with shaping personal knowing pursuing cherished endeavors.
Reilly – MU-3 - (spoiler alert--- I didn't have it in me, but I did manage to find my path in life which is different from what I imagined on my first day of nursing school.)	Reilly – FM-3 –In risking not achieving the cherished goal, Reilly structured meaning imaging new possibilities.

LOTE Reflection (Reilly) Meaning Units	Focal meanings
Reilly – MU-4 - I remember there was a moment in my first year of the nursing program when one of my professors said something that was very unkind towards me and absolutely astonished me that somebody that was a nurse and a teacher could say that to somebody. She told me outright to my face that "it would be best off if you left the program willingly. You don't have what it takes to become a nurse."	Reilly – FM-4 – Reilly experienced surprise and dismay when an honoured other disregarded Reilly, with comments of a negative light on Reilly as a person, shattering Reilly's hopes and dreams.
Reilly – MU-5 - (and there was an aspect to this that the professor didn't know--- at the time in my first year I was being severely bullied and harassed by my cohort which was causing me severe distress to begin with). It left me devastated and ended up throwing me into a severe state of depression that never resolved until after I left nursing school.	Reilly – FM-5– Awful feelings emerged with being disrespected as Reilly experienced shame. This humiliation and dishonoring of human worth illuminated the revealing-concealing paradox, as Reilly chose not to disclose challenges.
Reilly – MU-6 - It also fuelled me into trying my best to make it in the program in order to spite that professor.	Reilly – FM-6– Reilly chose to live value priorities, pushing-resisting of affirming-not affirming of intentions in light of being-nonbeing.
Reilly – MU-7 - Towards the start of my third year of university, I was still in a very depressed state from having the experience that I mentioned where one of my professors told me that I didn't have it in me to become a nurse. I was still being bullied and harassed by my cohort.	Reilly – FM-7– Reilly experienced shame that arose through dishonoring experiences with others in the struggle for personal and professional identity.
Reilly – MU-8 - The stress got to me (from nursing school and personal life difficulties) and it ultimately led up to me being hospitalized overnight because I was brought to the hospital after class (on a skills lab day) by a friend of mine from outside the nursing program because I ended up nearly attempting to end my life. I was hospitalized overnight but ultimately discharged because they couldn't admit me to the psychiatric unit because it was at capacity. I had a lab the day I was discharged from the hospital and went to the second day of skills lab that week directly after discharge (literally walked from the hospital to the nursing faculty building).	Reilly – FM-8– Feelings of anguish arose with the overwhelming adversity of academic and private challenges, Reilly contemplated being-nonbeing.
Reilly – MU-9 - My skills lab professor was so concerned. She told me that I looked very unwell physically and mentally, and she took me to her office to talk in private.	Reilly – FM-9–Reilly's attending-distancing with others (professors and peers) surfaced when Reilly was being with and yet apart at all at once.

LOTE Reflection (Reilly) Meaning Units	Focal meanings
Reilly – MU-10 - We ended up having a heart-to-heart on how nursing school was really destroying my mental health and that I should consider whether I wanted to persist in nursing school. I ultimately decided to persist and stayed in nursing school for so much longer than I should have.	Reilly – FM-10– Being present and bearing witness to Reilly's struggles provided opportunity for reflection on the explicit-tacit aspects of the academic experience. In reflective-pre-reflective moments, Reilly structured meaning as contemplated a possible path forward.
Reilly – MU-11 – She was so compassionate towards me and that compassion changed me and helped guide me to the path in life that I was meant to be on; the path that I ended up pursuing was working to help other people with their mental health -- I ended up eventually switching majors to another health discipline.	Reilly – FM-11–A valued other's authentic presence enabled Reilly to disclose-not disclose explicit-tacit knowings and all-at-once uncovering a new pathway in confirming-not confirming what was valued in choosing pattern preferences.
Reilly – MU-12 - and am so much happier and healthier and my own self views shifted from feeling worthless to seeing myself as a hardy, resilient person. That same professor is someone who I view as a mentor and someone who I became very close with, and we ended up working on other projects together outside of nursing school. She helped me find my place in life and I am so thankful for that.	Reilly – FM-12– Reilly overcame adversity and experienced a sense of wellbeing while transforming and imagining a new view of self, relationships, and projects, confirming cherished value priorities.
Reilly – MU-13 - For me, when I hear "living on the edge" in nursing school, I think of how a lot of the issues and experiences are very black and white and I think a lot of the dialectics that exist in nursing school.	Reilly – FM-13– For Reilly, the lingering presence of 'living on the edge' was persevering with cherished endeavors amid the paradoxical tensions that existed in nursing academia.

The focal meanings were then reviewed and with the benefit of free imaginative variation and an essential structure [or situated structural description] of the experience was written for each of the participants. It is important to note that there was not a one-to-one relationship between meaning units and their transformations to focal meanings as they were considered within the context of the whole. This structure was gained by dwelling with the focal meanings and determining what was truly essential to the lived experience (Giorgi, 2009). This analysis highlighted meanings that were lived by the participants that may not have been clearly or fully articulated, or in full awareness of the participants, but added value to what each participant made explicit in the description of their experience. The transformations for each focal meaning were used to describe the most invariant and connected meanings belonging to the experience. These

transformations provided the basis for the articulation of the situated structural description as they were written at the higher level of discourse to generalize meanings from within each of the descriptions of the participant experiences. “The specific description of the situated structure remains more faithful to the concrete subject and specific situation” (Giorgi, 1985, p. 20).

Essential Structure of Description

The synthesis of the situated structural of the experience, is a descriptive paragraph that lays out the lived experience of living on the edge through the lens of the humanbecoming teaching-learning model for each participant. “This structure is meant to depict the lived experience of a phenomenon, which may include aspects of the description of which the experiencer was unaware” (Giorgi, 2009, p. 166).

Situated Structural Description for Participant 1

In living on the edge in teaching-learning, Reilly experienced disquiet with the paradoxical rhythms of explicit-tacit uncertainty while shaping personal knowing in persevering the cherished endeavors. In reflective-prereflective moments Reilly structured meaning imaging new possibilities. Reilly experienced surprise and dismay when an honoured other disregarded Reilly with disrespectful comments directed to Reilly as a person, shattering Reilly’s hopes and dreams. Reilly experienced shame that arose through dishonoring experiences with others in the struggle for personal and professional identity. Reilly struggled when choosing to live value priorities pushing-resisting of affirming-not affirming intentions in light of nonbeing. Reilly’s attending-distancing with others (professors and peers) being with yet apart all at once, surfaced with feelings of anguish that arose with the overwhelming adversity of academic and

private challenges. With a revered other's authentic presence, Reilly found voice to disclose-not disclose explicit-tacit knowings and all-at-once uncovering a new pathway in confirming-not confirming what was valued in choosing pattern preferences. Reilly overcame adversity and experienced a sense of wellbeing while transforming and imagining a new view of self, relationships, and projects, confirming cherished value priorities. For Reilly, the lingering presence of living on the edge was persevering with cherished endeavors amid the paradoxical tensions that existed in nursing academia.

Table 7

Identification of Meaning Units for Participant 2

LOTE Reflection ~ Sense of the Whole	**LOTE Reflection (Taylor)** pseudonym **Meaning Units**	**Dwelling with…**
I found the question vague but decided I would answer it anyway, maybe that was intended? To me, living on the edge in nursing means I am in the perfect state for growth. It means I am comfortable enough to have confidence and not be completely overwhelmed, but also that I am very close to the unknown. By living on the edge as a nursing student I am able to constantly acquire new information, while also be grounded enough not to fall off and become over-stressed or too uncertain to make decisions.	Taylor – MU-1 - I found the question vague but decided I would answer it anyway, maybe that was intended? /	Taylor found the question ambiguous but decided would respond as that may have been intended.
	Taylor – MU-2 - To me, living on the edge in nursing means I am in the perfect state for growth. It means I am comfortable enough to have confidence and not be completely overwhelmed, but also that I am very close to the unknown. /	For Taylor, living on the edge was in a perfect state of balance, feeling sure-unsure able to explore the unfamiliar without being overwhelmed.
	Taylor – MU-3 - By living on the edge as a nursing student I am able to constantly acquire new information, while also be grounded enough not to fall off and become over-stressed or too uncertain to make decisions. /	For Taylor, living on the edge was acquiring knowledge while remaining present and connected enough not to fall off and become overburdened or too unsure to make decisions.

LOTE Reflection ~ Sense of the Whole	**LOTE Reflection (Taylor)** pseudonym **Meaning Units**	**Dwelling with…**
An example of living on the edge would be my first time performing an injection on a patient. I had practiced it in the lab and given one to one of my peers, but never to a patient before. This previous experience allowed me to stay grounded and be a functional and competent nurse. The living on the edge part came when I needed to do something new, which was giving an injection to a patient in the hospital. I had never done that before and thus was nervous. Because I had a solid grounding state, and also some new unexplored territory, I was living on the edge and I was in the perfect position to learn and grow my skills. To me living on the edge is a necessary balance. If I go too far into unknown territory (which is "falling off the cliff") then my brain is in no state to learn and remember anything. If I don't get close enough to the edge than I will not be able to improve as a nurse. In nursing, you need to constantly improve just to stay in the same place. The science and best practices are constantly changing, there are always new opportunities to improve your ability to care. If you are not moving forward (and you move forward/improve by living on the edge) then you are essentially moving backwards. As a nurse, if I am not constantly trying to improve my care, then I am reducing my competencies as a nurse. Other examples of living on the edge: Keeping up with the latest research of evidenced-based practice and applying it to my care.	Taylor – MU-4 - An example of living on the edge would be my first time performing an injection on a patient. I had practiced it in the lab and given one to one of my peers, but never to a patient before. This previous experience allowed me to stay grounded and be a functional and competent nurse. /	For Taylor, a living on the edge exemplar was performing an injection on a patient for the first time. With foundational knowledge and guidance and Taylor was able to give an injection to a peer (but not to a patient yet). This experience allowed Taylor to be confident and capable in this skill.
	Taylor – MU-5 - The living on the edge part came when I needed to do something new, which was giving an injection to a patient in the hospital. I had never done that before and thus was nervous. /	Living on the edge occurred when Taylor needed to give an injection to a patient in hospital for the first time and was apprehensive.
	Taylor – MU-6 - Because I had a solid grounding state, and also some new unexplored territory, I was living on the edge and I was in the perfect position to learn and grow my skills. To me living on the edge is a necessary balance. /	Because Taylor had the foundational knowledge and practice, in balance with the new unexplored territory of giving an injection and the possible patient response. For Taylor, living on the edge was having poise.
	Taylor – MU-7 - If I go too far into unknown territory (which is "falling off the cliff") then my brain is in no state to learn and remember anything. If I don't get close enough to the edge than I will not be able to improve as a nurse./	If Taylor exceeded the limits into the unknown (which is "falling off the cliff") then Taylor was no longer ready to learn or remember.
	Taylor – MU-8 - In nursing, you need to constantly improve just to stay in the same place. The science and best practices are constantly changing, there are always new opportunities to improve your ability to care. If you are not moving forward (and you move forward /improve by living on the edge) then you are essentially moving backwards. As a nurse, if I am not constantly trying to improve my care, then I am reducing my competencies as a nurse. Other examples of living on the edge: Keeping up with the latest research of evidenced-based practice and applying it to my care. /	Taylor recognized need to challenge oneself to continue to develop as a nurse. In nursing, science, research, and best practices are constantly evolving creating illimitable opportunities for lifelong learning and a responsibility for maintenance of competencies and integration of this knowledge into professional practice.

LOTE Reflection ~ Sense of the Whole	**LOTE Reflection (Taylor)** pseudonym **Meaning Units**	**Dwelling with…**
Having a difficult conversation with a patient Living on the edge is where I feel all nurses have an ethical responsibility to be. It doesn't mean being dangerous or reckless. Rather, it means the constant intentional effort to place myself in a difficult and unknown situation that I believe I will be able to conquer and learn from without serious consequences for myself or others.	Taylor – MU-9 - Having a difficult conversation with a patient. Living on the edge is where I feel all nurses have an ethical responsibility to be. /	For Taylor, living on the edge was being open to engagement in difficult conversations. Taylor believed all nurses have this ethical responsibility.
	Taylor – MU-10 - It doesn't mean being dangerous or reckless. /	Living on the edge does not mean being unsafe or irresponsible.
	Taylor – MU-11 - Rather, it means the constant intentional effort to place myself in a difficult and unknown situation that I believe I will be able to conquer and learn from without serious consequences for myself or others.	For Taylor, living on the edge meant making an intentional effort to be available and open to challenging and uncertain situations. Taylor believed will be able to overcome and take advantage of situations without serious repercussions to self or others.

Table 8

Transformation of Meaning Units to Focal Meanings for Participant 2

LOTE Reflection (Taylor) Meaning Units	**Focal meanings**
Taylor – MU-1 - I found the question vague but decided I would answer it anyway, maybe that was intended?	Taylor – FM-1 –Taylor found the research question ambiguous which created uncertainty but chose venturing forward in exploring the unknown.
Taylor – MU-2 - To me, living on the edge in nursing means I am in the perfect state for growth. It means I am comfortable enough to have confidence and not be completely overwhelmed, but also that I am very close to the unknown.	Taylor – FM-2 - For Taylor, living on the edge meant being in a state of equipoise of sureness-unsureness in speaking-being silent, and moving-being still with the fortitude to venture onward with envisioning the not-yet known.
Taylor – MU-3 - By living on the edge as a nursing student I am able to constantly acquire new information, while also be grounded enough not to fall off and become over-stressed or too uncertain to make decisions.	Taylor – FM-3 – Taylor experienced knowing -not knowing when configuring new meanings in the light of certainty-uncertainty of confirming-not confirming when envisioning possibilities.
Taylor – MU-4 - An example of living on the edge would be my first time performing an injection on a patient. I had practiced it in the lab and given one to one of my peers, but never to a patient before. This previous experience allowed me to stay grounded and be a functional and competent nurse	Taylor – FM-4 – Living on the edge was imaging the explicit-tacit knowing that emerged in the first-time performance of a skill. Taylor experienced enabling-limiting of the opportunities-restrictions as practiced on a peer. Taylor drew on previous experience when engaged in this new experience which was affirming.

LOTE Reflection (Taylor) Meaning Units	Focal meanings
Taylor – MU-5 - The living on the edge part came when I needed to do something new, which was giving an injection to a patient in the hospital. I had never done that before and thus was nervous.	Taylor – FM-5 – Living on the edge arose with Taylor's novel experience that started with feelings of certainty-uncertainty. Taylor experienced pushing-resisting in doing the familiar in an unfamiliar environment.
Taylor – MU-6 - Because I had a solid grounding state, and also some new unexplored territory, I was living on the edge and I was in the perfect position to learn and grow my skills. To me living on the edge is a necessary balance.	Taylor – FM-6 – Taylor was prepared with knowledge yet experienced the familiar-unfamiliar of carrying out the skill. Taylor was cautiously cultivating savoring the opportunity to give an injection while letting go of what was not valued in knowing-not knowing.
Taylor – MU-7 - If I go too far into unknown territory (which is "falling off the cliff") then my brain is in no state to learn and remember anything. If I don't get close enough to the edge than I will not be able to improve as a nurse.	Taylor – FM-7 – In attending to the everchanging, Taylor risked going into the abyss, of knowing-not knowing, there was certainty-uncertainty and the all-at-once revealing-concealing, enabling-limiting and connecting separating of living quality.
Taylor – MU-8 - In nursing, you need to constantly improve just to stay in the same place. The science and best practices are constantly changing, there are always new opportunities to improve your ability to care. If you are not moving forward (and you move forward /improve by living on the edge) then you are essentially moving backwards. As a nurse, if I am not constantly trying to improve my care, then I am reducing my competencies as a nurse. Other examples of living on the edge: Keeping up with the latest research of evidenced-based practice and applying it to my care.	Taylor – FM-8 – Taylor committed to the vision of the illimitability of nursing knowledge and everchanging demands for ongoing education to ensure safe, competent professional practice.
Taylor – MU-9 - Having a difficult conversation with a patient. Living on the edge is where I feel all nurses have an ethical responsibility to be.	Taylor – FM-9 – Taylor perceives that all nurses have a moral duty to engage in true presence as another exemplar of living on the edge.
Taylor – MU-10 - It doesn't mean being dangerous or reckless.	Taylor – FM-10 – For Taylor, living on the edge does not mean being unsafe or irresponsible.
Taylor – MU-11 - Rather, it means the constant intentional effort to place myself in a difficult and unknown situation that I believe I will be able to conquer and learn from without serious consequences for myself or others.	Taylor – FM-11 – For Taylor living on the edge means venturing forth pursuing daunting endeavors, while vigilantly attending to the possibilities in becoming.

Situated Structural Description for Participant 2

For Taylor, living on the edge meant being in a state of equipoise of sureness-unsureness in speaking-being silent, and moving-being still with the fortitude to persevere with envisioning the not-yet known. Taylor experienced explicit-tacit knowing when configuring new meanings in the light of certainty-uncertainty of confirming-not

confirming when envisioning possibilities. Taylor experienced enabling-limiting of the opportunities-restrictions when persevering in a new learning experience. Taylor drew on previous experience which was affirming. Taylor experienced pushing-resisting in doing the familiar in an unfamiliar environment. Taylor was cautiously cultivating savoring the new experience while letting go of what was not valued in knowing-not knowing. Taylor perceived that all nurses have a moral duty to engage in true presence. In attending to the everchanging, Taylor risked going into the abyss, of knowing-not knowing, there was certainty-uncertainty and the all-at-once enabling-limiting of living quality as a nurse. Taylor committed to the vision of the illimitability of nursing knowledge and everchanging demands for ongoing education to ensure safe, competent professional practice. For Taylor living on the edge means venturing forth pursuing daunting endeavors, while vigilantly attending to the possibilities in becoming. It does not mean being unsafe or irresponsible.

Table 9

Identification of Meaning Units for Participant 3

LOTE Reflection ~ Sense of the Whole	**LOTE Reflection (Quinn)** pseudonym **Meaning Units**	**Dwelling with…**
The most memorable experience I went through in nursing school was the simulation of postpartum bleeding. (before COVID in person). Our instructors made the simulation so natural that I felt like I was in a real clinical environment and not in a lab. We went through the simulation and reflected on our work afterwards I believe simulation is an effective tool in nursing that enables students to learn and remember things faster.	Quinn – MU-1 - The most memorable experience I went through in nursing school was the simulation of postpartum bleeding. (before COVID in person). /	Quinn reflected that the most powerful learning experience was the in-person simulation of real-world, relevant client experience(s) with postpartum bleeding.
	Quinn – MU-2 - Our instructors made the simulation so natural that I felt like I was in a real clinical environment and not in a lab./	Quinn observed that the facilitators made the simulation so authentic and true to life that they felt like they were immersed in an ambiguous, veritable, spontaneous, and unconstrained clinical experience.
	Quinn – MU-3 - We went through the simulation and reflected on our work afterwards. /	Quinn shared that as a team, they were able to focus on what was happening in the urgency of the situation. They then contemplated and evaluated their experience(s) in being with this patient.

LOTE Reflection ~ Sense of the Whole	LOTE Reflection (Quinn) pseudonym **Meaning Units**	Dwelling with…
	Quinn – MU-4 – I believe simulation is an effective tool in nursing that enables students to learn and remember things faster.	Quinn considered simulation to be an efficacious learning approach that enhanced their ability to be with clients, master knowledge, skills, and abilities needed in the situation. Students were able to assimilate new knowledge and commit to memory.

Table 10

Transformation of Meaning Units to Focal Meanings for Participant 3

LOTE Reflection (Quinn) Meaning Units	Focal meanings
Quinn – MU-1 - The most memorable experience I went through in nursing school was the simulation of postpartum bleeding. (before COVID in person).	Quinn – FM-1 - Quinn reflected being with and bearing witness to a client experiencing possible complications in-person simulation was immersive with coming to know something of value.
Quinn – MU-2 - Our instructors made the simulation so natural that I felt like I was in a real clinical environment and not in a lab.	Quinn – FM-2 - Quinn shared that the rhythms of revealing-concealing, enabling-limiting and connecting-separating with the simulated learning experience were so authentic that Quinn was immersed in the moment-to-moment reality of the experience.
Quinn – MU-3 - We went through the simulation and reflected on our work afterwards.	Quinn – FM-3 - Quinn observed that once the simulation activities were completed, they focused on affirming-not affirming their experience(s) conforming-not conforming in transforming their knowledge of theory to practice.
Quinn – MU-4 – I believe simulation is an effective tool in nursing that enables students to learn and remember things faster.	Quinn – FM-4 - Quinn considered the simulation to be an affirming learning approach enabled their ability to move beyond in their knowledge, skills, and abilities, cotranscending ways of becoming. A lingering presence arose in the remembering-prospecting of enduring of truths that were uncovered in the simulation, transforming what was learned in a new light.

Situated Structural Description for Participant 3

Through the lens of the teaching-learning model, this lived experience of living on the edge in teaching-learning began when Quinn reflected being with and bearing witness to a client experiencing possible medical complications through in-person simulation was immersive with coming to know something of value. Quinn shared that the rhythms of connecting-separating with the simulated learning experience were so

authentic that Quinn was immersed in confirming-not confirming the explicit-tacit and reflective-prereflective meaning of the experience.

Quinn observed that once the simulation activities were completed, they focused on affirming-not affirming their experience(s) conforming-not conforming in transforming their knowledge of theory to practice. Quinn considered the simulation to be an affirming learning approach that enabled their ability to move beyond in their knowledge, skills, and abilities, and cotranscending ways of becoming. A lingering presence arose in remembering-prospecting of the enduring of truths that were uncovered in the simulation, transforming what was learned in a new light.

Synthesis of the General Structural Description

The general structural description of living on the edge in teaching-learning emerged from the synthesis of the three situated structural descriptions provided. While the situated structural descriptions remained faithful to the participants' descriptions of their lived experiences and were situation specific, "the general description of the situated structure tries as much as possible to depart from the specific to communicate the most general meaning of the phenomenon" (Giorgi, 1985, p. 20). This structure is meant to depict the lived experience of the phenomenon of living on the edge in teaching-learning, "it means that in principle the structures are applicable to more individuals than the persons upon which they were based" (Giorgi, 2009, p. 166). "Writing of the structure takes a much more holistic perspective than the transformations themselves required" (Giorgi, 2009, p. 167). To gain insight into the essences of the lived experiences, I was very intentional approach in dwelling with each of the descriptions, moving to and fro, to synthesize and distinguish the invariant and key meanings of the lived experience of

living on the edge in teaching-learning. The humanbecoming teaching-learning model was used to guide the synthesis of the lived experience and to craft a careful description containing the constituent meanings and the relationships among the meaning units that were essential to the experience. The general structural description conveys what was truly essential within this series of teaching-learning experiences presented transcending the situations from which they were obtained (Giorgi, 2009).

Table 11

Comparison Table of the Situated Structural Descriptions

Humanbecoming Teaching-Learning Model			
Essences	**Reilly**	**Taylor**	**Quinn**
Semantic cohering is living with ambiguity in rationaling-intuiting amid clarifying-obscuring in appreciating mystery (Parse, 2021c, p. 181).	In living on the edge in teaching-learning, Reilly experienced disquiet with the paradoxical rhythms of explicit-tacit uncertainty while shaping personal knowing in persevering the cherished endeavors. In reflective-prereflective moments, Reilly structured meaning imaging new possibilities.	For Taylor, living on the edge meant being in a state of equipoise of sureness-unsureness in speaking-being silent, and moving-being still with the fortitude to persevere with envisioning the not-yet known. Taylor experienced explicit-tacit knowing when configuring new meanings in the light of certainty-uncertainty of confirming-not confirming when envisioning possibilities.	Quinn reflected being with and bearing witness to a client experiencing possible medical complications through in-person simulation was immersive with coming to know something of value.
Essences	**Reilly**	**Taylor**	**Quinn**
Synergistic patterning is potentiating integrity in warping-woofing amid the ebbing-flowing of weaving illimitably (Parse, 2021c, p. 181).	Reilly experienced surprise and dismay when an honoured other disregarded Reilly with disrespectful comments directed to Reilly as a person, shattering Reilly's hopes and dreams. Reilly experienced shame that arose through dishonoring experiences with others in the struggle for personal and professional identity.	Taylor experienced enabling-limiting of the opportunities-restrictions when persevering in a new learning experience. Taylor drew on previous experience which was affirming. Taylor experienced pushing-resisting in doing the familiar in an unfamiliar environment.	Quinn shared that the rhythms of connecting-separating with the simulated learning experience were so authentic that Quinn was immersed in confirming-not confirming the explicit-tacit and reflective-prereflective meaning of the experience.

Essences	Reilly	Taylor	Quinn
Synergistic patterning is potentiating integrity in warping-woofing amid the ebbing-flowing of weaving illimitably (Parse, 2021c, p. 181). ***(continued)***	Reilly struggled when choosing to live value priorities pushing-resisting of affirming-not affirming intentions in light of nonbeing. Reilly's attending-distancing with others (professors and peers) being with yet apart all at once, surfaced with feelings of anguish that arose with the overwhelming adversity of academic and private challenges.	Taylor was cautiously cultivating savoring the new experience while letting go of what was not valued in knowing-not knowing. Taylor perceives that all nurses have a moral duty to engage in true presence.	Quinn observed that once the simulation activities were completed, they focused on affirming-not affirming their experience(s) conforming-not conforming in transforming their knowledge of theory to practice.
Aesthetic innovating is honoring wisdom in considering-composing amid beholding-refining in witnessing unfolding (Parse, 2021c, p. 181).	With a revered other's authentic presence, Reilly found voice to disclose-not disclose explicit-tacit knowings and all-at-once uncovering a new pathway in confirming-not confirming what was valued in choosing pattern preferences. Reilly overcame adversity and experienced a sense of wellbeing while transforming and imagining a new view of self, relationships, and projects, confirming cherished value priorities. For Reilly, the lingering presence of 'living on the edge' was persevering with cherished endeavors amid the paradoxical tensions that existed in nursing academia.	In attending to the everchanging, Taylor risked going into the abyss, of knowing-not knowing, there was certainty-uncertainty and the all-at-once enabling-limiting of living quality as a nurse. Taylor committed to the vision of the illimitability of nursing knowledge and everchanging demands for ongoing education to ensure safe, competent professional practice. For Taylor living on the edge means venturing forth pursuing daunting endeavors, while vigilantly attending to the possibilities in becoming. It does not mean being unsafe or irresponsible.	Quinn considered the simulation to be an affirming learning approach that enabled their ability to move beyond in their knowledge, skills, and abilities, and cotranscending ways of becoming. A lingering presence arose in remembering-prospecting of the enduring of truths that were uncovered in the simulation, transforming what was learned a new light.

The General Structural Description

After carefully dwelling with the various facets of the individual situated structural descriptions and viewing them through the lens of the humanbecoming

teaching-learning model (Parse, 2004, 2014b, 2021c), the central findings or general structural description of living on the edge in teaching-learning for these nursing student participants emerged. Living on the edge in teaching-learning is

- acquiescing to ambiguity in the paradoxical rhythms of moving moment-to-moment coming to know something of value;
- dignifying the journey by vigilantly exploring unknowns of the everchanging;
- risking venturing forth with quieting-disquieting regard amid diverse alliances (ideas, objects, experiences, and others) in anticipation of cherished endeavors;
- persevering with novel experiences amid potentiating-restricting opportunities in realizing cherished endeavors;
- venerating words, wisdom, and images of others in considering-composing cherished choosings; and
- discovering anew cherished priorities as possibilities emerge.

The research processes in the analysis/synthesis of the participant descriptions using Giorgi's modified descriptive phenomenological approach were presented. The general structural description was presented in response to the research question, "What is the general structural description (or meaning) of the lived experience of living on the edge for nursing students in teaching-learning." In the discussion of findings that follows the central findings or essences of living on the edge in teaching-learning will be explicated.

CHAPTER 6 – DISCUSSION OF RESEARCH FINDINGS

This chapter presents an elaboration and discussion of the findings that emerged from this research. This section begins with a discussion of the general structural description from the theoretical perspective of humanbecoming paradigm and the teaching-learning model. The essences of the general structural description will be explicated and will frame the dialogue with the literature. Pertinent literature consistent with the humanbecoming paradigm is woven through the discussion of essences followed with a literature review of current, relevant natural science literature and research. The similarities and differences between participant experiences will be highlighted and alternative explanations will be proposed. The discussion will conclude with the identification of limitations of this research project and the contributions of this study.

Discussion of the General Structural Description

The research findings yielded three unique, substantial, yet discrete teaching-learning lived experiences. Within participant Reilly's description of living on the edge in teaching-learning, there was a discordant communication with Reilly in terms of their career path. As the experience unfolded, clarity and awareness of choices became more precise in hindsight. Within this teaching-learning description are the concepts of reflecting on a new view (imaging), confirming cherished value priorities (valuing), and recognizing future career goals (languaging); the paradoxes of revealing-concealing, enabling-limiting, and connecting-separating were apparent rhythms within this lived experience for Reilly. Reilly pushed forward (powering) in the face of certainty-uncertainty (originating) eventually to finding new ways of helping others (transforming).

In Taylor's written description, the living on the edge in the experience of teaching-learning focused on structuring meaning in imaging, valuing, and languaging of acquiring knowledge, skills, and abilities on this journey of lifelong learning. The goals were clearly identified within the teaching-learning process. Taylor expressed unsureness and discomfort at various points in the process of coming to know, demonstrating the rhythmical patterns of revealing-concealing, enabling-limiting, and connecting-separating in creating a preferred preference and balance to achieve learning goals. In cotranscending with possibles, Taylor recognized that real-life situations encountered are messier and more intricate than our conscious presence to them. Taylor identified the need to make an intentional effort (powering) to go into those difficult and unknown spaces (originating) in order to continue learning and advancing practice (transforming).

Quinn's description was on being with and bearing witness to a client experiencing possible complications during a meaningful in-person simulation which was immersive (imaging, valuing, and languaging) and engaging (powering) in the structuring of meaning to support learning. Quinn shared that the experience was so natural and authentic that they felt immersed (living rhythmical patterns revealing-concealing, enabling-limiting, and connecting-separating) of in a real clinical environment (originating) in coming to know (transforming) something of value (valuing).

According to Giorgi et al. (2017), while "there are no 'perfect descriptions': there are good ones, adequate ones and inadequate ones. The good ones allow for a rich analysis of the experience, and the adequate ones will allow a structure to be developed" (p. 183). The general structural description of living on the edge in teaching-learning for

the nursing student participants of this study was contained six essential themes or essences.

Living on the edge in teaching-learning is

1) acquiescing to ambiguity in the paradoxical rhythms of moving moment-to-moment coming to know something of value.
2) dignifying the journey by vigilantly exploring unknowns of the everchanging.
3) risking venturing forth with quieting-disquieting regard amid diverse alliances (ideas, objects, experiences, and others) in anticipation of cherished endeavors.
4) persevering with novel experiences amid potentiating-restricting opportunities in realizing cherished endeavors.
5) venerating words, wisdom, and images of others in considering-composing cherished choosings.
6) discovering anew cherished priorities as possibilities emerge.

These essences will frame the discussion making linkages to participant words (*in italics*) to provide transparency and rigour to the research process.

Reflections on Essences

Acquiescing to Ambiguity

Acquiescing to ambiguity in the paradoxical rhythms of moving moment-to-moment coming to know something of value. Accepting ambiguity has become a necessity today as "yet-to-be-discovered answers to serious questions continue to unfold, as explicitly living with ambiguity becomes more and more commonplace" (Parse, 2021b, p. 5). Each of the participants described aspects of ambiguity in the paradoxical

rhythms of comfort-discomfort, certainty-uncertainty, and confirming-not confirming. In review of literature on imagination, Letcher (2014) identified that "living with ambiguity in teaching-learning is being with the emerging now as what is known shifts with new meanings, understandings, and coming to know – imaging what could be" (p. 289). Reilly experienced disquiet with the explicit-tacit uncertainty in pursuing the cherished goal. There were paradoxical rhythms of explicit-tacit and reflective-prereflective moments unfolding with shaping personal knowing in pursuing cherished endeavors. Through imaging, this explicit-tacit questioning and reflection-prereflection, Reilly was confirming-not confirming the valued career choice. Imaging "is reflective-prereflective coming to know the explicit-tacit all-at-once. Reality is seamlessly constructed with the reflective-prereflective that is shaping personal knowledge explicitly-tacitly" (Parse, 2021c, p. 42). To illustrate this, Reilly wrote,

> *when I attended nursing school (a BN program) I learned a lot about how stressful nursing school could be. I have had several moments in nursing school that were particularly difficult for me, where I ended up questioning whether I had it in me to become a nurse.*

For Taylor living on the edge in teaching-learning meant being well situated with a balance of certainty-uncertainty, imaging the explicit-tacit and reflective-prereflective moments with the fortitude to explore the unknown. Taylor found the research question ambiguous which created uncertainty but chose to venture forward in exploring the unknown. For Taylor, living on the edge meant being in a state of equipoise of sureness-unsureness in speaking-being silent, and moving-being still with the fortitude to venture onward with envisioning the not-yet known. In Taylor's description,

> *I found the question vague but decided I would answer it anyway, maybe that was intended? To me, living on the edge in nursing means I am in the perfect state for growth. It means I am comfortable enough to have confidence and not be completely overwhelmed, but also that I am very close to the unknown.*

Taylor shaped existing knowledge and perceptions enabling-limiting and all-at-once potentiating-restricting in the face of certainty-uncertainty in coming to know something of value.

Quinn's description of living on the edge in a teaching-learning situation began with the identification of the most powerful learning experience which was an in-person simulation of an ambiguous real-world scenario of a client experiencing possible complications. Quinn described being with and bearing witness to a client experiencing possible complications during an in-person simulation was immersive with coming to know something of value. Quinn shared that the rhythms of connecting-separating with the simulated learning experience were so authentic that Quinn was immersed in confirming-not confirming the explicit-tacit and reflective-prereflective meaning of the experience. For Quinn,

> *the most memorable experience I went through in nursing school was the simulation of postpartum bleeding. (before COVID in person). Our instructors made the simulation so natural that I felt like I was in a real clinical environment and not in a lab.*

While Quinn did not explicitly identify comfort-discomfort or certainty-uncertainty in this simulation of a natural clinical setting and coming to know. Mitchell and Pilkington recognized that nurses experience various levels of comfort-discomfort with ambiguity:

"For some people ambiguity is a source of hope, whereas for others it signals dread" (2000, p. 31). Quinn may have regarded ambiguity as an opportunity to develop an understanding and to expand knowledge. While Reilly and Taylor approached ambiguity explicitly with trepidation, while Quinn may have embraced this ambiguous real-life situation as an opportunity for discovery and new learning, suspending the uncertainty and discomfort.

Through the lens of the humanbecoming teaching-learning model, *"*living with ambiguity is moment-to-moment moving with the vague. It is being patient with what is not yet clear in coming-to-know something in the becoming visible-invisible becoming of the emerging now" (Parse, 2021c, pp. 182). Mitchell and Pilkington (2000) acknowledged that "nurses, like other learners, have not been encouraged to embrace and appreciate the openings or opportunities that ambiguity provides for meaningful dialogue" (p. 34). In Yancey's (2018) study, living with ambiguity arose when "exploring the experience of living with changing expectations of new graduates of baccalaureate nursing programs" (p. 226). These new graduates "talked about the discomfort in not knowing, of not being sure, and of trying to find answers and a path to follow" (Yancey, 2018, p. 227).

Quinn's description of the simulation experience did not explicitly reflect the lack of comfort or discomfort experienced by Reilly and Taylor. Yancey (2018) reflected that

> creating space where letting go of what is known, safe and comfortable to accept uncertainty and often arduous challenge of the road ahead provides students with the opportunity to explore, learn, and gain an appreciation for being on a "never-ending journey of coming-to-know" (Parse, 2014b, p. 148). (p. 229)

Yancey (2018) noted that in "creating a teaching-learning space where students are comfortable in acknowledging not knowing is essential in illuminating a path where students can learn to let go of thinking they need to be the all-knowing-expert." (p. 229). All participants acquiesced to the ambiguity of the experience moving with the paradoxical rhythms of moving moment-to-moment in coming to know something of value.

Dignifying the Journey

Dignifying the journey by vigilantly exploring unknowns of the everchanging. In dignifying the journey, it is recognizing the mystery that permeates our lives, we choose internal, relational, and pragmatic "ways of living with conforming-not conforming and certainty-uncertainty as what lies on the path of creating a new way is not known." (Bunkers, 2019, p. 175). The participants each dignified the journey by appreciating mystery in the shaping of their personal knowing and structuring meaning. Each participant described their journey of discovery, exploring their unknowns, and envisioning their path forward.

For Reilly there was an experience of surprise and dismay when an honoured or privileged other disregarded Reilly, with comments that shed a negative light on Reilly as a person, shattering Reilly's hopes and dreams. Reilly described a difficult conversation with a professor:

> *I remember there was a moment in my first year of the nursing program when one of my professors said something that was very unkind towards me and absolutely astonished me that somebody that was a nurse and a teacher could say that to*

somebody. She told me outright to my face that "it would be best off if you left the program willingly. You don't have what it takes to become a nurse.

In a hermeneutic study of hope, Parse (2007a) defined hope-no hope as "living on the edge of the day-to-day with moments of acquiescence, while contemplating what might be, as shown in concern for others, acknowledged in surprise, and glimpsed in calm-turbulent moments" (p. 152). Through the concept inventing process, Doe (2020) found "hope is envisioning possible amid burdening challenges arising with the communion aloneness of seeing the familiar in a new light" (p. 144). In the description of a dialogue with another professor later in the program, Reilly described persisting the cherished goal, reflecting on personal values while structuring meaning and imaging new possibilities. McCormick (2002) recognized that "dignifying the process and in joining forces with [others]…that have come this way. We will not be alone. The words and images of others who have come this way can guide us" (p. 72). Reilly shared,

we ended up having a heart-to-heart on how nursing school was really destroying my mental health and that I should consider whether I wanted to persist in nursing school. I ultimately decided to persist and stayed in nursing school for so much longer than I should have." (spoiler alert--- I didn't have it in me, but I did manage to find my path in life which is different from what I imagined on my first day of nursing school.)

This dishonoring of Reilly's human worth remained as a lingering presence. Feeling disconsolate (by school and personal challenges) resulted in Reilly's considering suicide which demonstrated being-nonbeing. Mitchell and Bunkers (2003) identified in their reflections on the abyss that, "in being present, in risking engaging with the explicit-tacit

truth of a situation, one discovers truth" (p. 123). Mitchell and Bunkers recognized that, "engaging the abyss is really about risking and choosing. The risking may relate to a threat to one's very life, or to one's cherished beliefs, or to one's knowledge of self" (2003, p. 123). For Reilly, cherished interpretations and aspirations faded away to make way for the new, it was in the abyss where these new ideas, solutions appeared. "The abyss is a look at oneself and the discovery of some truth that also resides there" (Mitchell & Bunkers, 2003, p. 124). In these two very significant yet different conversations with faculty members, Reilly was able to explore the unknowns and imagine new possibilities. "Appreciating mystery is apprehending with awe the unfathomable. Individuals are mysteries, and with all revealing there is all-at-once concealing. In teaching-learning, wonder and awe arise with discovery and with knowing that nothing can be fully understood" (Parse, 2021c, p. 182).

Taylor's description highlighted the shaping of existing knowledge and perceptions while appreciating the mystery of not knowing all that could be known. Taylor experienced knowing-not knowing when configuring new meanings in the light of certainty-uncertainty of confirming-not confirming when envisioning possibilities. Living on the edge was imaging the explicit-tacit knowing that emerged in the first-time performance of a skill. Taylor experienced enabling-limiting of the opportunities-restrictions as practiced on a peer. Taylor drew on previous experience when engaged in this new experience which was affirming and transforming. In Taylor's words,

> *by living on the edge as a nursing student I am able to constantly acquire new information, while also be grounded enough not to fall off and become over-stressed or too uncertain to make decisions. An example of living on the edge*

> *would be my first time performing an injection on a patient. I had practiced it in the lab and given one to one of my peers, but never to a patient before. This previous experience allowed me to stay grounded and be a functional and competent nurse.*

For Taylor living on the edge was performing a new skill for the first time. Taylor practiced in the skills lab acquiring foundational knowledge with instruction and was able to give an injection to a peer. This knowledge and practice experience prepared Taylor to be safe and capable of completing this new skill.

> Creatively imagining a new situation moves individuals to become explicitly-tacitly aware of the whole structure related to living conformity-nonconformity. With certainty-uncertainty, considering the whole structure moves individuals to make clear choices while anticipating consequences with the mystery embedded with the ambiguity of not yet explicitly knowing the actual consequences. (Parse, 2021c, p. 55)

Taylor described living on the edge when was required to give an injection to a patient in hospital, which was a novel experience of doing something new yet familiar in an unfamiliar environment resulting in feelings of certainty-uncertainty reflected the paradox of potentiating-restricting. Taylor was prepared yet experienced ambiguity in the new unexplored experience of providing the injection as needed which reflected the paradoxes of pushing-resisting and affirming-not affirming.

For Quinn the simulation so authentic and true to life that it felt like they were in a veritable spontaneous and unconstrained clinical environment. In reflecting on humanuniverse, “No one or no thing is completely knowable; there is always the

unfathomable with the indivisible, unpredictable, everchanging humanuniverse" (Parse, 2007b, p. 309). Quinn described being with and bearing witness to a client experiencing possible complications through in-person simulation was immersive with coming to know something of value. "Individuals are mysteries, and with all revealing there is all-at-once concealing. In teaching-learning, wonder and awe arise with discovery and with the knowing that nothing can be fully understood" (Parse, 2021c, pp. 182). Quinn shared that the rhythms of connecting-separating with the simulated learning experience were so authentic that Quinn was immersed in confirming-not confirming the explicit-tacit and reflective-prereflective meaning of the experience. In Quinn's words,

> *the most memorable experience I went through in nursing school was the simulation of postpartum bleeding. (before COVID in person). Our instructors made the simulation so natural that I felt like I was in a real clinical environment and not in a lab.*

In Quinn's description there was no explicit acknowledgement of certainty-uncertainty which may indicate embracing ambiguity with a sense of safety in the learning environment. Quinn did not express discomfort or uncertainty with the instructors through this realistic simulation of caring for a client experiencing possible complications.

Parse (2021c) defined semantic cohering as "living with ambiguity in rationaling-intuiting amid clarifying-obscuring in appreciating mystery" (p. 181). Each participant described their experience in accepting ambiguity in coming to know something that informed their understanding and dignified the teaching-learning journey by vigilantly

exploring unknowns, in the “utterable and unutterable in glimpsing illuminating moments” (Parse, 2004a, p. 35).

Risking Venturing Forth

Risking venturing forth with quieting-disquieting regard amid diverse alliances (ideas, objects, experiences, and others) in anticipation of cherished endeavors. Reilly expressed surprise and dismay when an honoured other’s comments disrespected Reilly as a person, and shattered Reilly’s hopes and dreams. Reilly chose to risk living chosen value priorities, pushing-resisting of affirming-not affirming their intentions in light of being-nonbeing. In Bunkers (2009) phenomenological-hermeneutic exploration of the living experience, “taking a risk is venturing forth amid potential peril, as apprehension with elation surfaces in novel engagements” (p. 240). In Reilly’s words,

> *I remember there was a moment in my first year of the nursing program when one of my professors said something that was very unkind towards me and absolutely astonished me that somebody that was a nurse and a teacher could say that to somebody. She told me outright to my face that "it would be best off if you left the program willingly. You don't have what it takes to become a nurse." It also fuelled me into trying my best to make it in the program in order to spite that professor.*

In reflecting on similar student stories, Yancey (2021) noted,

> while a student’s sense of guilt might be motivational for improving performance, as it focused on a specific behavior or action, attacking the person of the student through shaming, intentional or not, might cloud the student’s vision for what might be and for the possibilities of success yet to unfold. (p. 126)

When feelings of anguish arose with the overwhelming adversity of academic and private challenges, Reilly contemplated being-nonbeing. As Reilly shared,

> *the stress got to me (from nursing school and personal life difficulties) and it ultimately led up to me being hospitalized overnight because I was brought to the hospital after class (on a skills lab day) by a friend of mine from outside the nursing program because I ended up nearly attempting to end my life. I was hospitalized overnight but ultimately discharged because they couldn't admit me to the psychiatric unit because it was at capacity. I had a lab the day I was discharged from the hospital and went to the second day of skills lab that week directly after discharge (literally walked from the hospital to the nursing faculty building). My skills lab professor was so concerned. She told me that I looked very unwell physically and mentally, and she took me to her office to talk in private.*

This experience of surprise with disillusionment was more than just the unexpectedness of the negative message but the disheartening prediction of unfulfilled hopes and dreams resulting in despair. In the study on feeling surprised, Bunkers (2017) concluded that "feeling surprised is startling disbelief of the unexpected arising with delight dismay" (p. 50). For Reilly in the abyss, there were several powering paradoxical moments of affirming-not affirming career choice and experiencing being-nonbeing, in the risking of not achieving the cherished goal of being a nurse. Reilly's attending-distancing with others (professors and peers) surfaced when Reilly was being with and yet apart at all at once. In response to the professor's critique, "you don't have what it takes to become a nurse," Reilly was "dis-engaging from the abyss, choosing to turn away because of the

imagined unknown leaves a questioning that lingers and can even become a persisting pattern in one's life" (Mitchell & Bunkers, 2003, p. 123). Reilly described persisting much longer in the nursing program than was prudent. Mitchell and Bunkers (2003) recognized that "turning away from the abyss may bring reprieve from the risk that is there, but only for a brief time" (p. 123). Reilly chose to persevere into the third year of the program until the stress of personal and academic challenges became overwhelming.

For Taylor living on the edge was performing a new skill on a patient for the first time. Foundational knowledge and practical experience in the skills lab prepared Taylor to perform this skill. Living on the edge arose with Taylor's novel experience of pushing-resisting in doing something new yet familiar in an unfamiliar environment which resulted in feelings of certainty-uncertainty. Although Taylor was prepared with knowledge yet experienced the familiar-unfamiliar of carrying out the skill. In Taylor's words,

> *the living on the edge part came when I needed to do something new, which was giving an injection to a patient in the hospital. I had never done that before and thus was nervous. Because I had a solid grounding state, and also some new unexplored territory, I was living on the edge and I was in the perfect position to learn and grow my skills. To me living on the edge is a necessary balance.*

Taylor was cautiously cultivating savoring the opportunity to give an injection while letting go of what was not valued in knowing-not knowing. "The teaching-learning journey unfolds in pushing-resisting as the risk of changing surfaces with certainty and uncertainty while not conforming to some traditions and all-at-once conforming to others" (Parse, 2021c, p. 180). Taylor explained further that all nurses have a moral duty

to engage in true presence as another exemplar of living on the edge. In Taylor's words, "*having a difficult conversation with a patient [depicts] Living on the edge is where I feel all nurses have an ethical responsibility to be."* Mitchell and Bunkers (2003) described this as taking a risk in connecting with others in the metaphor the abyss. "*The abyss was defined as "risking being present to the explicit-tacit truth of a situation*. The truth of a situation surfaces in us as we connect and separate with others" (italics in original, Mitchell & Bunkers, 2003, p. 123). Taylor described choosing to engage in difficult discussions is an ethical responsibility, "abiding with the abyss is a special way of bearing witness with *face-to-face discussions* (Parse, 1998) with others concerning what is occurring in the explicit-tacit truth of a situation" (Mitchell & Bunkers, 2003, p. 125).

In Quinn's description, the students and facilitator came together in the simulation setting with the intention of coming to know engaging with moments of vagueness in a "natural" situation of everchanging and moment-to-moment moving with the unpredictable simulation experience of a client experiencing possible complications. Quinn observed that once the simulation activities were completed, they focused on affirming-not affirming their experience(s) conforming-not conforming in transforming their knowledge of theory to practice. In Quinn's words, "*we went through the simulation and reflected on our work afterwards."* With this reflection after accomplishing the simulation activities, they considered their experience which may have involved the paradoxical rhythms of pushing-resisting, affirming-not affirming, being-nonbeing, certainty-uncertainty and familiar-unfamiliar in cocreating possible that surfaced from this collaborative reflecting.

The participants spoke of risking venturing forth with quieting-disquieting regard amid diverse alliances in anticipation of cherished endeavors. Each participant described their unique experience of the paradox of quieting-disquieting regard amid their diverse alliances that demonstrated living pattern preferences of, pushing-resisting, affirming-not affirming, and confirming- not confirming as new possibilities and meanings emerged.

Persevering With Novel Experiences

Persevering with novel experiences amid potentiating-restricting opportunities in realizing cherished endeavors. "Novel engagements arise from imagination and ingenuity. Novel engagements are projects, ideas, and people that challenge and offer adventure. Novel engagements involve the interconnection of unique individuals and events" (Bunkers, 2009, p. 246). "Persevering through a difficult time can be seen as persistently pursuing a course of action despite obstacles" (Allchin-Petardi, 1998, p. 172). In a study to gain an understanding of the lived experience of persevering through a difficult time, Allchin-Petardi (1998) found that "the lived experience of persevering through a difficult time is deliberately persisting with significant engagements while shifting life patterns" (p. 174). In persevering with novel experiences, Reilly was attending-distancing with others (with professor and peers) potentiating-restricting opportunities as a result of the dishonoring of Reilly's [humanbecoming ethos] presence, existence, trust, and worth resulted in a sense of betrayal and shame. Awful feelings emerged with the lack of reverence as Reilly was tormented by peers which caused feelings of devastation and disquietude. Isolating and protective attempts resulted in an overwhelming aloneness (within the cohort). Reilly's skills lab professor demonstrated connecting-separating when invited Reilly to leave the lab and meet privately. Through

communion, this professor's presence enabled Reilly's to be imaging the opportunities-restrictions within the nursing program and shaping of a new career path. In being disrespected by the first professor, Reilly had experienced shame. This "humiliation with dishonoring of human worth" (Parse, 2010a, p. 259) illuminated the revealing-concealing paradox, as Reilly chose not to disclose personal challenges. Reilly experienced shame that arose through dishonoring experiences with others in the struggle for personal and professional identity. Reilly's attending-distancing with others (professors and peers) surfaced when Reilly was being with and yet apart at all at once. Parse described the core knowings of discerning witness as attending, discriminating, and disclosing. "Discerning witness is seeking to know the now-truth with what is shown in the witnessing and what is not shown" (Parse, 2021a, p. 57). In being present and bearing witness to Reilly's struggles, the second professor provided an opportunity for reflection on the explicit-tacit aspects of the academic experience. Parse (2021a) described this balance of reflective knowing and prereflective not knowing as "attending [that] happens with discerning witness with observing and recognizing what is at hand; it unfolds with listening and dialoguing regarding emerging pattern preferences in contextually construed situations that come into view with the emerging now" (p. 57). In reflective-pre-reflective moments, Reilly was able to structure meaning as contemplated a possible path forward. "Discriminating is moving directly onward to uncover the now-truth that may not be evident in the moment. It is careful discernment regarding what is unfolding, which may be immersed in the fog of illusion" (Parse, 2021a, p. 57).

In Reilly's words,

(and there was an aspect to this that the professor didn't know--- at the time in my first year I was being severely bullied and harassed by my cohort which was causing me severe distress to begin with). It left me devastated and ended up throwing me into a severe state of depression that never resolved until after I left nursing school…. Towards the start of my third year of university, I was still in a very depressed state from having the experience that I mentioned where one of my professors told me that I didn't have it in me to become a nurse. I was still being bullied and harassed by my cohort. My skills lab professor was so concerned. She told me that I looked very unwell physically and mentally, and she took me to her office to talk in private. We ended up having a heart-to-heart on how nursing school was really destroying my mental health and that I should consider whether I wanted to persist in nursing school. I ultimately decided to persist and stayed in nursing school for so much longer than I should have.

"Disclosing is telling, yet there is that which cannot be told. In discerning witness there is always the disclosed and at once the not disclosed that is foreshadowed with the inherent revealing-concealing present in all contextually construed situations" (Parse, 2021a, p. 57). Reilly described the rhythms of connecting-separating, revealing-concealing, and enabling-limiting in persevering with goal of helping others and becoming a nurse. For Reilly dishonoring experiences lead to, "feelings of shame [that arose] with a strong desire to escape, revealing-concealing the profound depth of discomfort of being seen in an unfamiliar light" (Parse, 2010a, p. 259). These negative experiences collectively resulted in a sense of despair eroding Reilly's confidence to move forward in persevering with cherished goal. In an integrative literature review of shame, Shaughnessy (2018)

found “three themes emerged: (a) shame propels miring in paralysis, (b) shame captures the illusory seen-unseen, and (c) permeated the struggle for identity” (p. 87). Reilly struggled with persevering towards the career goal, and “experienced being seen as dishonorable by another” (Shaughnessy, 2018, p. 89), with the first professor in the struggle for personal and professional identity.

For Taylor, living on the edge is persevering while maintaining a necessary balance of the paradoxes of familiar-unfamiliar in a situation of knowing-not knowing which gave rise to certainty-uncertainty. Taylor’s description of the possibility of going into the abyss, reflected the paradox of being-nonbeing when Taylor is unable to learn or remember. Taylor freely chose to be seeking new knowledge and experiences to develop a safe, competent professional practice. In living on the edge, there is a sense of being exposed with the possibility of feeling overwhelmed. Kabigting’s (2021) research revealed that “feeling overwhelmed is a phenomenon concerned with living quality since individuals choose to feel overwhelmed or not as they make choices moment-to-moment” (p. 275). Taylor described the unlimited opportunities for learning and that the need for balance in lifelong learning is necessary to advancing professional knowledge and maintaining competence and confidence. Kabigting (2021) discovered that “feeling overwhelmed is arduous burdensome discomfort with perplexing immobilization surfacing with fervently pursuing repose” (p. 283). In attending to the everchanging, Taylor risked going into the abyss, of knowing-not knowing, where there was certainty-uncertainty and the all-at-once revealing-concealing, enabling-limiting and connecting-separating of living quality as a nurse. “Certainty-uncertainty surfaces with humanuniverse as individuals make clear choices with situation, yet all-at-once living

ambiguity" (Parse 2021c, p. 54). Parse further explicated, "experiences originate with the human's moment-to-moment attentive presence with others, ideas, objects, and situations. The attentive presence calls forth risking that is illuminated with the rhythms of revealing-concealing, thus incarnating the human's choosing diverse ways of becoming" (2021c, p. 22-23). In Taylor's words,

> *if I go too far into unknown territory (which is "falling off the cliff") then my brain is in no state to learn and remember anything. If I don't get close enough to the edge than I will not be able to improve as a nurse.*

Parse (2021a) defined fortifying wisdom as

> living the illimitable unbounded coming to know, the remembering-prospecting all-at-once, as contextually construed moments are unfolding with individuals, ideas, objects, and situations. Wisdom is explicit-tacit knowing—innate knowing, acquired knowing, contextual knowing—all incarnated with the all-at onceness that manifest as deep understanding. (p. 54)

This quotation speaks to Taylor's persevering yet moving with caution into the unknown.

Quinn described being attentive to and immersed in the simulation experience. "Attending is being present with the moment to moment as the emerging now sheds light on the whatness as the core of living quality. It is keen watching of unfoldings with enduring devotion" (Parse, 2021a, p. 57). Quinn shared that the rhythms of revealing-concealing, enabling-limiting, and connecting-separating with the simulated learning experience were so authentic that Quinn was immersed in the moment-to-moment reality of the experience. Quinn shared, *"our instructors made the simulation so natural that I felt like I was in a real clinical environment and not in a lab."*

Each participant spoke of engaging in novel experiences and the rhythms of potentiating-restricting that unfolded in persevering with prospects. In all the participants' descriptions, they were living quality in discerning witness and the core knowings of attending, discriminating, and disclosing (Parse, 2021a) through the rhythms of revealing-concealing, enabling-limiting, and connecting separating which either potentiated or restricted the participant in persevering in their teaching-learning journey.

Venerating Words, Wisdom, and Images of Others

Living on the edge is venerating words, wisdom, and images of others in considering-composing of cherished choosings. Revering the unfolding moments of the teaching-learning journey is to be present, and "inviting dialogue is a way of honoring the wisdom of others" (Parse, 2014a, p. 5). Reilly described a valued other's authentic presence which enabled Reilly to disclose-not disclose explicit-tacit knowings and all-at-once uncovering a new pathway in confirming-not confirming what was valued in choosing pattern preferences. Parse (2004a) identified that "potentiating integrity is strengthening a oneness of purpose. The teaching-learning process is fortified where intentions are respected" (p. 35). Reilly wrote,

> *she was so compassionate towards me and that compassion changed me and helped guide me to the path in life that I was meant to be on; the path that I ended up pursuing was working to help other people with their mental health -- I ended up eventually switching majors to another health discipline.*

Reilly's lived experience of venerating words, wisdom, and images of others encompassed the dishonoring-honoring of Reilly and Reilly's value priorities. Parse (2004a) explicated honoring wisdom as "the revering sagacity. The wisdom of all present

on the teaching-learning journey is respected, since all humans have unique inherent wisdom" (p. 35). One might argue that the first professor highlighted limitations to fortify wisdom for Reilly. However, Parse (2013) explicated that fortifying wisdom "dwells with the individual's explicit-tacit knowings, as the individual is moving and at once initiating ways to strengthen personal value priorities" (p. 114). With the second professor's attentive presence and compassion, "wisdom of the learner is honored in the ever-changing, moment-to-moment process of coming to know" (Yancey, 2019b, p. 109). Reilly's lived experience highlighted how wisdom is a dynamic experience with movement. Bunker's (2014), selected review of literature on wisdom identified four themes as viewed through the lens of humanbecoming:

> (a) living wisdom is a cocreated community encounter involving the seen-unseen and the expressible-inexpressible; (b) living wisdom is powering with the pushing-resisting of unfolding value priorities; (c) living wisdom surfaces with explicit-tacit knowings with questioning and wrestling with what is known and unknown; (d) living wisdom is envisioning anew humanuniverse flourishing. (p. 10)

These themes unfolded in Reilly's experience of coming to know with the "heart-to-heart" with the second professor.

Taylor committed to the vision of the illimitability of nursing knowledge and everchanging demands for ongoing education to ensure safe, competent professional practice. "Fortifying wisdom is strengthened with the intuitive insights arising with sureness-unsureness of intensely propelling with the unexplainable winds of ambiguity of

living quality" (Parse, 2021a, p. 58). Taylor recognized there are unlimited learning opportunities which are necessary to maintaining professional competence.

> *In nursing, you need to constantly improve just to stay in the same place. The science and best practices are constantly changing, there are always new opportunities to improve your ability to care. If you are not moving forward (and you move forward /improve by living on the edge) then you are essentially moving backwards. As a nurse, if I am not constantly trying to improve my care, then I am reducing my competencies as a nurse. Other examples of living on the edge: Keeping up with the latest research of evidenced-based practice and applying it to my care.*

For Taylor, this learning involved remaining current with the ever-increasing amount of evidence-based-practice and, translating and integrating new knowledge and understanding into caring. Yancey (2019b) identified,

> wisdom is an awareness that the world is to be explored with a humble recognition that knowledge is not absolute and there are always new knowings waiting to be discovered, no matter how much formal education on may have or how many advanced degrees, honors, or titles. (p. 109)

Taylor described their commitment to the vision of illimitability of nursing knowledge and the everchanging demands and the need for lifelong learning. In living quality, Parse (2021a) identified the core knowing "discerning witness surfaces with attending to seeing the unforeseen and carefully discriminating to expose the hidden in the becoming visible-invisible becoming of the emerging now" (p. 58), supporting the postulates of

illimitability and mystery in “the indivisible, unpredictable and everchanging cocreation” (p. 56).

Quinn described the in-person simulation as an efficacious learning approach that potentiated the students’ ability to move beyond in their knowledge, skills, and abilities and to commit to ways of becoming. Quinn reflected that simulation enabled their ability to move beyond in their knowledge, skills, and abilities, cotranscending ways of becoming. In Quinn’s words, *“I believe simulation is an effective tool in nursing that enables students to learn and remember things faster.”* A lingering presence arose in the remembering-prospecting of enduring of truths that were uncovered in the simulation, transforming what was learned in a new light when being recalled when needed (Parse, 2021b). Quinn recognized strengthening of wisdom and the ability to readily draw on this knowledge in future situations.

All three participants described venerating words, wisdom, images of others in considering-composing their cherished choosings. Each participant was attentive and responsive to the everchanging, listening intently as their journeys unfolded. The paradoxes of explicit-tacit knowings, connecting separating in confirming-not confirming occurred with honoring-dishonoring in attending distancing on their unique learning journeys.

Discovering Anew Cherished Priorities

Discovering anew cherished priorities as possibilities emerge. “Discovering is noticing what is in the depth of stillness in the immersion of penetrating silence. The noticing is personal discerning, the foreshadowed with the inherent affirming-not affirming of being- non-being in profoundly searching for different ways of becoming”

(Parse, 2021a, p. 58). Reilly was able to cotranscend the possibles, living quality with the becoming visible-invisible becoming of the emerging now, as meaning changed with this lived experience. For Reilly there was a lingering presence of the dialectical processes that exist in nursing academia which led to a "discovery of what is there-with inventing-impending possible in becoming visible-invisible becoming of the emerging now" (Parse, 2021a, p. 58). Reilly overcame adversity and experienced a sense of wellbeing while transforming and imagining a new view of self, relationships, and projects, confirming cherished value priorities. Ortiz's hermeneutic study of the meaning of lingering presence found, "a lingering presence surfaces in the cherished remembered which changes moment to moment as new experiences arise in the now and shed light on the was and will be. It is a confirming- not confirming of what was important" (Ortiz, 2003, p. 152). For Reilly, the lingering presence of living on the edge was persevering with cherished endeavors amid the paradoxical tensions that existed in nursing academia, discovering anew the cherished priority of helping others in different ways as possibilities emerged. Parse (2007b) explicated paradox as "an intricate rhythm expressed as a pattern preference. Paradoxes are not opposites to be reconciled or dilemmas to be overcome but, rather, are living rhythms" (p. 309). In Reilly's words

> *and am so much happier and healthier and my own self views shifted from feeling worthless to seeing myself as a hardy, resilient person. That same professor is someone who I view as a mentor and someone who I became very close with, and we ended up working on other projects together outside of nursing school. She helped me find my place in life and I am so thankful for that. For me, when I hear "living on the edge" in nursing school, I think of how a lot of the issues and*

experiences are very black and white and I think a lot of the dialectics that exist in nursing school.

In freely choosing pattern preferences, Reilly discovered cherished priorities as new possibilities and projects emerged with the transition to another health discipline. For Reilly, living on the edge in nursing teaching-learning encompasses several paradoxical experiences that resulted in shifting priorities as new possibilities emerged.

For Taylor living on the edge was venturing forth pursuing daunting endeavors, while discovering anew cherished priorities as new learning opportunities emerge. For Taylor, living on the edge does not mean being unsafe or irresponsible. In choosing to be available and open to challenging and uncertain situations, Taylor discovered anew, mastering and learning without crucial ramifications for themselves or others. Taylor believed nurses have an ethical responsibility to engage in difficult conversations with patients which involves living on the edge. It does not mean being risky, unsafe, careless, or negligent, but rather reflecting the paradox of attending-distancing in being present and supportive. In Taylor's words,

it doesn't mean being dangerous or reckless. Rather, it means the constant intentional effort to place myself in a difficult and unknown situation that I believe I will be able to conquer and learn from without serious consequences for myself or others.

In choosing to be available and open to challenging and uncertain situations, Taylor is discovering anew cherished priorities as possibilities emerge.

Quinn considered the simulation to be an effective learning approach to advance knowledge, skills, and abilities, cotranscending ways of becoming. "Becoming visible-

invisible becoming of the emerging now is the living moment that brings to the fore the idea that meaning changes with each unfolding living experience, incarnating remembering-prospecting all-at-once" (Parse, 2021a, p. 54). A lingering presence arose in the remembering-prospecting of enduring of truths that were uncovered in the simulation, transforming what was learned in a new light. In Quinn's words

> *I believe simulation is an effective tool in nursing that enables students to learn and remember things faster.*

Parse (2021a) explicated "fortifying wisdom is living the illimitable unbounded coming to know, the remembering-prospecting all-at-once, as contextually construed moments are unfolding with individuals, ideas, objects, and situations" (p. 54). Quinn discovered anew cherished priorities of strengthening wisdom and as new possibilities emerge, would be able to draw on this knowledge more readily.

The relevant literature consistent with the humanbecoming paradigm and teaching-learning model was selected and woven through this discussion of essences with linkages to the participants' words. A review of relevant general natural science literature and research will be presented with linkages to the research findings based on participant experiences will be presented.

Findings Dialogue With the Related Literature

The COVID-19 pandemic has heightened awareness of some of the challenges experienced by nursing students and amplified the uncertainty and ambiguity experienced daily. Additional challenges with the transition to alternate delivery methods; theory and skills being taught online; and a shift from clinical experiences to in-person and virtual simulations have significantly impacted the teaching-learning processes. There has been

significant new research focussing on various aspects of these challenges. The six essences of the lived experience of living on the edge in teaching-learning will frame this dialogue with the literature to further inform the research findings. Each essence is presented through a summary of participant experiences followed by the relevant natural science literature as it related to findings.

Acquiescing to Ambiguity

Acquiescing to ambiguity in the paradoxical rhythms of moving moment-to-moment coming to know something of value. In acquiescing to ambiguity, the paradoxical rhythms of moving moment-to-moment coming to know something of value were a significant finding from all participant descriptions. In a recent interview, Habermas (as cited in Schwering, 2020) described our current environment of living with COVID-19 as one never experienced before, "there has never been so much awareness of our ignorance and of the necessity to have to act and to live under conditions of uncertainty" of not-knowing what we need to know (p. 2). Participants described their discomfort with ambiguity in terms of certainty-uncertainty sureness-unsureness and knowing-not knowing. This finding is supported in a synthesis of qualitative research on students' perceptions of learning psychomotor skills, by Aldridge (2017) who found, "anxiety, uncertainty, and fear were emotions commonly expressed by many students" (p. 24). Taylor articulated the need to have confidence so as not to be overwhelmed. Mezirow (2012) identified that coping with ambiguity is central to transformative learning, "identifying the common in the contradictory, tolerating the anxiety implicit in paradox, searching for synthesis, and reframing" (p. 80). For Quinn, engaging in a simulation was so natural it was like a real clinical environment, Quinn did not explicitly

identify any discomfort, or uncertainty in this authentic learning experience and debriefing. Eschenbacher and Fleming (2020) recognised that when conversations and reflections with learners about assumptions and perspectives were acknowledged this provided a

> framework where they gain an increased ability to cope with ambiguity, uncertainty and contingency as their clusters become more inclusive, discriminating and open to further change. Transforming core meaning structures allows learners to make sense of new experiences that are challenging. (p. 661)

Accepting omnipresent ambiguity is a challenge in everyday life in addition to teaching-learning.

Dignifying the Journey

In dignifying the journey by vigilantly attending to the unknowns of the everchanging, each participant described their journey of discovery that shaped their personal knowing and structuring meaning. “Meanings are the remembering-prospecting valued images language in the becoming visible-invisible becoming of the emerging now with or without words, with or without movement” (Parse, 2014b, p. 33). Thus, a meaning perspective is needed in order to make meaningful interpretations of a situation, reflecting on past knowledge, experiences and future expectations to make sense of the current situation. Mälkki and Green (2018) further explicated that meaning perspective “provides us with tools that we need to make sense of our experience and form coherent understanding of what happens within us as well as our interactions with our situation. Thus, it is an embodiment of practical wisdom” (p. 28). For Reilly this journey included challenges with incivility, shaming, and bullying while pursuing nursing education. In

their study, Ackerman-Barger et al. (2021) explored incivility in academic settings including classroom, clinical, and simulation settings. “Many participants spoke specifically about feeling powerless and described the role of a hierarchy, whether it was faculty to student or tenured faculty to nontenured faculty, which impeded their ability to address incivility” (Ackerman-Barger et al., 2021, p. 236). Mälkki and Green (2018) found that in exploring this comfort – discomfort,

> the elements of both Damasio’s and Mezirow’s theory together, …gave rise to the new concepts of edge-emotions and comfort zone (Mälkki, 2010; 2011). Namely comfort zone, as we define it based on the first author’s research, refers to the experience of comfort when nothing questions our meaning perspectives. It provides us with a sense of ontological security; “I’m OK and my world is safe.” That is, when we are able to make meaning to our experiences within the light of our previous understanding. Thus, the comfort zone may be seen as the experiential dimension of the meaning perspectives. In contrast, the edge-emotions refer to those unpleasant feelings, e.g.[*sic*] anxiety, depression, and shame, that we feel when our meaning perspectives become questioned and our dearly held assumptions and premises become challenged. (pp. 29-30)

Reilly described how incivility and bullying impacted their mental health. In a study of promoting a culture of civility within nursing, Ackerman-Barger et al. (2021) “shed light on a feeling of powerlessness that many participants discussed in their responses. When asked what could be done or how incivility could be prevented, some simply responded, ‘nothing’” (p. 237). The above authors’ participants identified, “a sense of powerlessness because they were aware of real consequences of criticizing or complaining about

someone who had the ability to impede their progression in school" (Ackerman-Barger et al., 2021, p. 237). Courtney-Pratt et al.'s (2018) study on bullying found that nursing students experienced multiple examples of bullying which caused "many of the participants to feel anxious and distressed, it undermined their confidence and perception of competence, and it often led them to question their career choice" (p. e903). As with this study, Reilly eventually chose a different career path, and Ackerman-Barger et al. (2021) also found "at least a few respondents in this study reported they would not continue their careers in nursing education because of the prevailing incivility they experienced" (p. 237), compounding challenges with the current global shortage of nurses. When the second professor demonstrated attentive presence in a private heart-to-heart with Reilly, Ackerman-Barger et al 's (2021) research findings support and confirm the importance of this dialogue with "80 participants who spoke specifically about the importance of open communication" (p. 237).

Taylor described practicing skills on a peer and drawing on this previous experience when preparing to carry out skill on a patient. In Aldridge's (2017) synthesis of qualitative research on student perceptions of skill acquisition found "the idea that learning is incomplete until students have actually performed the skill with a real patient. Students reported using peers for practice" (p. 24). Aldridge (2017) found that, "students were also anxious about actually performing their skills on real patients and stated that they did not want to hurt the patient or cause complications" (p. 25).

As nurse educators,

> we can invite learners to enter into a conversation with their emotions, to work *with* them instead of avoiding them. The current crisis, [COVID-19] … creates a

> learning opportunity to engage in the kinds of conversations that are supportive to coping with these challenges either in an individual way or as a society. Since these different ways of coping belong to different spheres (the private and the public, respectively), there is a need to address both spheres in ways that are adequate for each. (Eschenbacher & Fleming 2020, p. 668)

Aldridge (2017) found that peers were a valued support when students were learning psychomotor skills: "the person teaching and supporting them during skills learning made a difference in the learning experience… The environment that the faculty created—a safe place where making mistakes was permitted—promoted learning" (p. 24).

Like Taylor's description, students reported "that drawing on previous experiences with either performing skills or with having skills done to them in order to decrease anxiety" (Aldridge, 2017, p. 25). Quinn described appreciating the authenticity of the simulation experience as a memorable learning experience, embracing ambiguity of the unfolding scenario with a sense of safety in the learning environment. All participants described acquiescing to ambiguity in coming to know something of value.

Risking Venturing Forth

All participants described venturing forth with quieting-disquieting regard amid diverse alliances (ideas, objects, experiences, and others) in anticipation of cherished endeavors. Participants experienced paradoxical rhythms while living pattern preferences in their teaching-learning journey. Reilly described the experience of surprise and dismay when a professor's comments disrespected Reilly as a person and their cherished career choice resulting in feelings of anguish and overwhelming adversity. Mälkki and Green, (2018) identified that when exploring emotions as alarm systems, found,

> the edge-emotions, that arise at the edges of our comfort zones when our meaning perspectives become questioned, orient us to avoid the threat to our meaning perspectives (Mälkki, 2010). These reactions, in this case of reflection, refer to avoiding dealing with the questioned assumptions, or aiming to reframe in a way that the problem can be explained away. (p. 30)

In the heart-to-heart meeting with the second professor, Reilly described the previous professor's comments that were perceived as dishonoring and disrespectful. In working with edge-emotions, Mälkki (2019) found that

> what makes reflection challenging to actualize is that it requires us to work with our survival instinct: our embodied reactions push us to protect our comfort zones, thus bringing us the urge to act – against the intent to reflect. Instead, to proceed to reflection would require us to mindfully be with the urge, rather than act according to it.…Rather it is about being there to mindfully recognize that we have such urge, such an unpleasant emotion. In this way we may move beyond the emotional reaction and thus gain access to perceiving what assumptions were questioned in the first place, to give rise to such reactions. (as cited in Mälkki & Green, 2018, p. 30)

Taylor also described experiencing certainty-uncertainty when completing a new skill in an unfamiliar environment. These edge-emotions offer "access to knowledge that we could not perceive from our existing meaning perspectives" (Mälkki, 2019, p. 69). Taylor intentionally explored the new territory, maintaining a balance in emotions and knowledge to be able to develop the necessary skill. In the development of edge-emotion theory, Mälkki (2011, as cited in Eschenbacher & Fleming, 2020) explained that while

> comfort zone refers to the pleasant experience of being able to make meaning unproblematically within the meaning perspective and maintain the intactness of it; *edge-emotions* refers to the unpleasant feelings that emerge when we are unable to understand or when our meaning perspective becomes questioned. In other words, in these situations we are out of our comfort zone or at the edges of it. (p. 662)

Quinn did not describe any unpleasant feelings in moving through the simulation and reflecting on the experience suggesting that the experience of learning was within Quinn's comfort zone.

Each participant expressed their unique perspective in their engagement with others. In a phenomenological-hermeneutic study, Deering and Williams (2019) demonstrated that faculty interactions in terms of collaborative relationships, making space for learning and modelling with nursing students enhanced their capabilities in obtaining support and moving toward their learning goals. Students and faculty highlighted "the importance of respect to build collaborative relationships, for example impacting on the approachability of lecturers; this was even when interactions were momentary owing to time-constraints" (Deering & Williams, 2019, p. 155). When participants described a safe space, it was a space that "symbolised as time to think, challenging preconceptions, and sharing or relinquishing difficulties that hindered abilities to learn, while assisting students to be independent learners" (Deering & Williams, 2019, p. 156). Finally, faculty living principles of the therapeutic relationships made visible student support which facilitated learning. This intersubjective learning occurred when the teacher-learner communicate to support or understand each other. All

participants described risking venturing forth while engaging with others and experienced paradoxical rhythms of quieting-disquieting regard while pursuing cherished endeavors.

Persevering With Novel Experiences

Persevering with novel experiences amid potentiating-restricting opportunities in realizing cherished endeavors. All participants uniquely described persevering with novel experiences amid potentiating-restricting opportunities in realizing cherished endeavors. Reilly described both restricting and potentiating situations while persevering in the nursing program. Reilly described experiences of dishonoring and bullying that negatively impacted the persistent struggle for personal and professional identity, and persevering on a possible path forward. In this description, Reilly demonstrated grit, resilience, and perseverance. Meyer et al. (2020) explored the relationship between resilience and grit among nursing students, and found they were similar but different constructs. Duckworth (2016, as cited in Meyer et al., 2020) "describes grit as the power of passion and perseverance. While the perseverance aspect of grit may be analogous to resilience, it is the passion aspect that is synonymous with consistent interest" (p. 4). "Resilience embodies the personal qualities that enable one to thrive in the face of adversity" (Connor & Davidson, 2003, p. 76). Reilly's resilience and perseverance were demonstrated in the continued focus on personal goals even when it became difficult, and finally knowing when to let go and transition into another health discipline. Meyer et al. (2020) determined that "those who choose to leave their situations are indeed 'bouncing'—to land in what they perceive to be a more positive environment or condition. They are resilient but they are not retained" (p. 4) within nursing. Meyer et al. (2020) concluded that attention to the development of grit and resilience may improve

retention in nursing, and it is important to develop cultures in which nursing students can thrive. “Culture, according to Duckworth, has the power to shape our identity —how we see ourselves, what we expect of ourselves and what we are willing to do (or not do) because of who we are” (Meyer et al., 2020, p. 4).

Taylor described persevering while finding the necessary balance of knowing-not knowing, certainty-uncertainty in the familiar-unfamiliar without being overwhelmed to continuously seek new knowledge and develop a safe competent practice. Eschenbacher and Fleming (2020) identified that within the current environment with COVID-19 “Mezirow’s (1991) TL [transformative learning] theory, Kegan and Lahey’s (2009) developmental approach and Habermas’ (1975) notion of learning democracy intersect: They all see a need to help adults learn to live with ambiguity, contingency” (Eschenbacher & Fleming, 2020, p. 665) and in this time of heightened awareness of uncertainty and all the unknowns.

> Engaging in a critically reflective (Mezirow 1991) conversation about assumptions opens the possibility of transforming them, so that learners’ assumptive clusters provide a framework where they gain an increased ability to cope with ambiguity, uncertainty and contingency as their clusters become more inclusive, discriminating and open to further change. Transforming core meaning structures allows learners to make sense of new experiences that are challenging. (Eschenbacher & Fleming, 2020, p. 661)

Nursing students face multiple challenges and stressors within their nursing programs, Keener et al. (2021) summarized these “sources of their stress included studying and test-taking anxiety, managing heavy didactic and clinical workloads, balancing competing life

demands, feeling unprepared for practice, and fearing mistakes" (p. 143). Keener et al.'s study examined the relationship between quality of life, resilience, and other factors related to the COVID-19 pandemic such as the transition to online learning, virtual simulations, and virtual clinical excursions which each created additional stressors. In this study 152 students participated in the survey and 76 provided additional comments. "Overall, resilience, having online experience, and being well prepared for online learning were associated with each QoL domain" (Keener et al., 2021, p. 146). Results indicated that "38% of this sample had poor resilience scores" (Keener et al., 2021, p. 146) identifying a need for educators to consider activities to improve resilience and success in teaching-learning as well as into future practice.

It is important to note that Quinn described their most memorable teaching-learning experience was a simulation on postpartum bleeding (before COVID in-person) and this effective experience was so natural that it felt like a real clinical environment. Pre-COVID there was a move to in-person and subsequently virtual simulations when students could not attend clinicals often due to COVID-19 or clinical availability (Beltz et al., 2020) which substantially changed the learning experience. In a phenomenological study focused on learning psychomotor skills during a pandemic, when learning moved to online, Aldridge and McQuagge (2020) identified in

> the first theme, 'Finding My Own Way' participants described that since learning conditions had changed, their study methods also had to change. They recognized that they had to advocate for their own learning needs and reach out for help when needed, which is consistent with the characteristics of successful adult learners….

> [and] that nursing students tend to advocate for themselves when needed and generally tend to persevere. (p. 350)

Quinn explicitly chose a pre-COVID teaching-learning experience, which may implicitly reflect similar learning experiences to the undergraduate students in this study. All participants described persevering with novel experiences amid potentiating-restricting opportunities on their teaching learning journeys.

Venerating Words, Wisdom, and Images of Others

All participants individually described venerating words, wisdom, and images of others in considering-composing cherished choosings. Reilly described the dishonoring of self, career path, and personal wisdom. Subsequently, Reilly's description highlighted connecting with a respected other and the importance of connection, cocreated wisdom, and support in the teaching-learning journey. "We need to foster new kinds of dialogue suitable for supporting learners in transforming their individually experienced crises into learning opportunities – limit situations" (Freire 1972, as cited in Eschenbacher & Fleming, 2020, pp. 667-668). In a scoping review of transformative learning literature, Van Schalkwyk et al. (2019) found,

> several authors refer to the social dimensions of TL [transformative learning]. Transformative learning is not just the process of introspection through critical reflection that leads to new ways of thinking, or illumination, but it also emphasises high-level communication skills, including 'empathic listening', rational discourse, reflective discourse and an awareness of the assumptions of others. (p. 551)

In Taylor's description there were intuitive insights into the illimitability of nursing knowledge and the need to develop strategies to remain current in knowledge and maintain competence in practice. "Students' increased reflectiveness encourages a process of self-actualisation, which is seen to build self-confidence and the resulting competence and empowerment" (Van Schalkwyk et al., 2019, p. 551).

Quinn described the value of the in-person simulation experience and interactions that was followed by a debriefing activity on the learning experience with peers. "Transformative learning is described as learning that changes the way we see the world through an experience or event that encourages reflection, typically challenging preconceived understandings, which enables positive future action and meaningful relationships" (Van Schalkwyk et al., 2019, p. 552). Bernard (2019) found that "participants stressed that teachers need to help the students understand the reasons for deep learning… helping the students discover how transformation occurs. Trust and student preparation prior to class were important concepts within this theme" (p. 227). "Transformation occurs as the learners explore both the cognitive and affective skills needed to determine priority assessments and interventions to quickly solve the identified patient problem" (Bernard, 2019, p. 219). Professional development strategies were not clearly explicated within the lifelong learning descriptions. "The experience of an existential crisis – like COVID-19 – reveals the absence of a debate about the idea of personal development and an ability to cope with crises apart from the notion of 'employability' within the lifelong learning discourse" (Eschenbacher & Fleming, 2020, p. 667).

Each of the participants described honoring words, wisdom, and images of others in considering-composing their cherished choosings in terms of career choices, lifelong learning, and learning through a simulation experience. “Meaning is continuously changing as the individual changes, incarnating diverse pattern preferences, as different images give rise to possibilities for appropriating new values with original languaging” (Parse, 2021c, p. 47). This connected knowing of the unique inherent wisdom of the learner in a relationship of trust and reverence for changing perspectives eases the shifting of meaning with each new experience is living quality on the teaching-learning journey.

Discovering Anew Cherished Priorities

In discovering anew cherished priorities as possibilities emerge, Reilly described adversity in the teaching-learning process, and the discovery of a new approach to “helping others” as an alternate career choice. Reilly described a sense of purpose and wellbeing in continuing to work on new projects with the professor. “The occurrence of transformative learning may be dramatic and epochal, or it can be systematic and developmental – over time with small or incremental changes and demonstrated by shifts in the thought process” (Wang et al., 2021, p. 327). Taylor described being open and available to challenging and uncertain situations discovering new learning opportunities as they presented and being mindful to remain intentional and safe in these opportunities as they unfolded. Van Schalkwyk et al. (2019) concurred that many active learning experiences take place in patient care settings, “this increases the opportunity for exposure to learning experiences that are potentially transformative, allowing for a pedagogy of uncertainty that acknowledges the complexity of the world we live in and

questions what we believe we know about it" (p. 547). Quinn described the effectiveness of in-person simulation and subsequent discussion as an effective learning tool that enhanced the ability to recall the information more readily when needed. "Through debriefing, students can clarify actions and discuss areas of needed improvement, and faculty can encourage students to communicate misunderstandings and provide feedback that will improve their communication skills" (Kaulbach, 2020, p. 349). Mälkki reinforced the importance of open communication in that "educators need to create some kind of safe (enough) space where learners can work their (individual) ways through experiencing existential crises accompanied by *edge-emotions*" (Mälkki 2011, 2019, as cited in Eschenbacher & Fleming, 2020, p. 667).

The discovery of new priorities as possibilities emerged in different ways, as the participants in this study described varying degrees of independence which may have been situational or task-specific highlighting the importance of self-direction. "Self-directed learning has been identified as an approach to learning as well as a core professional concept for nursing and other healthcare professions" (Kaulbach, 2020, p. 348). In a review of self-directed learning literature, Chakkaravarthy et al. (2018), highlighted the necessity to enhance academic focus on self-directed learning to ensure its unfolding as a lifelong process. Self-directed learning is a continuum: those dependent learners most comfortable with didactic teaching, those who are interested but need to be stimulated, the highly engaged active and involved learners, and lastly the self-directed learner who takes ownership of their learning (Grow, 1991). "Learning transformatively involves rediscovering a sense of self-direction insofar as one learns to act on one's freely chosen values, feelings and purposes instead of those 'uncritically assimilated from

others'" (Mezirow, 2012, p. 75). The participants in this study all described their discovering anew their cherished priorities as possibilities emerged reflecting on their movement towards lifelong learning.

Upon reflection, living on the edge is dynamic lived experience, which requires an openness to change, and courage to navigate between perceived opposites (paradoxes). I believe that sometimes we freeze on the edge, at other times we may make a mistake, but in living on the edge in teaching-learning there is an opportunity to create steppingstones which facilitate movement to safe places where knowledge, skills, and abilities can be acquired and developed. For me, living on the edge in teaching-learning is reminiscent of Lyng's (2005) theory of edgework reflected the voluntary risk taking, most often in high-risk leisure activities. In defining the edge, Bunn, (2017) explored the edgework features of choice, mastery, and necessity of edgework practice. As I consider living on the edge in teaching learning there are similarities in terms of intellectual edgework. Living on the edge in teaching-learning requires students to make choices in terms of risking and engaging in learning activities, practicing specific required skills, and developing mastery. We live in a complex world which can be very perplexing, where we need to spend time exploring the not-knowing in order to develop an understanding and increase our knowledge. Openness and curiosity are needed to interpret things, acknowledge our own not-knowing, and to move from that uncomfortable place of uncertainty to knowing.

Limitations of Study

This study was conducted with nursing students during the protracted COVID-19 pandemic experience. The participants were from a baccalaureate nursing program in Atlantic Canada. The main limitation for this study was that the sample size was small (N = 3). When reflecting on these findings it is important to consider that "all phenomena have meaning only in light of beliefs and values. Teaching-learning happens in the context of teacher-learner values and formal settings' and institutional values" (Parse, 2021c, 179). "A retrospective account may be forgetful, or distorting in other ways, regarding what happened" (Giorgi, 2009, p. 117).

> The human is a being who remembers experiences as they are appearing now. The human coconstitutes a personal remembrance by choosing the order and arrangement of reflections while giving to situations anew. Meanings of the remembered change over time as new experiences shed light on the now moment. (Parse, 2021c, p. 17)

This small group of participants, which was a convenience sample, represented the nursing student population, and generalizability was not the goal as we can never fully understand what another is sharing because we interpret it in our own way, based on our own experiences, values and beliefs. This study provided an opportunity to explore living on the edge in teaching-learning and inform understanding of the experience. "Witnessing is non-intrusive, gentle glimpsing in reaching beyond to honor the other is human dignity" (Parse, 2021c, p. 118). Further research such as repeating this study would be of value to further explore the unique and diverse experiences of nursing students.

Contributions of this Study

The participants chose a living on the edge teaching-learning situation that was meaningful or significant to them which resulted in the richness of detail and diversity of the submissions. The truth or authenticity of findings was enhanced by asking an open-ended question without follow-up which might have guided reflections and responses. While the descriptions were unique to the individual participants, there were themes and essences that were consistent across the participant group. Due to the limited number of participant descriptions other types of teaching-learning experiences and their meanings may not have been captured. The findings demonstrated that each of the participants had unique living on the edge teaching-learning experiences, all experiencing paradoxes in their own unique ways. This study was guided by the humanbecoming paradigm and teaching learning model illuminating the lived experience of living on the edge in teaching learning and demonstrating its usefulness as a nursing paradigm in the investigation of lived experiences. The fundamental tenet of humanbecoming paradigm is the humanuniverse, "indivisible, unpredictable, everchanging cocreation" (Parse, 2021c, p. 8), it is the "what is coming to be known explicitly-tacitly all-at-once with the unbounded unexplainable choosing of the apparent contradictory rhythms of living quality" (Parse, 2021c, p. 33) which was explicated in the unique participant descriptions of experiences. The ethos of humanbecoming "is the sentiment and straight thinking that inform the enduring truths of reverence, awe, betrayal and shame, in venerating treasured presence" (Parse, 2021c, p. 33) which presented in the participants' descriptions. Living quality is the "all-at-onceness of the truth for the moment, which is all there *is*" (Parse, 2021c, p. 33). "The moment is shifting meaning, rhythms, and transcendence with living

inherent core knowings of living quality in manifesting the incomparable unforeseeable that is embedded with the ethos of humanbecoming" (Parse, 2021c, p. 33). Each participant was living quality in their teaching-learning journeys. The findings substantiate the similarities and commonalities of responses across participant descriptions of experiences and concur with literature findings. These findings interlace multiple facets of the teaching-learning experiences from a holistic student perspective contributing to the current body of knowledge on the nursing students lived experience of living on the edge in teaching-learning.

Summary

Learning is an awareness of the necessity to refocus personal learning goals based on discrepancy between the implicit assumptions brought to the situation vital for continuance in the program, and a shift in perception and understanding. With the support of a significant other, Reilly was able to choose a course of action and genuinely communicate this decision to others.

Taylor's learning situation was described as an opportunity to learn a new skill, which they are highly motivated to master. This mastery is accomplished by 1) acquiring new information as a foundation, with the help of an expert other, and 2) performed an injection on a peer in a skills lab setting. These initial achievements gave Taylor some confidence to perform this procedure on a client in hospital. Taylor was nervous when needing to carry out this skill on a patient for the first time, feeling awkward along with the fear of the unknown, and thrill of achievement simultaneously. The thrill of achievement and realization of being in control without fully knowing what they were doing when learning was accomplished after practice, Taylor described needing a

balanced perspective with respect to all the significant features and subtle nuances of the situation and felt more confident. Learning is the acquisition of knowledge concerning the actual execution of, as well as the belief in one's ability to execute on one's own, or on demand. The teaching-learning process involved working through the scenario with others, living through the ambiguous moments, reflecting on learning opportunities, evaluating learning, and integrating of new knowledge.

While there have been numerous studies conducted addressing teaching of nursing students, (i.e., methods, models), but notably absent from this research is the more individualized, holistic perspectives. I have attempted to capture the essence of the lived experience of living on the edge in teaching-learning and to describe the students' perspectives and meanings of those lived experiences. The analysis revealed a general structural description including six essences, that were applicable to all three participants' lived experiences in teaching-learning. This study successfully captured the perceptions of these nursing students as individual, unique human experiences in teaching-learning which encompassed personal goals, hopes, dreams, wishes, and how the participants were transformed. These authentic descriptions provided a foundation to foster an understanding of the nursing student experience and how it is unique to each individual nursing student.

This chapter presented an elaboration on the central findings of this study, which began with a discussion of the general structural description. The essences of the general structural description framed the discussion of the pertinent literature consistent with the humanbecoming teaching-learning model and humanbecoming paradigm followed by a dialogue with the current, relevant, and extant literature and research. The similarities and

differences between participant descriptions of experiences were highlighted and alternative explanations were proposed as well as a reflection on the literature in relation to findings. The discussion concluded with the identification of limitations of this research as well as the contributions of this study. The final chapter will discuss reflections, implications, and recommendations for further research.

CHAPTER 7 – REFLECTIONS, IMPLICATIONS, AND RECOMMENDATIONS

This final chapter includes my reflections on this investigative journey, as viewed through the lens of the humanbecoming paradigm, the humanbecoming teaching-learning model, and the essences identified in the general structural description of living on the edge in teaching-learning. In nursing we tend to borrow from and explore questions using other disciplinary knowledge as I have in this interdisciplinary research approach (adult education, philosophy, and nursing). The discussion that follows describes the essential contributions of the findings, their significance in advancing disciplinary knowledge in terms of understanding of the art and science of teaching-learning, implications, and recommendations for how these findings can be utilized in academia, research, practice, and policy.

> From a humanbecoming perspective, teaching-learning is a never-ending journey of giving-receiving in coming to know (Parse, 2004a). It is everchanging with becoming visible-invisible becoming of the emerging now as individuals assume responsibility for learning in living quality as truth for the moment. (Parse, 2021c, p. 180)

This research highlights the significance of nursing theory and the relationships between theory, research, and practice. It highlights the importance of the discipline of nursing maintaining its own distinct knowledge, using a dynamic, living metatheory or paradigm. Lange (2012) recognized that "living systems are fluid and responsive, continuously oscillating between habitual and novel patterns. Living systems require stability, and thus their patterns of repetition are maintained within a state of dynamic balance" (p. 202).

Mezirow (2007, as cited in Finnegan, 2019) recognized that "to flourish we need to develop new capacities to make meaning, critically reflect and act in a flexible open way" (p. 45). In the context of this increasingly virtual age and dramatically changing healthcare environments, we continue the shift from a content-laden curriculum to more student-centered learning approaches that are more humanistic, recognizing human dignity as well as the science. These research finding are of interest because of the limited nursing research into the lived experiences of nursing students and the complexity of the experiences which have been amplified by the shift to online learning. Mälkki (2019) recognized that "the complexity of societal and individual problems brings new kinds of pressure to continuously learn, broaden our meaning perspectives, solve complex problems, and tolerate and live with ambiguity and contradictory information" (p. 59).

Nursing students have individual requisites in what they need to know. To become resilient as students and professional nurses, and to be successful and responsive to the changing healthcare environment, they need to become self-directed, lifelong learners. The use of a nursing-specific pedagogy can inform academia and expand discipline-specific nursing knowledge. The use of nursing theory and research to guide teaching-learning practice can facilitate an increase in capacity, capability, resilience, and grit (Duckworth, 2016), so students can transcend and reach their fullest potential. Describing the meaning and essences of the lived experience of living on the edge in teaching-learning serves to guide to academia, future research, and practice, by making explicit the processes of learning, and recognizing that learning and structuring meaning are both personal and relational.

Giorgi's (2009, 2012) descriptive phenomenological research method used in this study proved to be effective in describing the lived experience of living on the edge in teaching-learning for these nursing student participants. From the written reflective descriptions, it became clear student participants structured meaning uniquely in their learning. The descriptions highlighted that relationships were key in their teaching-learning journey to achieving their cherished endeavors and transcending towards achievement of their fullest potential.

General Structural Description

The central findings or general structural description of living on the edge in teaching-learning for the nursing students of this study were cocreated through the lens of the humanbecoming teaching-learning model (Parse, 2004a, 2014b, 2021c). Living on the edge in teaching-learning is

1) acquiescing to ambiguity in the paradoxical rhythms of moving moment-to-moment coming to know something of value.
2) dignifying the journey by vigilantly exploring unknowns of the everchanging.
3) risking venturing forth with quieting-disquieting regard amid diverse alliances (ideas, objects, experiences, and others) in anticipation of cherished endeavors.
4) persevering with novel experiences amid potentiating-restricting opportunities in realizing cherished endeavors.
5) venerating words, wisdom, and images of others in considering-composing cherished choosings.
6) discovering anew cherished priorities as possibilities emerge.

Reflections through the theoretical lens of the humanbecoming paradigm (Parse, 2014b, 2021c) and humanbecoming teaching-learning model (Parse, 2004a, 2014b, 2021c) that guided the interpretation of the findings and identification of implications that follows.

Reflections

Humanbecoming Paradigm

The humanbecoming paradigm assumptions incorporate the conceptualizations of humanuniverse, humanbecoming, becoming visible-invisible becoming of the emerging now, ethos, and living quality. As I reflect on these assumptions, I believe that the participants merged teaching-learning contexts within their descriptions. As they wrote about their becoming in terms of their teaching-learning experiences, new meanings became visible and old ideas and notions fell away in the unfolding of their perspectives. The ethos of humanbecoming was illuminated in the revering of others and knowledge, the awe of acquiring new knowledge and skills, as well as betrayal and shame in the relationships that unfolded on the learning journey. Living quality recognizes the participants' freedom to make choices, consider personal goals, hopes, dreams, and wishes, and to live with dignity where "humanuniverse is indivisible, unpredictable and everchanging" (Parse, 2007b, p. 310).

As I considered these assumptions and their significance, each of the participants included a description of their teaching-learning situations within specific learning contexts, which brought to the fore that the teaching-learning experiences could not be separated from their context (humanuniverse) when sharing their experiences. Reilly detailed the challenges of experiencing betrayal, shame, and the feeling of being

disrespected. Taylor described the moral and ethical responsibilities when engaging in difficult conversations with clients, as well as the desire to intentionally pursue new experiences, while vigilantly attending to potential consequences. Quinn described with reverence and awe the instructor's ability to make simulation an authentic and true to life experience, which provided meaningful learning. Living quality was evident in Reilly's journey when determining a career path and confirming cherished value priorities. Taylor described choosing learning and skills opportunities to achieve goals and ensure safe, professional practice. Quinn reflected on the value of the authentic simulation which provided meaningful learning that would facilitate remembering.

The postulates are inextricably woven throughout the humanbecoming paradigm and undergird the principles, the postulates make explicit the foundational truths and beliefs (Parse, 2007b). In our unpredictable and everchanging environment, illimitability embodies the limitless or endless possibilities that emerge moment to moment. For Reilly, it was the discovery and confirmation of cherished value priorities and finding a new career path. Taylor described the limitless opportunities for learning, practicing new skills, and engaging with clients. Taylor wrote about the importance of self-directed, lifelong learning and the need to constantly be acquiring new information reflecting on the illimitability of nursing knowledge. Quinn described the ambiguity, unpredictability, and everchanging in the unfolding of the simulation that was so natural that it felt real. Learners needed to assume an active role in their learning, acknowledging their individual knowledge, becoming comfortable with critical thinking, clinical judgement and problem-solving to meet their individual learning needs and prepare them to act. As the patient-student-instructor relationships unfolded with certainty-uncertainty there were

shifting priorities of the emerging now in the students' coming to know the patient. The unexpected or unanticipated teaching-learning experiences highlighted the limited ability to predict what might unfold. For Taylor learning a new skill was not complete until described the opportunity to carry out the skill in a clinical situation on a client.

The second postulate is paradox. "A paradox is an intricate rhythm expressed as a pattern preference. Paradoxes are not opposites to reconciled or dilemmas to be overcome, but rather, are liv[ing] rhythms" (Parse, 2021c, p. 35). An example of a paradox is when one feels certain, but at the same time feels uncertain when trying something new. As I reflect on this postulate, I believe that all participants described the paradoxical relationship of knowing-not knowing which was always fluid and shifting as these participants moved along their lifelong teaching-learning journey. These findings illuminated the many ways of learning and the importance of being open and curious to new learning opportunities in both personal and professional life. Each of the participants reflected on certainty-uncertainty, sureness-unsureness, and familiar-unfamiliar in their teaching-learning reflections.

The third postulate, freedom highlights the participants' liberty to make personal choices. As I reflect on this postulate, I believe each participant recognized and made choices while living their value priorities in their descriptions of their teaching-learning activities. Each participant freely chose meaning in each situation, while living quality moment-to-moment in the emerging now (Parse, 2012). The participants and their teachers freely made choices of where, when, how, or whether, to engage in the teaching-learning process. As participant descriptions unfolded, I believe that living on the edge in teaching-learning was expressed from the perspective of each participant's value

priorities; certain aspects of the experience were highlighted and became clear while there were other aspects that remained unknown. In the process of writing their descriptions, the participants attached interpretations of meaning to their situations. These meanings that were present in living on the edge in the teaching-learning situation may have changed during the writing of the description for this research, but we will never know, as persons are not predictable.

The final postulate, "Mystery is the unexplainable, that which cannot be completely known unequivocally. It is a puzzlement, an impenetrable" (Parse, 2021c, p. 36). Mystery is just beyond one's grasp of understanding completely, and moves into the future (Parse, 2021c). As the participant descriptions of the teaching-learning experience unfolded there was "the everpresent mystery of the unexplainable becoming visible-invisible becoming of the emerging now" (Parse, 2012, p. 44). Upon reflection on this postulate, I believe that changing value priorities determined what became visible for these individuals, but they did not know how, when, or where it would be. "Mystery is the veiled, that which cannot be known clearly or at all" (Parse, 2021c, p. 36). As participants described their ways of being, their teachers may not have fully understood, which may or may not have provided an opportunity for engagement to enhance understanding. In teaching-learning relationships, language, tone of voice, and unique mannerisms are uniquely perceived by others in the situation. Each of the participants highlighted various relationships (learner-teacher, learner-peers, learner-patient) as they were perceived along their teaching-learning journey.

As I reflect on the written descriptions of these experiences, and the observations that participants shared of their discoveries and understandings (illimitability) of their

situations, their interpretations may not be at all what was envisioned. The participant descriptions were written from their individual frame of references, experiences, values, and beliefs which are all central to their humanbecoming (mystery). The participants freely interpreted and integrated information into their own frames of reference and those interpretations became part of their ways of being (freedom). Individuals (students, teachers, or peers) can never fully understand another, so to some degree there was always a living with the tension of being understood-misunderstood in relationships with others (paradox). Hence, teachers needed to consider their words and actions carefully because words and ways of being are so important to how others might interpret what was said and done. With an appreciation of the postulates of illimitability, paradox, freedom, and mystery, my further reflections on the humanbecoming themes, principles, and associated concepts, and paradoxes will follow. Upon reflection on the situated structural descriptions for each of the participants, the humanbecoming themes and principles were identified as they emerged. The concepts, and paradoxes were identified within the focal meanings for each of the participants and were further explicated in the discussion of research findings.

Upon reflection on structuring meaning, the participants described how they gained a deeper understanding and expanded knowledge based on their existing knowledge, values, beliefs, and ways of being in their view of their teaching-learning experiences. The participants described examples of the *imaging* paradoxes (explicit-tacit, reflective-prereflective knowing in the emerging now). Upon reflection, it was important to explore the meanings and understandings that participants attached to their learning, and what was known-not known or understood-not understood in paradoxes of

the explicit-tacit and reflective-prereflective of imaging. It was by engaging with the participants through dialogue that they explored their explicit-tacit knowings. The participants' valuing was reflected in their descriptions of their knowledge, values, and beliefs, as they sought to confirm certain aspects of knowledge and practice while choosing not to confirm other aspects. Each participant was unique in their tacit and explicit personal knowing and their choosing of what to share or not share in living on the edge in the teaching-learning experience, as the confirming-not confirming of shared values by the other surfaced.

Upon reflection on rhythmical patterns, participants configured unique rhythmical patterns in the development of their teaching-learning relationships as they evolved. The choosing of what the participants revealed-concealed in the process of disclosing-not disclosing shaped these teaching-learning relationships. For example, Reilly chose not to disclose to the teacher that "*in first year I was being severely bullied and harassed by my cohort which was causing severe distress*." Participants made choices based on their perceived learning needs and interests on a moment-to-moment basis. In making these choices, the participants engaged in learning opportunities, but were at the same limited from other opportunities that may have presented through the process of potentiating-restricting learning opportunities. In the teaching-learning relationship, the paradox of connecting-separating through the process of attending-distancing defined how the participant lived out this relationship. Each of the participants provided examples of connecting-separating and attending distancing within their teaching-learning descriptions. The rhythmical patterns were apparent in the participants ways of thinking, how they related with others, and what they expressed or experienced.

Transformative learning or critical thinking is “not a continuously joyful exercise in creative actualization. It is psychologically and politically dangerous, involving risks to one’s livelihood, social networks, and psychological stability” (Brookfield, 1990, as cited in Eschenbacher, 2019, p. 86). However, “one may find transformative learning threatening, exhilarating, and empowering” (Mezirow, 1990, as cited in Eschenbacher, 2019, p. 86). The paradoxes lived by the participants do not define the teaching-learning process but make explicit the expression of the teaching-learning activity (or ways of moving-being still) which was incorporated into rhythmical patterns.

Upon reflection upon this final principle, cotranscending with possibles occurred as conversations and experiences unfolded, participants moved to a new place in their understanding, and with this new knowledge they shifted ideas and their focus within the teaching-learning experience. They were each forever changed by the ideas, encounters, and experiences on their journeys. In cotranscending with possibles, the concepts are powering, originating, and transforming. The participants demonstrated powering through their explication of intentions and actions as they engaged in the teaching learning journey. As opportunities presented to challenge or clarify what was known in their learning experiences, the participants made choices on what was to be integrated into their personal knowledge. The second concept originating drew attention to the individual uniqueness of each of the participants, their choices, and relationships with others which affected their personal teaching-learning journeys. The participants made choices moment-to-moment, unsure of what the future would hold in terms of the unfolding teaching-learning experience or future learning opportunities. As participants made discoveries and were seeing things from a new perspective their knowledge

deepened and learning needs shifted. Transcendence occurred in very personal ways of becoming as the participants faced sureness-unsureness or certainty-uncertainty in their teaching-learning experiences. Living quality and making choices in the face of new ventures created new opportunities and possibilities to be transcended. Transcendence was illuminated in the participants' becoming which may have included reflection and self-directed learning focused on personal development, self-awareness, resilience, and perseverance. Lack of safety and movement out of their comfort zone was necessary for personal growth, change, and professional development. Experiential education activities in clinical situations or simulations guided the participants into new territory, as these were new, not previously experienced situations, and they may have been uncomfortable and unfamiliar. As teachers, we strive to ensure safety while guiding learning: however, these participants experienced a range of emotions which was evident in their descriptions of living certainty-uncertainty, knowing-not-knowing, and sureness-unsureness.

As participants engaged in new learning opportunities from the illimitable possibilities available and struggled with new challenges, they achieved higher levels of understanding as they moved towards their cherished goals, transforming their foundational knowledge. I have reflected on the participant experiences through the lens of the humanbecoming paradigm nature of existence which includes the postulates, principles, concepts, and paradoxes. In the next section, my thoughts on the humanbecoming teaching-learning model essences will be illuminated and linked to the research findings as viewed through participants' descriptions.

Humanbecoming Teaching-Learning Model

Essential to the humanbecoming teaching-learning model are essences, paradoxes, and processes that arise from the humanbecoming paradigm (Parse, 2014b, 2021c) and were illuminated in the synthesis of the participants' situated structural descriptions of their lived experiences of living on the edge in teaching-learning. The essences provide a guide and explicate how teaching-learning activities can be responsive to the learner's needs.

The first essence, semantic cohering encompasses the processes of seeking to understand as ideas or concepts become clear and new questions come to light. "*Semantic cohering* is living with ambiguity in rationaling-intuiting amid clarifying-obscuring in appreciating mystery" (Parse, 2021c, p. 181). This first essence drew attention to the uncertainty, ambiguity, and mystery experienced by participants in pursuing cherished endeavors and envisioning possibilities. "Living with ambiguity is the experience of not knowing explicitly all the consequences of decisions, yet moving on with executing details" (Parse, 2014a, p. 5). Appreciating mystery surfaced as the participants explored knowing-not knowing, certainty-uncertainty in coming to know something of value. Learning was risking, developing an acceptance of and comfort with ambiguity, recognizing mystery as all could not be known or anticipated. Semantic cohering is reflected in meaningful, intentional, and transformative learning that promotes a higher level of thinking and lifelong learning and highlighted the significance of being learner-centered. Participants learned concepts and developed critical thinking, clinical reasoning, and judgment, not only thinking like a nurse, but acting like a nurse. In Taylor's description, these concepts were integrated into acquiring new knowledge,

learning and using a new skill with a client, engaging with clients in difficult conversations, and in committing to lifelong, self-directed learning. Quinn described students going "*through the simulation*" and reflecting on this work, which enabled learning and remembering.

This second essence encompasses the teaching-learning processes of potentiating integrity and weaving illimitably. "*Synergistic patterning* is potentiating integrity in warping-woofing amid the ebbing-flowing of weaving illimitably" (Parse, 2021c, p. 182). In potentiating integrity, teachers in Reilly's description demonstrated the paradoxes of understanding-misunderstanding and honoring-dishonoring of Reilly's goals. Reilly described the professor in first year who did not have a full understanding of the situation resulting in Reilly feeling devastated. Reilly's second professor in third year connected with Reilly bearing witness to this unique situation as Reilly uncovered a new path forward. Taylor described the experience of learning a new skill, practicing with peers, and eventually practicing with a client. Quinn wrote about an in-person, immersive simulation of a client experiencing a medical emergency that was so engaging as it felt natural as it unfolded authentically. Weaving illimitably was the engagement in teaching-learning relationships as teachers, peers, and clients moved with the learner moment-to-moment in learning opportunities and experiences. I believe that an appreciation of students' unique learning styles, needs, and experiences (Dewey, 1938/1997), with recognition of their unique views and skills they bring to new learning endeavors (Gardner, 2008; Vygostky, 1978), as they construct understanding to facilitate deep learning. Potentiating integrity and weaving illimitably brought to the fore the rhythmical patterns of coconstructing knowledge and the movement of the teacher, peers, and client

with learners on their cocreated learning journey. Epp et al. (2021) identified that learners need to "let go of being 'just a student' and to consider how they want to be, and what they need to become, as they develop a professional identity" (p. 808). "Teachers need to vigilantly attend to and encourage students to actively work towards forming a healthy and thoughtful professional identity" (Epp et al., 2021, p. 808). It is important to acknowledge that formal education provides foundational knowledge which is only a small part of the learning process; and it is incumbent upon the nursing student, soon to be nurse, to continue to seek new knowledge in the development of their personal and professional identity and formation of their moral and ethical integrity. I believe the focus of the teacher in any teaching-learning relationship is on being present, bearing witnessing, listening with the intent of understanding, caring, and being open to the uniqueness of learners (Noddings, 1984). Through student identification of learning needs, learning strategies can be identified that support deliberate practice. Deliberate practice provides opportunities for addressing knowledge gaps, practicing skills until confident, and developing critical thinking and problem-solving abilities. These activities should be designed in such a way to respond to identified needs and arranged with a focus on the clinical reasoning and judgment that support the development of safe, competent, and caring practice. With this acknowledgment of complexity of the teaching-learning relationships, the third essence aesthetically innovating will be explicated.

The third essence encompasses the teaching-learning processes of honoring wisdom and witnessing unfolding. "*Aesthetically innovating* is honoring wisdom in considering-composing amid beholding-refining in witnessing unfolding" (Parse, 2021c, p. 182). Aesthetic innovating is lived through creative novel teaching-learning activities

whilst dialoguing, teacher with learner, and learner with teacher. The participants made connections with what was being learned in the context of their pre-existing perceptions, backgrounds, values, and knowledge in creating a new understanding or way of being with this knowledge. In Reilly's description, Reilly connected with the professor in third year to imagine a new view of self, in confirming value priorities and uncovering a new pathway. Taylor described attending to the everchanging by committing to a vision of lifelong learning. In pursuit of new endeavors, Taylor identified the importance of being safe. Quinn described the meaningful learning from the true-to-life simulation experience and the ability to readily draw on this learning for future use. This essence highlights the recognition of participants as experts in their learning as it was lived through witnessing unfolding. In the teaching-learning relationship, being respectful, caring, and authentically engaged with participants facilitated meaningful connections, affirmed learning, and enabled their envisioning anew. I believe the humanbecoming teaching-learning model shifts a teacher's gaze and opens possibilities to move beyond the traditional pedagogical assumptions. It proposes teachers encourage learners to be full partners in their learning, self-directed in their endeavors to be nursing professionals, and lifelong learners to navigate the dynamic and changing health care landscape in their pursuit of excellence.

The humanbecoming model with teaching-learning essences and processes served well as a guide in the development of teaching-learning strategies that contribute to the excellence in nursing practice. There was an appreciation for living with ambiguity and the significance of appreciating mystery of nursing practice within the teaching-learning process, being attentive and bearing witness as participants moved toward their cherished

endeavors in this study. In witnessing unfolding, there was an honouring of wisdom and attentiveness to the everchanging perspectives while pondering teaching-learning possibilities.

The uniqueness of each of the participant's written descriptions, similarities, and differences have been presented, paradoxical rhythms of the teaching-learning processes were explicated as viewed through the lens of the humanbecoming paradigm. My reflection on the teaching-learning model was framed by the essences and linked to the participants' descriptions of their experiences. A reflection on the phenomenon of living on the edge in teaching-learning with identification of implications associated with the research findings will follow.

Implications for Nursing and Nursing Education

Living on the Edge in Teaching Learning

In this research, living on the edge in teaching-learning was a unique experience for each participant. The suspense of the unknown, the mystery, and ambiguity were difficult to traverse alone. Living on the edge was where paradox and ambiguity prevail. The following section will include a discussion of central findings (the essences in bold, from the general structural description), how these findings can be best utilized, as well as a discussion of the implications.

Acquiescing to Ambiguity. Acquiescing to ambiguity in the paradoxical rhythms of moving moment-to-moment coming to know something of value. Generally, learners have not been encouraged to accept, embrace, and appreciate the opportunities that ambiguity provides for meaningful exploration and dialogue which creates discomfort for them. As reflected by the participants, learners are unique in their approach to ambiguity,

discovery, and new learning. Ambiguity emerges with changing expectations as nursing students transition from term to term within the nursing program, and as they embark on their nursing careers. Research on reality shock (Kramer et al., 2012) and transition shock (Boychuk-Duchscher, 2009, 2012; Boychuk-Duchscher & Windey, 2018) reinforce the need for integration of theory about role transition and the importance of bridging undergraduate curricula with changing workplace expectations. The goal is the successful integration of new nursing professionals into the stressful and highly dynamic context of professional practice. There is a need to reinforce that new graduates are members of a community, that all cannot be known or fully understood, there is need to accept varying degrees of ambiguity, and an to understand that they are not expected to be expert, but engaged learners is key in each these transitions.

Dignifying the Journey. Dignifying the journey by vigilantly exploring unknowns of the everchanging. Although nursing students continue to prefer teacher-focused (passive) learning rather than student-centred (active) learning based on their unique needs and learning goals, this learning responsibility should be shifted to the students within the curriculum (Kaulback, 2020). This can be achieved using various active learning strategies such as unfolding case studies, flipped classroom, clinical learning, and preceptorship experiences. In acquiring new knowledge, exploring novel experiences, and developing new skills, it is important to recognize that individuals are mysteries and can never be fully understood. Each client will respond in unique ways to care, disease processes, and treatments. Nursing students need to develop a comfort level for the unexpected and unanticipated responses of real-life, moving away from linear thinking of cause and effect to “learning to live with the grey”, because caring and

competent practice depends on many individual and contextual factors (Ursel, 2020). Halfer et al. (2019) identified there needs to be

> a dramatic shift and transition from the use of Newtonian science (1 correct answer to questions, examinations in all situations) that has predominated theory worldwide in past centuries to CAS [Complex adaptive system] theory…CAS theory provides a more comprehensive model for thinking through clinical dilemmas that may have more than 1 right answer. CAS theory needs to be taught, discussed, and utilized in both schools of nursing and in hospital nursing practice. (p. 607)

There is a more intentional integration of complexity into the curriculum with the incorporation of NCLEX-style questions that have best answer(s) or multiple-select answers. The creation of deliberate decision points in clinical settings, unfolding case studies, and virtual simulations, in addition to the development of examinations that require making choices and decisions with rationale foster clinical judgment. While a task-focused care delivery model in many clinical settings continues to prevail in difficult times, person-centered care guided by humanbecoming teaching-learning model embraces the complexity of clinical experiences and prepares students for the real world of nursing which includes risking venturing forth with disquieting disregard by others (Ursel, 2010).

Risking Venturing Forth. Risking venturing forth with quieting-disquieting regard amid diverse alliances. There is always a risk of being disregarded in professional practice by others (Ursel & Aquino-Russell, 2010). Kramer et al. (2012) identified seven major challenges of newly graduated nurses, “delegation, prioritization, managing patient

care delivery, autonomous decision-making, collaboration with other disciplines, constructive conflict resolution, and utilizing feedback" (p. 156). In-person or immersive virtual simulations provide the opportunity to create a safe environment to address these challenges intentionally. Nursing students have identified challenges in engaging in person-centered care, difficult conversations, and moving with the unanticipated and unpredictable. While there has been significant progress on the development of critical thinking and clinical judgment, but the issue of "failure to rescue" or to act continues to be a challenge. Herron (2017) identified, "clinical reasoning is an essential component for preventing 'failure to rescue'" (p. e390). In this study, Herron found that students did not have the opportunity to experience or care for a deteriorating patient and identified that simulation could be effective in preparing students/nurses for deteriorating patients and multiple patient scenarios. Cooper et al. (2016) developed a simulation program and protocol "to address patient safety in relation to first responders 'failure to rescue' deteriorating patients with a focus on enhancing nursing assessment and management of clinical deterioration" (p. 2) through immersive virtual and face-to-face simulations. Chung et al. (2018) reported on the educational impact of using the FIRST^{2}ACT™ (Feedback Incorporating Review and Simulation Techniques to Action on Clinical Trends) Web. This screen-based immersive and engaging simulation requires the participant to act on the symptoms of a deteriorating patient with detailed feedback at the end of each of the scenarios and end of program. "This study provides evidence that both the FIRST^{2}ACT face-to-face version and FIRST^{2}ACTWed provide a pedagogical response to the challenge of a deteriorating patient (Chung et al., 2018, p. 98).

Persevering With Novel Experiences. Persevering with novel experiences amid potentiating-restricting opportunities in realizing cherished endeavors. Working with students to develop and enhance resilience is key in their ability to address issues of bullying, being disrespected, learning to maintain a "balance" in their knowing-not knowing and capability to advocate for themselves to address their unique learning needs and knowledge gaps. As we move through the COVID-19 pandemic crisis, which is simultaneously an individual, community, and a global experience, there is a need to focus on resilience and the capacity to persevere and transform to manage the uncertainty, ambivalence, and challenges of professional practice. In their scoping review findings, Thomas and Asselin (2017) recommended the incorporation of the concept of resilience into nursing programs for everyday practice. New graduates experience reality or transition shock as they enter professional practice related to multiple factors and many prematurely leave their first position or the profession. Building resilience may help students to persevere in academia and their future professional practice. In their qualitative literature review, Amsrud et al. (2019) identified a need for future studies to more systematically address and "implement strategies for development of resilience in nursing students, thereby empowering them for their future professional practice" (p. 8). In an integrative literature review, Walsh et al. (2020) looked at key teaching strategies to promote resilience, in response to the need to prepare students for the reality of caring for the client versus the ideal, including aspects of ambiguity, authenticity and "messiness" of practice. In their research, Urban and Barnes (2020) recently explored the lived experience of new graduates, the themes of feeling overwhelmed, challenges navigating work-based relationships and finding their flow (e.g., time-management, organization)

emerged. Their recommendations included using simulations and unfolding case studies where students could experience these challenges in a safe environment and would include cognitive skills of critical thinking, clinical judgment, prioritization, delegation, situational awareness, prioritization, and time management.

In a phenomenological study, Ankers et al.'s, (2018) participants further identified a disconnect between what was taught and actual practice, the speed of the clinical setting, responsibility, and demand for skill proficiency. "Transitioning from university to professional clinical practice remains a time of considerable challenges for graduate nursing students" (Ankers et al., 2018, p. 324). The experience of not- knowing, of lacking knowledge to cope with situations provoked by a crisis, is a potential point of entry for learners to reflect on current ways of knowing and being in the world, and to engage in changing these ways. A graduate nurse's transition into their professional role can be an overwhelming experience due to the many new demands. The importance of support as students learn and develop resilience is key, this may mean having the opportunity to practice skills repetitively until they develop mastery, confidence, and understand the subtleties of real-world impact on this development.

Venerating Words, Wisdom, and Images. Venerating words, wisdom, and images of others in considering-composing cherished choosings. In the current fast paced environment, "we are in danger of being too busy to engage the abyss and too pre-occupied to create meaningful connections with others" (Mitchell & Bunkers, 2003, p. 124). Teachers and learners need to honour the wisdom and value priorities of all present (students, peers, patients, families, the healthcare team) in this teaching-learning journey (Ursel & Aquino-Russell, 2010). There is a need to instil the importance of lifelong

learning to maintain current knowledge and ensure safe, confident, competent, and resilient practice.

Discovering Anew Cherished Priorities. Discovering anew cherished priorities as possibilities emerge. Self-directed learning is a core professional concept in nursing, and as new opportunities emerge, individuals are required to intentionally engage in deliberate practices and mastery of various skills to ensure safe, compassionate, and competent practice. This commitment to lifelong learning facilitates self-development and enhances the ability to persevere during difficult times as an active member of the healthcare team in a challenging healthcare environment. Disciplinary knowledge supports the holistic, humanistic, emancipatory, and empowerment-based emphases that defines nursing education. Since self-directed learning is a prerequisite for lifelong learning, and lifelong learning is a professional responsibility, it is essential to create an educational environment that encourages self-directed learning and foster habits of lifelong learning (Kaulback, 2020). Hof (2017) contends that transformative learning theory complements the lifelong learning discussion, as it enhances our understanding of learning throughout life and professional practice.

The implications of this study shed light on how appropriate Giorgi's (2009, 2012) descriptive phenomenological method was in enhancing understanding the lived experience of the nursing student participants. Throughout this research process I come to appreciate how diverse and unique the teaching learning journey can be. These findings underscore the importance of understanding of the complexities of the lived experiences of nursing students. Whether students are engaged in competency-based or outcomes-based education, there is a need to tailor education approaches to the individual student's

learning needs with a more humanistic approaches informed by theory, with intentional learning activities and deliberate practices. The findings of this study point to some of the potential implications. Recommendations for policy development or revision, teaching strategies, virtual and face-to-face simulations, and alternate delivery methods that can enhance understanding, shift perspectives, and decrease judgments will follow.

Recommendations for Future Research

There has been limited nursing education research completed on teacher-learner pedagogies utilizing nursing theory as a foundation. Further research utilizing nursing theories will expand nursing theoretical perspectives, increase disciplinary-specific knowledge awareness, and enhance professional influence. Innovative pedagogical strategies that integrate discipline-specific knowledge acquisition, use of critical thinking, clinical reasoning, and clinical judgment are key to being responsive in these increasingly complex environments. Fawcett (as cited in Butts et al., 2012) identified that "true interdisciplinary practice cannot occur if the members of each discipline do not fully understand the conceptual models, theories, practice focus, and research methods of their own discipline" (p. 151). Further studies exploring nursing students lived experiences will increase understanding of the nursing students' individual needs including what is working and not working in terms of effective teaching-learning strategies. Additional research building on the concepts of resilience and perseverance in relation to nursing student stress and wellbeing will facilitate identification and development of strategies to build resilience.

Learning is not always a comfortable process, nor does it occur in a linear fashion, the paradoxes that occurred in the findings highlight the complexities of the lived

experiences explored in this research. Parse (2004a, 2014b, 2021c) does not prescribe strategies but provided the teaching-learning model to guide teaching-learning approaches. Further research on how teaching practices can be guided by the humanbecoming paradigm in various teaching-learning situations (classroom, simulations, skills labs, and clinical) can enhance responsiveness to student learning. Further research to evaluate the shifts in educational strategies is needed to ensure that students can gain the knowledge, skills, and abilities needed to reach their fullest potential in practicing the art and science of nursing.

There are opportunities for further research utilizing the humanbecoming paradigm as the theoretical lens to gain a better understanding of the lived experience of living on the edge in teaching-learning for students at various stages of their learning journey: entering the nursing program, in their capstone courses, as they transition into their careers. Porteous and Machin (2018) identified there are few studies that consider first year undergraduate nursing experience in the transition into higher education and the nursing program. A study of new graduate nurses within 12-18 months of graduating would serve in uncovering specific aspects of the transition from academia to practice which would enhance nursing knowledge and inform curriculum decisions – illuminating common experiences, meanings, and unique perspectives. It would also be of value to gain an understanding of nurses' lived experiences of living on the edge during the COVID-19 pandemic.

The phenomenon of living on the edge could also be investigated more broadly with different populations as it is a universal living experience. Future research with Parsesciencing inquiry will expand understandings of humanuniverse living experiences

and promote research findings from a nursing perspective to further advance the science of nursing and disciplinary knowing.

Recommendations for Education

Admissions Policy

In addition to grades, the concepts of passion and perseverance (Duckworth, 2016, 2018; Duckworth et al, 2007) are beginning to be incorporated into the admissions process when assessing candidates. Passion may be revealed in application letters or letters of interest to the program and perseverance may come to light in letters of reference as part of the process in addition to specifically testing for grit. Von Culin et al. (2014) have developed measures for passion and perseverance (grit) that have been found to be more accurate than grades in predicting academic and professional success. The measurement of grit is egalitarian in that it emphasizes equality and is a less class-based indicator of potential success as it does not relay heavily on culturally specific prompts, whereas academic achievement relies heavily on environmental stimuli, opportunities, advantages, and various social factors. Further research is appearing in the literature related to grit in professional education (Stoffel & Cain, 2018), nursing leadership in healthcare (Sequin, 2019), and nursing academia in relation to academic success development of grit, and clinical performance (Terry & Peck, 2020).

Teaching-Learning

Acquiescing to Ambiguity. Acquiescing to ambiguity in the paradoxical rhythms of moving moment-to-moment coming to know something of value. These research findings highlight the challenges that occur in teaching-learning which have been amplified with the increased complexity and dynamics of the current healthcare situation.

Transformational teaching recognizes that a teacher's purpose is more than delivery of information. Rather than being content-focused, teachers help students become perceptive participants in the learning process, well-practiced at critical thinking, clinical judgement, goal setting, and critical reflection, drawing attention to the fact that formal education is a very small part of the professional development process.

> A transformative teacher helps students reach the edge of their understanding and then stays for the difficult work of helping students become comfortable living on the edge, so that the edge becomes incorporated into the shape of their world, making that world larger than it was before and making new actions possible from a larger field than previously available. (Berger, 2004, p. 347)

Becoming comfortable with ambiguity requires recognition of "the perceived importance of both the science and art of nursing being inextricably intertwined in clinical practice" (Terry & Peck, 2020, p. 4). Students who are uncomfortable with ambiguity, tend to gravitate to the applied science aspects of the program, and concrete skills and tasks that they are comfortable with. Stoffel and Cain (2018) found a correlation between grit, course engagement, and skills development. Terry and Peck (2020) suggested that as students engaged in actual and simulated clinical learning activities across the program that required them to apply theoretical and skill-based components learned throughout the program, there was an increase in their perceived clinical performance in correlation to an increased measure of grit. There are opportunities for teachers to continue to promote student well-being and create positive and supportive learning environments where students can experience ambiguity and uncertainty in a safe learning environment.

Dignifying the Journey. Dignifying the journey by vigilantly exploring unknowns of the everchanging. The teacher has the potential to play a key role in equipping nursing students with clinical reasoning skills and encouraging the development of self-directed learning and mastery of various skills that prepares them to be competent professionals. For nursing student looking for the one correct answer, "it is more about the realisation that there are always other possibilities to explore, that one is not trapped by one way of looking at [their professional practice], the world and one way of living" (Eschenbacher & Fleming 2020, p. 667). The continued use of unfolding case studies, problem-based learning, clinical practice, immersive virtual simulations, and preceptorship experiences where students can experience the uncertainty of clinical dilemmas and challenging, or complex client scenarios will help them develop an appreciation for the mystery of nursing and to develop comfort with unknowns. With these experiences comes the recognition that each client and their experience is unique, how they respond to their nurse, family, disease process, medications, and tests will also be unique in some way requiring the student to be attentive to and explore the unknowns.

Recommendations for Practice

Risking Venturing Forth

Risking venturing forth with quieting-disquieting regard amid diverse alliances. The importance of relationships has been highlighted throughout this study in the participants' descriptions. With an enhanced understanding of living on the edge in teaching-learning, the clinical teacher with the healthcare team can create and maintain an "healthy" and safe clinical work environment that facilitates learning. The humanbecoming paradigm guided practice complements the natural science and human

science domains within the healthcare environment. Whichever theory the reader aspires to, it is important to remember that for it to be sustainable, “it involves theory informing practice, and even more importantly, practice informing theory” (Jasper, 2019, p. 216). To be truly interdisciplinary in practice, nurses need to bring theoretical nursing knowledge to the collaborative activities and practice. “Direct engagement of the professional has a double purpose in the context of promotion of organizational learning with effective transformative outcomes because it makes explicit the knowledge construction and the meaning making processes embedded within professional practices” (Striano, 2019, p. 242). Being able to transfer theory to practice and learning from the client who is the expert in their experience supports the concept of person-centered care, taking their values, beliefs, hopes, and dreams into consideration (Ursel & Aquino-Russell, 2010).

Persevering With Novel Experiences

In persevering with novel experiences amid potentiating-restricting opportunities in realizing cherished endeavors, there is an ongoing recognized need to prepare nursing students for the realities of today’s demanding nursing practice and the obligation of self-directed, lifelong learning. It is essential that we explore the complexities of care, discuss clinical dilemmas, identify available and credible resources, and examine care approaches to facilitate this preparation. The seminal research by Duckworth (2016, 2018), has identified that anyone can learn to be gritty, and creating an environment to nurture this attribute will be key for to improve retention of nursing students in university and these future professional nurses.

Venerating Words, Wisdom, and Images of Others

With the development of curated collections of virtual and in-person simulations there is an opportunity to be more responsive to the variability of clinical opportunities, and individual and cohort identification of gaps when choosing simulations to address learning needs and facilitate student preparation for professional practice. As teachers we need to honor the student learning needs as we collaborate in choosing learning activities, reinforcing the importance of self-directed lifelong learning. Client-centered care requires the student to develop an effective nurse-client relationship and honour the wisdom of their client when considering and developing their plans of care (Ursel & Aquino-Russell, 2010).

Discovering Anew Cherished Priorities

In discovering anew cherished priorities as possibilities emerge, there is continued exploration, identification, and implementation of approaches for enhancing heutagogy (Eschenbacher & Fleming, 2020; Hof, 2017; Kaulback, 2020) which emphasize the development of learning capacity, capability, and self-reflection on the students' own nonlinear teaching-learning process. Learning strategies that rely on face-to-face and alternate delivery methods should incorporate theory-based approaches. When guided by a theory-based approach, the need to connect with students to understand and respond to their learning needs and expectations is illuminated. Theories draw attention to the need to explore opportunities with the students for the development of critical thinking and judgment, which can create meaningful structures and support their development of autonomous, self-directed, and self-determined learning. Engaging in communication, development of collaborative skills, and demonstrating empathy facilitate the discovery

of new learning possibilities as they emerge. As teachers we need to be intentional as we guide nursing students to the edge of their knowing and support them on the edge as they explore and build a firm foundation of knowledge in this space and look to new endeavors.

Summary

From the conceptualization through to the conclusion of this study I have set out to capture the essence of the lived experiences of living on the edge for nursing students. The humanbecoming teaching-learning model underpinned by the humanbecoming paradigm guided this research to uncover the epistemology – for the structural meaning of living on the edge in teaching-learning. It is hoped that readers consider these findings to enhance understanding and guide future practice in academia, research, and clinical venues.

Through the participants' written descriptions, I have described their unique perspectives of their teaching-learning experiences which has provided fresh insights. These insights have opened my eyes to the illimitable possibilities in coming to know these lived experiences. "Enlightening is the precious moment of awakening with the unborrowed vision of seeing the now possible, quietly alive in contextually construed chosen situations. The unborrowed vision arouses the availability to view the familiar in a new light" (Parse, 2021a, p. 57). The findings of this study may enhance understanding and contribute to decisions in academia and in practice in terms of the increasing use of technology, addressing the explosion of digital resources, and envisioning new ways of teaching-learning that facilitate critical thinking, clinical judgement, and creative

problem-solving as well as the non-cognitive skills of integrity, tenacity, grit, and perseverance.

> The most beautiful experience we can have is the mysterious. It is the fundamental emotion that stands at the cradle of all true art and science. He to whom this emotion is a stranger, who can no longer wonder and stand rapt in awe, is as good as dead, a snuffed-out candle. To sense that behind everything that can be experienced there is something that our minds cannot grasp, whose beauty and sublimity reaches us only indirectly. — Albert Einstein. (*The World as I See It,* as cited in Isaacson, 2007, p. 387)

It is the hoped these research findings and participant lived experiences will inspire the desire to gain a more holistic and in-depth understanding of the teaching-learning process, the uniqueness of the lived experience of living on the edge in teaching-learning, and the value of discipline-specific theory and research methods. Sharing of these findings at meetings, conferences, and in publications will serve to enhance understanding of the complexities of the lived experience of living on the edge in teaching-learning for nursing students.

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APPENDIX A

Research Study E-Posting

"LIVING ON THE EDGE"

UNDERSTANDING THE TEACHING-LEARNING JOURNEY

Are you a nursing student presently?

Have you had the experience of "*living on the edge*"

during your teaching ~ learning journey in your Nursing Program?

Would you be willing to write about your experiences of "*living on the edge*"?

Describing what has it been like for you

and

Submitting your description anonymously using LimeSurvey™.

APPENDIX B

Research Study Invitation

Living on the Edge: Letter of Invitation

Title of Study: ***Living on the Edge***

Principal Investigator: Karen Ursel, Interdisciplinary PhD Student, University of New Brunswick

Faculty Supervisor: Dr. Catherine Aquino-Russell, Faculty of Nursing, University of New Brunswick

Dear Nursing Students

I would like to invite you to take part in a research project. The ***purpose*** of my research is to understand your experience of *living on the edge* in a learning situation within your Nursing program.

You are asked to "Please write about a learning experience that describes what *living on the edge* was like for you". You are asked to write as much or as little as you wish.

I would be honoured if you copy your description onto LimeSurvey™ using the link provided

You can type your description in a Word document and submit it by copy/paste. Your information will be anonymous and confidential. All reflections will be stored in on my password protected computer. After the study is done and 5 years pass, these reflections will be destroyed.

No signed consent form is required.

I assume that if you copy and paste your description onto LimeSurvey, that you are consenting to participate.

If reflecting on an experience brings up feelings or concerns, you can talk about them with the Student Support Services available to you at UNB.
https://www.unb.ca/fredericton/studentservices/sit/index.html

Your input will assist teachers in understanding students' view of *living on the edge* in a teaching-learning situation and will benefit future nursing students.

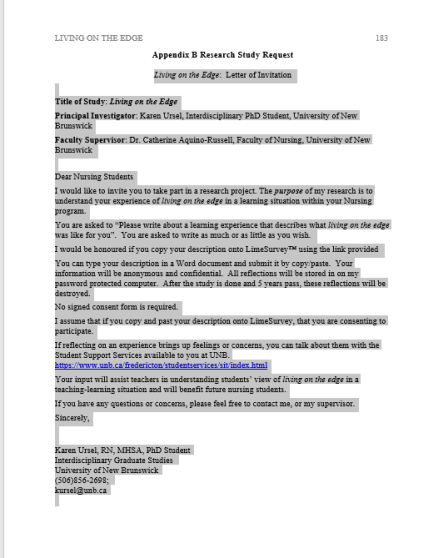
If you have any questions or concerns, please feel free to contact me, or my supervisor.

Sincerely,

Karen Ursel, RN, MHSA, PhD Student
Interdisciplinary Graduate Studies
University of New Brunswick
(506)856-2698;

kursel@unb.ca

Dr. Catherine Aquino-Russell, RN, MN, PhD
Thesis Supervisor
Faculty of Nursing, University of New Brunswick
Moncton N.B
caquinor@unb.ca
This project has been reviewed by the University of New Brunswick Research Ethics Board and is on file as REB20xx-xxx



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Appendix B Research Study Request

Living on the Edge: Letter of Invitation

Title of Study: ***Living on the Edge***

Principal Investigator: Karen Ursel, Interdisciplinary PhD Student, University of New Brunswick

Faculty Supervisor: Dr. Catherine Aquino-Russell, Faculty of Nursing, University of New Brunswick

Dear Nursing Students

I would like to invite you to take part in a research project. The ***purpose*** of my research is to understand your experience of *living on the edge* in a learning situation within your Nursing program.

You are asked to "Please write about a learning experience that describes what *living on the edge* was like for you". You are asked to write as much or as little as you wish.

I would be honoured if you copy your description onto LimeSurvey™ using the link provided

You can type your description in a Word document and submit it by copy/paste. Your information will be anonymous and confidential. All reflections will be stored in on my password protected computer. After the study is done and 5 years pass, these reflections will be destroyed.

No signed consent form is required.

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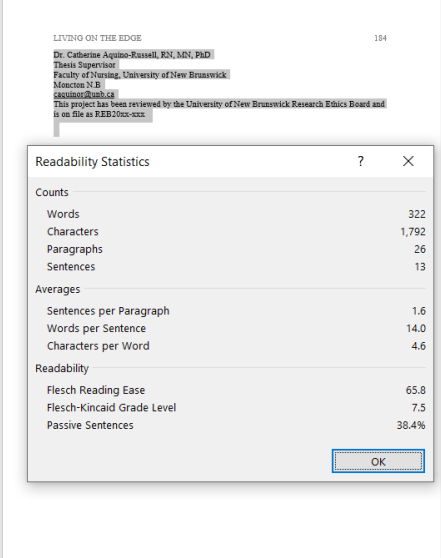
If reflecting on an experience brings up feelings or concerns, you can talk about them with the Student Support Services available to you at UNB.
https://www.unb.ca/fredericton/studentservices/sh/index.html

Your input will assist teachers in understanding students' view of *living on the edge* in a teaching-learning situation and will benefit future nursing students.

If you have any questions or concerns, please feel free to contact me, or my supervisor.

Sincerely,

Karen Ursel, RN, MHSA, PhD Student
Interdisciplinary Graduate Studies
University of New Brunswick
(506)856-2698
kursel@unb.ca



LIVING ON THE EDGE 184

Dr. Catherine Aquino-Russell, RN, MN, PhD
Thesis Supervisor
Faculty of Nursing, University of New Brunswick
Moncton N.B
caquinor@unb.ca
This project has been reviewed by the University of New Brunswick Research Ethics Board and is on file as REB20xx-xxx

Readability Statistics

Counts	
Words	322
Characters	1,792
Paragraphs	26
Sentences	13
Averages	
Sentences per Paragraph	1.6
Words per Sentence	14.0
Characters per Word	4.6
Readability	
Flesch Reading Ease	65.8
Flesch-Kincaid Grade Level	7.5
Passive Sentences	38.4%

OK

CURRICULUM VITAE

BIOGRAPHICAL: **Surname:** Ursel **Given Names:** Karen Lynn

Karen L. Ursel https://orcid.org/0000-0003-2346-9875

EDUCATION:

Post-Secondary Education

2009	Interdisciplinary PhD Studies – In Progress University of New Brunswick	Fredericton, NB
1995	Masters in Health Services Administration Dalhousie University	Halifax, Nova Scotia
1991	Bachelor of Nursing University of Manitoba	Winnipeg, Manitoba

PUBLICATIONS:

Ursel, K. L. (2020). Minding the gap: The art and science of teaching guided by humanbecoming. *Nursing Science Quarterly*, *33*(4), 322-329. https://doi.org/10.1177/0894318420943138

Ursel, K. L. (*2015*). From theory to practice: Guided by the humanbecoming leading-following model. *Nursing Science Quarterly*, *28*(1), 28-33. https://doi.org/10.1177/0894318414558618

Aquino-Russell, C., & **Ursel, K. L.** (2014). Honoring Pocahontas: Through the lens of humanbecoming postulates and ethical tenets of human dignity. *Illuminations, 23*(1), 3-5.

Ursel, K. L. (2012). The Lise Perrault Memorial Scholarship article. *Illuminations, 21*(2), 4-6.

Aquino-Russell, C., **Ursel, K. L.,** Dube, A., & Charron, D. (2011). Illuminating the humanbecoming models: leading-following and teaching-learning through the phenomenon of living on the edge with a clinical situation. *Illuminations, 20*(2), 4-6.

Ursel, K. L., & Aquino-Russell, C. (2010). Illuminating person-centered care with Parse's teaching-learning model. *Nursing Science Quarterly,23(2), 118-123.* https://doi.org/10.1177/0894318410362546

CONFERENCE PRESENTATIONS:

Ursel, K. L. (2021, August 31). *Integrating digital health into the ASP BN Curriculum* [Oral Presentation]. UNB Faculty of Nursing Digital Health Workshop, Fredericton, NB, Canada.

Ursel, K. L. (2019, June 13-15). *The art & science of teaching psychomotor skills in nursing* [Oral Presentation]. Atlantic Region, Canadian Association of Schools of Nursing (ARCASN) Conference. Rankin School of Nursing, St FX University, Antigonish, NS, Canada.

Ursel, K. L. (2018, December 7). *The art & science of teaching psychomotor skills* [Poster presentation]. Kaleidoscope Teaching Showcase, Fredericton, NB, Canada.

Ursel, K. L. (2012, December 6). *Cautiously cultivating teaching-learning numeracy* [Poster presentation]. Kaleidoscope 2012 Teaching Showcase, Fredericton, NB, Canada.

Aquino-Russell, C. & **Ursel, K. L.** (2012, November 2-4). *Human dignity - Honoring Pocahontas* [Conference Session]. International Consortium of Parse Scholars Biennial Conference, Niagara-on-the-lake, ON, Canada.

Ursel, K. L. (2012, November 2-4). *Cautiously cultivating teaching-learning numeracy through the lenses of H\humanbecoming & human dignity* [Poster presentation] International Consortium of Parse Scholars Biennial Conference, Niagara-on-the-lake, ON, Canada.

Barter, C. & **Ursel, K. L**. (2012, April 27). *Imagination, inspiration & identity: Challenges with numbers* [Oral Presentation]. 17th Annual Faculty of Nursing Research Day, University of New Brunswick, Fredericton, NB, Canada.

Ursel, K. L., Barter, C., & Smith, K. (2011, December 8). *Developing numeracy skills in nursing students* [Oral Presentation]. University of New Brunswick Kaleidoscope 2011 Teaching Showcase, Fredericton, NB, Canada.

Aquino-Russell, C. & **Ursel, K. L.** (2011, June 17). *Being with Persons who live with the medical diagnosis of depression* [Oral Presentation]. Canadian Association for Parish Nursing Ministry Conference, Moncton, NB, Canada.

Ursel, K. L., & Barter, C., (2011, May 6). *Dosage calculation -"Making it real"* [Oral Presentation]. 16th Annual Faculty of Nursing Research Day, University of New Brunswick, Fredericton, NB, Canada.

Aquino-Russell, C., **Ursel, K. L.,** Charron, D., & Dube, A. **(**2010, November 5-7). *Leading-following with teaching-learning* [Oral Presentation]. International Consortium of Parse Scholars Biennial Conference, Niagara-on-the-lake, ON, Canada.

Ursel, K. L. (2010, April 16). *"Living on the edge": Understanding the teaching learning journey* [Poster Presentation]. 15th Annual Faculty of Nursing Research Day, University of New Brunswick, Fredericton, NB, Canada.

Ursel, K. L. (2009, November 29th). *Living on the edge": Understanding the teaching learning journey* [Poster Presentation]. Work In Progress (WIPS) Session, University of New Brunswick, Faculty of Education,

Aquino-Russell, C., Beiswanger, D., MacCarthy, C., & **Ursel, K. L.** (2008, November 14-16). *Living paradox in Parse's teaching-learning model* [Oral Presentation] "Living Paradox". International Consortium of Parse Scholars Biennial Conference, Niagara-on-the-lake, ON, Canada.

ACADEMIC AWARDS:

2021 McPhedran Nursing Faculty Development Graduate Scholarship.
UNB Faculty of Graduate Studies.

2012 The Lise Perrault Memorial Scholarship – Recognition of commitment to nursing theory and the humanbecoming school of thought.
International Consortium of Parse Scholars.

1994 Dalhousie University Graduate Scholarship
Dalhousie University Faculty of Graduate Studies.

ACADEMIC GRANTS

Ursel, K. L. (Principle Investigator). (2011-2012) *Developing numeracy in the nursing student population.* [Grant]. UNB Teaching and Learning Priority Fund.