

NURSE FACULTY EXPERIENCES WITH INTEGRATING HIGH-FIDELITY SIMULATION
(HFS) INTO THEIR TEACHING PRACTICE: A PHENOMENOLOGICAL STUDY

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By

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ABSTRACT

High-fidelity simulation (HFS) is a teaching innovation that is becoming a key component in nursing education programs. Nursing students are able to practice skills without fear of harm to themselves or to a patient, and nurse faculty can demonstrate techniques and critical scenarios in a way that may not be available to students or faculty in the clinical setting. However, nursing faculty are not utilizing this teaching innovation to its potential suggesting educational administrators could benefit from understanding the challenges that nurse faculty face when integrating HFS into their teaching practice. The purpose of this phenomenological study was to explore the lived experiences of nurse faculty who were required to integrate HFS into their teaching practice.

In this study, seventeen female nurse faculty who taught in the second year of the Saskatchewan Collaborative Bachelor of Science in Nursing (SCBScN) at Saskatchewan Polytechnic Saskatoon Campus were interviewed about their experiences integrating HFS into their teaching practice. The transcripts were analyzed using Moustakas' (1994) modified Van Kaam method. Six themes describing the essences of the participants' experiences were identified: striving for self-efficacy, struggling to maintain autonomy, being part of a community of practice, adopting HFS as a teaching innovation, being an advocate, and being proud. An emerging theme, being an outsider, was discussed. An interpretation and synthesis of the results resulted in a conceptualization of the experience.

This research has implications for integrating a new teaching innovation. The nurse faculty required support and resources, psychological safety while learning the new innovation, ongoing communication about the innovation, acknowledgement of their accomplishments, and a sense of pride in the institution. Recommendations for nurse faculty include becoming prepared, finding a mentor, participating in discussion forums, and advocating for time needed to learn. Recommendations for educational administrators include ensuring ongoing education and support, involving nurse faculty in discussions about the innovation from the beginning, providing a psychologically safe environment for learning, providing time to learn away from other teaching responsibilities, and fostering pride through acknowledgement of accomplishments.

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DEDICATION

This dissertation is dedicated to my husband (Robert) and my children (Robyn, Sarah, Joshua, Andrew, Heather, and Thomas) who have always been there for me through many years of education. You were always so sure I would finish, and you were always so proud of my accomplishments. Without that love and support, I don't know if I would have finished.

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LIST OF ABBREVIATIONS/ACRONYMS

<u>Acronym</u>	<u>First Page Number</u>
Beh-REB: Behavioral Research Ethics Board.....	53
CASN: Canadian Association of Schools of Nursing.....	2
CoP: Communities of Practice.....	30
DOI: Diffusion of Innovations.....	15
HFS: High-fidelity simulation	1
NLN: National League of Nursing	17
S.T.E.P: Simulations Take Educator Preparation.....	17
SCBScN: Saskatchewan Collaborative Bachelor of Science in Nursing	3
SCT: Social Cognitive Theory.....	15
SLC: Simulation Learning Centre	4
TPB: Theory of Planned Behavior.....	15

CHAPTER 1 BACKGROUND TO THE STUDY

Introduction

High-fidelity simulation (HFS) has become an important part of Registered Nurse education in the last decade as sophisticated technology allows for realistic models of the human patient. These models (or manikins) are used in scenario-based learning experiences. Nursing students are able to practice skills without fear of harm to themselves or to a patient, and nurse faculty can demonstrate techniques and critical scenarios in a way that may not be available in the clinical setting. Despite the fact HFS is becoming an expectation in Registered Nurse curriculums, nurse faculty remain hesitant to use it in their teaching practice (Jansen, Berry, Brenner, Johnson, & Larson, 2010). It is important to understand why nurse faculty are reluctant to integrate HFS into teaching practice. As a nurse faculty at Saskatchewan Polytechnic, I became interested in the personal experiences of integrating HFS into practice. The purpose of this phenomenological study was to explore the lived experiences of nurse faculty who were required to integrate HFS into their teaching practice.

Background of HFS

HFS is a teaching innovation that enables students to develop the skills critical to nursing practice in a safe, supportive environment. Based on experiential learning theory, students are able to apply theoretical knowledge in a safe learning environment that mirrors the clinical setting, as well as giving them time to reflect on their learning through a debriefing experience (Howard, Englert, Kameg, & Perozzi, 2011). HFS has been gradually increasing in use as a means of giving students safe learning experiences.

In the literature, simulation is described as low-fidelity, intermediate-fidelity, and high-fidelity. Low-fidelity simulations are non-computerized and focus on a single task; intermediate-fidelity simulations include actors, games, or computer programs but only focus on parts of a scenario; and high-fidelity simulation refers to the human patient manikin computerized simulator as used in a teaching scenario (Harder, 2010). For the purposes of this research, the discussion around simulation will refer to the high-fidelity, computerized, patient manikin simulator.

HFS is a fairly recent addition to nurse education. In two national surveys of State Boards of Nursing in the United States, the researchers found simulation and high-fidelity manikin use continues to grow even though most institutions have a lack of faculty and staff who are trained

to run the simulation scenarios (Kardong-Edgren, Willhaus, Bennett, & Hayden, 2012; Nehring & Lashley, 2004). HFS can be used to replace a portion of clinical practice education hours. For instance, the California Board of Registered Nursing allows 25% of clinical hours to be spent in a high-fidelity simulation setting rather than in the clinical setting (Gates, Beth Parr, & Huguen, 2012). HFS would be especially useful in areas where clinical placements were hard to access.

In a study commissioned by the Canadian Association of Schools of Nursing (CASN), the researchers found 70% of respondents had used HFS to augment clinical learning with the majority of these (86%) being undergraduate programs. They reported nursing programs used the highest number of hours of simulation, but only 17 out of 64 programs required it as a mandatory component; however, most respondents felt it was inappropriate to use simulated scenarios to replace clinical hours (Garrett, Van der Wal, Tench, & Fretier, 2007). The recommendations from this research were additional studies in cost effectiveness, investigation into inter-professional uses, and pedagogical theory development.

In a study by Howard et al. (2011), faculty were surveyed after the implementation and integration of simulation throughout the nursing curriculum. Faculty reported better consistency and standardization of teaching, enhanced student learning of the content, opportunities for students to experience high-risk and low-occurrence scenarios, and better student communication skills with HFS. Howard et al. reported challenges to the use of HFS including: faculty inexperience, not enough time to learn the technology, not enough time to schedule students, inadequate space, lack of realism within the scenarios, and difficulty grouping students to enhance learning. Even though there are issues with using HFS in teaching, nurse faculty acknowledge the benefits to student learning.

In a descriptive study of nursing educational administrators and faculty members' experiences with integrating HFS into a nursing curriculum, Adamson (2010) identified barriers and facilitators to integrating HFS. The barriers included lack of time, support, and equipment; and the facilitators were comprehensive training, personal initiative, and peer and administrative support. Adamson suggested reducing the barriers, strengthening the facilitators, and implementing incentives to promote integration of HFS. A limitation of this study is that it may only reflect the views of early adopters due to the low survey participation rate (Adamson, 2010). It is also important to understand the experiences of all levels of technology users.

In an exploratory research study, Miller and Bull (2013) found that even though nurse faculty had positive attitudes towards the use of HFS in nursing education, they were reluctant to adopt it into their own teaching practice due to lack of comfort and understanding of the innovation. According to Miller and Bull, nurse faculty require time to “play” with the technology and become comfortable with it prior to integrating HFS into their practice. The feelings and experiences of nurse faculty towards HFS must be considered when integrating it into a nursing program.

Context and Positionality

As a result of a provincial mandate to increase nursing student seats, there are now two new nursing degree programs in Saskatchewan, one through the University of Saskatchewan, and one as the result of a collaboration between the University of Regina and Saskatchewan Polytechnic. As a nurse faculty at Saskatchewan Polytechnic, I was involved with the development of the collaborative degree program, the Saskatchewan Collaborative Bachelor of Science in Nursing (SCBScN). The SCBScN program will have a substantial increase in reliance on HFS, resulting in a requirement for clinical nurse faculty to integrate it into their teaching practice.

A new teaching technology takes time to become an integrated practice in nurse education. HFS is an advanced teaching innovation that is rapidly becoming an integral part of clinical practice education (Nehring & Lashley, 2004), and has been incorporated into undergraduate nursing programs internationally (Cant & Cooper, 2010). This trend to increase the use of HFS is apparent within the SCBScN program.

There are two considerations I believe have influenced this pedagogical change at Saskatchewan Polytechnic. The first consideration is the increased number of students who will be admitted to nursing as a result of the provincial mandate to educate more nurses. The competition for clinical placements has increased and will continue to increase as the two Saskatchewan nursing degree programs are developed and the increase of the additional seats is accomplished. An increase in HFS hours would reduce the impact of increased numbers of student placements by reducing the amount of time spent in the clinical setting.

The second consideration is the literature on HFS has shown the benefits to students who experience it as an adjunct to clinical learning by improving diagnostic reasoning skills, interprofessional team work, skill and knowledge transfer to the clinical setting, understanding and knowledge acquisition, critical thinking, and safety (Paige et al., 2014; Richardson &

Claman, 2014; Tofil et al., 2014; Wilson, Klein, & Hagler, 2014). These and other positive research results prompted the nursing division to invest a large amount of money into the development of a Simulation Learning Centre (SLC), a program head for the SLC, dedicated teaching and technology staff, and up-to-date equipment and technology. This also prompted the developers of the clinical courses to make HFS a mandatory part of these courses. Up to this point, it was left to the discretion of nurse faculty whether or not to include HFS experiences during clinical practice education. Most of the nurse faculty at Saskatchewan Polytechnic have had some experience with HFS.

Saskatchewan Polytechnic School of Nursing offered educational sessions on simulation learning, best practices, and debriefing as part of yearly professional development. There has been technology information presented by vendor representatives, and all nurse faculty were required to participate in an orientation to the SLC. The faculty in the SLC were available for individual information or training sessions with interested nurse faculty. There was also an opportunity for nurse faculty to participate in ongoing formal and informal educational sessions about HFS.

The second year of the SCBScN program consists of theory courses in microbiology, counselling, pharmacology, research methods, statistics, assessment, and two practice education courses (Saskatchewan Polytechnic/University of Regina, 2014). The total second year clinical time was 216 hours with 20 hours allocated to HFS. All nurse faculty teaching in the second year clinical courses are required to facilitate their student groups during these sessions with the support of the SLC faculty and technicians. The nurse faculty at Saskatchewan Polytechnic are assigned courses based on approximately 650 student contact hours over 199 days. This time allows for preparation and complementary functions such as meetings and professional development. The second year clinical courses would be equivalent to 230 contact hours.

This study was conducted in the fall of the 2013/2014 school year, following the first year that HFS was a required component of nurse faculty teaching responsibilities in the SCBScN program. Data was acquired through 17 semi-structured interviews. Only the nurse faculty who taught using HFS in the second year of the SCBScN program were sent an invitation to participate. All of the nurse faculty who responded were interviewed. Thirteen of the interviews took place outside of Saskatchewan Polytechnic Saskatoon Campus at a coffee shop or restaurant convenient for the participants. Two of the interviews took place after working hours at

Saskatoon Campus, and two of the interviews took place over a break time at Saskatoon Campus at the request of the participants. Participants were given a \$15.00 gift card to cover any costs they may have incurred.

The HFS Scenario

The HFS scenario at Saskatchewan Polytechnic Saskatoon Campus follows a specific pattern. Each student group consists of six to eight students. The students receive an orientation to the SLC and to the scenario, and they are asked to sign a confidentiality form. They are given report outside of the patient room. A group of three to four students runs through the scenario while the remaining three to four students are sequestered in a debriefing room. After the first group of students has completed the scenario, the second group of students completes it. The scenarios are video and audio-taped. There are two options for running through a scenario:

1. The faculty and sequestered students watch the participating group as they go through the scenario; then, the second group of students continues on from where the first group left off, or
2. The sequestered students do not watch the scenario and the scenario is repeated from the beginning for that group. The video may be watched during the debriefing or is available for student viewing later.

The process of moving through an HFS scenario is depicted in Figure 1-1. This process is completed in approximately four hours.

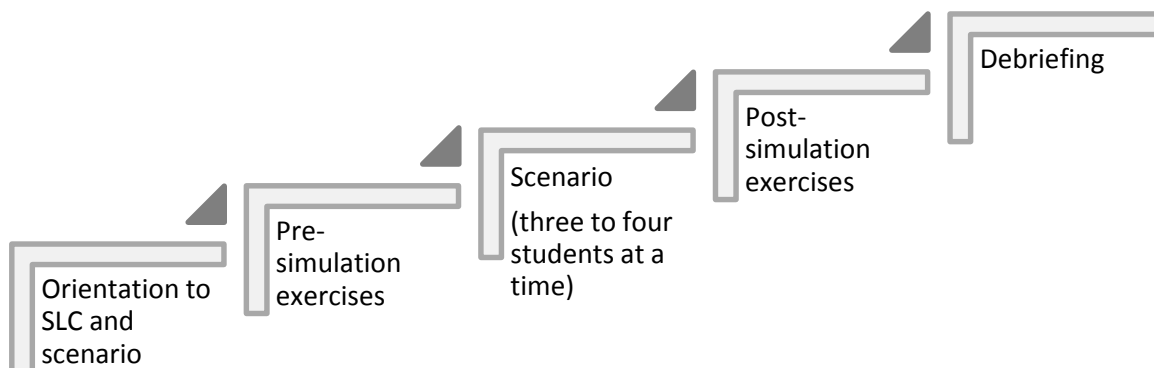


Figure 1-1. The process of moving through an HFS scenario at Saskatchewan Polytechnic Saskatoon Campus.

The SLC

The SLC is a dedicated HFS area with four patient rooms including a mother-baby unit, three debriefing rooms, three control rooms, and an apartment. There are assigned nurse faculty (full-time and part-time) who facilitate and develop teaching scenarios, full and part-time technicians who set up the equipment and run the scenarios from the control room, simulation assistants who prepare and package the supplies for the scenarios, and administrative support. In addition to the School of Nursing, the SLC provides HFS training to students in other programs. During a simulation scenario, the students are in the room by themselves (See Figure 1.2).



Figure 1-2. A patient room in the SLC at Saskatchewan Polytechnic Saskatoon Campus looking through the two-way mirror from the perspective of the technician's booth. The technician manipulates the manikin's responses based on an algorithm (see Appendix I).

The technician and nurse faculty sit in the control room. The technician or the SLC faculty manipulates the responses of the manikin based on the scenario algorithm (see Appendix I). After the scenario is completed, the nurse faculty debrief the students in the debriefing room (see Figure 1.3). The students can also log onto computer programs associated with the scenario and complete the post-scenario exercises.



Figure 1-3. A debriefing room at Saskatchewan Polytechnic Saskatoon Campus. From the debriefing room, the faculty and students can watch other students while they go through the scenario or the video can be viewed by all students after they have completed it.

The Researcher

I have been working in the nursing profession since 1991. Most of my time has been spent in the clinical area as a staff nurse with an advanced certification in neurosciences. In the last five years, I have been working in the nursing faculty at Saskatchewan Polytechnic which requires teaching both nursing theory and clinical practice education. Recently, I have also been involved in curriculum development for the new SCBScN program. One of the curriculum teams I served on developed the second year clinical practice education courses. As a faculty member with the SCBScN, and as clinical faculty with experience using HFS, I am in a position to understand the nature of traditional clinical practice education and the complexities of simulation education, and I can see the benefit of both.

My experience with HFS includes using it a few times with the assistance of simulation faculty in a previous program, researching the uses of HFS for a research project, touring the SLC when it was opened, and taking a brief introductory session from the SLC faculty. Since the SLC has opened, I have taken two groups of students into the SLC for HFS scenarios. I would classify my skill level with HFS as a beginner to intermediate.

I believe HFS is a necessary adjunct to clinical practice education that gives students learning opportunities they would not experience during clinical. I also believe it should be a mandatory component within nursing education programs. I understand the reticence nurse faculty have to use HFS because I do not feel comfortable with my level of experience and education in this area. By reflecting on my personal experiences with and beliefs about integrating HFS into clinical practice education, I became aware of my biases that may influence analysis of the participants' experiences.

Phenomenological researchers "bracket" themselves to identify and set aside personal experiences and beliefs about a phenomenon in order to focus on the experiences of the participants (Creswell, 2012). Van Manen (1990) defined bracketing as "the act of suspending one's various beliefs in the reality of the natural world in order to study the essential structures of the world" (p. 175). Through bracketing, I have attempted to suspend my previously held beliefs about integrating HFS into my teaching practice in order to focus entirely on the experiences of the participants. This was done by recording and transcribing my responses to the interview questions, then reflecting on my beliefs and assumptions prior to interviewing any of the participants.

Nature of the Study

The research method chosen to conduct this study was qualitative in nature. Lincoln and Guba (1985) stated:

Qualitative methods...are more adaptable to dealing with multiple (and less aggregatable) realities; because such methods expose more directly the nature of the transaction between investigator and respondent...and because qualitative methods are more sensitive to and adaptable to the many mutually shaping influences and value patterns that may be encountered. (p. 40)

The varied experiences of the participants were acknowledged and became part of the research by using a qualitative research method.

The use of the transcendental phenomenological research approach facilitated the exploration of the lived experiences of nurse faculty during a transitional period in their practice. The research method was guided by the work of Moustakas (1994). According to Moustakas, transcendental phenomenology differs from other qualitative research methodologies in approach, emphasis, and analysis. Transcendental phenomenological research follows a structured and systematic approach to analysis of the participants' narratives with emphasis on

the use of intuition and imagination to obtain an understanding of the phenomenon (Moustakas, 1994). During the analysis, the researcher used imaginative variation based on the theoretical concepts described in Chapter Two to cluster and develop themes which required imagination and intuition. This approach allowed for an exploration of the experiences of nurse faculty who were required to integrate HFS into their teaching practice.

Significance of the Study

This study may contribute to education theory and research in the following ways:

1. It may increase understanding of the perceptions of nurse faculty to a mandated change in clinical practice education.
2. Extensive research has been done on the benefits of HFS to student learning; however, very little has been done on the experiences of nurse faculty when integrating simulation into their practice. This research explored an area where there has not been much research with the goal of increasing nursing knowledge.
3. It may increase understanding of why HFS is not utilized to its full potential by nurse faculty, and it may address the reticence of nurse faculty to use it.
4. It may give a voice to selected nurse faculty about their teaching practice and the influence of organizational pressures to change that practice.
5. It may help the organization to identify areas where nurse faculty training and support is required.
6. It may help the educational community understand the impact professional communities of practice have on personal beliefs about educational innovation.
7. It may provide information for educational administrators who are interested in changing teaching practice within an educational institution.
8. It may add to the body of knowledge related to the impact of technology or teaching innovations on epistemology and pedagogy.

Purpose of the Study

The purpose of this phenomenological study was to explore the lived experiences of nurse faculty who were required to integrate HFS into their teaching practice. The research question guiding the research was, “What are the lived experiences of nurse faculty who are required to integrate HFS into clinical practice education?” The following six sub-questions were addressed:

1. How do participants attempt to develop the knowledge, skills, and attitudes they perceive are necessary to teach using HFS?
2. What are participants' beliefs about using HFS scenarios as part of their clinical teaching practice?
3. To what extent do participants perceive they are prepared to teach using HFS?
4. What factors do participants perceive might help or hinder their use of HFS?
5. How do participants perceive the role of HFS scenarios in their teaching practice?
6. In what ways do the participants' community of practice influence beliefs about HFS in nursing education and practice?

Definition of Terms

The following terms appear in this research proposal. The usage of the terms in the research proposal is based on the descriptions that follow.

Technological Innovation

Rogers (2003) described an innovation as a practice considered new by a person. In this definition, it does not matter if the innovation is actually new, but whether or not the person perceives it as new to themselves (Rogers, 2003). An innovation is not necessarily technological in nature. According to Rogers, technology and innovation are often used synonymously. In this study, the innovation is technological in nature, but also has a pedagogical component.

Human Agency

“To be an agent is to influence intentionally one’s functioning and life circumstances” (Bandura, 2006, p. 164). Agency is an important element of human functioning. According to Bandura (2006) people are not just observers of their actions; they contribute to their life circumstances through self-organization, self-regulation, and self-reflection. Bandura stated human agency is affected by outside influences, and there is no absolute agency because people must accommodate their self-interests with the interests of others. Therefore, environmental and behavioral factors can impede or support human agency.

Self-Efficacy

Self-efficacy is the empowerment of human agency (Alkire, 2005). Human agency is an intentional act; whereas, self-efficacy is a person’s perception of their ability to complete a task (Bandura, 1997). Self-efficacy differs from self-esteem and self-confidence. According to

Bandura (1997), self-esteem is a judgment of self-worth, whereas self-efficacy is a judgment of one's capabilities. Self-confidence is a holistic belief in oneself, whereas self-efficacy pertains to a specific situation or task to be completed (Straub, 2009). Self-efficacy plays an important role in whether or not a person will act. Bandura postulated self-efficacy is one of the human mechanisms governing action.

Social Learning

Persons are capable of learning both from personal experiences and from the experiences of others. Social learning occurs by observation of other persons' behaviors and the consequences of those behaviors (Bandura, 1986). Learning occurs through interaction with the environment. Learning is social, it occurs with other people, and the environment provides the innovations and structure (Wilson, 1993). Hansman (2008) stated:

The nature of the interactions among learners, the innovations they use within these interactions, the activity itself, and the social context in which the activity takes place shape learning. The knowledge gained through learning in a situated context, then, is real-life knowledge, reflecting the values of the learners themselves. (p. 298)

Communities of Practice

A community of practice is defined by Lave and Wenger (1991) as "a set of relations among persons, activity, and world, over time and in relation with other tangential and overlapping communities of practice" (p. 98). It contains a dynamic knowledge base which identifies issues, shared practices, and persons with an interest in this knowledge (Wenger, McDermott, & Snyder, 2002). Communities of practice have close links with both social learning and collective self-efficacy. Lave and Wenger stated people learn by becoming intimately involved with a community through interaction, participation, and understanding of the history, assumptions, values, and rules of that community.

Limitations

The following limitations may exist:

1. The study may be limited by the participants' readiness to describe their experiences due to one or more of the following: difficulty remembering past experiences, reluctance to describe unpleasant experiences, and degree of openness and candidness. The political pressure to use simulation in nurse education is increasing (Miller & Bull, 2013), and this may affect the participants' willingness to express negative feelings. As an insider

researcher, a faculty member within Saskatchewan Polytechnic School of Nursing who has taught in the second year clinical courses, the researcher is aware of the pressure on nurse faculty to use HFS as part of clinical practice education. The researcher is not associated with the SLC and is not a part of the management team at Saskatchewan Polytechnic. Therefore, the researcher should have been considered a peer to the nurse faculty, thus allowing them to express their feelings honestly.

2. Data collection occurred through semi-structured interviews supplemented by researcher observation. The researcher as human instrument is able to interact with the participants, and understand and interpret that interaction (Lincoln & Guba, 1985). The study may be limited by the researcher's ability to engage the participant, ask questions eliciting a detailed response and review and interpret written accounts of interviews. To offset this limitation, the novice researcher sought help from her academic supervisor to ensure preparedness for the interview process, and she had two of the interviews analyzed by an experienced nurse researcher. The participants were familiar with the researcher and the researcher's role at Saskatchewan Polytechnic, and they may have been more comfortable during the interview process because of this.
3. Because the study was conducted in one nurse education program within one educational institution, and because it targeted a small number of nurse faculty in that program, the researcher is not able to generalize the results to the nurse faculty population in the general sense. However, the data may be transferable throughout the field of nursing education and human patient simulation.
4. The study took place following the 2012/2013 school year, which is when the initial presentation of the second year medical-surgical clinical rotation was offered in the SCBScN program. The significance of this year is nurse faculty were not required to use HFS in clinical practice education before this. Most nurse faculty would have had an introduction to HFS and may have participated in one or two scenarios. During this year, nurse faculty were required to use HFS as an adjunct to clinical practice education no matter what their previous experiences were with it. This special circumstance makes the research very timely. It is unlikely this study will be able to be replicated in this setting. After this point, all nurse faculty participating in clinical practice education in the SCBScN program will be required to use HFS as part of their teaching practice.

5. The researcher is a member of the School of Nursing at Saskatchewan Polytechnic Saskatoon Campus. All participants who responded to the initial invitation were interviewed. No other members of the faculty were approached. The researcher felt it would put undue pressure on nurse faculty to participate in the research study if they were approached individually due to their relationship with the researcher. Due to the closeness of the nurse faculty community, anonymity could not be guaranteed although every effort was made to maintain anonymity.
6. According to Rogers (2003), the time research is conducted in relation to the diffusion of the innovation and the focus of the research may limit understanding of the innovation. This research is limited by a focus on individual experiences with integrating HFS rather than systemic problems within the organization and to perspectives of participants after the innovation was integrated into the nursing curriculum.

Assumptions

The following assumptions were made by the researcher:

1. Aspects of personal life, organizational culture, and communities of practice influence nurse faculty experiences with integrating a new teaching innovation into their teaching practice.
2. The conceptual framework selected was useful in understanding nurse faculty members' responses to a change in teaching practice.
3. Nurse faculty respond to change based on the meaning they attach to the change.
4. Because the researcher is familiar with both clinical practice education in nursing and with HFS, the participants were able to discuss HFS in a manner in which the researcher could understand and interpret.
5. The scenarios used in the SLC were chosen specifically for the course by the course leader and the SLC staff; therefore, the scenarios meet the outcomes of the course and are appropriate for the level of student.

Summary

High-fidelity simulation is a teaching innovation that is quickly becoming integrated within the SCBScN curriculum. Nurse faculty view HFS positively, but there is a reluctance on their

part to use it as part of the clinical experience. The experiences and feelings of nurse faculty must be considered when integrating HFS into a nursing program. A phenomenological look at the lived experiences of nurse faculty who teach in a second year clinical course at Saskatchewan Polytechnic Saskatoon Campus may help increase understanding of the hesitancy to use HFS. The purpose of this phenomenological study was to explore the lived experiences of nurse faculty who were required to integrate HFS into their teaching practice. This research is timely in that nurse faculty at Saskatchewan Polytechnic were required to integrate HFS into clinical practice education as part of the SCBScN program. The researcher has a unique opportunity to study the lived experiences of this group of nurse faculty.

Organization of the Dissertation

This chapter has provided a background to the research problem and an introduction to the study. It has also provided a brief look into the context of HFS at Saskatchewan Polytechnic Saskatoon Campus. Chapter Two presents a review of the literature as it relates to the key concepts and theories underpinning the study. This includes an exploration of social cognitive theory and the concepts of human agency, self-efficacy, and social learning, and the development of a conceptual framework. Chapter Three outlines the methodology and the research design. In Chapter Four, the results of individual participants' analysis are presented. This chapter includes the denaturalized transcripts (after irrelevant information was removed), the textural and structural descriptions, and the synthesized textural-structural description for each participant. Chapter Five provides an analysis, interpretation, and synthesis of the individual textural-structural descriptions into the essence of the phenomenon, emerging themes, and a return to the conceptual framework. In Chapter Six, the conclusions and recommendations are presented; and a reflection on the research process is done.

CHAPTER 2 LITERATURE REVIEW

Introduction

The purpose of this study was to explore the experiences of selected nurse faculty who were required to use HFS as part of their teaching practice. This chapter begins with an overview of HFS and the nurse faculty role in it. Secondly, diffusion of innovations theory (DOI) and the theory of planned behavior (TPB) are discussed as a foundation for understanding diffusion and adoption of technology or technological innovations. Next, social cognitive theory (SCT) is considered as a theoretic lens for understanding the personal experience. Specifically, the concepts of agency, self-efficacy, and social learning are explored in detail and discussed in relation to technology acceptance. Finally, a conceptual framework combining the concepts identified in the discussion is described.

High-Fidelity Simulation (HFS)

New advances in simulation technology have expanded educational possibilities. HFS manikins closely resemble the physiological functions of a human being, and they are accompanied with strategies for teaching with simulators such as learner support, facilitation and cueing, and debriefing (Harder, 2009). These strategies support learning and encourage changes in nurse education pedagogy. Faculty must become comfortable with adapting their teaching to a more visible and less teacher-centered model (Miller & Bull, 2013). The changes in simulation technology have led to new interest in educational practices and research (Harder, 2009). The interest in improved educational practices drives administrators to adopt HFS within their schools. Administrators of healthcare education are pressured to improve quality and safety in healthcare, and simulation-based education provides an innovative solution (Miller & Bull, 2013). In a small exploratory research study, Miller and Bull (2013) found faculty played a key role in how HFS was integrated into the curriculum, and how faculty viewed HFS as a teaching innovation impacted adoption of it. This section consists of an overview of HFS, the nurse faculty role when teaching with it, and research related to nurse faculty perspectives of HFS.

Overview of HFS

HFS is a teaching innovation that enables students to learn critical nursing skills. Not all students are able to gain experience or participate in commonly occurring critical clinical

situations (Murphy, Hartigan, Walshe, Flynn, & O'Brien, 2011). Murphy et al. (2011) stated critical situations can be reproduced within a simulated environment so students can practice responses to that situation. In this way, students become active participants in their learning rather than being passive observers.

HFS, as a learning strategy, supports active pedagogies such as unfolding case studies and problem-based learning (Benner, Sutphen, Leonard, & Day, 2010). The student can expand their abilities through examples of real-life situations that mimic patient responses where neither the student nor a patient are at risk of harm (Weaver, 2011). Not only are students provided safe, simulated experiences, but they are able to develop other skills as well. In a study of first year nursing students, exposure to HFS was shown to improve: communication; knowledge retention; student confidence; and critical thinking and problem-solving skills (Burns, O'Donnell, & Artman, 2010). Through repetition, nursing students can accomplish advanced skills, and they are more likely to retain previously learned skills (Kardong-Edgren, Starkweather, & Ward, 2008). Therefore, HFS may be a very important adjunct to undergraduate nursing education.

Nurse Faculty and HFS

Nurse faculty are vital contributors to the success of HFS as a teaching innovation. Nurse faculty develop scenarios, integrate those scenarios into clinical teaching, and assess effectiveness of the teaching (Lane & Mitchell, 2013). The attitudes of nurse faculty towards HFS can affect whether or not they utilize it. In a pilot study testing Ajzen's (1991) theory of planned behavior as it related to faculty development in simulation, Jones, Fahrenwald, and Ficek (2013) found attitudes of faculty towards HFS improved after they attended a two-day workshop. However, the faculty who attended the workshop were considered to have positive attitudes towards HFS prior to attending (Jones, Fahrenwald, & Ficek, 2013). Nursing faculty development may be a crucial component to the integration of HFS into a nursing program but there is little research regarding nurse faculty professional development in the nursing literature. In a systematic review, Nehring et al. (2013) identified barriers and incentives to faculty development. Incentives included improved attitudes of faculty towards HFS, mentoring and support for faculty, and faculty involvement in development of scenarios; and barriers were lack of administrative support, pressure to use HFS, and difficulty scheduling lab time (Nehring et al., 2013). Nurse faculty attitudes toward using HFS as a teaching innovation may make a difference

to its effective use in clinical practice education. Faculty opinions regarding the effectiveness of simulation will make a difference in whether or not they utilize simulation in their teaching practice (Akhtar-Danesh, Baxter, Valaitis, Stanyon, & Sproul, 2009). For an integrated HFS program to succeed, nurse faculty support and utilization of the program is essential.

Nurse faculty involvement and support are required to sustain an effective simulation program, to validate the importance of the program, and to keep the simulation program going once it has started (Berkowitz, Peyre, & Johnson, 2011). It may be difficult to achieve their involvement and support, and initial reticence and inertia are difficult to overcome; but, nurse faculty are more likely to participate in HFS when they can see the importance of it as a means of enhancing student learning (Berkowitz et al., 2011). Ongoing education on the importance of HFS as a teaching innovation may help encourage nurse faculty to use it.

One way to encourage nurse faculty use of HFS is to engage champions to promote it. A core group of nurse faculty, such as HFS faculty and technicians, is necessary to help with the technical skills required in simulation, development of the content of the simulation scenarios, and to provide help (Garrett, MacPhee, & Jackson, 2010). This core faculty can help educate others in the use of HFS and to promote it as a teaching innovation.

New teaching innovations require new learning for nurse faculty, and a change in attitudes towards HFS may be encouraged through adequate training programs (Jones, Fahrenwald, & Ficek, 2013). Educational administrators must address the learning needs of faculty, and they need to ensure support systems are in place to help nurse faculty integrate HFS into their practice. Administrators must commit human and financial resources in order for integration of HFS to succeed (Taplay, Jack, Baxter, Eva, & Martin, 2014). In a study of Canadian nursing programs, Taplay et al. (2014) reported nursing administrators who worked together with nurse faculty through negotiation and networking had greater success integrating HFS into nursing programs compared to other administrators.

A Pedagogical Shift

The use of HFS in clinical practice education represents a paradigm shift and a new pedagogy for nurse faculty (Jeffries, 2008). Jeffries, in conjunction with the National League of Nursing (NLN), developed the Simulations Take Educator Preparation (S.T.E.P) program outlining steps faculty could take to integrate HFS into a nursing program. The four elements of

this program are standardized materials, training of faculty, encouraging a design and integration team, and planning coordination of development and integration activities. Jeffries identified a theoretical framework for teaching with HFS scenarios as follows:

1. Objectives – the objectives must match the content of the scenario and what one would expect to see in that particular clinical situation.
2. Time limit – there should be a set time for both the scenario and the debriefing components. Both components are equally important.
3. Specific roles – assign specific roles to students within their scope of practice to eliminate wasted time with inappropriate student roles.
4. Don't interrupt – instructors should observe remotely so they don't interrupt students decision-making and problem-solving.
5. Small group sizes – from two to six students so that all participants can play a role.
6. Scenarios appropriate to student level – the students need to be able to achieve the objectives for the scenario.
7. Faculty development – faculty need to know how to conduct the scenarios and achieve the objectives.

This framework is supported in nursing education. In a critique of the framework, Lafond and Van Hulle (2013) found the framework provided a good theoretical basis for HFS but required further investigation.

The use of HFS as a teaching innovation requires that nurse faculty become facilitators of student learning (Howard et al., 2011). The *facilitator* role is different than the *teacher* role used in didactic teaching environments such as a classroom. Jones, Reese, and Shelton (2013) investigated the construct of *teacher* or *facilitator* as it related to HFS. The facilitator needs to be knowledgeable in the technology, the subject matter of the scenario, and HFS pedagogy; they must be skilled in clinical and nursing education, creating realistic learning environments, management and organization, mentoring students, and debriefing; and they must have positive attitudes, be enthusiastic and motivated, and be calm and caring (Jones, Reese, & Shelton, 2013). There are three key components to the facilitator role in HFS: learner support, facilitation and cueing, and debriefing (Kardong-Edgren et al., 2008). This is different from the traditional clinical teaching role. The instructor or “master” of the clinical knowledge is in control of the learning opportunities, and the focus of the teaching is on supervised clinical skill acquisition

(Berragan, 2011). The pedagogy of HFS changes the learning from teacher-centered to student-centered.

Learner support. The nurse faculty provides learner support by ensuring a safe environment, active learning opportunities, and consistent experiences for all students. Student emotional safety is a concern when using HFS. The nurse faculty must set a safe and confidential learning environment where the student feels valued and respected without fear of denigration (Fanning & Gaba, 2007). Nurse faculty help to provide all students with the same clinical learning experiences, and this consistency allows faculty to review specific student behaviors and decision-making in the simulated experiences (Henneman, Cunningham, Roche, & Curnin, 2007). In order for the student to gain the most from the simulation experience, they must actively participate in the scenario (Fanning & Gaba, 2007). These roles may be different from what nurse faculty have used in the past and may require more time for them to become comfortable with them.

Facilitation and cueing. All nurse faculty must be aware of how to prompt, when to assist during simulation, and how to meet the learning objectives of the course (Garrett et al., 2010). The nurse faculty must be cognizant of when it is appropriate to intervene and when to let the students make decisions on their own (Dieckmann, Friis, Lippert, & Ostergaard, 2009). Dieckmann et al. (2009) researched the roles of the facilitator in HFS, and they found the instructor needed to be flexible in their role and with the pedagogy and content of the scenario. The balance between providing information and letting students discover the information on their own can be difficult for instructors to maintain (Dieckmann et al., 2009). The instructor role of facilitation and cueing is one of maintaining that balance.

Debriefing. “Debriefing is a lynchpin in the process of learning” (Gardner, 2013, p. 166). The nurse faculty must be able to debrief students post-scenario. Through debriefing, or self-reflection and facilitated discussion, students gain a more informed understanding of the situation and how it might apply to future similar situations (Gardner, 2013). Debriefing is a carefully planned event led by experienced nurse faculty who can engage students without criticizing them or making them feel inadequate (Medley & Horne, 2005). The nurse faculty role in debriefing after HFS is critical. Nurse faculty and students review videotapes of the HFS session, collaboratively critique student responses to the situation while seeking alternative actions, and use learning resources and theory to support the suggested actions (Hravnak, Tuite,

& Baldisseri, 2005). Quality debriefing is very important; the nurse faculty must complete planning forms with course objectives and key teaching points that must be stressed in the debriefing sessions (Binstadt et al., 2007). Debriefing may be one of the most critical roles in HFS.

Gardner (2013) identified three stages of debriefing and the role of the facilitator within each of the phases. In the first stage, the facilitator determines the student reactions by discussing issues, reviewing the facts, and addressing the learning objectives. The second stage promotes student understanding by exploring what happened, using an advocacy-inquiry framework of “I saw...” or “I wonder...,” thus moving students to a new understanding, and generalizing the lesson to a real situation. The final stage is summarizing, reviewing what was learned and applying learning to future events. The debriefing session must occur right after the learning event (Gardner, 2013).

The debriefing role must be well understood by the nurse faculty who help students gain insight and clinical reasoning skills through debriefing; therefore, they must be clear on what the role entails (Dreifuerst, 2009). Debriefing and reflective thinking must be conducted by a nurse faculty who knows the objectives and expected outcomes of the experience (Rothgeb, 2008). Debriefing may also be useful when training nurse faculty to teach with HFS. Henneman and Cunningham (2005) found debriefing of facilitators was required after student debriefing to discuss what went well and what could be done differently.

The pedagogical shift from didactic classroom teaching to facilitation of learning through HFS may make nurse faculty uncomfortable, but the integration of HFS into nursing education is making this change necessary. Learner support, facilitation and cueing, and debriefing are critical to student learning in a safe, supportive environment; thus, the structure of the HFS scenario requires the nurse faculty to adopt this change in practice. Nurse faculty may not be comfortable or experienced with HFS pedagogy.

HFS as a Teaching Innovation

Rogers (2003) defined an innovation as “an idea, practice or object that is perceived as new by an individual or other unit of adoption” (p. 11). A teaching innovation can result in positive changes to pedagogy. Ertmer (1999) stated “technology adds value to the curriculum not by affecting quantitative change (doing more of the same in less time) but by facilitating qualitative

ones (accomplishing more authentic and complex goals)” (p. 49). In order for technology to add value, it has to be accepted and used by faculty (Ertmer, 1999); therefore, theories about integration of technology may provide important information for administrators who are integrating HFS into the nursing curriculum.

Theories about integration of technology refer to diffusion and adoption of the technology. It is important to understand both the stages of diffusion of new innovations and the personal adoption of an innovation in order for successful implementation (Straub, 2009). In this section, two theories will be discussed, Rogers’ (2003) DOI theory, and Ajzen’s (1991) TPB. In his DOI theory, Rogers (2003) described the process of innovation acceptance within a social system. This theory can provide an understanding of the influences within the social system or school when a new innovation is introduced. Ajzen (1991) described the TPB as a way of understanding the influences that may affect personal belief systems. Knowledge of the influences within the social and personal belief systems is essential to understanding the personal experiences of integrating an innovation into teaching practice.

Diffusion of Innovations (DoI)

DoI theory describes how an innovation is communicated over time within a social system (Rogers, 2003). A person goes through a decision-making process when introduced to a new innovation. According to Rogers (2003), the decision-making process consists of five stages:

1. Knowledge about an innovation and its function
2. Persuasion to develop a positive attitude towards an innovation
3. Decision to accept the innovation
4. Implementation of the innovation
5. Confirmation that the decision to implement the innovation was the correct one

Rogers also categorized persons into five groups: innovators, early adopters, early majority, late majority, and laggards. The difference between these persons is the amount of time it takes for them to go through the innovation decision-making process, with the innovators having a very short decision-making period and the laggards having an exceptionally long one. DoI theory helps administrators to understand the process by which persons come to accept and implement an innovation. DoI theory can be represented by a bell curve, with the early adopters on one end

and the late adopters at the other (Figure 2-1). The diffusion curve is a composite of all personal adoption decisions within a specific setting and related to a specific innovation.

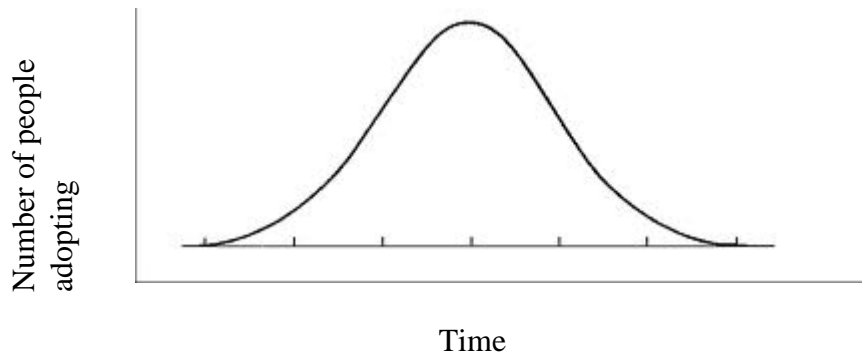


Figure 2-1. The diffusion curve (Ajzen, 1991).

There are several considerations that must be made when using DoI theory in research. According to Rogers (2003), diffusion research implies that an innovation should be adopted by all members of a social system, but researchers have a tendency to focus on the problems one person may have with the innovation rather than seeking to understand systemic problems within the organization. The time in which research is done may also affect the accuracy of the participants' memories regarding time and events associated with adoption of an innovation (Rogers, 2003). This research study takes place after the diffusion of HFS into the SCBScN curriculum, and participants must rely on memory and reflection to describe their experiences. Research conducted at different time points during the diffusion of an innovation may help reduce potential error in recall.

DoI theory was used to guide implementation of HFS into an undergraduate nurse education program at Washington State University (Starkweather & Kardong-Edgren, 2008). Starkweather and Kardong-Edgren (2008) found the development of faculty interest in simulation through communication networks reduced the innovation decision-making period allowing for a quick diffusion of HFS throughout a large, multi-site undergraduate nurse program. They were able to gain nurse faculty support for their simulation program by including them throughout the decision making process, providing a nurse faculty retreat to develop scenarios, and using experienced nurse faculty as resource persons for novice nurse faculty.

Irwin (2011) described a three-year diffusion of HFS into a southwestern Pennsylvania nursing curriculum for an associate degree nurse program which was guided by DoI theory. She stated administrators must involve nursing faculty in the development of simulation programs and provide resources for nurse faculty learning. Using DoI theory to guide the implementation of HFS created both a sense of security and a climate of support for nurse faculty, and it guided the administrators through the implementation process (Irwin, 2011).

Using DoI theory as a theoretical lens can assist with understanding the context in which an innovation or technology is introduced. Through DoI theory, Rogers (2003) described the process a social system goes through when integrating a new innovation. A look at systemic issues in a particular organization may shed more light on why persons choose to either implement or not implement an innovation.

Theory of Planned Behavior (TPB)

A person's beliefs may affect their attitude towards a new innovation. In TPB, Ajzen (1985) described influences on personal belief systems and the impact they have on attitude. The TPB provides a guiding framework which helps with understanding of the development of beliefs and attitudes towards a change, and the likelihood of the person incorporating the change into their practice (Ajzen, 1991; Ajzen, 1985).

The TPB was first described by Ajzen (1985) as an extension to the theory of reasoned action which posits a person evaluates a behavior based on a positive or negative attitude towards the behavior, and whether or not they believe significant others want them to perform the behavior (Fishbein & Ajzen, 1975). These two factors result in an intention or motivation to perform the behavior, and they are positively correlated with the likelihood the person will perform it. Self-efficacy may also influence behavior. In 1985, Ajzen extended the theory of reasoned action by adding a self-efficacy component; therefore, if a person anticipates a behavior will be difficult to perform, a positive intention may not result in actual performance of the behavior.

In the TPB, three major categories of beliefs are described: behavioral, normative, and control. According to Ajzen (1991), behavioral beliefs reflect a person's subjective belief about the consequences of a behavior and leads to their attitude (either positive or negative) towards performing that behavior. Behavioral beliefs include belief systems and values, attitudes towards

specific behaviors, and personality traits (Ajzen, 2012); normative beliefs reflect a person’s perception about what significant others (such as peers) think about the behavior which leads to the person’s perception of social normative pressures to perform or not perform a behavior (Ajzen, 1985); and control beliefs reflect a person’s beliefs about factors that facilitate or impede the performance of a behavior as well as the ease or difficulty of performing specific behaviors (Ajzen, 2002). According to Ajzen (2002), control beliefs lead to a person’s *perceived control* in relation to the behavior. A person’s attitude, the influence of subjective norms, and their perceived behavioral control all impact their intention to perform a particular behavior, and subsequently, the actual behavior (Ajzen, 2002). The relationship between behavioral, normative, and control beliefs and the performance of a behavior are depicted in the conceptual map shown in Figure 2-2.

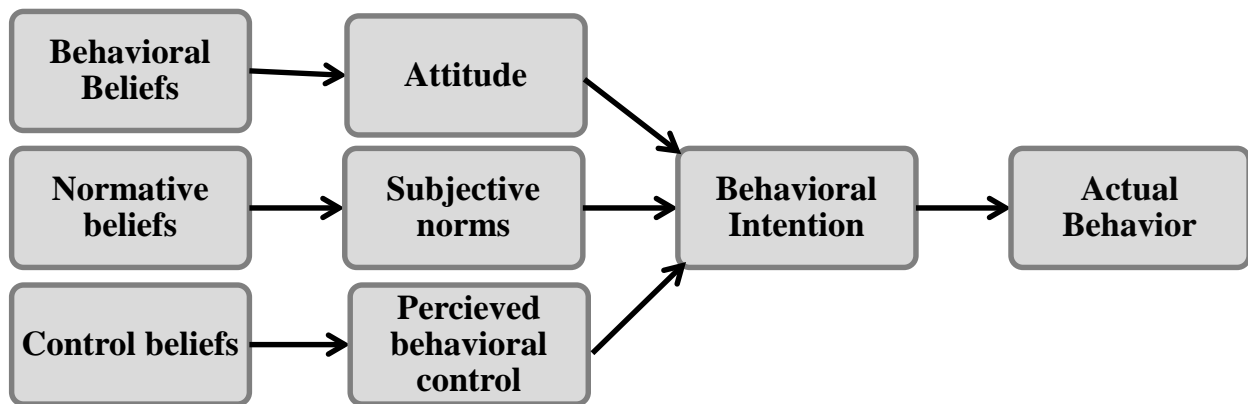


Figure 2-2. The theory of planned behavior model (Ajzen 1991).

The TPB describes behaviors or actions in terms of a person’s beliefs about a particular action. Ajzen (1985) stated intention to perform a behavior does not determine if it is performed. He suggested both internal factors and external factors influence the performance of a behavior. Ajzen described internal factors as personal differences, skills and abilities, willpower, and

emotions or compulsions; and he described external factors as time, opportunity, and reliance on others. Some of these factors, such as skills or abilities, can be modified through education, but others, such as emotions, are very difficult to change (Ajzen, 1985). According to Ajzen, external factors will not change a person's intention to act; if the opportunity to act doesn't arise over time, and if efforts to perform the behavior fail, changes in intention to perform the behavior may occur. The influence of internal and external factors may play a role in the amount of control a person has over performance of a behavior. If the influences are negligible, the person's intention to perform the behavior is the only determinant of whether or not it will be performed (Ajzen, 1985).

The context in which the behavior is to be performed may also influence intention. Ajzen (2012) stated "attitudes as well as behaviors are guided, respectively, by the beliefs that are accessible in the context in which attitudes are expressed and in the context in which behavior is performed" (p. 35). The closer the context of the behavior is to previous or similar contexts, the more likely the behavior will be performed.

King, Moseley, Hindenlang, and Kuritz (2008) studied the use of HFS by nurse faculty using the TPB as a theoretical framework. They gathered data related to TPB constructs of attitude, subjective norm, perceived behavioral control, and intent to use. They found nurse faculty had poor attitudes towards their own use of HFS, but believed HFS was an effective teaching innovation. In the study, nurse faculty also reported little or no experience and training with HFS. From the data acquired, an intervention program was designed to address the lack of training and experience. A post-survey showed a positive impact of the training on attitudes, subjective norms, and perceived behavioral control (King et al., 2008). They suggested further research was necessary to determine the challenges nurse faculty face when integrating new technology into their teaching practice.

Jones, Fahrenwald, and Ficek (2013) also used the TPB as a theoretical framework to guide the evaluation of an HFS training program for nurse faculty. They found improvement in the post-survey scores for the TPB constructs of attitude, subjective norms, and perceived behavioral control with a significant gain in intention to teach using HFS. Unlike the previous study, they found even though nurse faculty stated their intention to use HFS, they did not specifically intend to use it within the next academic year. They found an improvement in nurse

faculty competence and confidence, but also negative attitudes toward extra workload and preparation time with HFS.

The TPB takes into account behavioral, normative, and control beliefs that influence a person's intention to perform a behavior. In studies using the TPB as a theoretical framework, the researchers found a lack of training and knowledge about HFS influenced nurse faculty beliefs about their ability to use it in their practice. However, a lack of training may not be the only environmental influence on beliefs. Social cognitive theory may provide further understanding of the influences related to the environment and to the behavior itself.

Social Cognitive Theory (SCT)

Bandura (1997) described human behaviour as a dynamic and reciprocal interaction between the person, the environment, and the behaviour; and he suggested the behavior of persons would be determined by the interaction of these three factors. Personal factors, such as cognition, belief systems, and physiology, can both influence and be influenced by the environment and the behaviour. Bandura (1986) stated “what people think, believe, and feel affects how they behave” (p. 25); and the results of their behaviour affect how they will behave in the future. As one component influences the other two, it is also influenced by them. The result is a unique personal experience (Figure 2-3).

Personal characteristics, such as physical features, may illicit specific responses from the environment; and environmental factors, such as social roles or status, may affect how the person interprets the environment. It is difficult to determine in any given situation which factor has the most influence because the same event can change its influence from behaviour to environment and back again during one interaction (Bandura, 1986). The relationship between behaviour and environment is also dynamic and reciprocal. Bandura (1986) stated. “In the transactions of everyday life, behavior alters environmental conditions, and it is, in turn, altered by the very conditions it creates” (p. 26); thus, beliefs, false or real, can create a strong influence which overrides any environmental influence. In summary, every person is influenced in a different way, and the way a person is influenced is constantly changing such that the context of the situation and the way the person responds to the context may change the experience.

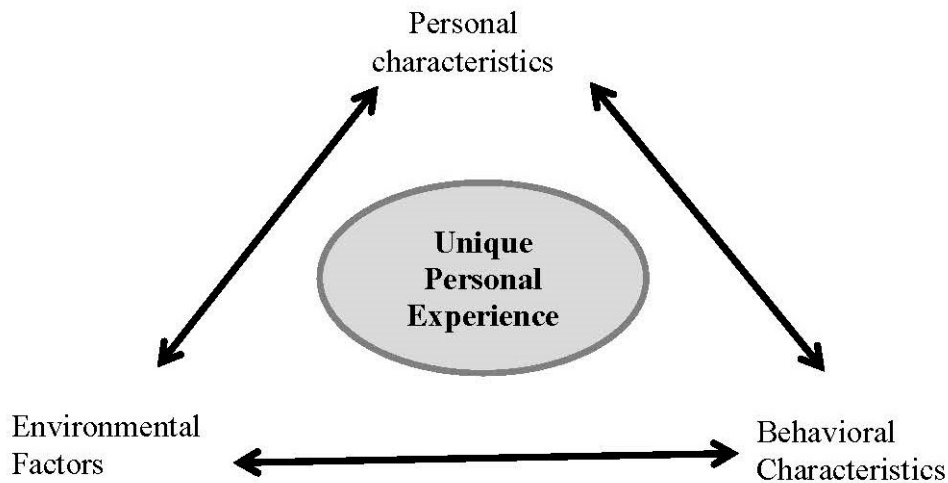


Figure 2-3. The interdependent nature of personal characteristics, environmental factors, and behavioral characteristics result in a unique personal experience. Bandura (1997) described the reciprocal relationship between the person, the environment, and the behavior.

The interdependent relationships among personal, behavioural, and environmental factors are present in all interactions. The reciprocal influences do not necessarily act at the same time, but are more likely to occur as feedback with varying time lags (Bandura, 1986). These influences can be either internal or external. Bandura (1997) stated a person can be influenced vicariously, by observing the behaviour of others; internally through their own reactions to behaviours; and through external pressures. Through regulation and motivation of human behaviour, these factors influence all human action (Bandura, 1997). Bandura (1997) suggested a person's beliefs about a specific action, the results of an action, and personal motivation directly influence life experience. The constructs of human agency, self-efficacy, and social learning are important to understanding the influence of beliefs, actions, and context on behavior.

Human Agency

Technical innovations such as HFS both constrain and result from human agency. According to Boudreau and Robey (2005), technologies are products of human action, but once installed, technology can become a constraint on human agency. Human agency is the capacity of humans to sustain and transform structures to their own use (Emirbayer & Mische, 1998). Advanced technology, such as HFS, may not be able to be transformed to personal use;

therefore, it becomes a constraint on human agency. An agency perspective views technology as a socially-constructed phenomenon that may have a number of different meanings and support a wide range of uses (Orlikowski, 1992). By looking at technology adoption from a human agency perspective, a deeper understanding of decision-making surrounding technology can be obtained. According to Emirbayer and Mische (1998):

The key to grasping the dynamic possibilities of human agency is to view it as composed of variable and changing orientations within the flow of time. Only then will it be clear how the structural environments of action are both dynamically sustained by and also altered through human agency – by actors capable of formulating projects for the future and realizing them, even if only in small part, and with unforeseen outcomes, in the present. (p. 964)

Bandura (2008) stated “to be an agent is to influence intentionally one’s functioning and the course of environmental events” (p. 87); and he identified four agentic properties in social cognitive theory: intentionality, forethought, self-regulation, and reflection. The definition and role of each of these properties is outlined in Table 2.1.

Table 2.1

Properties of Human Agency (Bandura, 2006; Bandura, 2008)

Property	Definition	Role
Intentionality	A plan for action, strategies	Aids in achievement of goals Contributes to motivation and adaptation
Forethought	Visualized future and anticipated outcomes	A motivator for purposeful behavior
Self-regulation	Making choices and taking appropriate action	Provides motivation to act on future goals
Reflection	Reflect on personal efficacy, thoughts and actions, and the meaning of pursuits	Allows for corrective adjustments to be made

These properties of agency provide direction and coherence to life by helping people to set goals and anticipate outcomes (Bandura, 2008). The properties of agency highlight the cyclical nature of human motivation and behavior. Intentionality is the implementation of agency; forethought is

the extension of agency into the future; self-regulation links thoughts to actions and motivates the actual performance of behaviors; and reflection is a re-examination of personal functioning and a contemplation of the adequacy of thoughts and actions (Bandura, 2006; Bandura, 2008).

The social environment or context of the behavior plays a role in human agency. Emirbayer and Mische (1998) stated “agency is always a dialogical process by and through which actors immersed in temporal passage engage with others within collectively organized contexts of action” (p. 974). Social networks can influence behavior. Boudreau and Robey (2005) stated social influences on human agency impact motivation and behavior, especially when technologies put a constraint on human agency by requiring a person to use them in a certain way. As a result, the degree to which the technology constrains human agency will affect a person’s intention to use it. The concept of human agency, in itself, does not provide a holistic picture of intention to perform a behavior. Human agency is exercised through judgments of self-efficacy, intentions, forethought, anticipation of outcomes, and feedback (Alkire, 2005). Self-efficacy provides the impetus to act out human agency.

Self-Efficacy

The relationship between self-efficacy and behavior was proposed by Bandura (1977) as a component of social cognitive theory. Bandura stated self-efficacy is the most important predictor of behavioral change; and he defined it as the understanding one has about successful completion of a certain behavior required to produce an outcome; or, the expectation a person has that a behavior will lead to a specific outcome. Thus a person’s self-efficacy beliefs influence if they will act. In order to motivate a behavior, a person must learn from failure and the behavior must be positive enough to override negative feedback (Alkire, 2005).

Self-efficacy can be seen as the empowerment of human agency, but it is limited by the environment and by a person’s own behaviors (Alkire, 2005). Bandura (1997) described self-efficacy as a person’s belief in their ability to complete certain actions required to achieve a certain outcome. Thus, self-efficacy is limited by both personal beliefs and the context in which the behavior is to be performed.

Perceptions of self-efficacy influence teaching practice. Klassen, Tze, Betts, & Gordon (2011) defined self-efficacy as both the confidence and capability of a person, and the collective confidence and capability of their community of practice. Therefore, a person is affected by their

own self-efficacy beliefs and their understanding of the self-efficacy beliefs of their community. Self-efficacy beliefs of a community of practice, or collective efficacy, reflect shared values and beliefs through group norms, attitudes, socialization practices, and attributions of members, both dynamic and emergent (Bandura, 1997). Collective efficacy has a reciprocal relationship with personal self-efficacy which contributes to the collective efficacy of the group's shared beliefs in the ability to perform an action (Bandura, 1997); and collective efficacy has an influential role in the development of personal self-efficacy. Through social learning and communities of practice, a person learns from their own experience and the experiences of those around them.

Social Learning and Communities of Practice (CoP)

Learning and the context in which learning occurs cannot be separated; rather, it is dependent on the situation in which it is learned and reflects personal insight and experiences (Brown, Collins, & Duguid, 1989; Brown & Duguid, 1991). Hansman (2008) stated:

The nature of the interactions among learners, the innovations they use within these interactions, the activity itself, and the social context in which the activity takes place shape learning. The knowledge gained through learning in a situated context, then, is real-life knowledge, reflecting the values of the learners themselves. (p. 298).

The ability of a person to learn from others is one of the key foundational concepts of social cognitive theory (Straub, 2009). According to Bandura (1986), persons are capable of learning both from their own experiences and from the experiences of those around them; therefore, human nature is influenced by experience, both direct and vicarious. Vicarious verification of appropriate behaviors or actions allows a person to observe and learn from another person's behavior and the results of that behavior; subsequently, vicarious learning within the community of practice interacts with inherent physiological factors to form patterns of behavior (Bandura, 1986). Thus, social interactions within communities of practice may result in unique learning.

In communities of practice, people interact through culture, innovations, and context resulting in learning unique to the community (Hansman, 2008). Learning is "an integral and inseparable aspect of social practice" (Lave and Wenger, 1991, p. 31); and it is a result of the interaction between the environment and the learner (Wilson, 1993). Wilson (1993) explained learning is social because it occurs with other people, and the environment provides the innovations and structure necessary for the cognitive process.

A CoP has close links with both social learning and collective efficacy. It is defined by Lave and Wenger (1991) as “a set of relations among persons, activity, and world, over time and in relation with other tangential and overlapping communities of practice” (p. 98). A CoP contains a dynamic knowledge base which identifies issues, shared practices, and persons with an interest in this knowledge (Wenger et al., 2002) and responds to internal and external influences. An organization may contain more than one CoP; for example, there may be an organizational community and a professional community (Van AalSt, 2003); and each CoP will influence and be influenced by the others.

In nurse education, nurse faculty are involved in the organizational community, a nurse educator CoP and a professional nurse CoP. As a participant in a community of practice, a person acquires knowledge and skills pertinent to that community (Billett, 1996); and when they become part of another community, those knowledge and skills may be transferred to the new CoP. Thus, learning within the professional nurse CoP may have a strong influence on the beliefs and actions of nurse faculty in an organizational CoP; and members from the nurse faculty CoP may in turn influence the professional nurse CoP.

People learn as they participate in a community. Lave and Wenger (1991) stated people learn by becoming intimately involved with a community through interaction, participation, and understanding of the history, assumptions, values, and rules of that community. A person does not need to be a full member of a CoP in order to participate in that community. For instance, students have access through peripheral participation which provides exposure to a practice community (Wenger, 1998). However, the person must be more than just an observer in order to learn. Wenger (1998) described three dimensions to social learning: engagement with other members, engagement in the actions of the community, and engagement with the language (or *repertoire*) of the community. The concept of peripheral participation is not limited to novices, but can also relate to professionals through the context of professional learning within a CoP (Carr, Cox, Deacon, & Morrison, 2008), such as learning a new teaching technology like HFS.

SCT and Technology

SCT can help increase understanding of the interaction between humans, their behavior, the technology, and the context in which the technology is enacted. Technologies are products of human action; they are maintained through ongoing maintenance and adaptation; and they

mediate human action by both constraining and facilitating action (Orlikowski, 1992). The way persons interact with technology, their beliefs about it, and the context in which they use it will influence their experiences with that technology. The use of technology is a social activity subject to the context of its use; it is bounded by historical and physical usages; and yet, it has interpretive flexibility (Orlikowski, 1992). As a result, it is both a product of human agency and a constraint on it.

As a result of human agency, organizations are limited in their ability to effect change through implementation of a technology. Persons using the technology will either reinforce organizational properties by using it the way the organization intends them to or transform and change the organization by using the technology in a different way (Orlikowski, 1992). If a person conforms to the rules of the technology, they reinforce organizational properties; and if a person uses the technology other ways than what is intended, they limit the organization's ability to effect change (Boudreau & Robey, 2005; Orlikowski, 1992). Personal behavior in relation to a technology is influenced by personal beliefs and the context in which the technology is used, and a CoP can also influence the use of a technology. A person is more likely to adopt a behavior if other respected persons adopt the behavior; thus, vicarious learning through modeling plays an important role in the adoption of technology (Bandura, 1986).

Personal beliefs can affect whether or not an innovation is adopted as it is intended. A person will act based on the following: the anticipated benefits or detriments of adopting the technology, the ease of use and perceived competency with the technology, available social and economic resources associated with use of the technology, and potential outcomes of using the technology (Bandura, 1986). Innovations that require a pedagogical change, such as HFS, may be more difficult to adopt. External factors such as resources and skills pose little challenge to personal beliefs, and pedagogical changes that require faculty to adjust their practice may conflict with underlying belief systems (Ertmer, 1999). Instructional practices that incorporate a technology may require a change in pedagogical knowledge which in turn may impinge on a person's belief system, thus creating a barrier to incorporating the new technology into their practice.

Boudreau and Robey (2005) used a grounded theory approach to study the influence of human agency on the adoption of highly integrated and inflexible technologies and to explain changes in utilization of technology over time. They found users of technology go through three

stages: inertia, improvised learning, and re-invention. Initially, a person will use old and familiar methods rather than using new procedures when interacting with the technology, then the person becomes familiar with the technology through improvised learning, and finally, the person will work around perceived limitations with the technology and begin to use the technology in a way they find most beneficial, which may not be the way it was intended to be used (Boudreau & Robey, 2005). Boudreau and Robey found even with inflexible technologies, people exercised human agency and utilized the technology in a way that they chose. They also found social learning had a strong influence on the person moving from the inertia stage to the reinvention stage. Adoption and utilization of a teaching technology or innovation such as HFS can be viewed through the lens of SCT. Human agency, self-efficacy, social learning, and a CoP may influence the experiences of nurse faculty required to integrate HFS into teaching practice.

Summary

The purpose of this chapter was to review the literature related to HFS and to explore the concepts of human agency, self-efficacy, and social learning as they relate to adoption of technology. The chapter began with an overview of HFS and the role of the nurse faculty in HFS. The DoI theory provided an overview of technology adoption within a social system. The relationship between beliefs and intention to act were explored through the TPB. Process and adaptation models of innovation adoption provided basic understanding of the progression through integration of an innovation into practice. A basic understanding of these processes is required to move further into the experiences of adoption. Social cognitive theory was used as a theoretical lens to explore the relationship between the person, the behavior, and the environment as they relate to technology integration.

Conceptual Framework

The purpose of this phenomenological study was to explore the lived experiences of nurse faculty who were required to integrate HFS into their teaching practice. The theories that were reviewed indicated the importance of exploring underlying beliefs, actions, and context in relation to integration of a technology in order to understand the unique personal experience. A person's beliefs, their response or action in relation to an experience, and the context in which the experience takes place all result in a unique personal experience (Figure 2-4).

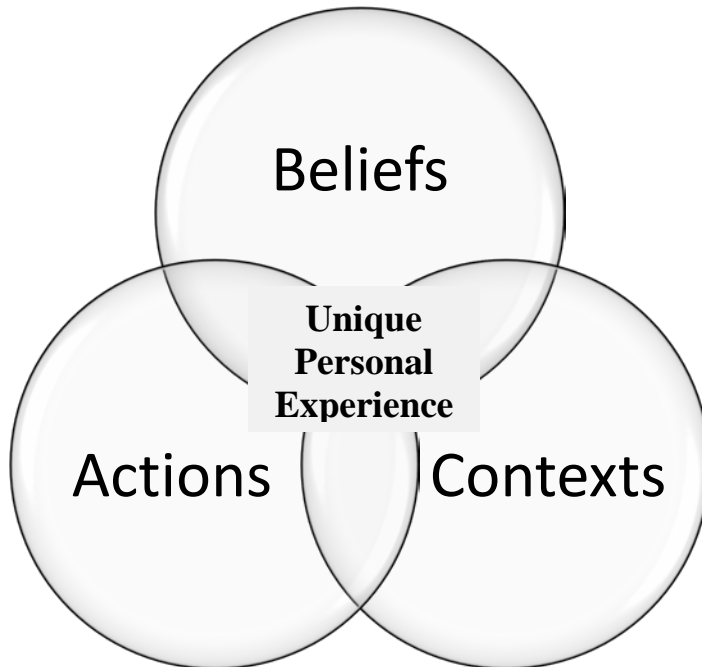


Figure 2-4. The unique personal experience as a result of the interaction between beliefs, actions, and contexts.

The three factors that influence behavior are beliefs, actions, and contexts. Beliefs, actions, and contexts related to a behavior interact and result in three dimensions to the unique personal experience: the beliefs-actions dimension; the beliefs-contexts dimension; and the actions-contexts dimension (Figure 2-5). In the beliefs-actions dimension, human agency and self-efficacy influence how beliefs will be enacted. Human agency provides direction and coherence to life by helping people set goals and anticipate outcomes; and self-efficacy is a person's belief in their ability to complete certain actions required to achieve a certain outcome (Bandura, 1977). The beliefs-contexts dimension is influenced by social learning and a CoP. Social learning is a reflection of both the context in which it is learned and the underlying personal beliefs developed through experience. A CoP provides both a source of normative beliefs and a context in which a behavior takes place. The actions-contexts dimension is influenced by organizational factors and characteristics of the technology. Organizational practices and procedures impact what actions are available to the person, and how they will interact with the technology. Technological characteristics are both physical and pedagogical. They influence both the actions to be taken and the context in which those actions will occur.

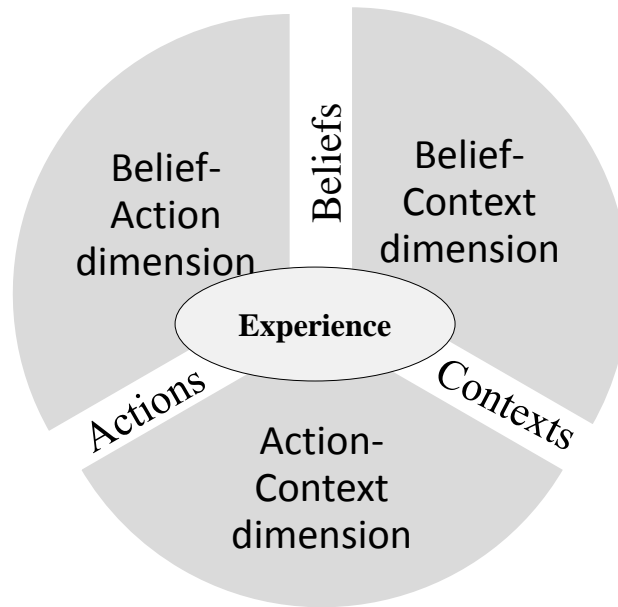


Figure 2-5. Dimensions of the unique personal experience as they relate to beliefs, actions, and contexts.

In this study, the unique personal experiences of nurse faculty were explored. Figure 2-5 depicts the relationship of beliefs, actions, and contexts to experiences. This framework was used to explore the experiences of nurse faculty who were required to use HFS as part of their teaching practice. The beliefs of the nurse faculty about clinical practice education may have impacted their experiences integrating HFS into their teaching practice. Their beliefs encompass behavioral, normative, and control beliefs as described in the TPB. Beliefs are dynamic and are influenced by feedback from previous actions, from the human agency feedback loop, and from changes to self-efficacy. Beliefs also change as new learning from a CoP is absorbed. Therefore, the beliefs of nurse faculty about clinical practice education change as a result of experience with it.

The actions or clinical education practices of the nurse faculty will also influence their experiences with integrating HFS into their practice. Clinical practice education teaching methods are dynamic, and as nurse faculty experiment with different methods and respond to feedback from the other two areas, their methods may change. The experience of integrating

HFS into their teaching practice will, in turn, influence their beliefs about clinical practice education.

Finally, the context of clinical practice education will influence the experience of integrating HFS into practice. The context itself is dynamic and is influenced by beliefs about clinical education practice. The organization, the clinical setting, the SLC, and HFS all influence the context of clinical practice education. Teaching practices as well as beliefs about clinical practice education influence the context in which it occurs. Figure 2-6 depicts the conceptual framework developed from the theoretical literature. The framework demonstrates the influence of nurse faculty beliefs about clinical practice education, the context of HFS in clinical practice education, and clinical teaching methods on the experience of integrating HFS into teaching practice.

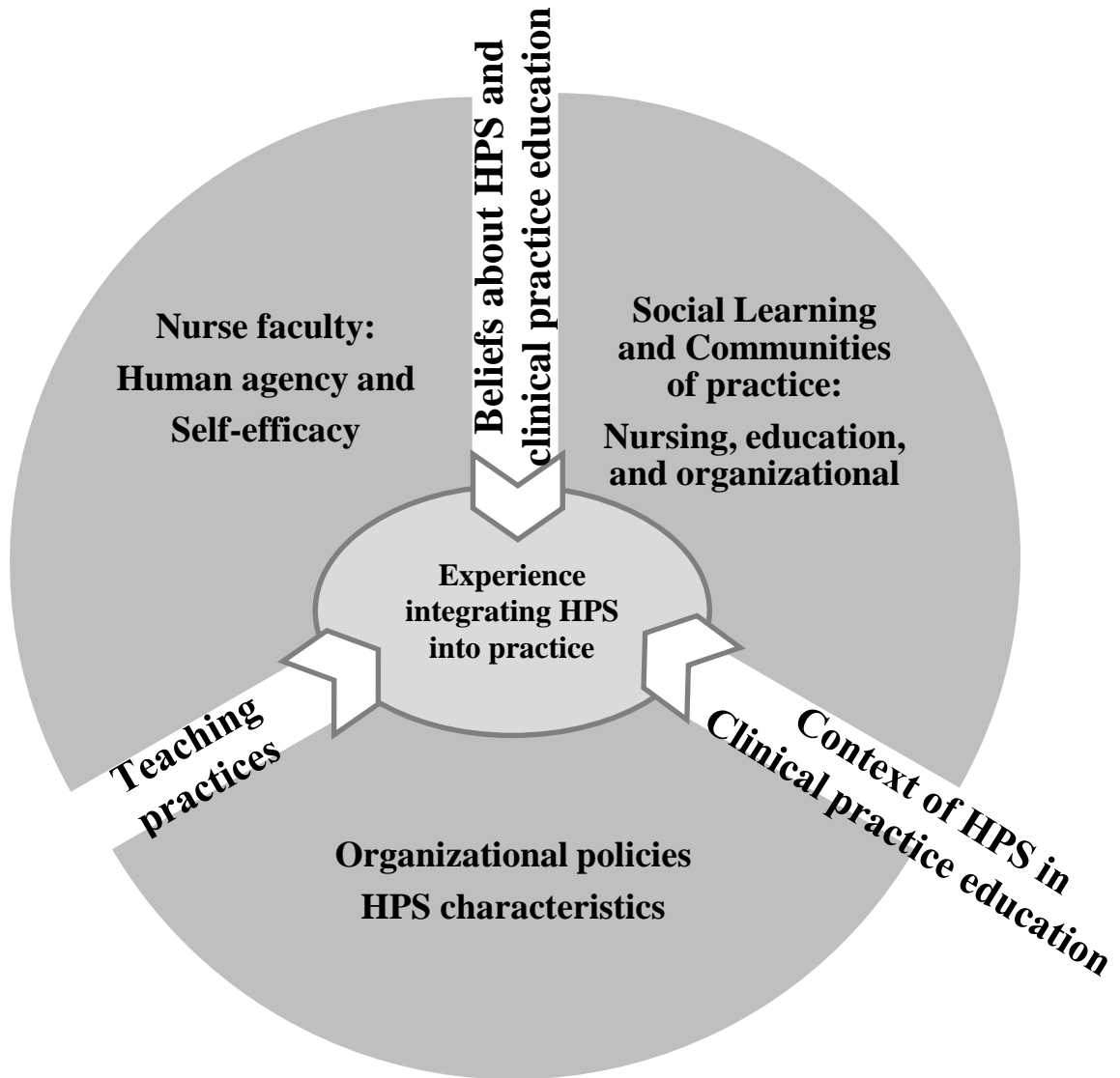


Figure 2-6. Conceptual framework demonstrating the influence of nurse faculty beliefs about clinical practice education, the context of HFS in clinical practice education, and clinical teaching methods on the experience of integrating HFS into teaching practice.

CHAPTER 3 METHODOLOGY

Introduction

The purpose of this phenomenological study was to explore the lived experiences of nurse faculty who were required to integrate high-fidelity simulation (HFS) into their teaching practice. HFS is a teaching innovation that enables students to develop critical nursing skills in a safe and supportive environment. The trend to increase its use in nursing education influenced curriculum development at Saskatchewan Polytechnic. There is a substantial increase in reliance on HFS in the SCBScN program, resulting in a requirement for nurse faculty to integrate it into their teaching practice. Although Saskatchewan Polytechnic has dedicated SLC faculty to support nurse faculty, there is still a considerable role for them. A better understanding of the experiences of nurse faculty integrating HFS into their teaching practice may enable administrators of nursing programs to proceed from a more informed perspective in regards to support and education for faculty.

In seeking to understand this phenomenon, the following question guided the research, “What are the lived experiences of nurse faculty who are required to integrate HFS into their teaching practice?” The following six sub-questions were addressed:

1. How do participants’ attempt to develop the knowledge, skills, and attitudes they perceive are necessary to teach with HFS?
2. What are participants’ beliefs about using HFS as part of clinical practice education?
3. To what extent do participants perceive they are prepared to teach using HFS?
4. What factors do participants perceive might help or hinder their use of HFS?
5. How do participants perceive the role of HFS in their teaching practice?
6. How do participants perceive they are influenced by their communities of practice?

In this chapter, a description of the study’s research methodology is presented, as well as discussions pertaining to the following areas: (a) rationale for using qualitative research and the phenomenological approach, (b) a description of the researcher and nurse faculty, (c) an overview of the research design, (d) data collection procedures, (f) how the data was analyzed, (g) issues of trustworthiness, and (h) ethical issues. This chapter concludes with a brief summary.

Qualitative Research Design Rationale

This qualitative research is grounded in a social constructivist philosophical position. The social constructivist researcher believes there are multiple subjective realities and attempts to approach these realities by acknowledging personal biases and values, spending time with participants in the field, giving voice to the participants through the use of quotes, and using an emergent design to understand the topic within its context (Creswell, 2013). According to Denzin and Lincoln (2005), the construction of reality through qualitative research tries to match the participants' realities as closely as possible; and rather than the creation of a single reality, the researcher seeks to fairly represent the multiple constructions of reality of the participants. In this study, the data collection and the analysis of individual transcripts were done in their entirety before moving on to seek the essence of the phenomenon; thus ensuring each participant had a voice. The social constructivist philosophical position best reflects the beliefs and understandings of this researcher.

Qualitative methodology implies an inductive approach to understanding the phenomenon. Researchers inductively generate a pattern of meaning through broad, general questions that focus on the specific contexts in which the participants live and work (Creswell, 2013). The researcher interprets the meaning of the experiences through their own understandings. "The researcher's intent...is to make sense (or interpret) the meanings others have about the world," and this interpretation is shaped by the experiences and background of the researcher (Creswell, 2013, p. 25). According to Denzin and Lincoln (2005), qualitative research is "a situated activity that locates the observer in the world...[and] qualitative researchers study things in their natural settings, attempting to make sense of, or interpret, phenomena in terms of meanings people bring to them" (p. 3). Therefore, qualitative research done through a social constructivist philosophical understanding seeks to discover the meaning of an experience through description and interpretation.

In this researcher's opinion, the characteristics and assumptions of qualitative research fit best. The characteristics are as follows: the research takes place in the natural setting; the researcher is the key instrument of data collection and uses multiple sources of data; data analysis is inductive and deductive as it becomes increasingly abstract; researchers try to learn the meaning held by the participants; the research design is emergent and may change throughout the study; the researcher makes interpretations based on their understanding; and a holistic

account of the phenomenon is developed (Creswell, 2013). This research study adhered to these characteristics of qualitative research. The approach chosen for this study was phenomenology.

Phenomenological Approach Rationale

A phenomenological approach allows for the study of experience. Gallagher (2012) stated experiences may differ from what is real; therefore, the first step in understanding a phenomenon is to study the “conditions imposed by consciousness” (p. 9). The researcher is interested in a person’s interpretation of the experience. In order to study the phenomenon, the researcher must study the way the phenomenon presents itself through human experience (Sokolowski, 2000) and develop a description of meaning through the *lived experience* of the phenomenon (Creswell, 2013). This inductive process allows for exploration of multiple realities, therefore it is congruent with social constructivism.

Through the phenomenological approach, the researcher explores personal experiences of a phenomenon in order to find what all experiences have in common (Creswell, 2013). This approach enables the researcher to discover and describe the essence of the experience. In order to determine the essence of the phenomenon that persists throughout all interpretations, the researcher looks for that which stays the same, or the *invariant*, in the personal interpretations (Lyotard & Ormiston, 1991). A phenomenological researcher describes what participants have in common rather than focusing on the differences. Through this approach, personal experiences are reduced to a universal *essence*, then a holistic description is made of the experiences and how they are experienced (Creswell, 2013).

The essence of the experience, as described by Smith, Flowers, and Larken (2009), is “the set of invariant properties lying underneath the subjective perception of individual manifestations of that type of object” (p. 14). As a phenomenon is experienced, a person fills in the missing pieces through the use of imagination, and through reduction the investigator seeks to see through the variation to the essence of the phenomenon, or the invariants. According to Gallagher, a phenomenologist’s aim is to allow the essence of the phenomenon to emerge within the scope of their own experience, which is also a limitation of phenomenological research. The ability to discover the essence of the phenomenon depends on the abilities of the investigator to understand it (Gallagher, 2012). Through phenomenological reduction, intentionality, and bracketing the essence of the experience can be discovered.

The phenomenological approach used in this research study was guided by the writings of Moustakas (1994). His work described a transcendental phenomenological approach which espoused bracketing of prejudgments and beliefs about the phenomenon as much as possible in order to be completely open to the experience of the participant. Moustakas emphasized researcher intuition and imagination as a means to understand the experience; and he described a distinctive structured approach to data analysis.

Phenomenological Reduction

During phenomenological reduction, attention is given to the phenomenon as it appears without the theories or natural beliefs, as a “pure” or transcendental description (Gallagher, 2012). The phenomenon of interest is experienced from a particular perspective; therefore, each person experiences the phenomenon incompletely even though the person’s experience of it is complete (Gallagher, 2012). Multiple personal descriptions of the experiences with the phenomenon may give a more complete understanding of it.

In order to understand the phenomenon, the researcher must reflect on it through the following process: first, the researcher must question the meaning of the experience; secondly, the researcher must overcome natural inclinations towards the phenomenon as it is experienced; third, the researcher must strip away any theories or scientific preconceptions of the phenomenon; and finally, the researcher must look past the lived experiences to the essence of the phenomenon (Van Manen, 1990). Thus, the researcher may come to understand the invariant correlates through the participants’ multiple understandings of the phenomenon. A limitation of phenomenological reduction is the researcher’s ability to achieve complete reduction which includes the concepts of intentionality and bracketing.

Intentionality. Consciousness is the intentional act of perceiving something; therefore, the concept of intentionality means every conscious act is directed towards something (Sokolowski, 2000). Intentionality is a conscious process that links the subjective experience of a phenomenon to the phenomenon itself. It is not perceived as separate from the meaning attached to it by the person (Creswell, 2013). Therefore, the phenomenon and the subjective experience of it are one entity rather than separate entities. There is no subject-object dichotomy because the phenomenon does not exist for the person outside the subjective meaning or experience.

Intentionality is made up of two components: the textural dimension and the structural dimension. Moustakas (1994) described the textural dimension, or *noema*, as the process of uncovering or exposing the phenomenon; and the structural dimension, or *noesis*, as the process of putting the phenomenon into context and relating it to experience. It is important to understand both dimensions of a phenomenon. The function of intentionality is to derive meaning through exploration of the textural and structural dimensions of the phenomena (Moustakas, 1994). By using the phenomenological approach, these dimensions are exposed to the researcher.

Bracketing. The researcher comes to the research from a particular perspective. Gallagher (2012) referred to this perspective as the natural attitude of the researcher, and he suggested the following:

If we think of the natural attitude as a collection of beliefs, judgments, opinions, or theories about how things work...then the first step into the phenomenological attitude is to bracket these beliefs, judgments, opinions, and theories...simply to set the judgment aside. This includes the most basic judgment that the world exists and is real. (p. 43)

Husserl (1954/1970) referred to this step as bracketing. The researcher must become aware of their underlying beliefs in order to approach the essence of the phenomenon. In order for the researcher to become aware of their natural understandings, the natural attitude must be modified by putting it in brackets; only then does the researcher become open to the phenomenon itself (Gallagher, 2012). Previous understandings are put aside, or bracketed, in order for the true phenomenon to be exposed. This process is based on the assumption the researcher is aware of and able to identify their personal assumptions about the phenomenon. This may be difficult for novice researchers; even so, bracketing should be attempted (Barroso & Cameron, 2013). In this study, the researcher recorded and transcribed her responses to the interview questions, then reflected on her beliefs and assumptions, and on how they may affect her interpretations, prior to interviewing any of the participants.

The Researcher

It is important for researchers to have an initial knowledge of the topic; then, through phenomenological analysis, researchers seek an in-depth understanding of the phenomenon (Denscombe, 2010). In this study, the researcher had an understanding of both HFS and clinical

practice education. The researcher also had an understanding of the literature supporting HFS for student learning. A lack of research in the area of nurse faculty experiences with using HFS in clinical teaching suggested more information was needed. The context of the study and the positionality of the researcher were described in Chapter 1.

Phenomenological investigation is done in the first person. The phenomenologist first examines his or her own subjective experience; then brackets those beliefs and assumptions (Gallagher, 2012). In relation to this study, the researcher reflected on the experience of integrating HFS into clinical practice education and what that experience meant to her. The researcher's reflections were audio-taped and transcribed so they could be further reflected on throughout the study. The researcher was a 55 year old female with a 20 year history as a clinical nurse and five years as nurse faculty in an undergraduate nursing program at Saskatchewan Polytechnic. She had some experience facilitating students in HFS and understood the faculty role and the context in which HFS is presented at Saskatchewan Polytechnic. The researcher also had an ongoing professional relationship with most of the participants following the study.

HFS has been used as an adjunct to clinical practice education. As a practicing nurse, the researcher believed students learn more in the clinical setting than in the classroom. The researcher also believed HFS can provide the student with experiences they may not have in the clinical setting. The clinical setting can be a harsh place for a new graduate nurse; therefore, the more varied the student experience, the more prepared the nurse will be for clinical practice. Therefore, this researcher supported the use of HFS as an adjunct to clinical practice education.

The role of the nurse faculty is very structured in HFS. Because it was not a familiar role for many nurse faculty, they may have felt uncomfortable with facilitating HFS, or they may have tried to use their previous teaching strategies in that setting. The researcher believed nurse faculty may have felt discomfort with the faculty role in HFS or felt under pressure to conform to an unfamiliar pedagogy. Throughout the study, the researcher bracketed these beliefs in order to allow the experiences of nurse faculty to be revealed.

The Nurse Faculty

Under the framework of phenomenology, the perceived view of nurse faculty provided information about the experiences of integrating simulation into practice. In this study, the researcher sought to understand the perceptions, feelings, and beliefs of nurse faculty engaged in

integrating HFS into their teaching practice. In order to achieve this understanding, the researcher used Moustakas' (1994) modification of the Van Kaam method of analysis.

Through phenomenological analysis, the experiences of nurse faculty integrating HFS into their teaching practice were described and understood through the framework of social cognitive theory and the concepts of agency, self-efficacy, social learning, and communities of practice. In this research, it was important to understand the common or shared experiences of nurse faculty who were integrating HFS into their teaching practice. The phenomenological approach was best suited for understanding the lived experiences. It is "important to understand these common experiences in order to develop practices or policies or to develop a deeper understanding about the features of the phenomenon" (Creswell, 2013, p. 81). The results of this research may influence future practices or policies in educational administration.

Research Design

Using a phenomenological approach, this study sought to understand and interpret the experiences of nurse faculty who were required to integrate HFS into their practice. The research took place at Saskatchewan Polytechnic Saskatoon Campus, the participants were faculty in the SCBScN program or in the SLC, and all participants had experience with integrating HFS into their teaching practice.

Participants

Participants in this research study were employed at Saskatchewan Polytechnic Saskatoon Campus prior to the study. The level of experience of the participants ranged from those who had taught very little with HFS to those who worked with HFS on a daily basis. Following ethical approval, the researcher contacted the administration of the nursing program at Saskatchewan Polytechnic to discuss the requirements of the study and to gain permission to approach nurse faculty. Once permission was obtained from Saskatchewan Polytechnic Research Ethics Board and the School of Nursing administration, the researcher contacted the potential participants through a mass email to inform them about the study, to indicate the requirements for participation, and to ask them to participate. There were 26 potential participants who taught in clinical courses in the second year of the program. Potential participants who indicated their interest to the researcher by email or telephone were contacted and an appointment was set up.

Before any study procedures were undertaken, an explanation of the study was provided and informed consent was obtained (Appendix B).

The participants were interviewed individually. In an effort to maintain anonymity of the participants, the interviews were conducted outside of work hours, and the participants were informed of the risk to anonymity due to the small population of nurse faculty at Saskatchewan Polytechnic Saskatoon Campus. The confidentiality of the participants' data was protected at all times by assigning a pseudonym to each interviewed participant so the transcribed responses could not be linked to their identity. Confidentiality was further maintained by ensuring transcription occurred outside of the work setting. The research data will be stored for five years after the completion of the study at the office of the principal investigator, and then the electronic data will be deleted and paper data will be shredded.

Phenomenological interviewing was the method of data collection in this study. Interviews were critical to the study because they provided context and meaning of experiences from the point of view of the participants experiencing the phenomenon (Seidman, 2012). Seidman (2012) stated in order to understand the meaning attached to an experience, interviewing is a necessary data collection method; and, effective interviewing can provide researchers with information not previously considered and may elucidate ideas that are new and thought provoking. It was the understanding of this novice researcher that only persons engaging directly with the phenomenon under study were able to portray an accurate picture of the phenomenon, and personal interviews produced more detailed descriptions of those experiences.

Sample

Purposeful sampling was used to select the research site and the nurse faculty who would receive an invitation. By selecting this site, the researcher was able to engage those persons who could "inform an understanding of the research problem and central phenomenon in the study" (Creswell, 2013, p. 156). Only those nurse faculty who had taught in clinical education courses and had to integrate HFS into their teaching practice were invited to participate. Some of the participants had also worked in the SLC. All of the participants who responded positively to the email invitation were interviewed. This was done to ensure all respondents were given an opportunity to contribute to the research. The sample included 17 participants.

Setting

The context of this study was within the School of Nursing in one campus of a multi-city polytechnic in Saskatchewan, specifically within that population of teachers that were employed by Saskatchewan Polytechnic and who had access to the SLC. The School of Nursing at Saskatchewan Polytechnic had many years of experience teaching nursing education. Initially, a diploma program was offered as entry to practice nursing as a Registered Nurse. In 2000, the bachelor degree in nursing became the entry to practice for Registered Nurses. At that time, Saskatchewan Polytechnic collaborated with the University of Saskatchewan to deliver an undergraduate degree program and recently collaborated with the University of Regina to deliver the SCBScN program. The history of nursing at Saskatchewan Polytechnic may have given nurse faculty a unique understanding of their role in nursing education. The nurse faculty are prepared at the Masters level. In the past, nurse faculty who have continued on to the doctoral level have left the institution.

The decision to conduct the study within Saskatchewan Polytechnic School of Nursing was driven by the fact that the researcher was familiar with the culture and environment of Saskatchewan Polytechnic and access to research participants was expected to be easily granted. The professional relationship the researcher has with the potential participants of the study may have helped them to feel comfortable discussing the topic. The researcher's position as a professional colleague who did not teach at that time in the same courses and was not associated with the SLC, yet understood the culture of nursing education at Saskatchewan Polytechnic, may have encouraged participants to feel comfortable describing their experiences to the researcher.

Data Collection Procedures

In qualitative research, the researcher is the primary instrument of data collection and analysis. Creswell (2013) stated qualitative researchers "build their patterns, categories, and themes from the 'bottom-up,' by organizing the data inductively into increasingly more abstract units of information" (p. 45). Qualitative researchers also use deductive processes. The themes are constantly compared back to the data to ensure accuracy (Creswell, 2013). This study required a high level of trust and communication between the researcher and the research participants as the researcher moved through this inductive-deductive process.

Through the process of bracketing, the researcher attempted to set aside any preconceptions before engaging in the interviews and analyzing the data. When conducting the interviews and phenomenological analysis, the researcher maintained a journal to document personal thoughts about the study and subject matter in order to remain aware of any personal perceptions that may have affected data collection and analysis. In order to step away from the data, the researcher did not transcribe the interviews until they were all completed. This was done to further minimize any developing ideas about what the research would mean to the next participant to be interviewed; this allowed each participant to reflect on their personal experiences without judgements or assumptions by the researcher.

Interviews. Semi-structured interviews were used to collect data for this study. Once informed consent was obtained, the participants were interviewed individually. Interviews lasted between 30 minutes and one hour. The interviews were recorded on two audio tape recorders and the researcher wrote field notes. After obtaining informed consent, each participant was asked to verbally respond to the following questions:

1. What dimensions or incidents of your experience with simulation stand out for you?
(RQ3)
2. How did you prepare yourself for teaching with simulation? (RQ1, RQ3)
3. What changes to your practice do you associate with the experience? (RQ5)
4. What factors helped or hindered your experience with simulation? (RQ4)
5. What are your beliefs about using simulation in clinical practice education? (RQ2)
6. What influence did institutional policies have on your experience with simulation?
(RQ3, RQ6)
7. What influence did your colleagues have on your experience with simulation? (RQ6)
8. How did the SLC influence your experience with simulation? (RQ1, RQ3, RQ6)
9. Have you shared all that is significant about the experience? Explain.

These questions helped elicit responses that assisted with answering the research questions (RQ). Information for RQ1 was elicited from interview question two; RQ2 was answered by interview question five; RQ3 was answered by interview questions one, two, and six; RQ4 was answered by interview question four; RQ5 was answered by interview question three; and RQ6 was answered by interview questions six, seven, and eight. Due to the semi-structured nature of the study, the interview questions may have elicited information pertaining to other research

questions or areas not covered by the research questions. The final interview question gave the participants an opportunity to add new information that was not included in the interview questions.

The loose structure of the interview helped keep the participants on topic while allowing them to reflect on their experience. If additional information was needed to develop the description of the phenomenon, participants were asked to expand on their responses. The typed transcripts were *denaturalized* and “idiosyncratic elements of speech (e.g., stutters, pauses, nonverbal, involuntary vocalizations)” were removed (Oliver, Serovich, & Mason, 2005). Any identifying information was removed from the transcript. Participant checking was utilized to ensure accurate understanding of the participant responses by the researcher. This was done in two ways:

1. The researcher made clarifying statements during the interview to ensure understanding of the participant’s experience. This was done by repeating the information back to the participant in the way it was understood by the researcher.
2. The interview was denaturalized by removing pauses, colloquialisms, identifying information, and irrelevant expressions or discussions. Each participant was given the denaturalized interview to review and confirm it accurately reflected their experience.

Data saturation. The researcher knows data saturation has been reached when the information received from participants becomes repetitive and no new information emerges (Barroso & Cameron, 2013). In this study, the interviews were completed prior to the analysis, and the researcher interviewed all participants who expressed an interest in the study whether or not data saturation was achieved. During the analysis, it was clear data saturation had been achieved; the themes within the interviews were repeated and no new themes emerged.

Data Analysis

The raw data of the transcribed participant interviews was analyzed using Moustakas’ (1994) modified Van Kaam method of phenomenological inquiry. There were two stages in the analysis. The first stage included bracketing, phenomenological reduction, imaginative variation, and synthesis of meanings/essences. The second stage consisted of the development of narrative descriptions of the phenomenon representing the perceptions of the individual participants, and the experiences of the participant group as a whole.

Stage 1

This stage was completed in four steps: (1) listing and preliminary grouping, (2) reduction and elimination, (3) clustering and development of themes, and (4) validation (Moustakas, 1994). In Stage 1, each participant's transcript was analyzed separately. The demarcation of the transcript data is presented in Appendix G. The development of themes from the structural and textural correlates is presented in Appendix H.

Listing and preliminary grouping. Moustakas (1994) described this step as presenting "every expression relevant to the data" (p. 120). In this step, every expression or phrase from each participant's transcript relevant to the experiences of integrating HFS into teaching practice was listed. This required the researcher to put aside or bracket any previous understandings of the phenomenon and look only at the data. The phrases or expressions with similar meanings were grouped together. This step of the analysis is referred to as horizontalization where each horizon of the experience is distinctive and of equal value (Moustakas, 1994). Thus, every identified expression was considered to have equal value in providing an understanding of the phenomenon.

Reduction and elimination. The second step in the analysis determined the horizons that stood out as invariant constituents of the experience. As indicated by Moustakas (1994), two questions were considered when making the decision to keep or discard an expression or phrase: Is it relevant to the experience? Can it be abstracted and labelled? From each transcript, phrases with similar meanings were grouped together and given a descriptive label. These labels became the textural correlates (the *what* of the experience). For example, the expressions *not an actor*, *didn't know what to expect...didn't know what to do*, and *being uncertain* were grouped under the textural correlate *being unfamiliar with the role*. This step required much moving around of correlates to find the best grouping and moving back and forth between the correlates and the transcript to ensure meaningful groupings were made. A complete list of the individual groupings into textural correlates is presented in Appendix G.

Clustering and development of themes. In the third step, the textural correlates were clustered into core concepts, and the structural correlates (the *how* and *why* of the experience) were developed. In order to determine the structural correlates the researcher used imaginative variation based on the theoretical concepts in Chapter Two and the descriptions of the participants. This step requires researcher intuition and imagination in the development of the

themes (Moustakas, 1994). It involved moving back and forth between the participant expressions and the textural correlates to determine the corresponding structural correlate. Once the structural correlates were determined, they were clustered into themes. The themes were developed by going back to the literature to find meaning related to the structural correlates. For example, the textural correlates *being uncomfortable, fear of looking bad in front of others, being unprepared* made up the structural correlate of *feelings of inadequacy*. Furthermore, the structural correlates of *struggling to define role, feelings of inadequacy, being a learner, and needing more resources* were clustered under the theme *striving for self-efficacy*. A complete list of the structural correlates and themes are included in Appendix G and Appendix H.

Validation. This step consisted of returning to the participant transcripts and comparing the textural and structural correlates to the narrative. As indicated by Moustakas (1994), three questions were asked to validate each textural and structural correlate: Are they explicit in the transcript? If not explicit, are they compatible with the meaning of the narrative? Are all incompatible or inexplicit correlates deleted? This step required multiple readings of the original transcript and comparisons to the textural and structural correlates to ensure they were explicit or compatible with the transcript.

Stage 2

This stage was completed in three steps: (1) individual textural description, (2) individual structural description, and (3) textural-structural description (Moustakas, 1994). The individual descriptions are presented in Chapter Four, and the composite textural-structural description through themes, the essence of the phenomenon, is presented in Chapter Five.

Individual textural description. In this step, the textural description was developed from each person's textural correlates. This description included verbatim examples to support the textural correlates and represented what the participant experienced. The textural descriptions were presented in an order that helped the flow of the description; thus they may not be in the same order as the original transcription.

Individual structural description. The structural description represented the context of the participant's experience developed through imaginative variation. Therefore, it does not contain any quotes from the original transcript. This description was developed with each person's structural correlates. The structural descriptions were presented in an order that helped the flow of the description.

Textural-structural description. The final step in describing the individual experiences was to combine the textural and structural descriptions into one description that provided the essence of the phenomenon for that participant. The description is presented in an order that flows and may not match the order of the original transcript. The individual textural-structural descriptions are presented in Chapter Four. From the individual descriptions, a composite of the meanings and essences of the experiences of the whole group was developed and presented in Chapter Five.

Trustworthiness

In qualitative research, trustworthiness is established by attending to credibility, transferability, dependability, and confirmability. According to Lincoln and Guba (1985), these can be established as follows (1) credibility – by prolonged engagement with the data, triangulation, peer debriefing, and member checking; (2) transferability – by thick description; and (3) dependability and confirmability – by keeping an audit trail. In qualitative research, the researcher must provide evidence that the descriptions and the analysis of the data reflect the experience of the phenomenon (Bloomberg & Volpe, 2008).

Credibility

Credibility refers to “whether the participants’ perceptions match up with the researcher’s portrayal of them” (Bloomberg & Volpe, 2008, p. 77). This was achieved in a number of ways. First, the researcher kept field notes and a journal to reflect on perspectives and biases brought into the study. After each interview, a field note was audio-taped which included the researcher’s thoughts about the interview, the setting, and the overall experience of interviewing. This audiotape was included at the end of every interview and was transcribed with the interview. A journal was kept throughout the data collection and analysis. Again, the journal was audio-taped and transcribed. It included thoughts on the process of phenomenological research, doing insider research, and experiences of being a novice researcher. This journal is reflected on in Chapter 6.

Second, the researcher ensured an understanding of the phenomenon through prolonged involvement in the field and with the data. The data collection and analysis took eight months and the researcher spent the time examining the data from different theoretical perspectives, as described in Chapter 2, in order to develop an understanding of the phenomenon. Third, through peer debriefing, the researcher consulted with her academic supervisor and with an experienced

phenomenological researcher to ensure that the interpretation of the data was sound. Finally, the denaturalized transcripts were sent to the participants to ensure they accurately reflected their personal experience.

Transferability

Lincoln and Guba (1985) described transferability as “the degree of similarity between sending and receiving contexts” (p. 297). An effective method for endorsing transferability is for the researcher to provide thick, rich description. The researcher attempted to address the issue of transferability by providing detailed information about the context of the experiences and a holistic description of the phenomenon. A second method for endorsing transferability is to provide an audit trail. This research study followed five of Halpern’s (1983) six categories to include in an audit trail:

1. A record of all raw data including transcripts, field notes, documents, and records.
2. Products of data reduction and analysis such as summaries, write-ups, and theoretical notes.
3. Products of data reconstruction and synthesis such as categorical structure, themes, definitions, relationships, interpretations, inferences, and a final report that links the existing literature to the above.
4. Process notes on methodology, trustworthiness, and audit trail.
5. Material relating to intentions and dispositions including the proposal, personal notes, and expectations.
6. Instrument development (this category is not pertinent to this study).

Dependability and Confirmability

Dependability is conceptualized as an audit trail from data collection through data analysis (Guba & Lincoln, 2005). Dependability “refers to whether one can track the processes and procedures used to collect and interpret data” (Bloomberg & Volpe, 2008, p. 78). Confirmability is the objectivity of the qualitative study, in that the findings are a result of the research and not of the biases or subjectivity of the researcher (Bloomberg & Volpe, 2008). Dependability and confirmability can be achieved through the same methods. In this study, the researcher provided a detailed and thorough account of how the data was collected and analyzed. A second means of ensuring dependability and confirmability was by having another person check the coding of the

data. Two of the coded transcripts were sent to a nurse researcher who did not have any relationship with the participants to determine if she agreed with the analysis. This helped reduce researcher bias (Bloomberg & Volpe, 2008). Finally, the researcher provided examples from the participant interviews when presenting the findings. This illustrated how the themes can be traced back to their origins in the data (Bloomberg & Volpe, 2008).

Ethical considerations

The ethical protection of the participants is of utmost concern during a research study. The names of the participants were kept confidential by assigning pseudonyms. In small communities, word can travel quickly that a study is taking place. Even the act of a colleague stopping at the door to say hello can spark curiosity about an interview or conversation in progress; therefore, all interviews were conducted outside of Saskatchewan Polytechnic with the exception of four participants who specifically requested the interviews take place in the workplace. In those cases, the interviews were conducted outside of working hours. All necessary precautions to ensure anonymity were taken by the researcher. Prior to their participation in the study, the participants were advised of the risk to anonymity.

Prior to conducting the study, ethical approval was received from the University of Saskatchewan Behavioral Research Ethics Board (Beh-REB) (see Appendix A) and Saskatchewan Polytechnic Research Ethics Board. Permission to access nurse faculty was obtained from the School of Nursing and signed consent forms were obtained from each of the participants prior to their participation in the study. The consent forms indicated the minimal risk involved with the study and the participants' rights to withdraw their participation at any time without risk of consequences. A copy of the consent form is attached (see Appendix B).

Once consent from the School of Nursing was obtained, the researcher provided written information about the nature of the study and the risks of participation to the potential participants through an information email (see Appendix D). The risk of exposure was carefully discussed with all participants before they began participation in the study. Once the potential participant gave consent to proceed with the study, they were asked to read and sign the consent form. The signed consent forms were placed in a locked cabinet in the principal investigator's office and will remain there for five years after the completion of the study, at which time all

paper study documents will be destroyed by shredding, and all electronic documents will be deleted. At no time was anyone but the researcher privy to the names of the participants.

Summary

This chapter outlined the methodology for a phenomenological study exploring the lived experiences of nurse faculty who were required to integrate HFS into their teaching practice. The researcher's perspective was discussed, and guidelines for using a phenomenological approach were explored. Specifics regarding research design, data collection, and data analysis were presented. Finally, strategies for ensuring trustworthiness and ethical considerations were discussed. The intent of this research was to make a contribution to the understanding of faculty experiences with integrating a new innovation into their teaching practice. It is hoped this study will be of value to nursing educational administrators who are integrating HFS into undergraduate nursing education.

CHAPTER 4 DESCRIPTIONS OF PERSONAL EXPERIENCES

Introduction

The purpose of this phenomenological study was to explore the lived experiences of nurse faculty who were required to integrate HFS into their teaching practice. The researcher believed a better understanding of this phenomenon would be of value to nursing educational administrators who are integrating HFS into the undergraduate nursing curriculum and allow administrators to proceed from a more informed perspective in terms of support and education for nurse faculty. This chapter presents the denaturalized interview transcripts of the 17 participants and the textural, structural, and textural-structural descriptions of the participants' experiences.

Transcendental phenomenology is “focused less on the interpretations of the researcher and more on a description of the experiences of the participants” (Creswell, 2013, p. 80). Therefore, it is important to present the written transcriptions of the participants. The interviews were transcribed by the researcher, and all the words in the transcriptions are exactly as spoken by the participant with the following exceptions:

1. All pauses and colloquialisms were removed from the transcript.
2. All statements that could potentially identify the participants or other persons were removed.
3. Expressions or discussions not relevant to the experiences were removed.

An invitation to participate was sent to 26 nurse faculty who met the inclusion criteria from a University of Saskatchewan research email account. The first response was received within an hour of the original email. Over the following week, the remainder of the responses came in. The timelines of the responses indicated nursing faculty were eager to talk about their experiences integrating HFS into their teaching practice. Overall, 17 candidates responded positively and were able to participate, four candidates responded they had never used HFS, and two candidates were interested in the research but would not have time to participate. As the researcher was doing insider research, it was important to interview all those who responded positively; therefore, appointments were made with the 17 potential participants. Twelve of the interviews took place in coffee shops or restaurants outside of Saskatchewan Polytechnic Saskatoon campus. One meeting took place in the home of the participant. Four of the participants requested to meet outside of work hours in their offices.

Participant Demographics

Demographic information was collected from the participants at the beginning of the interview (see Appendix E). The participants were all female. Their ages ranged from 30 to 65 years. The exact age of each participant was not collected to maintain anonymity. Their previous nursing practice experience ranged from six to 25 years. The nurse faculty experience of participants ranged from two to 20 years. The education level for all participants was at the Master's level. The participant demographics are presented in Figure 4-1.

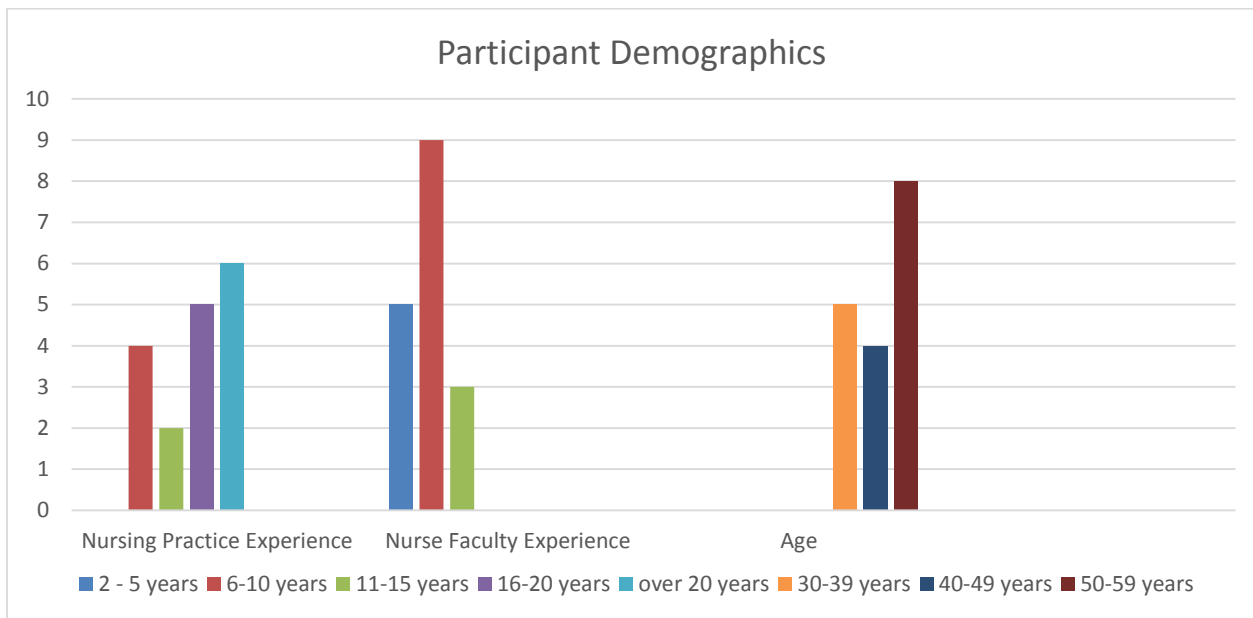


Figure 4-1: Participant demographics.

The transcripts were checked for accuracy in the following ways:

1. The participants read their written transcripts and signed the Transcript Release Form (see Appendix F).
2. An experienced qualitative nurse researcher read and analyzed two of the transcripts using Moustakas' (1994) modified Van Kaam method of analysis (see Appendix C).
3. Two participants read the complete analysis of two randomly selected transcripts with all identifying features removed and confirmed they felt the analysis captured the experience.

The personal experiences of the participants are presented and analyzed using Moustakas' (1994) modified Van Kaam method of analysis. The transcription excerpts were derived by listing all the expressions that were relevant to the experience of integrating HFS scenarios into the nurse faculty's clinical education practice that contained a moment of the experience necessary for understanding. The textural descriptions are described as the "What?" of the experience (Moustakas, 1994). The structural descriptions are the clustered and thematized invariant constituents of each participant's experience. According to Moustakas (1994), the invariant constituents are the "How?" and "Why?" of the experience. This is followed by the textural-structural synthesis of the experience which was derived by combining the textural and the structural descriptions into a single description of the meanings and essences of the personal experiences of integrating HFS into each participant's teaching practice. Throughout this process, the descriptions were continually compared to the complete transcripts to ensure the descriptions matched what was explicitly expressed in the transcripts. The individual textural and structural correlates are listed in Appendix G.

For each participant, a denaturalized interview excerpt is presented first. This allows the reader to develop a sense of the experience of integrating HFS into teaching practice from the unique perspective of the participant. The participant's words are presented in a single-spaced blocked quotation to make it easier for the reader to differentiate the participant's words from the researcher's words. The textural descriptions contain quotes from the participant interview; the structural and textural-structural descriptions represent the analysis of each unique personal experience.

"Ellen's" Experience

At first it was uncomfortable. I was really uncertain as to what to do, but I loved the idea. But I am not an actor. I don't know why I felt that way, but I didn't know what to expect. You didn't know where to go and what to do even though in practice I would have known, but in that situation how do you respond? It's not the same as practice. How am I going to answer their questions? Just unease. Will I be prepared? Once you got in [the SLC], it was okay. Here is another experience that puts you back to where you were a while ago.

I would like more time in there, not necessarily teaching time, but time spent in the [SLC] exploring, watching scenarios take place, buddying, and that kind of thing. Well, we did have some training sessions, but it would have been nice not to start right away, to have had time with someone who had done it before, to buddy, and to see what it was all about. It was just like, "This is what you will do," and quickly you are shown

things, and then the next time you do it, you just do it. It was kind of, “Here it is; here you go.” It could have been better. I could have been better prepared for it.

What helped is that it was really exciting to be able to do [HFS], so we just had the attitude that this was an awesome opportunity for our students, so we just did it. The physical set-up – awesome. I would think, “Oh my goodness, I’m home – with monitors, etc. – and just let me stay here, oh, just let me stay!” Simulation certainly changes my dialogue with students. I think it is an excellent opportunity for students to all experience a particular scenario that they may not all be able to experience in the clinical area. I think it is an enhancement.

[Scheduling] seems like a problem in spring when everybody wanted to book. If there was some way that [we] could book when they do their schedules [which] would be good. When it was being built, we in nursing had the thought that we were very important to the [SLC] picture. As time went on, our importance kind of waned because of the many programs. There are too many programs. We need to play fair and be generous with the time. I have to say that some of the “wonder” of the area kind of changed with the reality of how we were expected to use the facility. Sometimes the cameras may not work, some glitches – you needed to start again – or the mikes weren’t working, or the scenario. You improvised and carried on. Time and workload! Negative things were disorganization and differences between groups. There was so much change-over in the personnel. I think I still looked at that like get over it, things will be different each time. It is what it is. So it’s okay, it wasn’t what I had hoped, but okay.

The positive attitudes that many of [the faculty] have, and the sharing of how they themselves use simulation, both the low and high-fidelity, are sometimes truly inspiring. To be able to share that with other people, and how they use things, and of course they share the positive aspects of that.

We would always practice a scenario if there was an empty bed, we’d always practice things a lot, and do what we could. It was really good for learning, for our own personal learning. Seeing that and doing that and then having [the SLC] be a bigger, more modern, very appropriate place in nursing education – then it’s a good thing – to start with [HFS], and then maybe [the students] will remember their experiences in simulation and carry that with them.

Textural Description

Ellen liked the idea of HFS, “it was really exciting.” She believed it was good for students, good for nursing education, and good for nursing practice. “I think it is an excellent opportunity for students to all experience a particular scenario that they may not all be able to experience in the clinical area. I think it is an enhancement.” The physical set-up of the SLC was comfortable and familiar but the unfamiliar role and unfamiliar environment caused feelings of unease, “I could have been better prepared for it,” and a fear of looking bad in front of the students:

But I am not an actor. I don’t know why I felt that way, but I didn’t know what to expect. You didn’t know where to go and what to do even though in practice I would have known, but in that situation how do you respond? It’s not the same as practice. How am I going to answer their questions? Just unease.

Ellen explained having to incorporate HFS into her teaching practice resulted in an increased workload. She found she wasn't given enough time to learn and was thrown in before she was ready, "I would like more time in there, not necessarily teaching time, but time spent in the [SLC] exploring, watching scenarios take place, buddying, and that kind of thing." It was difficult to fit HFS into her schedule, "seems like a problem in the spring when everybody wanted to book," and SLC staffing and technology glitches posed additional problems. Inspiring colleagues made integrating HFS easier, "The positive attitudes that many of [the faculty] have, and the sharing of how they themselves use simulation, both the low and high-fidelity, are sometimes truly inspiring." Ellen described her reality as different from her expectations,

There are too many programs. We need to play fair and be generous with the time. I have to say that some of the "wonder" of the area kind of changed with the reality of how we were expected to use the facility.

She eventually came to terms with the reality of using HFS in her teaching practice, "It is what it is. So it's okay, it wasn't what I had hoped, but okay."

Structural Description

The structural elements that account for Ellen's experience centered on her striving for self-efficacy. Being a learner, and struggling to define her role as nurse faculty using HFS led to feelings of inadequacy. The practice of teaching in the SLC was different than in the clinical setting, so she struggled with the change and pushed back. She began to advocate for her needs. Over time, she came to terms with HFS through acceptance and understanding. She was an advocate for HFS in nursing education and practice, and she began to use it to support student learning. Her experience was made easier by being part of a CoP. Ellen was proud of the SLC.

Textural-Structural Experience

Learning a new educational technology puts Ellen in a position of striving for self-efficacy. As a learner, she felt like a novice, or a newcomer to the role. Ellen struggled to define her role, she didn't know what to expect or how to do it. This resulted in her feeling inadequate, uncomfortable, and unprepared. The unfamiliar role and unfamiliar environment caused feelings of unease, and a fear of looking bad in front of the students. She felt she had to be an actor

playing a role rather than being a nurse in the practice setting where she was comfortable. Not knowing what to expect made her uneasy.

Ellen struggled to maintain autonomy in her teaching practice. She felt over-tasked, and she identified she wasn't given enough time to learn. She struggled with the change in her role and iterated problems with disorganization, inconsistency, and staffing issues. Through acceptance and eventual understanding of the process, Ellen was able to come to terms with the reality of teaching with HFS even though it wasn't as good an experience as she had hoped.

Ellen was an advocate for HFS in nursing education and practice. She was supportive of student learning with HFS, and she felt it was good for nursing education. Throughout the process of integrating HFS into clinical practice education, being a part of a community of nurse faculty provided Ellen with the mentoring she needed. She appreciated the positive attitudes and information sharing from other faculty and found it inspiring. Ellen was proud of the SLC and appreciated the physical environment, it felt very familiar to her.

“Bonnie’s” Experience”

It was just coming in and there was change taking place, there [were] a lot of mixed feelings about simulation. When the [SLC] first opened up I think it was a learning curve for everyone. I think it's taken a good year or so for [the SLC] faculty even to understand what their role is and how things work and how it would benefit students. Over time, I think it's improved greatly. I think change takes time. This is a normal process we are going through. We're getting buy-in better.

I was part of it at the ground level, and I think at the ground level it was very stressful. There were struggles and challenges. At the beginning or during the journey maybe people weren't so positive, and that, again, because it's been a lot of work physically, mentally. Maybe now that it has all come together, faculty can start enjoying themselves and making it work better.

I used it very minimally and was very hesitant towards using it because it was expected [that] faculty run the [scenario]. And I was shown many a times but never felt comfortable enough to do it on my own. When I did do it on my own, I felt it wasn't a good experience for the students. What helps me is when the person doing the technology part knows what they are doing. Before, I found my simulations ran just okay. I must tell you I used to dread simulation in that I would be a little bit stressed. If I had to do the techy part of it, I would not do it – I wouldn't do it. I would probably use that low-fidelity one now very comfortably. They have given me a few choices and I have suggested how I would like it done. That works much better for me just because I'm comfortable debriefing.

I would review the scenario either in my mind and review what we would do clinically with it. I would make sure I would look it up in the textbooks or in our manuals before I went in. I think it's really important for me to be an expert in that area. The more clinical experience you have, or the practice of nursing, the more you're

going to embrace simulation. What helps for me is knowing the situation ahead of time; to have the clinical skills to be able to function in a simulation experience that we are putting the students through. I am a firm believer that you should be involved in courses like assessment, pharmacology, and you should be doing clinical. Keep up-to-date with the evidence and the theory that we are using.

We were told we are going to use simulation. Institutional policies forced me. Faculty can be forced to do something, and they can take two routes - I always try and do the positive and make it work because I realize when something like that is coming in, you're not going to buck. You might as well jump on and make the best out of it. If we could actually be in the clinical setting, that's where we should be. Yes, simulation is excellent, but I do not think it should replace the actual clinical.

I surrounded myself with [faculty who] are very in favor of simulation. I would like to surround myself with people who compliment me where my weaknesses are. It helps to keep me positive. There is no way I can function if I am with people who are complaining all the time.

I see [the SLC] now developing into an excellent area and very healthy area. I see the faculty there starting to be more cohesive. They are at least happy when you go there – they are enthusiastic. They, too, have an attitude of nothing is written in stone and let's manipulate it so it's the best learning environment for the student. They have given me a few choices, and I have suggested how I would like it done. I am starting to adjust simulation to my own teaching needs.

The leadership realizes they need buy-in, and I am seeing leadership utilizing strategies to promote faculty and student buy-in. Leadership is positive. Leadership is also open to what is not working. They're taking feedback, positive or negative. What they are doing is they are taking this negative feedback and they're trying very desperately in turning it around. I always try and make it positive. I see that is what our leaders are doing.

[The students] said out of all the years at [Saskatchewan Polytechnic, the last one] was their best simulation experience. So that made me feel great. It's a good way to practice and be able to make mistakes and not kill anybody. What I have seen is everyone's focus is the best learning experience for the student. We are all on the same page for that.

Textural Description

Bonnie approached HFS with uncertainty. She felt she was forced to use it and found it a negative experience, "I was shown many a times but never felt comfortable enough to do it on my own. When I did do it on my own, I felt it wasn't a good experience for the students." Bonnie did not believe in HFS as part of clinical education, "Institutional policies forced me." She was prepared to use it if it was required, "You might as well jump on and make the best out of it." Getting prepared for teaching with HFS took a lot of time because she felt she was expected to be an expert teacher,

What helps for me is knowing the situation ahead of time, to have the clinical skills to be able to function in a simulation experience that we are putting the students through...Keep up to date with the evidence and the theory that we are using.

The experience got better as Bonnie developed understanding and acceptance of HFS,

Over time, I think it's improved greatly. I think change takes time. This is a normal process we are going through. We're getting buy-in better... [m]aybe now that it has all come together, faculty can start enjoying themselves and making it work better.

Bonnie credited the nursing leadership with being supportive, "Leadership is positive. Leadership is also open to what is not working. They're taking feedback, positive or negative." She was supported by her peers and by the SLC team. She was able to recognize the limitations of using HFS and felt able to suggest changes. Bonnie was beginning to adjust HFS to her own teaching needs,

I see [the SLC] now developing into an excellent area and very healthy area. I see the faculty there starting to be more cohesive. They are at least happy when you go there – they are enthusiastic. They, too, have an attitude of nothing is written in stone and let's manipulate it so it's the best learning environment for the student. They have given me a few choices, and I have suggested how I would like it done. I am starting to adjust simulation to my own teaching needs.

Structural Description

The structural elements of Bonnie's experience centered on her striving for self-efficacy. She experienced being a learner and this caused feelings of inadequacy. She struggled to maintain autonomy even though HFS was against her personal beliefs about clinical education. Over time, she came to terms with teaching with HFS through acceptance, understanding, and reinventing the teaching innovation to meet her own needs. She was proud of the accomplishments of the School of Nursing. Throughout the process, being part of a community of nurse faculty provided her with mentorship and support while she was integrating HFS into her practice.

Textural-Structural Description

Bonnie found herself striving for self-efficacy. She was put in the position of a learner and experienced feelings of inadequacy. Even though she was shown how to facilitate HFS, she never felt comfortable with it. Therefore, she didn't feel the students had a good experience. This caused her to be uncomfortable and overwhelmed which made the experience difficult. Bonnie

struggled to maintain autonomy. She described herself as being forced to use HFS and blamed institutional policies.

Eventually, she came to terms with HFS through acceptance, understanding, and adjusting the innovation to her own needs. She found she gained comfort over time, and she recognized what she was going through was normal. As a result, her experience improved, and Bonnie was able to articulate pride in the institution. Bonnie felt institutional support and support from her community of practice were important for her to integrate HFS into her clinical teaching practice. She began to recognize the growth of the SLC team and appreciated their positive attitudes. She was able to make suggestions to improve the experience and began to adjust HFS to her own needs.

“Anna’s” Experience

I wanted to have a set role and know what they wanted of me ahead of time. I don’t like stepping in and being put into it without knowing. [In a previous program], there was less information ahead of time. You would be put into that situation and you wouldn’t know what the person running the simulation wanted you to say, and was very uncomfortable. Being able to prepare yourself ahead of time is [important, when] nothing unexpected is thrown at you. If you are going to play a role, you know what you’re going to be doing. Just the fear of the new and not knowing what to do; you don’t want to look stupid, you don’t want to say or do the wrong thing. Whatever the students were going to look at, I looked at as well. I went into the lab itself, the [SLC], and talked to the staff there first. I had questions about whether they would run it or whether they would let the faculty run it. I had questions about whether they wanted us to play a role in the simulation. Preparing and making sure the students have a good explanation ahead of time [was important].

It was shaky when it got started the first year. Because I had [simulation] years before in a previous program, it wasn’t new for me. But I know that was the biggest concern for faculty for whom it was new. First year, that’s just the way it is, there wasn’t much prep for us. It would have been nice if they would actually run through a scenario and just give the faculty more of a guideline of what there will be and what’s expected of them. It wasn’t immediately there, it came later, you know the stuff we needed to prepare ourselves. [It would be better if] faculty can observe and watch and see how it’s done without expectations being placed on them. I think if they were able to run through it once themselves, then stand and talk about it afterwards, they would feel more comfortable with it. The work that I did before never really touched on simulation. I never even thought about simulation until I became faculty.

I don’t have apprehension about it anymore, I am past all that. The more you do, the more comfortable you feel. [That’s] experience and the consistency of how we are doing it. Last simulation for example was very, very well done. I think that it gets better each time. It helps to decrease that nervousness as long as you can do it before [the students] are on the floor or early on in their practicum. I think it’s great. It helps them

prepare, it decreases their nervousness and you can get lots of teaching across. I make more effort to bring in what we covered in the simulation. It definitely enhances what you are doing in the real clinical setting. It makes things more real than textbook knowledge. The motivation and the support for using simulation and developing it in our new program, there was lots of enthusiasm. I've had some very good mentors. They tried to make it the best it could be. To see that enthusiasm and support for it and excitement, then you can pass that on to the students. You sort of internalize it yourself and be happy about it.

[Dedicated SLC faculty] will be able to direct you and guide you more concretely. We had a huge turnover in staff in the [SLC] which has maybe contributed to some of the disorganization and people not understanding. The last time, the staff that was running it had been doing it for a while and it was very smooth, I felt people were very confident. They were also more knowledgeable about what the teaching points of the scenarios were. I feel that they have grown in their roles and their knowledge of their jobs. [You need] that knowledge and experience of the [SLC] staff who are helping you. I needed their input because they are doing it more than I am, so that I didn't miss anything. I wouldn't want to be running the equipment or anything like that.

I am ending up with only six clinical shifts in this practicum and I don't think that's enough. It would really be beneficial if they could make use of that clinical/practical time. The less days you have on the floor, the less time they are going to have for organization. I don't like pulling them out of clinical because that's a week that they aren't in clinical then. I find it disruptive. I would just like to see it out of clinical. It wasn't part of their clinical time before, and that's what I would like to see [in] ours as well, as part of the course work. I think it's better at the beginning [of clinical]. I don't see that it impinges on my teaching style, but just the placement in terms of it.

Textural Description

As an expert teacher, Anna felt uncomfortable not knowing what to do in HFS. She was concerned with how others would see her in that situation, "Just the fear of the new and not knowing what to do; you don't want to look stupid, you don't want to say or do the wrong thing." She was uncomfortable and felt unprepared even though she made an effort to become prepared,

First year, that's just the way it is, there wasn't much prep for us. It would have been nice if they would actually run through a scenario and just give the faculty more of a guideline of what there will be and what's expected of them. It wasn't immediately there, it came later, you know the stuff we needed to prepare ourselves.

She found being a nurse faculty did not prepare her for HFS. Eventually, she developed comfort with using HFS, and she credited her peers for providing support and mentorship, and the SLC team,

I've had some very good mentors. They tried to make it the best it could be. To see that enthusiasm and support for it and excitement, then you can pass that on to the students. You sort of internalize it yourself and be happy about it.

She found the faculty turnover in the SLC difficult, but felt the SLC team improved over time. Anna found HFS helped prepare her students for clinical by making the connections to practice and mimicking reality, though she still believed clinical time was more important,

It would really be beneficial if they could make use of that clinical/practical time...I don't like pulling them out of clinical because that's a week that they aren't in clinical then. I find it disruptive. I would just like to see it out of clinical.

Structural Description

The structural correlates of Anna's experience centered on her striving for self-efficacy. She described feelings of inadequacy, and the pressure of being a learner. Having to integrate HFS into her practice resulted in her struggling to maintain autonomy especially since integrating HFS into clinical was against her personal beliefs about clinical education, but she eventually came to terms with teaching with HFS through accepting and acknowledging the benefits to students. She advocated for HFS in nursing education and for student learning. Being part of a community of practice helped her become more comfortable with HFS through mentorship and support from her peers.

Textural-Structural Description

Anna's experience with integrating HFS into her clinical education practice centered on her striving for self-efficacy. She experienced being a learner and feeling inadequate. She felt unprepared, uncomfortable, and had a fear of looking bad in front of others. Anna felt it would have been better to spend more time learning. As it was, she had to spend a lot of time preparing to teach with HFS. Having to integrate HFS into her clinical teaching practice resulted in a struggle to maintain autonomy especially since she believed actual clinical practice is more important than simulated practice. She would have rather seen HFS used outside of clinical time.

Over time, Anna came to terms with teaching with HFS and was able to prepare the students and make connections to practice. Being part of a community of practice helped Anna integrate HFS into her practice. She was motivated by peers to use HFS and was mentored and supported through the learning process. She felt the enthusiasm and support from her peers made it easier for her to feel positive towards HFS.

“Connie’s” Experience

I had already been teaching for a number of years, and I didn’t even know what it was. I didn’t know what simulation was until I went to the first session. I didn’t really know what to expect. I didn’t really know if I would like it or not. There were all kinds of rules to follow. I thought it was interesting, but I had lots of questions and probably some reservations. At first I thought I probably wouldn’t [like it], partly because I’m not very techy and partly because I had this idea that a real patient has to be better to learn on than a manikin. Almost killed me! I have learned I need to become more consistent in not being a quitter. That first week, I could have easily quit, and I thought, “No, this is what you want to do, so suck it up and do the best you can.” I would never be [SLC] faculty. I would never work in the [SLC]. Mostly because of my lack of comfort with technology.

Lots and lots and lots of reading. I was always, and still am, scared I wouldn’t be ready. I reviewed all the nursing care that is required then looked at what the student is expected to know so that I am comfortable, and I will be able to step in if I am called in to help or if they ask me questions. I am a ridiculous preparer because I am always worried about making a mistake or feeling inadequate. I was worried about them asking me a question and me not knowing the answer. I don’t have the same skill set as all of the others that teach that class. I was just feeling inadequate in that class. I think I cried every single week.

Because I felt unprepared, it would have been nice if [the SLC faculty] would have responded the first time, and then the next time I could have responded. [One SLC faculty] was right in there and she would respond, and she would help with everything, and I felt like I was really well supported. I still believe that if the [SLC] faculty will come to my debriefing, I accept that with open arms. I just say, “Come on in,” and then I kind of let them run the debriefing. The [SLC] faculty are definitely becoming much more valuable because they are learning their roles better. I certainly would advocate very much for the presence of the [SLC] faculty. I’ve gone to them for resources asking for article ideas, that sort of a thing, a couple of times. You know, find me something or send me something or suggest what I can do. I still learned a lot teaching that class, and I learned to become more comfortable with simulation. We used sort of the same type of manikin, the same procedure every week. It is certainly helpful when you are first getting started. A lot of what we do seems repetitious.

You can plan for things and so you can do things that you may never experience as a student. That I can see – where simulation would be valuable. I don’t know if that’s a practice change or if that’s more of a philosophical change, because if I look at how I thought about [HFS] at the beginning and how I think about it now, [it’s changed]. I really like the [SLC] now that I have been there a few times, and I am comfortable walking in and knowing what is there. I have had a metamorphosis through the whole thing, where I see the value of simulation. I would certainly see the value of simulation in the lab more. To me the responses of a real patient are more valuable because that’s what you are going to be looking after. You are looking after people not manikins. I give up a whole day because I can’t take the students to the hospital for half a day. I can probably buy into that in the lab setting faster than I can the mandatory [HFS] in clinical hours. Not flexibility of choice, not flexibility of timing. I had to fight for the day I wanted because it wasn’t on the master calendar. So I fought my way through it and got

it, but it sure wasn't easy. I had to go through layers and layers and layers of whatever to finally be able to get that date, but it was the best date for us.

The more time I spend as a teacher the more I want academic freedom. I would like to have the choice of whether I take them to [HFS] in clinical or not. I don't like the checklists that come with the [SLC] because they are very prescriptive. I just usually tell the students - you can use those as a guideline, but I just want you to make notes on what you see. I'd like more freedom and truthfully, I take more freedom now that I have become more comfortable. Initially, I would follow the debriefing material that they handed out beforehand. It might be nice to have the option, to have a patient scenario that was more consistent with what the students would see. I still don't like it when I get an email from the course leaders saying you have to do a simulation.

There's always lots of varied opinions about simulation out there, and they don't sway you one way or the other way. Initially I felt like people were trying to sway or to push you towards liking simulation. It was kind of like, "What if I don't like this? [Am] I not allowed to say I don't like it?" Initially, I was very quiet. I wouldn't say a lot because maybe I didn't totally agree with it. If I had to develop a simulation scenario, that would be painful for me. I still am hesitant. I just am a little hesitant with it replacing clinical practice time.

Textural Description

Connie didn't know what to expect with HFS, "I didn't know what simulation was until I went to the first session. I didn't really know what to expect. I didn't really know if I would like it or not. There were all kinds of rules to follow." She felt peer pressure to integrate HFS into her practice. She had feelings of inadequacy, an underlying uneasiness with the technology, and discomfort in the new situation,

Initially I felt like people were trying to sway or to push you towards liking simulation. It was kind of like, "What if I don't like this? [Am] I not allowed to say I don't like it?" Initially, I was very quiet. I wouldn't say a lot because maybe I didn't totally agree with it.

But, it was important to her to stick it out,

Almost killed me! I have learned I need to become more consistent in not being a quitter. That first week, I could have easily quit, and I thought, "No, this is what you want to do so suck it up and do the best you can."

Connie needed time to become comfortable with HFS and to feel comfortable with the teaching material. She struggled to get the SLC time that she wanted,

I give up a whole day because I can't take the students to the hospital for half a day. I can probably buy into that in the lab setting faster than I can the mandatory [HFS] in clinical hours. Not flexibility of choice, not flexibility of timing. I had to fight for the day I wanted because it wasn't on the master calendar. So I fought my way through it

and got it, but it sure wasn't easy. I had to go through layers and layers and layers of whatever to finally be able to get that date, but it was the best date for us.

Connie felt she had support from her peers and from the SLC team. She could see value in using simulation and enjoys the SLC environment,

You can plan for things and so you can do things that you may never experience as a student. That I can see – where simulation would be valuable. But I don't know if that's a practice change or if that's more of a philosophical change, because if I look at how I thought about [HFS] at the beginning and how I think about it now...

Her underlying beliefs about clinical time being more important than time spent in the SLC did not change, and she perceived more value in clinical time, "I still am hesitant. I just am a little hesitant with it replacing clinical practice time."

Structural Description

The structural correlates of Connie's experience centered on her striving for self-efficacy. She experienced feelings of inadequacy and being a learner. She struggled with feelings of inadequacy in her ability to teach with HFS. Connie struggled to maintain autonomy over her teaching practice because she was not able to choose whether or not to integrate HFS. This feeling was compounded by her belief that HFS should not be integrated into clinical education. Through acceptance and reinventing, Connie began to change the technology to suit her own needs, and she became aware of the role of HFS in learning. She felt both pressured and supported by her community of practice. In the end, she was proud of the SLC.

Textural-Structural Description

Connie's experience was centered on her striving for self-efficacy while learning to use a new teaching innovation. She experienced being a learner and was uncomfortable, had feelings of inadequacy, and was hesitant. She struggled against quitting, but found the strength to continue on. She found she needed to be prepared and needed to understand the rules. She didn't know what to expect or whether or not she would like teaching with HFS.

Connie struggled to maintain autonomy. HFS in clinical was against her personal beliefs about clinical education, and she pushed back against the process. She felt HFS was better suited to lab classes. Connie found there was a lack of flexibility in the SLC. She struggled to make the changes she wanted.

Over time, Connie came to terms with teaching with HFS and could see the value to the students. She felt supported by her community of practice while she was learning to teach with HFS. Connie was also aware of the opinions of her peers regarding integration of HFS and felt pressured by their opinions. Initially, she felt pressured to use HFS but didn't share her opinion due to fear of looking bad in front of her peers. Connie came to appreciate the physical environment of the SLC after she became comfortable with HFS.

“Ina’s” Experience

I enjoyed it; I thought that it added to what we did. I think that it gave the students a real life experience. I wish we could have had it when I was a student. I believe that it is one of the greatest technologies that has been introduced to our program. I think that's good we can show them normal versus abnormal and how this intervention might affect someone. I think that it's something that will enhance my practice. I want [the students] to come away from simulation feeling good about it. It's usually a very positive experience for the students, and I try to make it very positive for them. I believe that our center at [Saskatchewan Polytechnic] is state of the art and I believe that we can still do it better. I would be in conflict with some of my colleagues, but I think [some of] my colleagues are uncomfortable with it. I can relate to many of their complaints, I really can – the resistance they have – I felt it, and I've acknowledged that. They got me very curious, and they were supportive as well.

We were floundering foundlings if you will. I was very uncomfortable being on the spot, thinking I had to know all the answers and had to run the simulations. It scares me because I always want to be competent when I'm dealing with something. If you were new to it and you never done it before, I think you should observe one. I didn't feel comfortable at first doing it on my own, and so I followed the guide, and I guess if I've strayed from the guide no one has told me that I've strayed too much. I use it as an outline, and we zero in on things that happen to our particular situation. I also wasn't always that familiar with what the other courses we're teaching. When I found out it was the simulation technician who did most of it and I had to do no more than be clinical faculty, I was fine with that then.

I don't believe that they should kind of just exit and leave us to do all of this because again we have a variety of faculty that haven't been that involved in simulation and to maximize the benefit of going and to make the experience positive for all of the students, the [SLC] faculty would be the constant there. Having simulation staff work with us and not just handed over to us definitely enhances the experience, and it makes it much more similar for each group that goes through there. You have someone who walks you through it and relaxes you and makes it more comfortable.

I would like to see the schedule arranged so it maximizes what we can do. I would like to see someone take over this. Scheduling is really key to me. They won't allow me to pre-book it, it has to go through course leaders now. There weren't enough places, that's the other thing. No other program should be given that option if it's a priority for us having this. If they're not going to make it kind of equal and fair to all of us in the clinical setting then it can't be mandated - it should be optional. It's hard enough to

book a clinical schedule these days – to have all of these restrictions on top of it just really, really frustrates you.

I will say I don't want to do excessive simulation; I want to be in the clinical. If I can go to clinical, I should go to clinical; I shouldn't spend the day in a lab somewhere. I think that we do struggle for placement, and there are times when we can't go to the areas. I didn't feel I could spare the time away. I don't want change just for change sake, but I want change when its positive and someone can demonstrate to me how it is going to impact me in a positive way. I don't want to be thrown into something that is half thought out. If we can make it work well, we have to work out the kinks. I'm not suggesting it's going to be perfect, and I'm not suggesting I'm not part of the solution to fixing some of the situations.

I'm maybe just a tiny bit of a rebel. I don't like being told things. I don't like being told, "You will have three simulations in this course!" I resisted, and I only have two. I was prepared to say, "I'm sorry I didn't do it, I know it was a rule but I didn't do it because of these reasons." I felt pressured, but I still said no. I would like to see a bit more autonomy. The rules are kind of harsh. The rules make it uncomfortable walking in the [SLC]. We had a little slap on the hand because I didn't come in a scrub uniform. I think we need to [have a] more welcoming atmosphere around some of the rules, and we're relaxing them I think.

Textural Description

Ina could see the benefit of simulation to student learning, "I believe that it is one of the greatest technologies that has been introduced to our program." She wanted the students to have a positive learning experience; "I want [the students] to come away from simulation feeling good about it. It's usually a very positive experience for the students, and I try to make it very positive for them." Ina found the SLC an impressive place. She appreciated the support she received from peers and from the SLC faculty,

...the [SLC] faculty would be the constant there. Having simulation staff work with us and not just handed over to us definitely enhances the experience, and it makes it much more similar for each group that goes through there.

Ina believed clinical was more important than HFS, "If I can go to clinical, I should go to clinical; I shouldn't spend the day in a lab somewhere." She found it challenging to learn something new, and she had expectations of herself as a teacher,

We were floundering foundlings if you will. I was very uncomfortable being on the spot, thinking I had to know all the answers and had to run the simulations. It scares me because I always want to be competent when I'm dealing with something.

Ina struggled against the loss of autonomy, "I'm maybe just a tiny bit of a rebel. I don't like being told things." As she became more comfortable, she began to recognize ways to improve the process and made suggestions for scheduling and rules,

Scheduling is really key to me. They won't allow me to pre-book it, it has to go through course leaders now. There weren't enough places, that's the other thing. No other program should be given that option if it's a priority for us having this. If they're not going to make it kind of equal and fair to all of us in the clinical setting then it can't be mandated - it should be optional. It's hard enough to book a clinical schedule these days to have all of these restrictions on top of it just really, really frustrates you... The rules are kind of harsh. The rules make it uncomfortable walking in the [SLC]. We had a little slap on the hand because I didn't come in a scrub uniform.

Structural Description

The structural correlates of Ina's experience centered on her struggle to maintain autonomy. She was able to advocate for her own needs but struggled with the change in her teaching practice. She felt a loss of autonomy and pushed back against the process. HFS in clinical was against her personal beliefs about clinical education. Ina strove for self-efficacy and had feelings of inadequacy about her abilities to teach with HFS. Being part of a community of practice made her aware of peers' opinions, and she felt mentored and supported by peers. Ina was an advocate for HFS in nursing education, and an advocate for student learning. She was proud of the SLC, and had positive feelings towards HFS as a teaching innovation.

Textural-Structural Description

Ina's experience integrating HFS into her clinical education practice centered on her struggle to maintain autonomy. She struggled against the process and described herself as a "rebel." She pushed back against the rules and identified ways to improve the faculty learning process. HFS in clinical was against her personal beliefs about clinical education. She preferred all clinical time to be spent in clinical rather than in the SLC. Ina strived for self-efficacy in her teaching and had feelings of inadequacy. She was uncomfortable being a facilitator and not knowing what to expect from the students. She wanted to appear competent and confident in front of the students.

Ina was mentored and supported by her community of practice. She appreciated the support she received from the SLC faculty. She was able to identify the challenges she had with the scheduling of HFS, and she recognized ways to improve. Ina identified scheduling as a problem with HFS, and she felt other programs were given priority over nursing. This made her frustrated. She felt the rules were rigid and led to discomfort in the SLC. Ina understood the need for HFS in nursing education, and she was able to support student learning through a new teaching innovation. She wanted the students to have a good experience, and she was able to see

the value of HFS to nursing education. She was proud of the SLC, was impressed by the technology, and appreciated the physical environment.

“Sarah’s” Experience

I like technology and I want to see it, but I’m not the one going out and implementing it. I’ve never done simulation so just watching the discomfort, the anxiety, and the frozen students – how do you get them through that? You do develop some skills in facilitating it. I’ve just done it at such a basic level. I’d like to feel more comfortable so that we can get more out of it. They’re calling me for all this stuff and just drives me crazy. You never know what’s going to happen because every single [faculty] does it differently, and that’s frustrating. It’s not a standardized approach, so some get a big tour and some make them do some [HFS]. It’s a new place, big changes, and it takes time to get things sorted. I like there’s a more organized approach now and some of that chaos is gone. I’m feeling more comfortable in the environment now. [The SLC faculty is] so enthusiastic, lots of energy and lots of ideas.

I look at what the students read, I look at pre-readings. Because we have access to the scenario, I looked through that and sometimes I’ll print it off. I know the scenario now, but before I didn’t know it. They have the algorithms and all that, so I can anticipate. I read a lot of articles on it and got enthusiastic about it, and then you kind of feel let down. I think we need to do more, but I can’t explain to you what that is. It needs to be more – you go in, you do this – even seeing some of where you go in and you do it, and then you come back and you do your debrief, then you do it again. I think I would see more learning that way. I think if we could pull it off – that would be great. I always feel like we’re not done when we do it. It just ends.

I got to sit in and watch and see how the techs work and participate a little bit and they’d ask me [for input]. That was nice to be involved and to participate because it is my group. I follow along, and I try to throw things in if I think they missed something, and then they get frustrated because I interfered. Sometimes, more faculty input [is needed]. The report [the SLC faculty] give is not how we are teaching them, so I would like them to look at how we give report, how we teach, what the students are going to see; do it more like they would see in the hospital. They bounce all over the place, so I’m struggling to write it down, and I’ve been taking report for a very long time.

The schedules were made before we had any input. To have input into scheduling would help. They gave us all these dates but some of them didn’t work. It would be nice to be able to book it when you think, “Okay, we’ve kind of hit a road block.” More choice. But, “You’re going to do this one and this one. You have to pick a date right now!” That is a limitation. If they didn’t book, they’d have all these people hanging around being paid. The [other programs] book this September for next year, so we need to know that so we can get in there before them. We encourage people to do two [scenarios], and there was a big push back. I do one at the beginning, one at the end, to see the growth.

[Faculty] are not seeing the value of it, they’re not utilizing it. It’s a fear of the unknown. That’s just discouraging to me in a meeting where you have people complaining about it. There is more capacity down the road to get the people in, get them more comfortable. I don’t know how you do that unless they come with someone

who likes to do [HFS], and they see the value. This is a resource, let's use it, it's awesome! People who have experience in other programs – that gets me excited about it because you can see that we can get better, and you know we can do more with this. I can see huge value because I am a critical care nurse, we did yearly annual recertification. That was part of our daily practice, and I really valued that, and I think it has a lot of capacity for the practice of nursing. Every time someone from the health region comes and sees these units, they just can't believe it. Education and practice are too far apart, we need to link up more. They don't have time to build practice on the ward.

Textural Description

Sarah found it difficult to support students when starting HFS, "I've never done simulation so just watching the discomfort, the anxiety, and the frozen students – how do you get them through that?" She was uncomfortable and frustrated with the unfamiliar environment and the unknown expectations,

I'd like to feel more comfortable so that we can get more out of it. They're calling me for all this stuff and just drives me crazy. You never know what's going to happen because every single [faculty] does it differently, and that's frustrating.

Over time, she developed comfort and was able to prepare. She found HFS was not standardized, but realized it takes time to develop,

It's not a standardized approach, so some get a big tour and some make them do some [HFS]. It's a new place, big changes, and it takes time to get things sorted. I like there's a more organized approach now and some of that chaos is gone. I'm feeling more comfortable in the environment now.

Sarah would have liked more support when doing HFS and more say in the process,

The schedules were made before we had an input. To have input into scheduling would help..."You have to pick a date right now!" That is a limitation. If they didn't book, they'd have all these people hanging around being paid.

She found the SLC team provided support, but she still felt like an outsider, "That was nice to be involved and to participate because it is my group. I follow along, and I try to throw things in if I think they missed something, and then they get frustrated because I interfered." She was also discouraged by negativity of some peers, "That's just discouraging to me in a meeting where you have people complaining about it." Sarah was supportive of HFS as an educational innovation, but she felt let-down with the reality of doing HFS "I always feel like we're not done when we do it. It just ends."

Structural Description

The structural correlates of Sarah's experience centered on her striving for self-efficacy while learning a new teaching innovation. She felt inadequate and struggled to define her role in HFS. Sarah struggled to maintain autonomy; she pushed back against the process and advocated for her own needs. She came to terms with teaching with HFS through acceptance, understanding, and reinventing the technology to suit her own teaching needs. Sarah was an advocate for HFS in nursing education, and she was proud of it.

Textural-Structural Description

Sarah's experience integrating HFS into her practice centered on her striving for self-efficacy. She was uncomfortable learning to teach with HFS, and she didn't know what to expect. She became frustrated and felt she needed more support. The SLC was an unfamiliar environment, and she worked hard to be prepared. She was frustrated with not knowing what was going to happen.

Sarah struggled to maintain her autonomy and pushed back against the process. She found she needed more say in what happened during HFS, and she felt let down by the reality of teaching with HFS. She wanted to have more flexibility in the scheduling of HFS but understood why that might not work. Sarah came to terms with teaching with HFS through accepting, understanding, and reinventing the innovation to suit her own teaching. She began to feel more comfortable in the environment and understood that change takes time. Sarah has been able to suggest ways to improve the learning process by making things more consistent for faculty. She felt the SLC became more organized, and she became more comfortable in the environment. Sarah was an advocate for HFS in nursing education. She saw the value in using it due to her critical care background. She was also impressed by the technology, and proud of the organization.

“Willa’s” Experience

I enjoyed it as an educator. I thought it was a great learning method. It wasn't something that was so much precision in the learning; it was a little bit of romance to the learning excitement. We are too focused on precision all the time, we need to expand and bring up their learning methods and innovations. I think it's a wonderful innovation [for] learning, and I think it improves safe patient care because students are more comfortable. I think back to when I was a student – how I would have enjoyed doing that. I try to find out why [the students] don't want to be there. If the students are not committed to it, it's not as worthy of an experience. [In clinical], I would use it to

supplement a patient scenario. I would often refer back to the experiences in [HFS]. I changed it up a bit for my students because the way we did it before was kind of past the group. I quit that and then let the second group take over where the first group had not been able to. I had to kind of work through things and say, “Well, why is this set up this way?” and “I’m going to change it a little bit.” I also took the opportunity in [SLC] to expand on other areas. I was on medicine and it was a surgical one.

I wait a bit to see how it works. I was feeling more comfortable as it progressed. I’d like to feel comfortable with what I’m going to do in [HFS] and what [the SLCs faculty] are going to do with the manikin. That helps me lots – to be well prepared. It’s very nice to have the written out information before and to be able to go in the day before and review my setting and talk to the faculty there. I’m glad the support’s in the room though. I don’t think I’d feel as comfortable with accessing everything for the students because I don’t do it on a daily basis. They mentored a lot of people through, and I was very thankful for support and guidance. I think it’s a wonderful centre.

I like to give [the students] time to prepare and to come in when there’s not such a scrunch of time. I think [the times] should all be set up for us, we shouldn’t have to be phoning and worrying. Everybody trying to worry about if they can get their [HFS] in - it’s just added stress for an instructor. I’ve been brought in because the staff members have an illness or surgery, for example, and nothing’s been planned. It’s just very difficult to get times. The scheduling is the big problem. The lab is always booked with [another program] in my opinion. I think that they shouldn’t be allowed to bump us. I think there’s not enough time right now. People need to quit this competitive stuff and work in collaboration. When they tell us we have to do three [HFS] in one rotation; staff are all trying very desperately to fit them all in. I felt that there was quite a push to get them done, and sometimes I felt it was quantity over quality. I thought it would be better to just do two really well [rather] than to do three or four and do a hit and miss.

I wish they had some more pediatric dolls and pediatric scenarios. They don’t seem to have as much equipment there. I just think that would be nice to have a few more specific innovations in the room and things that work. I wish that we had the ability for them to give injections into the dolls and start IVs right in there, but that’s coming I’m sure. I think that would be really nice, it would be a little more real. All day in the [SLC] is too much for them for one thing. I would like to see more involvement from the instructors in making scenarios. I would love to make a scenario and write one up.

Textural Description

Willa identified HFS as a good learning opportunity for students, “It wasn’t something that was so much precision in the learning; it was a little bit of romance to the learning excitement.”

It was important to her to ensure students had a good learning experience,

I think back to when I was a student – how I would have enjoyed doing that. I try to find out why [the students] don’t want to be there. If the students are not committed to it, it’s not as worthy of an experience.

She was able to see the advantages it would provide in nursing education, “I think it’s a wonderful innovation [for] learning, and I think it improves safe patient care because students are more comfortable.”

Willa enjoyed her experience with HFS, and she found being well-prepared was important, “That helps me lots – to be well prepared. It’s very nice to have the written out information before and to be able to go in the day before and review my setting and talk to the faculty there.” She exercised her autonomy by making and suggesting changes, and collaborating with the SLC team, “I changed it up a bit for my students because the way we did it before was kind of past the group.” She would like to have been more involved in the development of HFS, “I would like to see more involvement from the instructors in making scenarios. I would love to make a scenario and write one up.” She was frustrated with the scheduling of HFS,

The scheduling is the big problem. The lab is always booked with [another program] in my opinion. I think that they shouldn’t be allowed to bump us. I think there’s not enough time right now. People need to quit this competitive stuff and work in collaboration. When they tell us we have to do three [HFS] in one rotation; staff are all trying very desperately to fit them all in. I felt that there was quite a push to get them done, and sometimes I felt it was quantity over quality. I thought it would be better to just do two really well [rather] than to do three or four and do a hit and miss.

Willa is glad for the mentorship and support she received from the SLC team. She enjoyed her experience with HFS and appreciated the SLC environment,

I’m glad the support’s in the room though. I don’t think I’d feel as comfortable with accessing everything for the students because I don’t do it on a daily basis. They mentored a lot of people through, and I was very thankful for support and guidance. I think it’s a wonderful centre.

Structural Description

The structural correlates of Willa’s experience centered on the importance of HFS in supporting student learning. She was able to maintain self-efficacy with the teaching innovation, and she embraced being a learner. She was able to maintain autonomy by reinventing the innovation to suit her teaching needs. She appreciated her community of practice and the mentoring and support she received from peers. She was positive about HFS and proud of the SLC.

Textural-Structural Description

Willa's experience integrating HFS into clinical practice education centered on her being an advocate for HFS and for student learning with HFS. She identified learning opportunities and tried to ensure students had a good learning experience. She related to her experience as a student and felt HFS would have been good to have. She understood how important it is for students to have a good experience during HFS. Willa experienced being a learner and felt it was important to be prepared. She maintained autonomy by making changes to suit her teaching needs, but she became frustrated with the scheduling. She felt preference was being given to other programs and suggested more collaboration. Willa didn't see the need for three scenarios in one clinical rotation and felt two done well would have been better. Willa appreciated the mentoring and support from her community of practice and suggested more collaboration. She was proud of the SLC and enjoyed working with HFS. She appreciated the help she received from the SLC staff and felt they added to her comfort with teaching with HFS.

“Zoe’s” Experience

I would say it's positive. I've utilized it in practice, not just in education. The [colleagues] that I have interacted with have been positive. I'm a believer of it. It's really an impressive environment and maybe it has to be because it's expensive and it's new and it's shiny. I've always taken advantage of its availability in every clinical rotation. I have suggested to the manufacturers what I would like to see specific to [my area]. I'll use the simulations available to me, but eventually I like to see them use things [related to my clinical area]. [Once] the [SLC] faculty chose to focus on communication between the team members for debriefing rather than on physiology and what was going on, so that was an interesting departure for me from what I've seen previously done in that lab. If [the manikins] are at the speed where they can interact with us like a person can, I'm unaware of it. I think the default would be going to textbook companies or having faculty allowed the time to do [scenarios] not just an add-on to the end of their desk on top of everything else they are doing. [HFS] is a step up in realness from a generic lab situation or seminar situations.

I would put my comfort level at a four or a five and I would like to be at an eight or nine. I'm sure I'm ahead of most of the folks in terms of computer programs and most of the technology we use in education. I went and talked to the person who ran the [SLC]. I always did and asked lots of questions about what was going on. Other things I did to prepare was to read the scenario, kind of have an idea where you want to get with the scenario. [I] had some very good discussions with [SLC faculty] about the variety of ways that [HFS] could be used we had not discussed before. I think a lot of us in the world are control freaks and want to be in control of things. And although we might read the scenario over it is very different when we're manipulating those things with the intent of producing a certain result with the students. I just feel I'm a fifth wheel even though I'm not expected to function in that way. The most helpful thing was while the

[HFS] was running and I would be in the room with the operator of the equipment to change the parameters, not at the bedside with the students. That ability to discuss in real time what's going on particular to that simulation, that I found helpful. I don't feel I have a lot of autonomy in there because I'm not the one running the show with [HFS]. So I feel sort of out of kilter, like I said not necessarily quite a fifth wheel, but it isn't my operation and that's difficult some times. I live for autonomy, but to have that, I have to have the support and training. I would like to see either professionals or dedicated people there to assist with or in fact lead the debriefing afterwards.

The concern I have about simulation and overuse of simulation would be that students forget that there's a real person on the end of what they're doing in real life. I think the one thing it enables me to do, though, is – when we come across a situation in clinical that I know we've done in [the SLC] – to relate back to that. I think that the demands as it is right now are its being utilized to its max on day shift unless they staffed it with more people and had evenings available. I think people get to be so afraid of having a pen in there, a cup of coffee cross the threshold, sort of stifles people's comfort level. Even when you're coming there it always seems to be so “thou shalt do a, b, c, and d and shall not do d, e, and f,” and they almost want to put the fear of God into you, and I'm not sure that's the best. I think that students are already nervous enough coming in there, and I don't think that helps.

Textural Description

Zoe appreciated HFS as a teaching innovation and enjoyed the SLC, “I'm a believer of it. It's really an impressive environment and maybe it has to be because it's expensive and it's new and it's shiny. I've always taken advantage of its availability in every clinical rotation.” She was able to identify constraints to utilizing HFS and suggested changes to make it better, “I think that the demands as it is right now are its being utilized to its max on day shift unless they staffed it with more people and had evenings available.” Zoe used some simulation in her nursing practice, but still found she lacked the time to become more involved in HFS preparation. She disliked all the rules of the SLC,

I think people get to be so afraid of having a pen in there, a cup of coffee cross the threshold, sort of stifles people's comfort level. Even when you're coming there it always seems to be so “thou shalt do a, b, c, and d and shall not do d, e, and f,” and they almost want to put the fear of God into you, and I'm not sure that's the best.

Being prepared to teach was important to Zoe, and she was able to identify her own learning needs,

I went and talked to the person who ran the [SLC]. I always did and asked lots of questions about what was going on. Other things I did to prepare was to read the scenario, kind of have an idea where you want to get with the scenario. [I] had some very good discussions with [SLC faculty] about the variety of ways that [HFS] could be used we had not discussed before.

Zoe wanted to have more autonomy. She felt like an outsider in the SLC and would have liked to be more comfortable,

I don't feel I have a lot of autonomy in there because I'm not the one running the show with the [HFS]. So I feel sort of out of kilter, like I said not necessarily quite a fifth wheel, but it isn't my operation and that's difficult some times. I live for autonomy, but to have that I have to have the support and training. I would like to see either professionals or dedicated people there to assist with or in fact lead the debriefing afterwards.

Even though she was a supporter of HFS, Zoe was concerned students might not get what they need from it, "The concern I have about simulation and overuse of simulation would be that students forget that there's a real person on the end of what they're doing in real life."

Structural Description

The structural correlates of Zoe's experience centered on her striving for self-efficacy while being a learner. She struggled to define her role in the SLC and experienced feelings of inadequacy. Zoe struggled to maintain her autonomy. She felt a loss of autonomy and advocated for her own needs. She came to terms with teaching with HFS through understanding and reinventing the innovation to suit her own teaching needs. Zoe was an advocate for HFS in nursing education and practice and an advocate for student learning with HFS. She felt mentored and supported by her community of practice. Zoe was positive about HFS and proud of the SLC.

Textural-Structural Description

Zoe's experience integrating HFS into her teaching practice centered on her striving for self-efficacy with the innovation. She had feelings of inadequacy. She was uncomfortable and felt like an outsider in the SLC. Zoe struggled to define her role but was able to identify her learning needs. She spent a lot of time preparing to teach with HFS by asking questions, reviewing scenarios, and engaging in discussions with colleagues. Zoe struggled to maintain autonomy. She expressed a need to have teaching autonomy, and she was able to advocate for her own needs. She expressed a dislike of the rules in the SLC and found them very restrictive.

Zoe came to terms with teaching with HFS through understanding and reinventing. She was able to identify the constraints of using HFS and suggested changes. Being mentored and supported by a community of practice helped Zoe to become comfortable with HFS. She was proud and positive about HFS. She was impressed with the technology and the physical

environment of the SLC. She appreciated HFS as a teaching innovation and used it as much as she could.

“Frances” Experience

We were using the product but not utilizing scenarios as they should be laid out in a pre-brief, the simulation; thought that was pretty poor that we weren't standard across the board. When the human patient simulator looks like a guy and is supposed to be a girl – that takes away from it.

It's a lot of information gathering to ensure that there's an understanding of what a high-fidelity simulation would entail. I read a lot of literature. Also talked with colleagues working right alongside me. You have to ensure that the content of the simulation is meeting where the students are at. The simulation should be agreeable to the content that you're teaching.

Simulation is a safe learning environment without the same consequences that you would encounter if you were to give a real live patient 10 times the dosage of medication. I think that simulation is an active learning innovation in a safe learning environment. I think it's valuable for students because it solidifies course content when you are actively learning something that has been talked about.

Is there a lot of time set aside to learn how to utilize simulation? Definitely not! I think a lot of education needs to occur, whether that is lunch and learns, or seminars. It's quite cost prohibitive is the only rationale I believe behind not having that already have taken place. Time has to be set aside to learn if you want simulation to be effective for what simulation is good for. There's just no time to learn even how the electronic calendars work and how to get your time input into the calendar.

It has to be an interest of yours; you have to want to be able to have active learning practices within your classroom content or within your curriculum content. [Faculty] should go for their own orientation before they even get in [the SLC]. They are feeling uncomfortable themselves, so I think it would be difficult for them to evaluate students. To get them past that point – the only way to do that is by being within the simulation center and learning the processes and the correct way simulations should run within the high-fidelity setting; education with someone who knows the research behind simulation learning. I know that's how it is not being used by all faculty across the board. Simulations are taking place, the calendars are busy, but the valid learning component that it could be may not always being utilized correctly. Faculty that don't know how high-fidelity simulation should be run come with an agenda. There's only very few people that are interested in how simulation is running and how it should run for best practices. A lot of it is not understanding. What's lacking is education across the board. We need education.

You also need the adequate staffing levels [in the SLC] to be able to have small discussion groups which is really what debriefing is all about. It's a very busy active center, if you happen to get a three hour time slot to get in.

I think there's a place for [HFS] in clinical because there are some things that they don't get the experience of within clinical. It's safe. Those students that you are supervising in the clinical setting – it's not always safe because you cannot split yourself into six or eight people. I think there is a place for it in almost anything that we

do. I really, really, love clinical and I really, really, love simulation. If high-fidelity manikins could talk as well as the patient does then I think it would be extremely valuable. I think that we could have clinical right in our school and not even go to the hospital or acute care center. If I wouldn't have had nurse faculty colleagues that always had very open minds, I wouldn't have even thought about utilizing technology as much as I did. Now, the change to my practice would be to use simulation if it was accessible. You can do anything there, and it can be effective.

I would have assessed myself as knowing nothing about technology. There's a lot of technology within the world now, so if you don't get up and get interested in the technology and start using it, you're never going to learn it. Seven years ago I probably was a late adopter and now I would think I'm an early adopter. I like technology but I also hate technology, and I hate to change. I think change is happening at such a rapid pace; you either get on board of change and you try to make things better, or you're a snail and you're a dinosaur. By not changing your practices, changing your ways, you fall into that rut of "we've always done it this way," and I never want to be in that rut. Whenever there is something new within practice, I definitely make sure that I bring it to the simulation learning center's eyes. I think there's a lot more to come when you look at manikin interactions.

We need money. We need people at the top of the organization to understand how important it is. You need the time and you also need the support of the program head.

Textural Description

Frances appreciated HFS as a teaching innovation, "I think that simulation is an active learning innovation in a safe learning environment. I think it's valuable for students because it solidifies course content when you are actively learning something that has been talked about." Frances was concerned HFS was not being implemented the way it should be, "I know that's how it is not being used by all faculty across the board. Simulations are taking place, the calendars are busy, but the valid learning component that it could be may not always being utilized correctly." She brought information to the attention of the SLC as it became available, "Whenever there is something new within practice, I definitely make sure that I bring it to the simulation learning center's eyes." She felt nurse faculty needed a lot more support in order to do HFS, but she also understood the organizational restrictions to providing support,

Is there a lot of time set aside to learn how to utilize simulation? Definitely not! I think a lot of education needs to occur, whether that is lunch and learns, or seminars. It's quite cost prohibitive is the only rationale I believe behind not having that already have taken place. Time has to be set aside to learn if you want simulation to be effective for what simulation is good for. There's just no time to learn even how the electronic calendars work and how to get your time input into the calendar.

Frances felt there was no time to learn HFS, and faculty were overtasked, "You need the time and you also need the support of the program head." She understood the reluctance some of

her peers had with using HFS in their education practice, “It has to be an interest of yours; you have to want to be able to have active learning practices within your classroom content or within your curriculum content.” When it came to technology, Frances did not want to be left behind, “I never want to be in that rut.” Frances was an advocate for HFS. She saw its value for students and for faculty. She acknowledges her own struggles with technology, but understood the importance of moving past that,

I like technology but I also hate technology, and I hate to change. I think change is happening at such a rapid pace; you either get on board of change and you try to make things better, or you’re a snail and you’re a dinosaur.

Structural Description

Frances is an advocate for HFS and an advocate for student learning with the teaching innovation. She strove for self-efficacy while learning the new innovation. She was able to advocate for the needs of nurse faculty integrating HFS into their teaching practice. She understood the personal and organizational limitations. Frances experienced being part of a community of practice. She was aware of peers’ opinions, but was also mentored and supported by them.

Textural-Structural Description

Frances was an advocate for HFS in nursing education. She saw the benefits to students and appreciated the teaching innovation. Frances strove for self-efficacy while being a learner. She needed time to prepare, and she needed education and support. She felt there wasn’t enough education about HFS or time set aside to learn about it. Frances understood the personal and organizational limitations of integrating HFS. She was able to acknowledge the dichotomies in her own understanding. She both appreciated and disliked technology. She also expressed a dislike for change but understood she needed to change or be left behind. Frances experienced being part of a community of practice. She was able to support her peers, and she felt supported by them. She was aware of her peers’ opinions about HFS.

“Mona’s” Experience

I liked it and the students seemed to really like it because they got to have some hands on. [In] simulation, students learn better with the hands on. They have the opportunity, instead of looking to the instructor, to be in control of what they do. They learn in a contextual situation. You can read about it, you can observe, and observing is okay, but if you get to play with things and touch things and do things and them not work the way it says in the book, it’s a good thing. The critical thinking really seems to come alive

when you do simulation. I can take them into simulation and when a simulation manikin codes, they're not taking an observing role, they get to do it; and they get to understand why we do the things we do and what happens afterwards. Students get that opportunity they may not necessarily get as a student in the real world, and I would much rather them have that experience with a manikin even before they have to experience that outside.

I had some experience as a clinical facilitator; I think I did two times with the high-fidelity scenarios. I read a lot out of [the simulation book] and used as a reference and as well, I did the webinars that the evolve website had. I read about [what] the manikins can do, what they offer. When you had faculty that were coming in from the different courses, and they were willing to learn a little bit beforehand before they came in, and wanted to be prepared, [that was good]. The faculty that come thinking that they [can] just abdicate their role...and they didn't know anything and preferred not to know anything...there was no working together. When faculty came and they read over the scenario, they knew what to expect. It just makes things flow a lot better. It seemed if the faculty were on board, the students were on board, and they were more likely to embrace the experience and not treat it just like, "I should just be in clinical." If [the faculty] came in with preconceived ideas that this was a waste of time and they could be on the wards, it did not take well. A lot of the negative experiences, I think, were [because] the faculty were hesitant or not interested, and it made it really difficult to go through.

There was always opportunities to come, and there [were] invites to come and get an orientation to the area. They sent out a lot of information like the learning package and before we come with our students. [SLC faculty] helped a lot because in my world, when I was the faculty, I didn't have a lot of experience with it and knowing that [SLC faculty] was going to be there to do the simulation part and deal with that, and I was responsible for the clinical knowledge and expertise – that was the biggest thing, that was a big draw in. The staff was really helpful. Everyone's all excited and there's that mass chaos at the beginning. I have no patience for that. It's too confusing, and so once it's in place, I am more than happy to use it or if I'm involved with the implementing. When it first comes out and there are the rumors and the nattering and all that sort of stuff – a lot of it is just anxiety and fear of it, and it just adds to the poor reception of it.

When simulation was first brought in for the program saying that it was mandatory 10%, this is no discussion – that really does not help. I was irritated by it, because I am being told. I think that could have been introduced a little better. Instead of boom, done, there's no discussion, I think this mandatory 10% needs to be visited and maybe it's not the policy, but definitely, if you're on a mental health ward and you're mandated to go to a medical scenario, it needs to reflect what the students are being [taught]; that happened a lot. I think faculty should have the opportunity to make the scenarios more towards the students' experiences they are having right now. If you're getting the experiences you think the students need or the students are getting the experiences and you've got the opportunities, great! But in the same token, if you're not getting the experiences and you're just there x number of hours because they need to [be], then take advantage of simulation.

The biggest draw back with simulation is the students are so labor focused in getting the skills and they miss out on opportunities for communication and the different

roles they could have, whether it's being the leader in the group or whatever, when there's three or four, because they all get so focused. The communication and the inter-professional roles, that's part of it and I think that's lacking right now. When you deal with manikins, they don't have a facial expression and I know there's some new ones coming out that the faces will be more realistic. Like I think you can use it in more creative ways than, "10% and here's med scenario number two." Simulation needs to be integrated at the beginning when courses are being developed, not after they've developed their course and say well we need a simulation scenario. It would be better if it was integrated from day one. We were stopping the simulation about five minutes into it and giving them the chance to ask three questions, what information do you know, what information do you need, what are your priorities? And [that] just seemed to refocus them.

At first I thought with simulation, you'll never get what it's like in the real world. But we can get it pretty darn close. I liked the flow of the high-fidelity, that it was similar to life at a hospital, and they tried to make it as much as possible user-friendly. I think the most significant thing with simulation is that the students that take advantage of the experience and embrace it, you can see those light bulb moments and those ah-ha moments, and they will say to you, I've never done that before and was more exciting. The water bottles, the rules – there was a lot of rules that I think could be revisited, and I know the rules are there; but some of them, I think, are a little ridiculous.

I think the biggest hindrance to the simulation, and I truly believe that one of the reasons they have such a high turnover, is there's a not a universal thinking about simulation. Everyone has their idea about how it should go and it isn't consistent and there's conflicts amongst the technicians, amongst the nurses that are faculty. The technicians, when they saw simulations – they focused on the skills, the physical skills and the faculty were looking at not just the skills; but communication, critical thinking, the assessments; and [it] was abundantly clear when you would watch from the booth.

Textural Description

Mona enjoyed the experience of using HFS, and she was excited to be part of a new experience, "I liked it and the students seemed to really like it because they got to have some hands on." She was appreciative of the SLC, and she was able to connect her experience with HFS to previous experiences, "I had some experience as a clinical facilitator, I think I did two times with the high-fidelity scenarios." She had no patience for the confusion when HFS is first starting,

Everyone's all excited and there's that mass chaos at the beginning. I have no patience for that. It's too confusing, and so once it's in place, I am more than happy to use it or if I'm involved with the implementing.

Mona was attentive to the students' learning needs in HFS, "The critical thinking really seems to come alive when you do simulation. I can take them into simulation and when a simulation manikin codes, they're not taking an observing role, they get to do it..." It was important for

Mona to be prepared, and she became frustrated with colleagues who did not make an effort, “A lot of the negative experiences, I think, were [because] the faculty were hesitant or not interested, and it made it really difficult to go through.” She was frustrated with the inconsistencies in simulation learning and made suggestions to change the process,

Everyone has their idea about how it should go and it isn't consistent and there's conflicts amongst the technicians, amongst the nurses that are faculty. The technicians, when they saw simulations – they focused on the skills, the physical skills and the faculty were looking at not just the skills; but communication, critical thinking, the assessments; and [it] was abundantly clear when you would watch from the booth.

She was frustrated with the rules in the SLC, “The water bottles, the rules – there was a lot of rules that I think could be revisited, and I know the rules are there; but some of them I think are a little ridiculous.”

Structural Description

Mona's structural correlates centered on her being an advocate for HFS and for its use in nursing education. She experienced being a learner and struggled with the change. She pushed back against the rules. Mona experienced being a part of a community of practice and was both frustrated with peers, and supported by SLC faculty. She was proud of the SLC and positive about HFS.

Textural-Structural Description

Mona's experience integrating HFS into her clinical teaching practice centred on her being an advocate for HFS and for its use in nursing education. She liked it and felt her students liked it as well. She experienced being a learner and struggled with change. Mona expressed a dislike for the excitement and chaos that accompanies a new innovation.

Mona pushed back against the rules in the SLC and felt they were too strict. She experienced being part of a community of practice. Mona was frustrated with her peers and linked negative experiences with uninterested faculty. She was also frustrated with the process of integrating HFS. She felt there was a lack of consistency and conflicts between technicians and nurses. She also felt there were different perspectives on the focus of HFS within the SLC. Mona expressed pride in the SLC and was positive about HFS in nursing education.

“Olivia’s” Experience

I haven’t been involved in simulation myself like as a participant, I’ve only ever seen it through the students. A few times I was a participant as in one of the patient’s family members. I actually did my own in the clinical, like I would get an empty room and Sally, one of my students, would be on the bed being the patient and my other students would watch and I’d be the nurse. [When we first started simulation] I could not believe the transition of this group that I saw over that week as far as the collaboration and the team work, and to be able to stand back as a faculty and watch all that – I would not be able to do that in the clinical setting. I thought it was easy, but I think it was because of all my experience in nursing, to be able to step into that and say that I’ve had these experiences myself in real life. I jump on the band wagon and try things, like I would never be one to sit there and complain and not try.

If I was easily influenced by others certainly they might [influence my opinion], but since I’m not, because I know there’s some that don’t even want to do it – no, I’m not influenced by that. Maybe they haven’t seen the benefits that [simulation scenarios] do for the students. That doesn’t influence whether I would do it or not. [Initially], I didn’t do the debriefing, I watched though. They kind of led it, but they seem to be quite unclear as to their defining lines as to what they’re leading and what I’m leading, so it was a little bit of a collaborative. I would totally take over, but I didn’t want to impede on what their process was. I need a little support with that stuff but I definitely think I wouldn’t hesitate [to do the debriefing]. We designed [an HFS scenario]. They took the lead on [it] but we said what we needed which my influence in that would have been what I saw in the clinical setting. Then it becomes more authentic.

[After the first week], that’s when I first realized how good simulation was. It was amazing to see the difference in them from the beginning of the week to the end of the week. I couldn’t believe how they transformed as a team. There should be more [HFS], but I think it needs to be set up specific to the area that the students are in. The concept is very good, but I think there’s some work more that needs to be done with how they’re running [HFS]. I was told that’s kind of the way they do those things. I think they need to fine-tune it better.

I think the time lines seem to be a bit restrictive because we were only allowed so many hours and the simulation has to be utilized for many different programs. I would have rather had a few clinical days where we could see some of these patients [so] they could tie it together, but that’s just a restriction of the way they run it. It’s kind of dictated as to when you can go, whereas if I would have had the free range to book whenever, which is not really realistic, it would have been later than when I first did it.

Textural Description

Olivia had no experience with HFS as a student, but she did use a form of simulation in her clinical education practice, “I actually did my own in the clinical, like I would get an empty room and Sally, one of my students, would be on the bed being the patient and my other students would watch and I’d be the nurse.” When she was first exposed to HFS, she was able to watch SLC faculty go through the simulation and to be a participant in the scenario, “I haven’t been involved in simulation myself like as a participant, I’ve only ever seen it through the students. A

few times I was a participant as in one of the patient's family members." She was very excited about HFS and its potential for clinical education, "That's when I first realized how good simulation was. It was amazing to see the difference in them from the beginning of the week to the end of the week. I couldn't believe how they transformed as a team."

Olivia was an early adopter of educational technology and liked to give it a try, "I jump on the band wagon and try things, like I would never be one to sit there and complain and not try." She was not easily influenced by her peers but understood there was some reluctance to use simulation, "...because I know there's some that don't even want to do it – no, I'm not influenced by that. Maybe they haven't seen the benefits..." Sometimes, it was difficult for her to understand her role in HFS. There were no clear defining lines between the SLC faculty and herself as the clinical faculty,

They kind of led it, but they seem to be quite unclear as to their defining lines as to what they're leading and what I'm leading, so it was a little bit of a collaborative. I would totally take over, but I didn't want to impede on what their process was. I need a little support with that stuff...

She believed there was more work to be done in the SLC to develop HFS. She had participated in the development of a simulation scenario and was able to utilize her experience in the clinical area to make it more authentic, "We designed [an HFS scenario]. They took the lead on [it] but we said what we needed which my influence in that would have been what I saw in the clinical setting. Then it becomes more authentic."

Olivia believed there was a place for HFS in clinical education, "The concept is very good, but I think there's work more that needs to be done with how they're running [HFS]." There was little flexibility for when and how HFS was done in a clinical course. She would have liked to have chosen when to take her students to simulation, but she understood the restrictions to doing so, "It's kind of dictated as to when you can go, whereas if I would have had the free range to book whenever, which is not really realistic, it would have been later than when I first did it."

Structural Description

The structural correlates of Olivia's experience centered on striving for self-efficacy with HFS. She experienced being a learner and struggling to define her role with HFS. Olivia struggled to maintain autonomy. She felt a loss of autonomy and pushed back against the rules. She began to advocate for her own needs. Olivia was able to come to terms with teaching with

HFS. She acknowledged the benefits and saw ways to reinvent the technology for her own use. She was an advocate for HFS and for student learning with it. As a member of a community of practice, Olivia was aware of her colleagues' opinions. She was positive about HFS and proud of her contributions to it.

Textural-Structural Description

Olivia's experience centered on her striving for self-efficacy with HFS. She experienced being a learner and was unfamiliar with the role. She was confused with what the SLC role was and what her role was, and she was concerned about doing something wrong. She was able to connect with previous experiences to help with her learning, she had done practice scenarios in the clinical setting with her students prior to using HFS. Olivia struggled to maintain her autonomy. She felt a loss of autonomy and pushed back. She found that scheduling was out of her control and advocated for more choice.

Olivia came to terms with teaching with HFS and acknowledged the benefits. She watched the change in the students over a week of HFS and was amazed at the transformation. She was an advocate for HFS in nursing education. Being part of a nurse faculty community of practice, Olivia was aware of her colleagues' opinions and that some of her colleagues didn't support using HFS, but she was not influenced by them. She expressed pride in her contributions and in the teaching innovation, she had the opportunity to develop a scenario appropriate to her clinical area.

“Quinn’s” Experience

I love it. I could see the growth from day one to the end of the term. They were getting in there for the most part and doing their thing – critical thinking – it was really good. I think it's awesome, I think it needs to be there. When you got into the [SLC], I was more comfortable because I had used it before. It wasn't something that was foreign to me. My other colleagues – I think they are excited but I think they are nervous and scared because its technology. I had no idea what [HFS] was. So teaching has opened my eyes, like really opened my eyes, and has helped me develop my own nursing skills much better.

I was orientated with the [SLC] people, the lab tech and the whole crew over there. They were very awesome actually, and they went through things with us. They discussed how it was supposed to run and what the students were hopefully getting out of the whole thing. She kind of knew how I clicked, and I kind of knew how she clicked, and we kind of worked together. We're so comfortable with each other, that's the way it went. It was easier to do. It was a lot of guidance.

I probably overstepped my bounds a bit with the staff in regards to how I wanted the scenario to be run. I kind of went free flow a bit. I would talk to my [SLC] person and say, "Put those vital signs in," so I kind of went over a little bit in regards to what the scenario was about. If I thought they were heading off in a great direction, then I would let them. If I wanted to see critical thinking, I would kind of steer them to a little bit different. A lot of faculty probably wouldn't be able to do that, I think it's just because my background, my comfort zone. I like it, so I just go in and do my thing. It all depends on their background, their nursing background. The faculty were pretty nervous at the beginning. They don't have that experience. They really didn't understand what simulation was all about. Some of them were way more comfortable than others, [some] were quite anxious about the whole thing.

I'm kind of more of a latish [technology adopter]. [My co-worker is] techy, so she taught me things. As a faculty, I need to learn more techy stuff, there's no doubt about it. It's just the time sitting down and working with the systems and googling stuff and researching stuff, that's my issue at this point. I don't have time. But it was the development part that was very time consuming. It's having those students in a scenario that is similar to what they might see in the hospital setting. It's getting them comfortable so if they do come up to that kind of situation, they kind of have an idea of how to deal with it.

Clinical is very important time for the students' because that's where they bring everything together. I don't want too much simulation time taking away from actual with-the-patient time. I do believe it should be incorporated in there. I like to do it right at the beginning of the clinical course. Then I kind of like to do it at the end to see if there's any kind of growth. Scheduling [is the biggest barrier]. There's some faculty that just want to get it done. I don't think that's what it's all about, it needs to be useful for the students. They'd book it in just to get it done. Some of them did it on the same day. I don't know if that is beneficial, I've never done it that way. I have always done it at the beginning and the end.

The scenario has to be developed properly. Some of those scenarios were kind of way beyond the students thinking. [The SLC faculty] took it right from the [scenario] book and they didn't adapt it. I think because they didn't know the level of the student, so that hinders. Whosever's developing those scenarios must understand the knowledge level of the students and adapt that and bring in everything that the students understand. You have to have contact with the [SLC] tech and the course leader; work closely together, I think, and develop those the scenarios together because the [SLC] people don't know. We developed [scenarios] ourselves, we said this is how we want them; this is what we want to bring into the scenario; this is what we're talking about in lecture and lab this week, this is what we want the scenario to follow. [The SLC team] developed those scenarios the way we wanted them, and they worked quite well. If there's no communication, they just go by the book. The [SLC faculty] – they've been positive and very accepting and willing to work with us.

Staffing in the [SLC] - off. That was a big issue right at the beginning because they didn't know if they would have enough staff. That was a big issue if they were going to have enough staff to be able to run our scenarios the days that we wanted. I think the institution pretty buff, they want [HFS] cause that's the new thing. [The dean is] pretty on top of that, she's pushing that. She's very happy that we are incorporating

[HFS] into our new curriculum, so she's behind us. We have this big beautiful [SLC] – like holy man, that's awesome!

Textural Description

Quinn felt that HFS was an enjoyable experience for both herself and the students; and it was an important addition to nursing education,

I love it. I could see the growth from day one to the end of the term. They were getting in there for the most part and doing their thing – critical thinking – it was really good. I think it's awesome, I think it needs to be there.

Previous experience with HFS made her more comfortable, “When you got into the [SLC], I was more comfortable because I had used it before. It wasn't something that was foreign to me.” She understood her colleagues may have been nervous of the new technology, “They really didn't understand what simulation was all about. Some of them were way more comfortable than others, [some] were quite anxious about the whole thing.”

Quinn ran the HFS scenario the way she wanted to, “I probably overstepped my bounds a bit with the staff in regards to how I wanted the scenario to be run. I kind of went free flow a bit.” She believed her clinical background helped her to be comfortable in the SLC, “It all depends on their background, their nursing background.” Quinn found the SLC team supportive, and developed a positive relationship with them, “I was orientated with the [SLC] people, the lab tech and the whole crew over there. They were very awesome actually, and they went through things with us.” She thought communication with the SLC team was important, and she believed there needed to be adequate staffing in the SLC, “Staffing in the [SLC] - off. That was a big issue right at the beginning because they didn't know if they would have enough staff.”

Quinn described herself as a late adopter of technology, but she was influenced by a peer who was an early adopter. She felt it was important to adopt educational technology, “I'm kind of more of a latish [technology adopter]. [My co-worker is] techy, so she taught me things. As a faculty, I need to learn more techy stuff, there's no doubt about it.” She found learning to teach with HFS took a lot of time. But she saw it as an important adjunct to clinical practice education,

I don't have time. But it was the development part that was very time consuming. It's having those students in a scenario that is similar to what they might see in the hospital setting. It's getting them comfortable so if they do come up to that kind of situation, they kind of have an idea of how to deal with it.

The timing of the HFS was important as well, and scheduling was a barrier, “Clinical is very important time for the students’ because that’s where they bring everything together. I don’t want too much simulation time taking away from actual with-the-patient time. I do believe it should be incorporated in there.” Quinn felt the School of Nursing leadership was very supportive of HFS, and the SLC was very impressive, “I think the institution pretty buff, they want [HFS] cause that’s the new thing.”

Structural Description

Quinn’s structural correlates centered on her being a learner and striving to maintain autonomy. She was able to advocate for her own needs and maintain autonomy even through HFS was against her personal beliefs about clinical teaching. She understood the need for HFS and was an advocate for it in nursing education and as a support to student learning. She was positive towards the institution and was proud of the SLC. Being part of a community of practice, Quinn was aware of her peers’ opinions. She was also mentored and supported by peers while learning to use HFS.

Textural-Structural Description

Quinn’s experience with integrating HFS into her practice centered on her being a learner and striving to maintain autonomy in her teaching. She appreciated the new learning but would have liked more time to learn. She found developing scenarios very time consuming but important to ensure students have the best learning experience. She was able to link HFS to previous learning.

Quinn advocated for her own needs by identifying limitations with HFS. She took control of her teaching with HFS and experimented with the scenarios. She was able to identify where her beliefs may have been in conflict with the use of HFS in clinical practice education, and she didn’t want it used too much during clinical time. Quinn was able to identify her own limitations with the teaching innovation, and relied on her colleagues to teach her the technological aspects. She was an advocate for HFS and for student learning with this resource. She expressed her excitement when watching the students think critically, and she believed in the importance of HFS.

Quinn appreciated the institutional support for using HFS and the SLC. Being part of a community of practice, Quinn was aware of her peers’ opinions and was able to identify areas

where her peers required more education. She appreciated the support she received from her peers and from the SLC staff, and she appreciated the expertise of others in this area.

“Vera’s” Experience

[Initially], we didn’t get much information, but I think the first couple times we did it was the first time for them as well. I didn’t know the [simulated] patient was going to die, otherwise we would have said something [to the students]. When I talked to [the SLC faculty] about it, she said, “That’s real life.” That was my first simulation so I didn’t know what I could say and what I couldn’t. You were kind of told to basically observe and not say much. I’m still unsure of my role, new instructor – how much can I stop the simulation? As I got more secure as an instructor, I could ask more questions and say, “I’m not ok if this happens.” Those were the first two experiences. After that it was way better. It started to change there too, like after they did more. We get more of an outline so that’s nicer.

[Now] I will say something and find out more about what my role is. I was more confident that way. Here it is less intimidating because you have someone that runs through it, knows the equipment, [and] knows the scenarios inside and out. They are open to getting feedback from us. Instructors are able to speak up at any time. So I found it’s been really good.

As a new instructor – if we would have run through the scenarios, if we were allowed to go through and actually practice them – that would have made a huge difference. That would have been better for the students as well. As an instructor running through it, I think some of our staff would find better too. Some of it has to do with the faculty promoting it and also more communication about it and bringing up the research with it. [My colleagues] are a little leery about simulation, a little apprehensive. Because it’s unknown. You don’t want to look like you don’t know anything.

It’s a safe environment for a few reasons. One, it advances their knowledge. It also increases their comfort. It’s better to practice in a safe environment than out on the floor, and if mistakes are made, it’s a learning opportunity. In a way [HFS] is kind of like what we do.

Textural Description

Vera was unsure of her role with HFS, and she was afraid of looking bad, “I’m still unsure of my role, new instructor – how much can I stop the simulation?” She needed support to teach with HFS, “Here it is less intimidating because you have someone that runs through it, knows the equipment, [and] knows the scenarios inside and out.” As she gained experience, she was able to stand up for herself and became more self-confident, “As I got more secure as an instructor, I could ask more questions and say, ‘I’m not ok if this happens.’”

Vera thought the SLC had a rough time starting out, “It started to change there too, like after they did more.” She began to develop a relationship with the SLC team and make suggestions for future changes, “They are open to getting feedback from us. Instructors are able

to speak up at any time. So I found it's been really good." She felt there was a need for more communication and information about HFS, "Some of it has to do with the faculty promoting it and also more communication about it and bringing up the research with it." She empathized with peers who were having difficulty integrating HFS. "[My colleagues] are a little leery about simulation, a little apprehensive. Because it's unknown. You don't want to look like you don't know anything." She was able to see the link between HFS and practice, "It's better to practice in a safe environment than out on the floor, and if mistakes are made it's a learning opportunity. In a way [HFS] is kind of like what we do." She believed it was a good experience for students, "It's a safe environment for a few reasons. One, it advances their knowledge. It also increases their comfort."

Structural Description

The structural correlates of Vera's experience centered on her striving for self-efficacy and struggling to regain autonomy. Vera experienced being a learner, and struggled to define her role while feeling inadequate. She was able to regain autonomy and came to terms with teaching with HFS. Vera was an advocate for students' learning with HFS. She also experienced being a part of a community of practice, and she was both aware of her colleagues' concerns and appreciative of the support received from the SLC, "[My colleagues] are a little leery about simulation, a little apprehensive. Because it's unknown. You don't want to look like you don't know anything."

Textural-Structural Description

Vera's experience with integrating HFS into her clinical teaching practice centered on striving for self-efficacy with a new teaching innovation and regaining her autonomy. Vera experienced being a learner. She was unsure of her role and had a fear of looking bad in front of others. Initially, she needed more information and more support but was able to connect with previous experiences. Vera developed more confidence in her teaching with HFS and was able to stand up for herself as a teacher.

With persistence, Vera came to terms with teaching with HFS and was able to make suggestions for change. She was an advocate for HFS as a support to student learning, she found it a safe environment that advanced student knowledge and comfort. Vera experienced being part of a community of practice. She was able to empathise with her peers, and she experienced being supported by the SLC staff.

“Yvonne’s” Experience

I really look forward to it, I quite enjoy doing the simulation. Another thing that stands out for me, that I love, is when the students start to put it all together. You can tell they’re really understanding the assessment, they’re understanding the scenario, that’s what I really love about it too. I think it’s been an overall really positive experience. The way that we did it was very prescribed. I don’t know exactly who’s ultimately deciding how the scenarios will be run for the clinical setting. I don’t know if that was a decision by the program head or a decision by the faculty that were involved in the settings. Where they just said, “This is what scenario you are going to do.” So it was always [this scenario] or [that scenario] and it’s still kind of that way. I think there’s still maybe a little bit of ways to go for the clinical part of it. They are beginning to make new scenarios, so we will be able to implement some of those; not the same ones all the time – thinking about how we can run it in terms of the needs of our students a little bit more.

We didn’t really have much experience with it when I first started. I would run through that scenario in terms of the algorithm, the preparations for this scenario, the pre-readings, thinking of questions to ask students. This term and last year, I didn’t need as much preparation because I was more comfortable seeing the scenarios repeated. [Some scenarios] would take up a little bit more of my time because I wasn’t as familiar with some of the stuff. Repeatedly, doing it over and over again really helped to prepare me. Every time we did a scenario, I was familiar with what was going to happen, I knew exactly the way it was going to go over. It really helped me to go in and learn exactly how they run the scenarios in terms of the algorithms. I wasn’t as familiar with how they program into the computer, and actually watching on the screen, and I would say that helped to organize myself better in terms of what was going to happen and what wasn’t going to happen. I probably take a little bit more time to prepare myself especially when I’m going to new clinical settings in terms of simulation. When we started throwing in lots of different simulations, I was in different clinical settings, I had to really think about okay what are we going to assess here, how am I going to prepare for that because I wasn’t that familiar with it. Familiarizing myself more with [the electronic programs], I’ve really enjoyed that. Anything that was related to my previous field was obviously a lot easier.

The [SLC] is great. I can’t believe how well they designed it and built it. I’ve never seen anything like that before. I think overall getting the [SLC] built was a huge venture. The set-up, the hospital experience is fantastic. I love the way that you actually do report from the RN’s at an actual station. I love the idea that the carts are really similar to what you would see in the patient rooms. Making it as realistic as possible, for sure. I guess I’ve always been able to get into the [SLC] for clinical when I wanted to. I like to do it kind of near the beginning. Then I also like to do it later on when they have a little bit more knowledge. I really like carrying on [the scenario] from where we left off. If they haven’t even got to a point where the second group can take over, then I do think it’s beneficial to start it all over again. Trying to enhance the technology that I’m using to prepare myself – I think I’ve been a little bit more able to kind of change them as I need to. Very different from [another course I teach where] you could kind of run it how you wanted to if you needed to touch on something a little bit further. You could allow yourself to go wherever you needed to with the students in terms of their learnings. You can think about running the scenario for them in terms of their needs.

When you have faculty who are not really open to the idea of simulation – I struggle with that because I think it’s very important. I think it’s a great educational innovation. I struggle when I am trying to convey the importance of it. It’s such a great experience for the students, but yet when they’re not on the same page as you and they’re not on board – it’s really hard to get them to believe that. If you are doing a simulation with a faculty member that’s maybe not quite as involved as you are, sometimes you’re not sure they want to be there because they’re complaining about having to be in simulation. Then you’re taking the time to really enjoy the experience with your students.

Textural Description

Yvonne experienced being a learner again. She became familiar with a different area and found learning new things can be enjoyable. She transferred knowledge from her previous experience in nursing, and she enjoyed the new professional development opportunities, “Anything that was related to my previous field was obviously a lot easier.” Yvonne was prepared to teach with HFS and liked to be comfortable with the material,

I would run through that scenario in terms of the algorithm, the preparations for this scenario, the pre-readings, thinking of questions to ask students. This term and last year I didn’t need as much preparation because I was more comfortable seeing the scenarios repeated...Repeatedly, doing it over and over again really helped to prepare me.

She found it took more time to learn when the content was unfamiliar,

When we started throwing in lots of different simulations, I was in different clinical settings, I had to really think about okay what are we going to assess here, how am I going to prepare for that because I wasn’t that familiar with it.

Yvonne enjoyed the physical attributes of the simulation center and appreciated the work that went into building the SLC. She saw similarities between the SLC and clinical practice settings,

I love the way that you actually do report from the RN’s at an actual station. I love the idea that the carts are really similar to what you would see in the patient rooms. Making it as realistic as possible, for sure.

Yvonne found she was able to schedule for when she wanted to teach the simulation, “I guess I’ve always been able to get into the [SLC] for clinical when I wanted to.” She exercised autonomy in teaching with HFS and used it in different ways, “I think I’ve been a little bit more able to kind of change them as I need to.” She found HFS used prescribed methods, and she was not able to make pedagogical decisions,

The way that we did it was very prescribed. I don’t know exactly who’s ultimately deciding how the scenarios will be run for the clinical setting. I don’t know if that was a decision by the program head or a decision by the faculty that were involved in the

settings. Where they just said, “This is what scenario you are going to do.” So it was always [this scenario] or [that scenario], and it’s still kind of that way. I think there’s still maybe a little bit of ways to go for the clinical part of it.

Yvonne was frustrated with colleagues who did not support HFS. She thought it was important to get colleagues and students on board, “When you have faculty who are not really open to the idea of simulation – I struggle with that because I think it’s very important.”

Structural Description

The structural correlates of Yvonne’s experience centered on being a learner and striving for autonomy in her teaching. She experienced a loss of autonomy and struggled to regain it. She came to terms with teaching with HFS through persistence and reinvention. Yvonne advocated for HFS and for using it as a support for student learning. Being a part of a community of practice, she was aware of her peers’ opinions. She experienced pride in the SLC and was positive towards HFS.

Textural-Structural Description

Yvonne’s experience centered on being a learner and striving for autonomy in her teaching. She identified her lack of experience with HFS and her need to be prepared. She found over time she needed less preparation as she became comfortable with the scenarios. Repetition helped with her preparation. She was able to link to previous learning, and she related to her previous experiences. It took time for her to become comfortable with HFS, especially with material that was unfamiliar to her. Yvonne struggled to maintain autonomy in teaching with HFS. She experienced a loss of autonomy and found HFS very prescribed. She felt she didn’t have a lot of say in which scenario to use. She regained autonomy by taking control of her teaching, and she changed the scenario to meet her teaching needs. She came to terms with teaching with HFS through persistence and identifying improvements to the process.

Yvonne was an advocate for HFS and supported students’ learning with it. Being part of a community of practice, she was aware of the opinions of her peers. Yvonne was positive about the SLC. She appreciated the similarity of the center to the hospital setting and found it very realistic.

“Gerri’s” Experience

I didn’t like it. It was an uncomfortable experience. It was a problem with the execution of using the simulation. Sometimes I had problems with how they would run the

scenarios. We would have to be bogged down by only using prepackaged stuff from [a textbook company]. I don't think that's something they have to do; I think that's something they chose to do. It was the simulation itself that was the problem not the fact that we are being asked to do simulation. You couldn't always get in on the days that worked for your clinical; [it] was really difficult.

For preparing for simulation with clinical, I really didn't do a lot, probably next to nothing. Every time I was going in with the same prep level as the students, and I just thought they were doing that on purpose. I don't think they did it maliciously, it was the assumption that obviously I must have access to this information. It wasn't until my last go round with this [HFS] that they actually sent out the faculty stuff ahead of time. I thought it was kind of testing me to see if I would know what to do correctly and are they going to be just sitting back there and laughing?

There was a lot of antagonism between myself and the clinical simulation team for a little while. I butted heads so much with the simulation learning center. It was very, very, frustrating. I did let them under my skin a few times and we would have some "discussions." I just thought that they were trying to make it more difficult. We had no control over what we were doing in simulation or what the scenario was going to be. I didn't like that. I had no control over what was going on, or any idea where it was going to go on. I never knew that I could, because if I ever talked about it, it was, "Well, it's just the [textbook] scenarios and you don't get any input into it." It was fine, if I don't get any input in it, we'll just leave it at that. When they take away all autonomy it definitely decreases my motivation to be engaged in the process. I felt that if I had input into the scenario and what we were doing and how it was going to run and what it was going to look like, I would have been more engaged. [My students] are not going to be engaged and learning if they're getting the vibe from me that I don't want to be there either. I think there were lots of things which were wrong, but faculty input being probably the biggest one. I would need to have the ability to control the scenario myself. But at least we could have had the option or something.

I had philosophical differences in how they were running the scenario. All the prep and stuff they give you ahead of time isn't really relevant to what's going on. Maybe it's my control thing that I like to be there to support [the students] while they are doing [HFS]. The way it's organized with irrelevant reading and testing, with the inability to participate with your group in the same way that you would normally do in clinical, I think that all those downfalls they've built in to the program; I think you get a lot of resistance from people for using it. I would even tell the students not to bother with the readings – after I had run through these simulations a few times, because it's the same ones repeated always; it was like, "Don't even bother you guys." I didn't really see the relevance. Maybe I was helping too much but at the same time I wasn't doing anything for them – I was just helping them think it through. The [SLC faculty] would just call me back out and I would have to leave the room. I could see the "let you go do your own thing" at a higher level. The idea that they should do it on their own in simulation I found was a little bit baffling. That fits more with my teaching style to do the feedback right in the moment instead of looking at it later. We maybe just need to look at the pedagogy we have surrounding that and decide, "Does it really have to be completely on their own?"

I didn't like that we couldn't pick scenarios that fit for where we were. So design something that is specific for my student group for learning that they need in the clinical rotation. We are just not getting that opportunity, just because it's not presented itself. The relevance isn't there. We are repeating things and doing things that are not appropriate for that level or that clinical area. [At my new college] faculty make up their own scenarios in conjunction with the people down in simulation, so it's absolutely relevant to what you are doing. We thought it was a giant waste of our time and we would have rather been at clinical. The scenarios we were running were not applicable or helpful to what the students were doing and made it a waste of time. I think that basically, how I was looking at it, is that simulation should be a great additional activity we can do in clinical to capture those experiences you are not going to get or don't always get in the clinical setting. Even if you're having like a really good experience in clinical, you still had to pull them out of that good experience to go to what you know is not such a great simulation. That was very frustrating.

Debriefing is about how things went with the students and so that part I had no problems with, and the idea of using simulation. There are so many things you could do with simulation that you can't do in the clinical setting. There is definitely a place for high-fidelity simulation in the lower years too. If it's organized and run properly, it can be an awesome learning opportunity. I'm working on the easy complete novice level for the international certificate for excellence in simulation. The way I would organize things and run my classroom would be considered low-fidelity simulation all the time. The technology doesn't bother me, I'm not scared of the technology. When I was working cardiac surgery we had a lot of technology. It doesn't really bother me what other people might think about or experience with a new learning innovation. I may have influenced other people's opinions by ranting about my terrible experiences with simulation.

Textural Description

Gerri did not know how to prepare for simulation. She thought the SLC faculty were testing her knowledge by not giving her any information, "For preparing for simulation with clinical, I really didn't do a lot, probably next to nothing. Every time I was going in with the same prep level as the students, and I just thought they were doing that on purpose." She felt she had no control over teaching with HFS and wanted more autonomy, "We had no control over what we were doing in simulation or what the scenario was going to be. I didn't like that." The lack of autonomy made Gerri feel disengaged, "When they take away all autonomy it definitely decreases my motivation to be engaged in the process." She felt if she is not engaged, her students would not have a good experience, "[My students] are not going to be engaged and learning if they're getting the vibe from me that I don't want to be there either."

Gerri was uncomfortable using simulation in the SLC, "I didn't like it. It was an uncomfortable experience." She had a terrible experience and let people know it. Gerri had

concerns with how it was run, “I had philosophical differences in how they were running the scenario. All the prep and stuff they give you ahead of time isn’t really relevant to what’s going on.” Difference in philosophy caused resistance,

There was a lot of antagonism between myself and the clinical simulation team for a little while. I butted head so much with the simulation learning center. It was very, very, frustrating. I did let them under my skin a few times, and we would have some “discussions.”

Gerri broke the rules when they didn’t make sense and was angered when the SLC faculty called her out of the room. She felt her teaching style was different from how the SLC faculty expected her to teach,

Maybe I was helping too much but at the same time I wasn’t doing anything for them – I was just helping them think it through. The [SLC faculty] would just call me back out, and I would have to leave the room.

She felt she shouldn’t have had to pull the students out of clinical if she didn’t want to, “Even if you’re having a really good experience in clinical, you still had to pull them out of that good experience to go to what you know is not such a great simulation. That was very frustrating.”

Gerri was not able to schedule at a convenient time for her clinical group.

Gerri felt simulation should more closely mirror her students’ learning needs and be relevant to their current clinical, “The scenarios we were running were not applicable or helpful to what the students were doing, and made it a waste of time.” She liked the idea of using simulation and began taking a simulation certificate program, “I’m working on the easy complete novice level for the international certificate for excellence in simulation.” She had used low-fidelity simulation in the classroom, and she was comfortable with the technology, “The way I would organize things and run my classroom would be considered low-fidelity simulation all the time. The technology doesn’t bother me, I’m not scared of the technology.” Gerri did not feel her peers influenced the way she felt about simulation, “It doesn’t really bother me what other people might think about or experience with a new learning innovation. I may have influenced other people’s opinions by ranting about my terrible experiences with simulation.”

Structural Description

The structural correlates of Gerri’s experience centered on her striving for self-efficacy while learning a new teaching innovation and struggling to maintain autonomy in her teaching practice. Gerri had feelings of inadequacy and struggled to define her role in the SLC. She

experienced being a learner of a new teaching innovation. Gerri felt a loss of autonomy in the SLC and began to push back. She struggled with the change in her teaching practice, especially since she was asked to go against her personal beliefs about clinical education. Gerri began to understand and accept teaching with HFS, and she became an advocate for HFS to support student learning. As part of a community of practice, she was aware of her peers and of how she may have influenced them.

Textural-Structural Description

Gerri's experience centered on her striving for self-efficacy while learning a new teaching innovation and struggling to maintain autonomy in her teaching practice. Gerri had feelings of inadequacy and struggled to define her role in the SLC. She felt uncomfortable and unprepared to teach with HFS. She felt her preparation level was no different than that of the students. She was frustrated and felt "tested" by the SLC faculty which resulted in her being an outsider in the SLC. She felt she had no control over what was being taught. As a learner, Gerri was able to link to previous teaching experiences to support her beliefs about HFS.

Gerri struggled to maintain autonomy, thus she lacked motivation to engage in HFS. She felt a loss of autonomy and began to push back. As a result, she felt there was antagonism between herself and the SLC staff. She became very frustrated and angry. She struggled with the change to her teaching practice and began to undermine the experience with the students, realizing that her negative attitude was affecting the students. The way she was asked to teach in the SLC was against her personal beliefs about clinical education and teaching practice, and she was frustrated with having to leave clinical to engage in HFS.

Gerri advocated for HFS and for students' learning with it. She appreciated the teaching innovation. As part of a community of practice, Gerri was aware of the negative effect she had on her peers, and she admitted she may have influenced others to think negatively about HFS. Eventually, through understanding and acceptance, she came to terms with teaching with HFS. She was able to identify the problems with HFS and acknowledged it was getting better over time.

"Kelsey's" Experience

As a nurse educator in a rural health region, we would use simulation in some of our learning sessions – not the high-fidelity, I didn't even know this was an option or existed when I did my undergrad. We had done some low-fidelity simulation, but of

course, with budget we couldn't afford the high-fidelity, but it sure would have been nice – to actually be able to do it on a high-fidelity manikin and practice those skills that you don't practice very often.

I looked online and watched some YouTube videos on the types of manikins that we had up here. My orientation is ongoing. I booked in with the techs to learn how to do their side of it and learn how to use the computers. I watched one simulation and then I did it on my own. I'm learning as I'm going, and we've had such a supportive team here. I really like [the SLC] because everything is new; it's really exciting. If they have never been up there before [they might be] a bit confused for sure – where to go and what they need to do up here. One faculty that worked there before was really supportive and was very positive about the experience that she had. Then there's another faculty that didn't have a good experience there, and I spoke with her about that as well. I just took out of it what I needed to. [It's] helpful to them [to meet with the SLC team] ahead of time. For some that have never used the high-fidelity simulation, it's a bit overwhelming. They need to know right away exactly what their role will be, because I know I wasn't sure – I didn't have a clue.

I had no idea what it was, and I was overwhelmed thinking about bringing my clinical group. I thought I would have to run the manikins or that I would have to come up with a scenario. I was worried about my role too, I wasn't really sure what I needed to do with the students. I'm worried the manikins are going to stop working or the students are going to be in the simulation and they're going to get it right away, which seems weird because we want the students to succeed and learn, but I feel that wouldn't be a very good learning opportunity. Yesterday, I accidentally told the students what they were doing before they went in there, but it was okay, they didn't progress any quicker. I worry that it wasn't going to be appropriate for their learning level. There's some confusion too about what we can and we can't really offer. I don't want to waste their time up here. I am more aware now of how nervous they are going into the simulation, and they're probably that nervous – I hope they are that nervous – in the clinical area. I never saw that side of it because I was so busy looking at other things and evaluating them. I have a different relationship with them and I can see how nervous they are and how worried they are to make mistakes. They share that more than if I had them in the clinical area.

Scenario development is on our radar and expanding our [scenarios] so that we have unfolding case studies. Right now we just can't offer more than two [experiences] a term because – the space is there and the staff is there – but we just don't have anything ready for them. To do an entire simulation from beginning to end, just ball park, maybe around a hundred hours to do everything. It's a lot of work. We just can't offer as much as we want. For instance, the first-term second years will have only two [scenarios] that we can offer them right now, so once you've come twice, we have nothing more to offer until you progress. We definitely need more of a variety so that faculty can choose. Eventually I'd like to see it where the faculty can choose from a variety based on their students. We can only use the simulations that belong to the textbook that we've purchased. I don't want to have to make the students spend any more money. I don't want to make our faculty or coerce our faculty to use one textbook so that we can have a [scenario]. We can do it ourselves; it's just a matter of time.

Textural Description

Kelsey had used low-fidelity simulation in her nursing practice but the high-fidelity was something new, “As a nurse educator in a rural health region we would use simulation in some of our learning sessions – not the high-fidelity, I didn’t even know this was an option or existed when I did my undergrad.” She saw the value in HFS for clinical nurses and would like to see it used in practice, “...to actually be able to do it on a high-fidelity manikin and practice those skills that you don’t practice very often.” Learning to use simulation was an ongoing process. She had some preparation and sought information herself,

I looked online and watched some YouTube videos on the types of manikins that we had up here. My orientation is ongoing. I booked in with the techs to learn how to do their side of it and learn how to use the computers. I watched one simulation and then I did it on my own. I’m learning as I’m going, and we’ve had such a supportive team here.

Initially, Kelsey had no idea what was required of her in simulation. She had concerns about her role and what was expected,

I had no idea what it was, and I was overwhelmed thinking about bringing my clinical group. I thought I would have to run the manikins or that I would have to come up with a scenario. I was worried about my role too, I wasn’t really sure what I needed to do with the students.

Kelsey wanted the students to have a good experience and was worried she would not be able to give them that. She found she had a new relationship with her students because of HFS,

I worry that it wasn’t going to be appropriate for their learning level. There’s some confusion too about what we can and we can’t really offer. I don’t want to waste their time up here. I am more aware now of how nervous they are going into the simulation, and they’re probably that nervous – I hope they are that nervous – in the clinical area. I never saw that side of it because I was so busy looking at other things and evaluating them. I have a different relationship with them and I can see how nervous they are and how worried they are to make mistakes.

Kelsey found HFS was limited by the number of scenarios there are, and the time it takes to develop them,

To do an entire simulation from beginning to end, just ballpark, maybe around a hundred hours to do everything. It’s a lot of work. We just can’t offer as much as we want...We can only use the simulations that belong to the textbook that we’ve purchased.

She believed faculty should have a choice of what scenario they do, “Eventually I’d like to see it where the faculty can choose from a variety based on their students.” She was positive that it is something that can be accomplished, “We can do it ourselves; it’s just a matter of time.”

Structural Description

The structural correlates of Kelsey’s experience centered on striving for self-efficacy while learning a new teaching innovation. She experienced being a learner and struggling to define her role. As a result, she had feelings of inadequacy. Over time, she came to terms with teaching with HFS through understanding of the innovation. Kelsey advocated for HFS in nursing education and practice. Being part of a community of practice meant Kelsey was aware of her peers’ opinions, and she was both mentored and supported by her peers and a role model to her peers. Kelsey experienced pride in the SLC.

Textural-Structural Description

Kelsey’s experience centered on striving for self-efficacy while learning a new teaching innovation. She experienced being a learner and struggling to define her role. She was unfamiliar with and uncertain about her role. As a result, she had feelings of inadequacy. Kelsey had a fear of things going wrong and was overwhelmed at first. Not knowing what to do or how to do it was overwhelming to her. As a learner, she needed to be prepared. She became prepared by seeking information on the internet, in the manuals, and booking in with the SLC staff. She was able to watch a scenario then did one on her own. Kelsey’s experience was that the SLC staff were very supportive of her learning. Over time, she came to terms with teaching with HFS through understanding of the innovation. She became aware of the needed changes to the process, and she identified that more time needs to be spent on developing scenarios but acknowledged that there was a lack of time to do so.

Kelsey advocated for HFS in nursing education and practice. She was concerned about student learning and developed a new relationship with her students during HFS. She didn’t want it to be a waste of time for the students. Kelsey was able to see a new side to student learning in the SLC, and she felt she had a different relationship with her students as a result of it. She found there was more time to notice how the students were doing during an HFS scenario by taking the focus off of evaluation.

Being part of a community of practice meant Kelsey was aware of her peers' opinions, and she was both mentored and supported by her peers, and was a role model to them. She appreciated the support she received from her peers and was also able to empathize with them. Kelsey experienced pride in the SLC and enjoyed the new environment. She found teaching with HFS exciting

“Della’s” Experience

I developed curriculum surrounding the whole simulation high-fidelity. [I] did some research about simulation and decided it would be very beneficial. So when we were doing our curriculum, it was something we chose to do. We saw the benefits of it and decided to integrate that into our curriculum. It helped to look at trends in simulation and how things have been taught. All the courses I've ever done have always been in that scenario-based setting so I think that's really strengthened my teaching. Simulation just provides a huge advantage to students who are able to practice that way.

The first thing was to just get comfortable with the environment – so making sure that I was comfortable with the technology part of the high-fidelity area. Being able to adapt that, and being able to improvise and being very adaptable is key. One of the number one things with the way we are teaching the course now with high-fidelity is being really comfortable with your content. Knowing your audience, your equipment, and knowing your knowledge, like what you're teaching. You get people teaching in things they are not comfortable with.

It was exhausting trying to find the time. About two years, [a] year and a half of work, in designing those scenarios and putting tons and tons of extra hours into it. Making sure we were always going back looking at our scenario and did we meet those objectives, and pushing them along within the high-fidelity scenario to get them to those objectives. We got a little bit of time available for curriculum development that we used up probably in the first week, so everything was additional on our own. Not enough time. It is really a ton of work, it is a ton of prep. You are thinking on your feet. I think that's part of really being prepared. It's already a lot of work prepping and implementing it. I find the debriefing always takes a lot longer than you expect it to.

When we started to implement the way we wanted to teach our high-fidelity cases in the lab they [were] very rigid. They didn't really want to adapt to how we wanted to teach. [Nursing faculty] wouldn't have that autonomy to do that, and so I often hear people that say I didn't like my simulation experience. I think there was a kind of mentality [in] the lab at the beginning [that] hindered us a bit. I think now they've adapted to [us] and the [SLC faculty] are fine and we kind of run our own simulations there. The people who were in high-fidelity got very good at it because they were always there. There was some [faculty] in the lab that was very positive, very helpful and willing to get in there. I've had negative experiences with simulation where the students felt like they just stood there and did nothing and no one coached them along. We never wanted to do that because we did not have the time to waste.

I think [HFS] just enhances anyone's practice when you are able to teach in [the SLC]. That's key. I think just practicing scenarios in a safe environment. You use all of that knowledge even in the real world when you have your clinical, but I've always

done that anyway. That definitely is how we do it with simulation. If you can specialize to whatever unit you're on and do scenarios with that – I think there's room for doing different basic scenarios for assessment and skills that you need to practice. [I] think it's absolutely valuable to test things in that safe environment, and it can be very unit-specific.

I don't think there was a lot of support by the course leader or management role for getting people prepared to go in and do the simulation. I feel like sometimes it was left up to the lab staff up there to kind of run that simulation for the clinical person. I feel like I should have that role more than the faculty up there. Sometimes [they ran it] because maybe [the nursing faculty] didn't have the proper preparation. We try to support people as much as we can as a course leader. They feel supported and ready for that simulation because we've had meetings, we've had the prep, and we give them all the innovations. We would put in some time with them at the beginning if they wanted it. We all worked well as a team so it was a positive [experience]. It was positive for the most part, everybody is pretty positive and likes to help each other. It would be not a good environment if you didn't want to be there.

It is very sad we get to now use [HFS] through our four years of education – then you become a practicing nurse, and you never get to practice in that safe environment again, and you are just expected to learn in your work environment. One thing we're lacking in health care in general is that our nurse educators don't know how to do [HFS] and aren't implementing it.

Textural Experience

Della was prepared for simulation to come in, “I developed curriculum surrounding the whole simulation high-fidelity. [I] did some research about simulation and decided it would be very beneficial. So when we were doing our curriculum, it was something we chose to do.” She was a proponent of simulation as an educational innovation, “Simulation just provides a huge advantage to students who are able to practice that way.” Becoming comfortable with the technology was her first goal,

The first thing was to just get comfortable with the environment – so making sure that I was comfortable with the technology part of the high-fidelity area. Being able to adapt that, and being able to improvise and being very adaptable is key.

She also believed faculty need to be comfortable with the content they are teaching, “One of the number one things with the way we are teaching the course now with high-fidelity is being really comfortable with your content. Knowing your audience, your equipment, and knowing your knowledge, like what you're teaching.” Della found she did not get enough time to work on HFS scenarios, “It was exhausting trying to find the time. About two years, [a] year and a half of work, in designing those scenarios and putting tons and tons of extra hours into it... You are thinking on your feet.”

Della found there wasn't enough support from leadership for faculty to get prepared to teach with simulation, "I don't think there was a lot of support by the course leader or management role for getting people prepared to go in and do the simulation." She felt she had to support her colleagues, "We try to support people as much as we can as a course leader." It was a positive experience but only if they wanted to be there, "It was positive for the most part, everybody is pretty positive and likes to help each other. It would be not a good environment if you didn't want to be there." Initially, she found the [SLC] faculty not very flexible, "When we started to implement the way we wanted to teach our high-fidelity cases in the lab they [were] very rigid. They didn't really want to adapt to how we wanted to teach."

The student experience was important to Della, "I've had negative experiences with simulation where the students felt like they just stood there and did nothing and no one coached them along. We never wanted to do that because we did not have the time to waste." She felt that using simulation in her practice enhanced her teaching, "All the courses I've ever done have always been in that scenario-based setting so I think that's really strengthened my teaching." But it needed to be applicable to practice,

If you can specialize to whatever unit you're on and do scenarios with that – I think there's room for doing different basic scenarios for assessment and skills that you need to practice. [I] think it's absolutely valuable to test things in that safe environment, and it can be very unit specific.

Della thought HFS was missing in nursing practice,

It is very sad we get to now use [HFS] through our four years of education – then you become a practicing nurse, and you never get to practice in that safe environment again...our nurse educators don't know how to do [HFS] and aren't implementing it.

Structural Experience

The structural correlates of Della's experience centered on her striving to maintain autonomy while developing HFS and advocating for it as a teaching innovation. Della struggled with the change to her teaching practice and advocated for her own needs in order to maintain her teaching autonomy. She was an advocate for HFS and for student learning with HFS, and she advocated for HFS to be used more in nursing practice. Della strove for self-efficacy while being a learner and became familiar with HFS through understanding and acceptance of the innovation. Being a part of a community of practice, Della was aware of her peers' opinions and was appreciative of the expertise in the SLC.

Textural-Structural Description

Della's experience centered on her striving to maintain autonomy while developing HFS and advocating for it as a teaching innovation. Della struggled with the change to her teaching practice and advocated for her own needs in order to maintain her teaching autonomy. She found the rules of HFS very rigid when it was first started. She was uncomfortable with some of the policies in the SLC and found she needed more input. Della found she needed more support from the institution, and she felt preparation for teaching with HFS was lacking. She took control of her teaching in the SLC, but she was frustrated with the time required to integrate HFS. She spent extra time designing and implementing scenarios for a course and found it very demanding. Della strove for self-efficacy while being a learner and became familiar with HFS through understanding and acceptance of the innovation.

Della was an advocate for HFS and for student learning with HFS. She could see the value in HFS in student learning. She advocated for HFS to be used more in nursing practice, and she empathized with practicing nurses' lack of practice in a safe environment. Being a part of a community of practice, Della was aware of her peers' opinions and was appreciative of the expertise in the SLC.

Summary

In this chapter, excerpts from the participants' interview transcripts, the initial analysis of their textural and structural descriptions, and the combined textural-structural description were presented. There were 17 interviews conducted, transcribed, and analyzed. The participants were able to review their transcription excerpts for accuracy and to ensure their experience with integrating HFS into their teaching practice was described. All participants confirmed the excerpts represented their experience.

The analysis was conducted using Moustakas' (1994) modification of Van Kaam method of analysis. This is a seven-step approach to analyzing interview transcripts. The analysis required the researcher to move back and forth between the data and the developing themes. The final step in the analysis is to develop a composite description of the lived experiences of nurse faculty who were required to integrate HFS into their teaching practice. This composite description is presented in Chapter Five.

CHAPTER 5 ANALYSIS, INTERPRETATION, AND SYNTHESIS OF FINDINGS

Introduction

The purpose of this phenomenological study was to explore the lived experiences of nurse faculty who were required to integrate HFS into their teaching practice. It was hoped a better understanding of their perceptions would provide insight about how to support nurse faculty to successfully integrate it. This chapter has three parts. Part A presents the analysis through themes; Part B is an interpretation of the results through the learning cycle; and Part C presents a synthesis of the findings as they relate to the research questions and the conceptual framework.

The participant interviews were analyzed using Moustakas' (1994) modified Van Kaam method of phenomenological inquiry. This method requires the researcher to completely analyze each of the participant's transcripts separately to determine the essence of the experience from the perspective of that participant. The researcher felt it was important to describe the individual experiences separately, and they were presented in Chapter 4. In this chapter, the composite meanings and essences of the whole group is presented through themes.

Part A: Analysis

The researcher used a phenomenological approach to collect qualitative data by conducting semi-structured interviews. Participants in the study included 17 current and former nurse faculty with experience integrating HFS into their teaching practice and who had also taught in a second-year clinical course in the SCBScN program or provided support to nurse faculty in the SLC. The data were analyzed using Moustakas' (1994) modified Van Kaam method of analysis. Six major themes emerged from this study: (1) *striving for self-efficacy*, (2) *struggling to maintain autonomy*, (3) *being part of a community of practice*, (4) *adopting HFS as a teaching innovation*, (5) *being an advocate*, and (6) *being proud*. Another theme, *being an outsider*, is identified and presented as an emerging theme requiring further investigation. The themes were informed by the literature in Chapter 2.

In this section, each theme is discussed in detail while providing support and explanation of the theme through the words of the participants. All participants may not be represented through quotes; the quotes chosen were those that most comprehensively reflected the theme. Through the use of multiple illustrative quotes from the interview transcripts, the reader is able to develop a richer, deeper understanding of the phenomenon. The illustrative quotes contribute to the thick description which provides the reader with the information they need to understand the

findings (Lincoln & Guba, 1985). A breakdown of the group themes into structural and textural correlates is presented in Appendix H.

Theme 1: Striving for Self-Efficacy

The primary and over-riding experience described in the study was striving for self-efficacy. Self-efficacy is the belief a specific action can be completed successfully (Bandura, 1997). All 17 participants expressed their feelings regarding the need to learn a new educational innovation. It did not matter what the participants' level of comfort was with technology—they all strove for self-efficacy. The sub-themes that emerged were: *feelings of inadequacy*; *struggling to define a role*; *being a learner*; and *needing more resources*. The structural and textural correlates of this theme are presented in Table 5.1.

Feelings of Inadequacy. Many of the participants (10 out of 17) described feelings of inadequacy. They were uncomfortable with both the technology and teaching with HFS, and they worried about how that would affect their teaching. They were apprehensive about what might go wrong while they were teaching and feared looking bad in front of the students or other faculty. Anna stated, “You don’t want to look stupid, you don’t want to say or do the wrong thing.” Frustration and feeling overwhelmed contributed to a hesitancy to use HFS in teaching. Gerri felt she was being “tested” by the SLC faculty, “Every time I was going in with the same prep level as the students, and I just thought they were doing that on purpose.” Connie’s initial experience teaching with HFS illustrates the effect these feelings can have on a person’s self-efficacy:

Almost killed me...That first week, I could have easily quit, and I thought, “No, this is what you want to do so suck it up and do the best you can.” I would never be [SLC] faculty. I would never work in the [SLC]. Mostly because of my lack of comfort with technology...I was just feeling inadequate in that class. I think I cried every single week.

Table 5.1

Structural and Textural Correlates of Striving for Self-Efficacy

Structural Correlates	Textural Correlates	
Feelings of inadequacy	<ul style="list-style-type: none"> • Needing to be an expert • Being uncomfortable • Fear of things going wrong • Being unprepared • Lack of confidence • Being uncertain 	<ul style="list-style-type: none"> • Being frustrated • Being overwhelmed • Feelings of inadequacy • Fear of looking bad in front of others • Being hesitant • Feeling “tested”
Struggling to define role	<ul style="list-style-type: none"> • Being in an unfamiliar environment • Not understanding the rules • Being an outsider 	<ul style="list-style-type: none"> • Being unfamiliar with the role • Not knowing what to expect
Being a learner	<ul style="list-style-type: none"> • Knowing expectations • Needing to learn by doing • Appreciating new learning • Making connections to previous experiences 	<ul style="list-style-type: none"> • Being a novice • Becoming familiar with the technology • Needing to be prepared • Linking to previous learning
Needing more resources	<ul style="list-style-type: none"> • Needing support • Needing more time to learn • Needing a lot of education • Lacking experience • Needing better equipment • Being overtasked 	<ul style="list-style-type: none"> • Needing information • Frustrated with time commitments • Developing comfort with the technology • Needing improved education

Struggling to Define Role. Even though the SLC was part of the School of Nursing, it was a separate entity and a place where the nurse faculty took their student groups in order to teach with HFS. Some of the participants (eight out of 17) struggled to define their role as faculty within the SLC. They found the environment and the teaching roles unfamiliar. They did not understand the need for the rules. Often, they felt like outsiders. Ellen described her struggle with defining her role:

At first it was uncomfortable. I was really uncertain as to what to do, but I loved the idea. But I am not an actor, I don't know why I felt that way, but I didn't know what to expect. You didn't know where to go and what to do even though in practice I would have known, but in that situation, how do you respond? It's not the same as practice. How am I going to answer their questions? Just unease. Will I be prepared...Here is another experience that puts you back to where you were a while ago.

Being a Learner. Most of the participants (16 out of 17) found themselves in the position of being a learner. It was important to know what to expect, "Being able to prepare yourself ahead of time, nothing unexpected is thrown at you" (Anna). They wanted a chance to become familiar with the technology and to learn by doing before having to teach with HFS. Many participants were able to make connections with both previous learning and experiences with simulation. The following transcript excerpts highlight this theme:

It would have been nice if they would actually run through a scenario and just give the faculty more guideline of what there will be and what's expected of them. It wasn't immediately there, it came later, you know the stuff we needed to prepare ourselves...faculty can observe and watch and see how it's done without expectations being placed on them. I think if they were able to run through it once themselves, then stand and talk about it afterwards, they would feel more comfortable with it. The work I did before never really touched on simulation. I never even thought about simulation until I became faculty (Anna)

I would review the scenario either in my mind and review what we would do clinically with it. I would make sure I would look it up in the textbooks or in our manuals before I went in...What helps for me is knowing the situation ahead of time; to have the clinical skills to be able to function in a simulation experience that we are putting the students through. I am a firm believer that you should be involved in courses like assessment, pharmacology, and you should be doing clinical. Keep up to date with the evidence and the theory that we are using. (Bonnie)

Needing more Resources. The final structural correlate in this theme is the need for more resources. Some of the participants (11 out of 17) described needing more support, more time, and more information. They wanted to develop comfort with the technology and be prepared. Some faculty were frustrated with the time commitments and felt they were overtasked.

Is there a lot of time set aside to learn how to utilize simulation? Definitely not! I think a lot of education needs to occur, whether that is lunch and learns, or seminars. It's quite cost prohibitive is the only rationale I believe behind not having that already have taken place. Time has to be set aside to learn if you want simulation to be effective for what simulation is good for. There's just no time to learn even how electronic calendars work and how to get your time input into the calendar. (Frances)

I would like more time in there, not necessarily teaching time, but time spent in the [SLC] exploring, watching scenarios take place, buddying, and that kind of thing. Well we did have some training sessions, but it would have been nice not to start right away, to have had time with someone who had done it before, to buddy, and to see what it was all about. It was just like, “This is what you will do,” and quickly you are shown things, and then the next time you do it, you just do it. It was kind of, “Here it is; here you go.” It could have been better. I could have been better prepared. (Ellen)

It was exhausting trying to find the time. About two years...putting tons and tons of extra hours into it. Making sure we were always going back looking at our scenario and did we meet those objectives, and pushing them along within the high-fidelity scenario to get them to those objectives. We got a little bit of time available for curriculum development that we used up probably in the first week, so everything was additional on our own. Not enough time. It is a ton of work, it is a ton of prep. You are thinking on your feet...I find the debriefing always takes a lot longer than you expect it to. (Della)

These participant narratives provided insight into perceptions of self-efficacy, and how the learner strives to gain it. Bandura (1977) defined self-efficacy as the belief a person has that they can successfully complete a behavior or that the behavior will lead to a specific outcome; therefore, it is the most important predictor of behavioral change. The more the participants felt they had gained self-efficacy with this teaching innovation, the more likely they were to use it.

According to Rogers’ (2003) DOI theory, the first step in the decision-making process to adopt a new innovation is to gain knowledge about the innovation and its function. Most of the participants sought this knowledge as part of striving for self-efficacy. One of the concerns many participants had was not enough time to gain the knowledge and skills they perceived they needed to improve their self-efficacy with HFS. It is through self-efficacy that a person can exercise human agency (Alkire, 2005). As participants gain self-efficacy, the innovation is less likely to become a constraint on human agency.

Theme 2: Struggling to Maintain Autonomy

Autonomous people are free to act based on their own choices with no restraint (Chirkov, 2011). An overwhelming majority of the participants (16 out of 17) experienced a struggle to maintain their teaching autonomy. HFS comes with a defined protocol for how the scenario will run. Nurse faculty may not be familiar with this protocol, and therefore be uncomfortable teaching with it. The sub-themes for this category were *loss of autonomy*, *conflicting beliefs*, *pushing back*, *advocating for own needs*, and *regaining autonomy*. Table 5.2 depicts the structural and textural correlates related to this theme.

Table 5.2
Structural and Textural Correlates of Struggling to Maintain Autonomy

Structural Correlates	Textural Correlates	
Loss of autonomy	<ul style="list-style-type: none"> • Feeling frustrated with policies • Lacking autonomy 	<ul style="list-style-type: none"> • Being forced • Feeling unimportant • Needing more say
Conflicting beliefs	<ul style="list-style-type: none"> • Being asked to go against beliefs 	<ul style="list-style-type: none"> • Identifying where beliefs may be in conflict
Struggling with change	<ul style="list-style-type: none"> • Being disappointed • Pushing back against policies 	<ul style="list-style-type: none"> • Struggling against the process • Being frustrated
Pushing back	<ul style="list-style-type: none"> • Undermining the experience 	<ul style="list-style-type: none"> • Being negative • Pushing back
Regaining autonomy	<ul style="list-style-type: none"> • Beginning to stand up for self as educator • Making suggestions for change 	<ul style="list-style-type: none"> • Taking control of teaching • Identifying the challenges • Being a change agent

Loss of autonomy. Some faculty (nine out of 17) felt they were forced to use HFS in their teaching practice, “We were told we are going to use simulation. Institutional policies forced me.” (Bonnie). They were frustrated with the policies and felt unimportant in the larger scheme of things. Ellen stated, “When it was built, we in nursing had the thought that we were very important to the [HFS] picture. As time went on, our importance kind of waned because of the many programs.” Zoe described her loss of autonomy as follows:

I don’t feel I have a lot of autonomy in there because I’m not the one running the show with [HFS]. So I feel sort of out of kilter; like I said not necessarily a fifth wheel, but it isn’t my operation and that’s difficult some times. I live for autonomy, but to have that, I have to have the support and training.

Conflicting beliefs. There are differing beliefs about how HFS should be used in nursing education. A few participants (five out of 17) felt they were being asked to go against their beliefs:

I don’t like pulling them out of clinical because that’s a week that they aren’t in clinical then. I find it disruptive. I would just like to see it out of clinical. It wasn’t part of their

clinical time before, and that's what I would like to see [in] ours as well, as part of the course work. (Anna)

To me the responses of a real patient are more valuable because that's what you are going to be looking after. You are looking after people not manikins. I give up a whole day because I can't take the students to the hospital for half a day. I can probably buy into that in the lab setting faster than I can the mandatory [HFS] in clinical hours. (Connie)

Gerri identified where her beliefs were in conflict with what she was asked to do:

I had philosophical differences in how they were running the scenario. All the prep and stuff they give you ahead of time isn't really relevant to what's going on... The idea that they should do it on their own in simulation I found was a little bit baffling. That fits more with my teaching style; to do the feedback right in the moment instead of looking at it later. We maybe just need to look at the pedagogy we have surrounding that and decide, "Does it really have to be completely on their own?"... We thought it was a giant waste of our time and we would have rather been at clinical.

Pushing back. There were many indications in the transcripts where the participants pushed back. A few of the participants (four out of 17) were negative, others described being disappointed. Ina described her struggle to achieve what she wanted:

I had to fight for the day I wanted because it wasn't on the master calendar. So I fought my way through it and got it, but it sure wasn't easy. I had to go through layers and layers and layers of whatever to finally be able to get that date, but it was the best date for us...I'm maybe just a tiny bit of a rebel. I don't like being told things. I don't like being told, "You will have three simulations in this course!" I resisted, and I only have two...I felt pressured, but I still said no.

Regaining autonomy. Over time, some of the participants (seven out of 17) began to stand up for their own needs and take control over their teaching. They suggested changes they would like to see in the HFS program:

The more time I spend as a teacher the more I want academic freedom. I would like to have the choice of whether I take them to [HFS] in clinical or not. I don't like the checklists that come with the [SLC] because they are very prescriptive...I'd like more freedom and truthfully, I take more freedom now that I have become more comfortable. (Connie)

I probably overstepped my bounds a bit with the staff in regards to how I wanted the scenario to be run. I kind of went free flow a bit. I would talk to my [SLC] person and say, "Put those vital signs in," so I kind of went over a little bit in regards to what the scenario was about. If I thought they were heading off in a great direction, then I would let them. If I wanted to see critical thinking, I would kind of steer them to a little bit

different. A lot of faculty probably wouldn't be able to do that, I think it's just because my background, my comfort zone. I like it, so I just go in and do my thing. (Quinn)
As I got more secure as an instructor I could ask more questions and say, "I'm not ok if this happens"...I will say something and find out more about what my role is. I was more confident that way. (Vera)

Autonomy emerges as a result of interactions within a socio-cultural environment, and once established, it may lead people to make changes within their environment (Chirkov, 2011). Human agency and autonomy are interrelated. Autonomy "is a mind-set, and a constellation of skills of mindfulness, reflexivity, and rational choices...agency is an enactment of these decisions and intentions" (Chirkov, 2011, p. 613). The participant narratives provided insight into the struggle many of them had with maintaining or developing autonomy in relation to teaching with HFS. Many felt a loss of autonomy and pushed back. Eventually, participants exercised their agency and gained more control over their teaching.

Some of the participants struggled with differing beliefs about the use of HFS in clinical practice education. Ajzen (1985) described the effect beliefs have on the performance of a behavior. Behavioral beliefs result from a person's subjective belief regarding the consequences of a behavior, and they influence the person's attitude towards the behavior (Ajzen, 1991). Some of the participants expressed a belief that HFS did not belong in clinical practice education, and this may have affected their attitude about using HFS in a clinical practice education course.

Theme 3: Being part of a Community of Practice

An underlying theme connecting most of the experiences integrating HFS into teaching practice (16 out of 17) was the awareness of being part of a CoP. This awareness was demonstrated in the participants' narratives through the following sub-themes: *being supported and mentored, appreciating expertise of SLC staff, being aware of peers' opinions, and being a role model*. Even if the participant did not seek or receive mentoring or support, they were still aware of the feelings of others within their CoP. The structural and textural correlates related to this theme are presented in Table 5.3.

Table 5.3

Structural and Textural Correlates of Being Part of a CoP

Structural Correlates	Textural Correlates	
Being mentored and supported	<ul style="list-style-type: none"> • Being mentored • Being supported by peers • Being inspired by peers 	<ul style="list-style-type: none"> • Appreciating mentoring relationships • Being motivated by peers
Appreciating expertise of SLC staff	<ul style="list-style-type: none"> • Being supported by SLC staff 	<ul style="list-style-type: none"> • Appreciating support from SLC staff
Being aware of peers' opinions	<ul style="list-style-type: none"> • Empathising with peers • Being disappointed by peers opinions • Recognizing areas where peers need more education 	<ul style="list-style-type: none"> • Recognizing the discomfort of others • Being aware of her own negative effect on peers • Being aware of peers
Being a role model	<ul style="list-style-type: none"> • Being a support to peers 	<ul style="list-style-type: none"> • Being a role model

Being mentored and supported. Some of the participants (eight out of 17) described being mentored and supported. This sub-theme was supported by participants' discussions of being mentored, being supported, being inspired and being motivated by others as well as appreciating mentoring relationships. Quinn received support from a co-worker, "I'm kind of more of a latish [technology adopter]. [My co-worker is] techy, so she taught me things." Other experiences are demonstrated in the following transcript excerpts:

The positive attitudes that many of [the faculty] have, and the sharing of how they themselves use simulation, both the low and high-fidelity, are sometimes truly inspiring. To be able to share that with other people, and how they use things, and of course they share the positive aspects of that. (Ellen)

The motivation and the support for using simulation and developing it in our new program, there was lots of enthusiasm. I've had some very good mentors. They tried to make it the best it could be. (Anna)

Also talked with colleagues working right alongside me... If I wouldn't have had nurse faculty colleagues that always had very open minds, I wouldn't have even thought about utilizing technology as much as I did. (Frances)

Appreciating expertise of SLC staff. The staff in the SLC included both nurse faculty and technicians. The nurse faculty worked within the School of Nursing and may have a clinical

teaching assignment as well as a position in the SLC. The technicians are not faculty colleagues but have worked closely with the nurse faculty in the hospital labs and with low-fidelity simulation. Many of the participants (nine out of 17) were appreciative of the expertise in the SLC:

I was orientated with the [SLC] people, the lab tech and the whole crew over there. They were very awesome actually, and they went through things with us. They discussed how it was supposed to run and what the students were hopefully getting out of the whole thing. (Quinn)

There was always opportunities to come and there [were] invites to come and get an orientation to the area. They sent out a lot of information like the learning package and before we come with our students. [SLC faculty] helped a lot because in my world, when I was the faculty, I didn't have a lot of experience with it and knowing that [SLC faculty member] was going to be there to do the simulation part and deal with that, and I was responsible for the clinical knowledge and expertise – that was the biggest thing, that was a big draw in. The staff was really helpful. (Mona)

Some participants advocated for more use of the SLC faculty as experts during HFS experiences. Zoe stated, “I would like to see either professionals or dedicated people there to assist with or in fact lead the debriefing afterwards.”

Being aware of peers' opinions. Part of being in a CoP is an awareness of how others feel. Many of the participants in this study (nine out of 17) discussed their perceptions of how their peers viewed integrating HFS. Some participants empathized with peers, while others were disappointed in their peers.

My other colleagues – I think they are excited but I think they are nervous and scared because it's technology...A lot of faculty probably wouldn't be able to do that, I think it's just because my background, my comfort zone. (Quinn)

When you have faculty who are not really open to the idea of simulation – I struggle with that because I think it's very important. I think it's a great educational innovation. I struggle when I am trying to convey the importance of it...If you are doing a simulation with a faculty member that's maybe not quite as involved as you are, sometimes you're not sure they want to be there because they're complaining about having to be in simulation. (Yvonne)

Being a role model. In the narratives, there were two instances where the participants demonstrated being a role model and a support to peers. Willa described a positive experience she had with other nurse faculty:

We try to support people as much as we can as a course leader. They feel supported and ready for that simulation because we've had meetings, we've had the prep, and we give them all the innovations. We would put in some time with them at the beginning if they wanted it.

The participants benefited by being in a CoP. They were mentored and supported by their peers and by the SLC staff. Some of the participants were a positive role model to others. Carr et al. (2008) stated peripheral participation relates not only to novices, but may also be experienced in the context of professional learning within a CoP. The concept of peripheral participation was present in the narratives throughout these themes. Learning from others is foundational to social learning theory (Straub, 2009). The mentoring and support these participants received from their colleagues provided them with vicarious learning. Bandura (1986) stated a person is more likely to adopt a behavior if others they respect adopt the behavior; thus, vicarious learning plays an important role in adopting an innovation such as HFS.

Many of the participants gained knowledge about HFS and were persuaded to use it based on the attitudes of their peers. Even though some of the participants felt they may have had a negative influence on their peers, most of the participants appreciated the support and mentorship from the CoP. The CoP, as experienced by the participants, could impact steps one and two of the decision-making process as described by Rogers (2003) in DOI theory. The participants gained knowledge about HFS and its function and were influenced to develop a positive attitude towards HFS. This may have also encouraged them to accept the innovation.

Ajzen (1985) identified normative beliefs as the perception a person has about what others think of a behavior, which leads to social normative pressures to perform the behavior. A person may feel pressure to perform the behavior if they think their CoP is supportive of it. Some of the participants indicated feeling pressured by their peers and from the organization to integrate HFS into their teaching practice. Thus, this perceived pressure may have influenced the participant's intention to use it.

Theme 4: Adopting HFS as a Teaching Innovation

It was apparent in the participants' experiences that comfort comes over time. As they developed confidence, the participants were able to enjoy the experience more and contribute to student learning with HFS. This occurred through the following sub-themes: *acceptance*,

understanding, and *reinventing*. A majority (14 out of 17) of the participants related to one of these sub-themes. The textural and structural correlates of this theme are depicted in Table 5.4.

Table 5.4

Structural and Textural Correlates of Adopting HFS as a Teaching Innovation

Structural Correlates	Textural Correlates	
Acceptance	<ul style="list-style-type: none"> • Accepting • Getting better over time • Acknowledging the benefits 	<ul style="list-style-type: none"> • Becoming comfortable • Coming to terms with reality • Sticking it out
Understanding	<ul style="list-style-type: none"> • Understanding own limitations • Acknowledging affect own responses will have on students • Understanding limitations of organization 	<ul style="list-style-type: none"> • Understanding limitations of technology • Identifying problems • Acknowledging the dichotomies of own understanding
Reinventing	<ul style="list-style-type: none"> • Modifying the rules • Adjusting to own needs 	<ul style="list-style-type: none"> • Suggesting changes

Acceptance. The sub-theme of acceptance emerged as faculty related their experiences with HFS. Many of the faculty (10 out of 17) experienced acceptance. The textural correlates related to this were accepting, getting better over time, acknowledging the benefits, becoming comfortable, coming to terms with reality, and sticking it out. Bonnie described this process well, “Over time, I think it’s improved greatly. I think change takes time. This is a normal process we are going through.” As the participants became more comfortable, their apprehension decreased:

I don’t have apprehension about it anymore, I am past all that. The more you do, the more comfortable you feel. [That’s] experience and the consistency of how we are doing it. Last simulation for example was very, very well done. I think that it gets better each time. (Anna)

The participants discussed the perceived benefits of HFS in their clinical teaching practice:

You can plan for things and so you can do things that you may never experience as a student. That I can see – where simulation would be valuable. I don’t know if that’s a practice change or if that’s more of a philosophical change, because if I look at how I thought about [HFS] at the beginning and how I think about it now, [it’s changed]. I

really like the [SLC] now that I have been there a few times, and I am comfortable walking in and knowing what is there. I have had a metamorphosis through the whole thing, where I see the value of simulation. (Connie)

I think there is a place for it in almost anything that we do. I really, really, love clinical and I really, really, love simulation... Now, the change to my practice would be to use simulation if it was accessible. You can do anything there, and it can be effective. (Frances)

I could not believe the transition of this group that I saw over that week as far as the collaboration and the team work, and to be able to stand back as a faculty and watch all that – I would not be able to do that in the clinical setting... that's when I first realized how good simulation was. It was amazing to see the difference in them from the beginning of the week to the end of the week. I couldn't believe how they transformed as a team. (Olivia)

Understanding. Some of the participants (seven out of 17) began to understand some of the challenges of running a high-fidelity simulation centre like the SLC:

It's a new place, big changes, and it takes time to get things sorted. I like there's a more organized approach now and some of that chaos is gone. I'm feeling more comfortable in the environment now. (Sarah)

They began to identify their limitations and the dichotomies in their beliefs:

I would have assessed myself as knowing nothing about technology. There's a lot of technology within the world now, so if you don't get up and get interested in the technology and start using it, you're never going to learn it. Seven years ago I probably was a late adopter and now I would think I'm an early adopter. I like technology but I also hate technology, and I hate to change. I think change is happening at such a rapid pace; you either get on the board of change and you try to make things better, or you're a snail and you're a dinosaur. By not changing your practices, changing your ways, you fall into that rut of "we've always done it this way," and I never want to be in that rut. (Frances)

Reinventing. The SLC is a very structured environment that may not be conducive to reinvention. However, some of the participants (seven out of 17) exercised their autonomy by modifying the rules and suggesting changes. In a grounded theory study of the adoption of highly integrated and inflexible technologies, Boudreau and Robey (2005) found that even with inflexible technologies, people utilized the technology the way they chose. The following excerpts from the transcripts demonstrate this:

I changed it up a bit for my students because the way we did it before was kind of past the group. I quit that and then let the second group take over where the first group had not been able to. I had to kind of work through things and say, "Well, why is this set up

this way?” and “I’m going to change it a little bit.” I also took the opportunity in [SLC] to expand to other areas. (Willa)

When we started to implement the way we wanted to teach our high-fidelity cases in the lab they [were] very rigid...I think now they’ve adapted to [us] and the [SLC faculty] are fine and we kind of run our own simulations there. (Della)

Many of the participants experienced a phase of acceptance, understanding, and reinventing, and acknowledged their acceptance and understanding of the changes related to integration of HFS into the nursing curriculum. Occasionally, participants would modify the rules or change up the procedures to fit better with their clinical placement or their teaching style. This *reinventing* of the technology was described by Rogers (2003) as “the degree to which an innovation is changed or modified by a user in the process of adoption and implementation.” (p. 17). In this investigation, the participants discussed modifying the innovation to their own needs.

The decision to accept and implement HFS is consistent with steps three and four in Rogers (2003) DOI theory. In step three, individuals make a decision to accept the innovation; and in step four, individuals implement the innovation. The participants were required to implement HFS as part of their teaching in clinical practice education, and they eventually came to accept and understand the need to integrate it.

Theme 5: Being an advocate

Within the theme of being an advocate, the participants demonstrated advocacy for student learning, for nursing education and practice, and for HFS. The majority of participants (16 out of 17) described experiences that fit into this category. The structural and textural correlates of this theme are listed in Table 5.5.

Figure 5.5

Structural and Textural Correlates of Being an Advocate

Structural Correlates	Textural Correlates	
Being an advocate for student learning	<ul style="list-style-type: none"> • Being supportive of student learning • Being attentive to students' learning needs • Being aware of student learning 	<ul style="list-style-type: none"> • Being an advocate for students and student learning • Identifying with students' learning experiences • Preparing the students
Being an advocate for nursing education and practice	<ul style="list-style-type: none"> • Being an advocate for nursing education and practice 	<ul style="list-style-type: none"> • Seeing a need for HFS in nursing practice • Making connections to practice
Being an advocate for HFS	<ul style="list-style-type: none"> • Being excited • Appreciating teaching innovation 	<ul style="list-style-type: none"> • Seeing the value of HFS • Liking the idea of HFS • Being an early adopter

Being an advocate for student learning. Many of the participants (12 out of 17) advocated for student learning by being attentive to their learning needs, preparing them for simulation, identifying with their experiences, and being supportive of them. Ina was concerned about the student experience, “I want [the students] to come away from simulation feeling good about it. It’s usually a very positive experience for the students, and I try to make it very positive for them.” The following transcript excerpts demonstrate the participants’ concerns with the students learning:

I try to find out why [the students] don’t want to be there. If the students are not committed to it, it’s not as worthy of an experience. [In clinical], I would use it to supplement a patient scenario. I would often refer back to the experiences in [HFS]...I like to give [the students] time to prepare and to come in when there’s not such a scrunch of time. (Willa)

I don’t want to waste their time up here. I am more aware now of how nervous they are going into the simulation, and they’re probably that nervous – I hope they are that nervous – in the clinical area. I never saw that side of it because I was so busy looking at other things and evaluating them. I have a different relationship with them and I can see how nervous they are and how worried they are to make mistakes. They share that more than if I had them in the clinical area. (Kelsey)

Being an advocate for nursing education and practice. A few of the participants (four out of 17) demonstrated their concern for practice settings. They could see a need for HFS in practice:

It is very sad we get to now use [HFS] through our four years of education – then you become a practicing nurse, and you never get to practice in that safe environment again, and you are just expected to learn in your work environment. One thing we’re lacking in health care in general is that our nurse educators don’t know how to do [HFS] and aren’t implementing it. (Della)

I enjoyed it; I thought that it added to what we did. I think that it gave the students a real life experience. I wish we could have had it when I was a student. I believe that it is one of the greatest technologies that has been introduced to our program. I think that’s good we can show them normal versus abnormal and how this intervention might affect someone. I think that it’s something that will enhance my practice. (Ina)

Being an advocate for HFS. Even though the participants experienced apprehension and frustration learning to teach with HFS, many of the participants (12 out of 17) advocated for HFS in nursing education. They were excited about the possibilities and appreciated it as a teaching innovation. Many liked the idea of HFS and wanted to adopt it right away.

What helped is that it was really exciting to be able to do [HFS], so we just had the attitude that this was an awesome opportunity for our students, so we just did it. The physical set-up – awesome. I would think, “Oh my goodness, I’m home – with monitors, etc. – and just let me stay here, oh just let me stay!” Simulation certainly changes my dialogue with students. I think it is an excellent opportunity for students to all experience a particular scenario that they may not all be able to experience in the clinical area. I think it is an enhancement. (Ellen)

I think it’s great. It helps them prepare, it decreases their nervousness and you can get lots of teaching across. I make more effort to bring in what we covered in the simulation. It definitely enhances what you are doing in the real clinical setting. It makes things more real than textbook knowledge. (Anna)

I love it. I could see the growth from day one to the end of the term. They were getting in there for the most part and doing their thing - critical thinking – it was really good. I think it’s awesome, I think it needs to be there... I had no idea what [HFS] was. So teaching has opened my eyes, like really opened my eyes, and has helped me develop my own nursing skills much better. (Quinn)

It’s a safe environment for a few reasons. One it advances their knowledge. It also increases their comfort. It’s better to practice in a safe environment than out on the floor, and if mistakes are made it’s a learning opportunity. In a way [HFS] is kind of like what we do. (Vera)

The final step in the decision-making process identified by Rogers (2003) in the DOI theory is confirmation that the decision to implement was the correct one. The participants eventually came to agree that HFS was important to nursing education and practice, and they became advocates for HFS even though they had difficulty with the process of integrating it. They were able to move past their personal experiences with learning to teach with HFS, and they were able to envision the bigger picture as far as the benefits of HFS in nursing education and practice. Being an advocate was a confirmation that the decision to implement was the correct one.

Theme 6: Being proud

Quite a few of the participants (12 out of 17) experienced being proud. The sense of pride emerged from the sub-themes of *being proud*, *being positive about HFS*, and *being positive about the institution*. The textural and structural correlates related to this theme are presented in Table 5.6.

Table 5.6
Structural and Textural Correlates of Being Proud

Structural Correlates	Textural Correlates	
Being proud	<ul style="list-style-type: none"> • Being impressed by the technology • Appreciating the physical environment 	<ul style="list-style-type: none"> • Feeling pride in own contributions
Being positive about HFS	<ul style="list-style-type: none"> • Enjoying the experience • Deciding to integrate it into practice 	<ul style="list-style-type: none"> • Appreciating as a teaching innovation • “It’s great!”
Being positive about institution	<ul style="list-style-type: none"> • Appreciating leadership • Being aware of organizational limitations 	<ul style="list-style-type: none"> • Understanding organizational restrictions • Being supported by leadership

Being proud. Many of the participants (10 out of 17) experienced a sense of pride. They were impressed by the technology and appreciated the physical environment of the SLC:

The [SLC] is great. I can't believe how well they designed it and built it. I've never seen anything like that before. I think overall getting the [SLC] built was a huge venture. The set-up, the hospital experience is fantastic. I love the way that you actually do report from the RN's at an actual station. I love the idea that the carts are really similar to what you would see in the patient rooms. Making it as realistic as possible, for sure. (Yvonne)

Not only was there pride in the institution, but there was pride in personal accomplishments:

We designed [an HFS scenario]. They took the lead on [it] but we said what we needed which my influence in that would have been what I saw in the clinical setting. Then it becomes more authentic. (Olivia)

Being positive about HFS. Some of the participants (five out of 17) experienced being positive about HFS. Ina's description of the technology encompasses this feeling of pride, "I believe that it is one of the greatest technologies that has been introduced to our program...I believe that our center at [Saskatchewan Polytechnic] is state of the art..." Some of the participants found the experience of integrating HFS into practice enjoyable. Yvonne stated, "I love the way that you actually do report...I love the idea that the carts are really similar..." and Mona stated,

I liked it...Students get the opportunity they may not necessarily get as a student in the real world, and I would much rather them have that experience with a manikin even before they have to experience that outside...I liked the flow of high-fidelity, that it was similar to life at a hospital..

Being positive about the institution. A few of the participants (three out of 17) experienced being proud of the institution, and they were able to recognize the institutional challenges nursing leadership had faced. Bonnie's narrative demonstrates a positive attitude towards leadership:

The leadership realizes they need buy-in, and I am seeing leadership utilizing strategies to promote faculty and student buy-in. Leadership is positive. Leadership is also open to what is not working. They're taking feedback, positive or negative. (Bonnie)

The participants gave credit to nursing leadership for encouraging HFS integration:

I think the institution pretty buff, they want [HFS] cause that's the new thing. [The dean is] pretty on top of that, she's pushing that. She's very happy that we are incorporating [HFS] into our new curriculum, so she's behind us. We have this big beautiful [SLC] – like holy man that's awesome. (Quinn)

The feeling of pride was apparent in many of the participant narratives. The participants were impressed by the innovation and some of them were proud of their own accomplishments.

Feelings of pride are strong motivating forces to accept or accomplish something and result in institution-building (Katzenbach, 2003). According to Katzenbach (2003), feelings of pride “motivate people to excel far more effectively than money or position” (p. 71). Therefore, these feelings experienced by the participants may have influenced adoption of HFS into their teaching practice.

Emerging Theme – Being an Outsider

The concept of being an outsider began to emerge in the narratives when the participants discussed going into the SLC. Zoe described herself as a “fifth wheel,” of not being a part of the teaching, but rather being on the outside:

I just feel I’m a fifth wheel even though I’m not expected to function in that way...I don’t feel I have a lot of autonomy in there because I’m not the one running the show with [HFS]. So I feel sort of out of kilter, like I said not necessarily quite a fifth wheel, but it isn’t my operation and that’s difficult some times. (Zoe)

Other participants were uncomfortable with what their role was in the SLC and didn’t want to take over someone else’s role:

They kind of led it, but they seem to be quite unclear as to their defining lines as to what they’re leading and what I’m leading, so it was a little bit of a collaborative. I would totally take over, but I didn’t want to impede on what their process was. I need a little support with that stuff... (Olivia)

Another component of being an outsider is the feeling of being an outsider within the CoP. If your opinions and beliefs are different than the CoP you practice within, you may be reluctant to articulate them. A good example was Connie’s narrative:

Initially I felt like people were trying to sway or to push you towards liking simulation. It was kind of like, “What if I don’t like this? [Am] I not allowed to say I don’t like it?” Initially, I was very quiet. I wouldn’t say a lot because maybe I didn’t totally agree with it.

The study revealed learning that a new technological innovation put some of the participants in the position of being an outsider. Lave and Wenger (1991) discussed problems with accessing a CoP and the need for “information, resources, and opportunities for participation” (p. 101) to be readily available to those attempting to access it. If the SLC is considered another CoP by the nurse faculty and the resources and opportunities are not readily available to them, they could feel like outsiders. The concept of being an outsider as it relates to learning a new teaching innovation such as HFS would benefit from further investigation.

Summary of Analysis

The literature described in Chapter Two provided support for the themes developed in this study. Rogers (2003) DOI theory established a good background for the process of adopting a new innovation such as HFS. The five stages of the decision-making process were reflected in the themes. The TPB described by Ajzen (1991) gave insight into the role that beliefs play in attitude towards an innovation and intention to adopt it. The concepts of human agency and self-efficacy and the SCT were appropriate for understanding the experiences of integrating HFS into teaching practice.

There are two areas that were not described in Chapter 2. The first was related to the theme of *being proud*. Pride in the SLC, in personal accomplishments, and in the organization may make it more likely that a person would want to integrate HFS into their teaching practice. Research into the relationship between personal and organizational pride and the adoption of a new innovation may provide more understanding of this concept. The second area not described in Chapter Two was the emerging theme of *being an outsider*. If the participants felt like they were outsiders in the SLC, it may have affected their experiences with integrating HFS into their teaching practice. The relationship between insider/outsider status and integration of a teaching innovation into practice may provide a better understanding of this emerging theme.

Part B: Interpretation

When reviewing the transcripts and analyzing the data, it very quickly became apparent there was a pattern developing. The participants appeared to go through the same stages while integrating HFS; it did not seem to matter if they were early or late adopters of technology. The participants moved through the experiences in four stages: (a) unknowing, becoming prepared; (b) frustration, pushing back; (c) communicating, seeking support; and (d) moving forward, becoming comfortable. These stages become a cyclical process because they can be experienced more than once throughout the integration of HFS into teaching practice. This process can be viewed through Kurt Lewin's (1961/2008) Theory of Change.

Lewin (1961/2008) described successful change as a process of unfreezing, moving, and re-freezing. Unfreezing, or becoming open to new understandings, requires disconfirmation of previous beliefs and causes anxiety; therefore, it must occur in a psychologically-safe environment. Moving or cognitive redefinition occurs by getting information from multiple sources, and re-freezing is the integration of new behaviors with ongoing confirmation from

others that these behaviors are appropriate (Lewin, 1961/2008). Communication with others enables the person to move beyond their own understanding and into the unknown (Cayne, 2014). Thus, unknowing leads to learning in supportive environments.

Schein (1996) adopted and modified Lewin's Theory of Change and developed a model for managed change in an organization. The three stages in this model are unfreezing or creating motivation for change; learning new concepts, new meanings, new standards; and internalizing these new concepts, meanings, and standards. There are some aspects in both of these perspectives that can be used to understand the stages the participants in this investigation went through when integrating a new innovation into their teaching practice.

Unknowing – Becoming Prepared.

All of the participants discussed an aspect of unknowing and how they prepared to teach with HFS. Bonnie described the experience as a “steep learning curve.” The work of preparing involved linking with previous experiences, researching HFS, reading the materials sent out by the SLC, and becoming familiar with the theory behind the HFS scenario. Connie did “lots and lots of reading....reviewed all the nursing care that is required then looked at what the student is expected to know...” The following transcript summarizes the work of preparing:

It's a lot of information gathering to ensure that there's an understanding of what a high-fidelity simulation would entail. I read a lot of literature...education with someone who knows the research behind simulation learning...We need education. (Frances)

A conceptual link was made between unknowing and becoming prepared because they were closely related in the participants' descriptions. The participants described their feelings related to not knowing, then discussed what they did or should have done to become prepared. Being in a state of unknowing may encourage adults to seek information and become prepared. Heath (1998) suggested unknowing creates an openness to learning. Thus, to engage in the preparation for learning a new teaching innovation, the participants had to experience a state of unknowing. This position of unknowing encourages them to hear a colleague or a teacher and learn, thus they gain experience with the unknown (Munhall, 1992). In this study, being in a state of unknowing may have encouraged participants to seek information about HFS, and it may have motivated them to become prepared to teach with this innovation.

Frustration – Pushing Back.

There was an element of frustration in the transcripts as the participants explored their initial reactions to teaching with HFS. Unknowing resulted in the participants pushing back against the rules, against the faculty at the SLC, and against the course leaders who included HFS in clinical courses:

There was a lot of antagonism between myself and the clinical simulation team for a little while. I butted heads so much with the simulation learning centre. It was very, very frustrating. I did let them under my skin a few times, and we would have some “discussions.” (Gerri)

Frustration is common in learning environments. Schein (1996) stated “*all forms of learning and change start with some form of dissatisfaction or frustration generated by data that disconfirm our expectations or hopes*” (p. 29). Frustration was evident in the participant descriptions of their experience. Often, the frustration led to participants pushing back against integrating HFS into their teaching practice.

Dealing with learning anxiety is key to producing change but this change will only take place where a person feels psychologically safe (Schein, 1996). Schein (1996) suggested managers employ various tactics to ensure psychological safety such as, (1) group work, (2) relief from routine work pressures, (3) practice sessions where errors are acceptable, (4) breaking learning into manageable steps, and (5) providing coaching and help. If the participant did not feel they were in a psychologically safe environment, they may not have embraced the learning but rather pushed back against it. Schein argued if the person does not feel psychologically safe, they will deny the new information and defend themselves against new learning.

Communicating – Seeking Support.

The participants sought people they felt could help them or support them through the learning experience. Many participants mentioned a peer or the SLC faculty who helped them. Seeking support through communication helped some of them as they learned to teach with the innovation:

I went into the lab itself, the [SLC], and talked to the staff there first. I had questions about whether they would run it or whether they would let the faculty run it. I had questions about whether they wanted us to play a role in the simulation. Preparing and making sure the students have a good experience ahead of time. (Anna)

Learning requires communication with others. Schein (1996) stated cognitive restructuring requires teamwork which he defined as a “coordination of *individual* activities for pragmatic ends” (p. 31). When the learner has become open to change, they become open to new knowledge and other perspectives (Schein, 1996). Thus, role models and colleagues are important motivators of learning. Educational administrators can use ongoing communication as a way of providing support.

In this study, many of the participants indicated they had gained information or new perspectives from members of their CoP. Some of the participants appreciated the support given by administration. In all cases, communication appeared to be important for participants to get the support they needed to integrate the innovation. Thus, communication was linked with seeking support as a step in the process of integrating HFS into their teaching practice.

Moving Forward – Becoming Comfortable.

Most of the participants described a change in their comfort level as they gained more experience with HFS. This change in comfort allowed them to move forward and begin to see HFS with a different understanding.

I still learned a lot teaching that class, and I learned to become more comfortable with simulation...if I look at how I thought about [HFS] at the beginning and how I think about it now, [it's changed]. I really like the [SLC] now that I have been there a few times, and I am comfortable walking in and knowing what is there. I have had a metamorphosis through the whole thing, where I see the value of simulation. (Connie)

As participants became more comfortable teaching with HFS, they could move forward with integration of it into their teaching practice. Moving forward could put the participant in a state of unknowing again as they moved into a new experience with the phenomenon. Thus, the process of integrating a new innovation becomes cyclical.

The last stage in Lewin's (1961/2008) theory of change is re-freezing, which requires ongoing confirmation that the behavior should be continued. Schein (1996) stated this new behavior must be congruent with the beliefs and practices of the learner or it will not be maintained. When integrating a new innovation, it is best to involve the whole group in the training so that support for the old behaviors lessens and the new behavior is reinforced (Schein, 1996). Therefore, communication within a CoP is important for learning a new teaching innovation, and the whole group must be exposed to the new learning so these behaviors can continue to be reinforced through role modeling and interpersonal communication.

Summary of Interpretation

This investigation resulted in new thoughts about the phenomenon of integrating a new innovation into teaching practice. In this study, the participants went through a cyclical process of unknowing, frustration, communication, and moving forward. This process can be viewed through Kurt Lewin's (1961/2008) Theory of Change, and it is supported by Schein's (1996) model for managed change.

The process a person moves through while learning is important for educational administrators to understand so they can provide support to faculty integrating a new innovation into their practice. Learning involves changing behavioral or cognitive processes, and it involves anxiety (Cayne, 2014). Cayne (2014) explored the unknown that is present in all learning situations and encouraged relational learning as a way to open the learner up to the unknown:

Learning can be seen as a response to the unknown, becoming a way of closing down these kinds of anxiety-inducing experiences, through attempts to know, whilst paradoxically it is also experience of the unknown that opens up possibility including new ways of knowing. (p. 225)

According to Cayne, it is this attention to the unknown and the feelings of anxiety that encourage learning. The participants were exposed to their unknown by using a teaching innovation they were unfamiliar with, and this caused anxiety. As a result, they sought to know, and they worked through becoming prepared.

The participants in this study moved through a change in their understanding about HFS as they integrated it into their teaching practice. All of the participants experienced these stages at some point in the integration of HFS. When they were overwhelmed with unknowing, they tried to become prepared; and when they were frustrated, they began to push back. The participants sought support through communication with others, and they were able to move forward as they became comfortable with that stage of the learning process.

Part C: Synthesis

In seeking to understand the experiences of nurse faculty who were required to integrate HFS into their teaching practice, the following question guided the research, "What are the lived experiences of nurse faculty who are required to integrate HFS into their teaching practice?" The following six sub-questions were addressed:

1. How do participants' attempt to develop the knowledge, skills, and attitudes they perceive are necessary to teach with HFS?

2. What are participants' beliefs about using HFS as part of clinical practice education?
3. To what extent do participants perceive they are prepared to teach using HFS?
4. What factors do participants perceive might help or hinder their use of HFS?
5. How do participants perceive the role of HFS in their teaching practice?
6. How do participants perceive they are influenced by their CoP?

The Conceptual Framework

In Chapter 2, a conceptual framework was developed depicting the experiences of nurse faculty integrating HFS into their teaching practice. The conceptual framework demonstrated the influence nurse faculty beliefs about clinical education, the context of HFS in clinical education, and clinical education practices had on the experiences of integrating HFS into practice. Three dimensions were proposed:

1. The nurse faculty dimension – the interaction between the beliefs about HFS and clinical practice education, and clinical education practices (*Questions 1, 2, 3, and 4*).
2. The social learning and CoP dimension – the interaction between the beliefs about HFS and clinical practice education, and the context of HFS in clinical practice education (*Questions 2, 4, and 6*).
3. The Organizational policies and HFS characteristics dimension – the interaction between the clinical education practices and the context of HFS in clinical education (*Questions 4, 5, and 6*).

The Nurse Faculty Dimension. Bandura (1977) showed human agency provided direction and coherence by helping people set goals and anticipate outcomes; and self-efficacy influenced a person's belief in their ability to complete a certain action. These two concepts were determined in Chapter Two to be important to understanding the interaction between nurse faculty beliefs about HFS and clinical practice, and their actual teaching practices. In this research, the themes supported the concepts of human agency and self-efficacy. The themes of *striving for self-efficacy* and *struggling to maintain autonomy* demonstrated the importance of considering the nurse faculty dimension.

The Social Learning and CoP Dimension. Bandura (1986) stated persons are capable of learning from their own experiences and the experiences of others around them. In a CoP, people interact through culture, innovation, and context (Hansman, 2008). In Chapter Two, these two concepts were indicated to be important in the interaction between beliefs about HFS and clinical

practice education, and the context of HFS in clinical practice education. In this research, the theme of *being part of a CoP* demonstrated the influence a CoP may have on integrating a new innovation into teaching practice.

The Organizational policies and HFS Characteristics Dimension. The final dimension described in Chapter Two was the interaction between education practices and the context of HFS in clinical practice education. The characteristics of HFS and the context in which it is situated at Saskatchewan Polytechnic have implications for integrating it into teaching practice. Because the nurse faculty in this research were required to integrate HFS into their teaching practice, this dimension was apparent throughout the themes.

Although these dimensions were an important framework for understanding the experiences of integrating HFS into teaching practice, they did not account for the personal process of learning a new innovation. This research identified a cyclical process of integrating HFS into teaching practice. This process included unknowing – becoming prepared, frustration – pushing back, communicating – seeking support, and moving forward – becoming comfortable. The concept of unknowing was introduced in nursing as a way of knowing which leads to an openness to learning (Munhall, 1992). Cayne (2014) described the importance of communication as a means to unknowing. Mezirow (1997) stated transformative learning can be facilitated by participation in discourse. Transformative change requires an unlearning to occur simultaneous to the learning of something new (Schein, 2010). Therefore, administrators who are integrating a new innovation can foster unknowing and transformative learning by providing opportunities for learners to engage in discussions about it which may help change their frame of reference, or ideas about teaching practice.

Frustration was a common experience for the participants in this research study. Schein (1996) stated frustration was common in learning. Anxiety and frustration can increase the likelihood of learning a new innovation as long as the learner feels psychologically safe (Schein, 1996). Schein (2010) indicated anxiety can be caused by fear of power or position, incompetence, punishment for incompetence, personal identity, and loss of group membership. Administrators can create psychological safety by providing a positive vision, formal training, learner involvement, informal training through teamwork, practice, positive role models, support groups, and systems consistent with the new way of working (Schein, 2010). Frustration and anxiety may increase the likelihood of learning, but only if the learner feels safe.

Communication is an important component of transformative change. Schein (2010) suggested administrators give learners an opportunity to engage in dialogue regarding the change. Mezirow (1997) indicated participation in discourse facilitated learning. The participants in this research sought support through communication with their peers and with experts. This helped them to move forward. Even so, continued discourse is important to reinforce new learning, or the learner may revert back to previous frames of reference (Schein, 1996). Therefore, administrators must be prepared to continue the discourse in order to maintain the new learning.

Re-Visiting the Conceptual Framework

Although the conceptual framework was appropriate for depicting the experiences of integrating HFS into teaching practice through the interaction of beliefs, behaviors, and environment, it did not account for the processes of learning or change. The process identified in this research was: unknowing; frustration; communicating; and moving forward. This process is part of the experience of integrating a new innovation into teaching practice and is depicted in Figure 5-1.

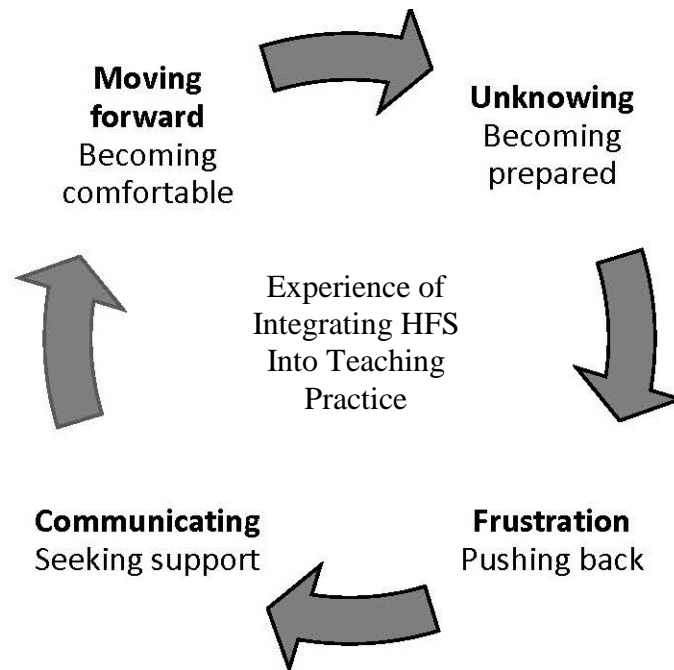


Figure 5-1. The experience of integrating a new innovation into teaching practice.

The process of learning the new innovation is depicted as a cycle because it may occur more than once within the learning period. Being in a state of unknowing encourages the learner to become prepared. As they start to experience the innovation, they may become frustrated and push back. If the learner feels psychologically safe, they will seek support and receive support through communication which will enable them to become comfortable with the learning and move forward with the innovation. As they become more comfortable and move forward, they may encounter a new experience with the phenomenon and the cycle begins again.

The learning process occurs within the larger framework depicted in Chapter Two. This framework is still important in the overall experience of integrating HFS into teaching practice. The person is represented in the beliefs about HFS and clinical practice education; the environment is represented by the context of HFS in clinical practice education; and the behavior or action is represented as teaching practices. The interaction between the behavior and the person is represented as a double-sided arrow and was experienced through human agency and self-efficacy by the participants. The interaction between person and environment is represented as a double-sided arrow and was experienced through social learning and CoPs. Finally, the interaction between environment and the behavior is depicted as a double-sided arrow and was experienced through organizational policies and HFS characteristics.

The person, behavior or action, and environment are depicted in the outside circle and represent the underlying factors related to integrating HFS into teaching practice which are part of the overall experience. The learning cycle of unknowing, frustration, communication, and moving forward are depicted in the inner circle and represent the specific process of learning that occurs as a result of having to integrate HFS into teaching practice. Thus, a modified conceptual framework that includes the process a person experiences when integrating a new innovation into their teaching practice is shown in Figure 5.2.

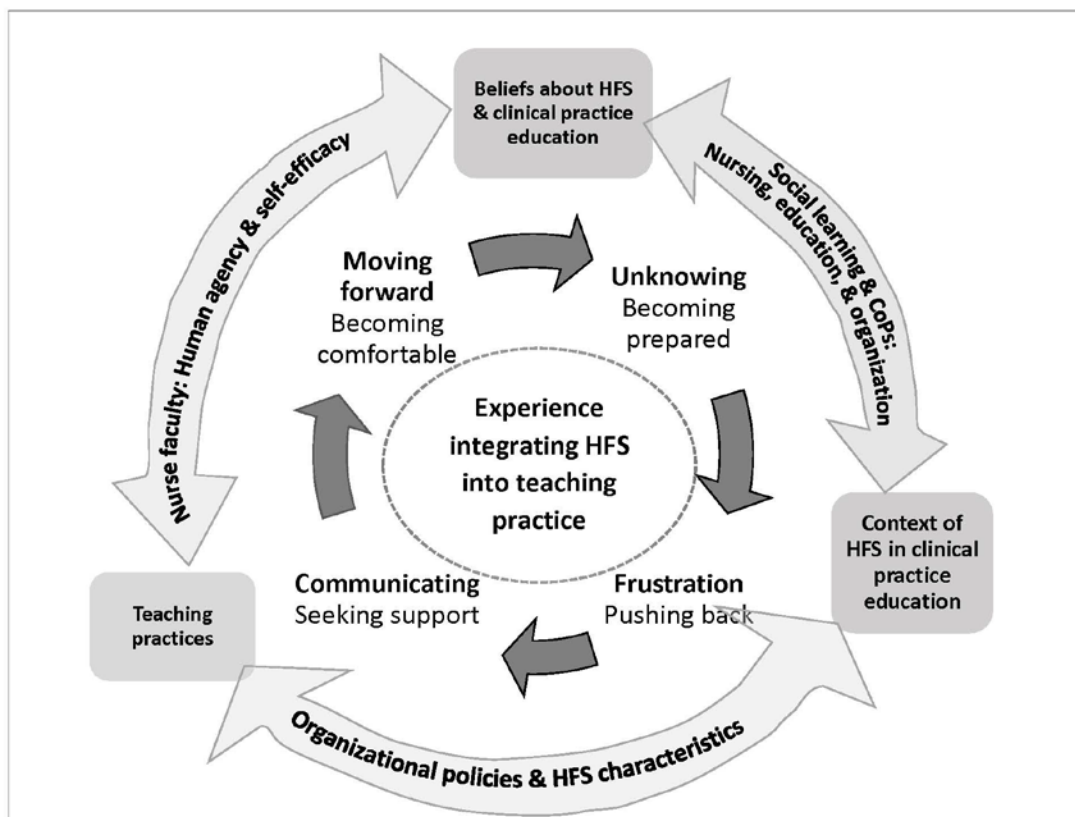


Figure 5-2. Conceptual framework: the experience of integrating HFS into teaching practice.

In this section, the new information gained from the research was integrated with the literature discussed in Chapter Two. The process of integrating a new innovation into teaching practice was depicted as a cycle that may occur more than once. This process is at the centre of the experience. The interaction between person, behavior, and environment was still considered important to the overall experience. As a result of the new information, a new conceptual framework was developed to represent the experience of integrating HFS into teaching practice.

Summary of Chapter

In this chapter, the analysis, interpretation, and synthesis of the research findings were discussed. Six themes were identified arising from the textural-structural descriptions of the personal experiences. The theories identified in Chapter Two supported these themes. The participants moved through four stages while integrating HFS into their teaching practice: (1)

unknowing, (2) frustration, (3) communicating, and (4) moving forward. These stages were supported by new literature from theories of change and learning.

The research questions were answered by the study and the dimensions of the conceptual framework were supported by the findings. The stages the participants went through while integrating HFS into their teaching practice required a modification of the original framework. Therefore, a modified conceptual framework was developed.

CHAPTER 6 IMPLICATIONS, RECOMMENDATIONS, AND REFLECTIONS

Introduction

High-fidelity simulation (HFS) is quickly becoming a central component of undergraduate nursing education. In Chapter Two, an exploration of the literature found the benefits to student learning with HFS; there is very little research on nurse faculty experiences with integrating it into their teaching practice. In order for successful integration of HFS into nursing education, nurse faculty need to be part of the process. The purpose of this phenomenological study was to explore the lived experiences of nurse faculty who were required to integrate HFS into their teaching practice. By understanding the nurse faculty experience, educational administrators are in a better position to integrate HFS into the undergraduate nursing curriculum. In this chapter, the implications, recommendations, and reflections from the research are presented.

Theoretical Implications

Although it has been some time since the beginning of this study, a review of the literature provided reassurance that this research remains timely. The National Council of State Boards of Nursing released the findings of a national simulation study. This longitudinal, randomized, controlled trial found there was no difference in professional exam pass rates, clinical competency, or comprehensive nursing knowledge when up to 50 percent of traditional clinical practice education was replaced with HFS (Hayden, Smiley, Alexander, Kardong-Edgren, & Jeffries, 2014). This high-profile American study will have implications for undergraduate nursing education and the use of HFS. It is of utmost importance educational administrators understand the experiences of nurse educators who will have to integrate HFS into their teaching practice.

Nursing practice is changing, and nursing education must change to meet the growing demands of the profession. HFS is an educational innovation that can support student learning and improve nursing skills and knowledge. In order for students to benefit from HFS, nurse faculty must be able to teach with it. This research demonstrates the importance of understanding the nurse faculty experiences with HFS in order to ensure it is being used in a manner that will enhance student learning.

To explore the experiences of nurse faculty integrating HFS into their practice, a conceptual framework was developed. Seventeen nurse faculty who had integrated HFS into their practice were interviewed. From the analysis of the interviews, an additional component

was added to the framework. The conceptual framework proposed that nurse faculty go through a cycle of unknowing, frustration, communicating, and moving forward as well as being influenced by the interaction between the person, environment, and behavior. This study adds to the nursing education body of knowledge and the educational administration body of knowledge. It also informs organizational learning knowledge and supports Schein's (2010) stages of organizational learning.

Revisiting the Literature

This research may have theoretical implications related to the literature in Chapter 2. The diffusion of innovations theory, the theory of planned behavior, and social cognitive theory helped to inform the research and the research results may, in turn, inform or support the theories. The theories are revisited with the research results in mind.

Diffusion of Innovations. Through DoI theory, Rogers (2003) described the process an organization goes through when integrating a new innovation. The focus of this theory is the institutional processes rather than the individual processes, and this research focused on the individual experiences. The five stages of the decision-making process were reflected in the theme *adopting HFS as a teaching innovation* as the participants went through a process of *acceptance, understanding, and reinventing*. Although these themes do not directly reflect the decision-making process described by Rogers, they do appear in his descriptions of the phases. Rogers also categorized people as innovators, early adopters, early majority, late majority, and laggards with innovators having a short decision-making period and laggards having an exceptionally long decision-making one. In this research study, the decision-making time did not have a direct effect on the participants' use of HFS because they were required to use it, but it may have had an effect on their experiences with integrating it. This was not identified in this study and may be an area for further research.

Theory of planned behavior. In the TPB, Ajzen (1985) described influences on personal belief systems and how they impact a person's attitude, the subjective norms, and their perceived behavioral control. The participants in this study were required to perform the behavior, but the impact of their beliefs on the behavior were described in their transcripts. For instance, *conflicting beliefs* was a sub-theme under *struggling to maintain autonomy*. The result was *pushing back* against the process of integrating HFS into practice. Thus, this research does reflect the importance of personal belief systems on attitude towards a behavior. The participants

did not perceive they had control over whether or not they used HFS and believed their CoP supported the use of HFS in nursing education. These two constructs were important in the participants' performance of the behavior. Therefore, this research supported the theoretical implications of the TPB.

Social Cognitive Theory. Bandura (1997) described human behavior as a reciprocal interaction between the person, the environment, and the behavior. The constructs of human agency, self-efficacy, and social learning within CoPs are important to understanding these interactions. The research results provided further evidence of the importance of these constructs through the themes *striving for self-efficacy*, *struggling to maintain autonomy*, and *being part of a community of practice*. SCT informed the development of the conceptual framework in Chapter Two and continued to be relevant in the modification of the conceptual framework in Chapter Five which integrated the research results.

Practical Implications

This research has practical implications for educational administrators who are integrating a new teaching innovation into a curriculum. The over-riding implications were derived from the analysis, interpretation, and synthesis of the findings. There is a need for support and resources, psychological safety, ongoing communication, and fostering pride.

Support and Resources

The first major finding of this research was that most of the participants felt they were unprepared to teach using HFS. A conclusion to be drawn from this finding is nurse faculty need support and resources in place prior to teaching using HFS. In order to do so, many faculty indicated they would need time to learn and time to prepare. There was also a strong indication that expert faculty were necessary for participants to rely on, and that the CoP provided both mentorship and support. Adequate scheduling and time in the SLC needs to be available.

Many of the faculty reported inadequate time to learn the innovation. They suggested more time in the SLC to explore, watch, and become familiar with the process. One faculty suggested time to buddy with an expert before having to teach with HFS. Many of the faculty did not have previous experiences to relate to, and they proposed a time of observation and watching to see how HFS is done. A number of faculty felt that, with their other obligations, there was not

enough time to learn to use the innovation, and they wanted time allotments in their schedules for learning. Time to learn was important to this group of faculty.

Nurse faculty felt they needed time to prepare. Most of the participants spent a considerable amount of time preparing for the HFS scenario as follows: reading all the material the students were to read; reviewing the nursing skills the students might be using; and reviewing information specific to HFS. They indicated this information must be available ahead of time. Participants advocated for more instruction and more time to learn the materials.

Most of the participants found that the expert faculty in the SLC were a good resource for learning HFS. Many participants insisted expert SLC faculty were necessary to provide direction, guidance, and support when needed. Some nurse faculty would like the SLC faculty to teach with them, rather than being left to teach on their own. It was indicated in the transcripts that SLC faculty can provide a constant presence ensuring students received consistent experiences. Some participants indicated the importance of developing a positive relationship with the SLC technicians to provide support through the HFS scenario. Time spent with the SLC faculty and staff would help familiarize the nurse faculty with the environment and with the process of HFS.

The participants were also able to get support from their CoP. They felt the positive attitudes of their peers inspired them to use HFS. Many participants felt their peers helped engage other faculty by mentoring and showing enthusiasm for using HFS. Other participants found they needed more support from peers.

Scheduling time in the SLC was difficult. Many participants discussed the importance of getting into the SLC at the right time in the clinical rotation. Some of the participants had difficulty getting time, and they felt the time scheduled was not conducive to student learning. Most of the faculty wanted to choose the time they would go to the SLC, and they had preferences for when to take their students for HFS during the clinical rotation. Being able to schedule HFS when it best suited their clinical schedule was very important to nurse faculty.

Psychological Safety

The second major finding of the research was the importance of feeling psychologically safe while learning a new teaching innovation. As the participants moved through the process of unknowing and frustration, it was easier if they felt safe. Some participants felt they were working at a level for which they had not been trained. This resulted in anxiety and frustration as they attempted to integrate HFS into their practice.

The participants reported a sense of unknowing about what to expect. They were teaching in an unfamiliar environment, and they were unfamiliar with the HFS process. Many of them feared looking bad in front of their students; and their uncertainty resulted in hesitancy, mixed feelings, and being overwhelmed. Most participants felt it was important to be an expert in the area they were teaching in order to feel psychologically safe, so they needed to be prepared ahead of time.

Another concern of some participants were the unfamiliar and strict rules in the SLC. Some of them found these rules to be onerous. Many participants reflected on whether there was a need for these rules, and they felt the rules added to their discomfort in the SLC. Many of the participants reported feelings of being an outsider and being unfamiliar with the environment. This may have contributed to their discomfort and anxiety in the SLC. The participants who felt comfortable in the SLC found the experience enjoyable, possibly because they were familiar with the environment and with the rules.

Feeling psychologically safe while learning a new teaching technology may help nurse faculty overcome their fear and anxiety. Motivation and support from both the CoP and the institution may provide a safe environment in which to learn. The participants who reported a good experience felt supported and mentored by their peers and by the SLC faculty. When a participant felt they were not supported by the CoP or by the institution, they experienced anxiety and feelings of inadequacy. They felt they either didn't have the appropriate background to teach using HFS or did not have an understanding of the technology. In both of these cases, the participants did not feel psychologically safe while integrating HFS into their teaching practice.

Ongoing Communication

Throughout the narratives, the importance of communication was implied even when not directly stated. In the analysis and interpretation, the importance of ongoing dialogues and training sessions was raised as a means for the institution to communicate about HFS to the nurse faculty. Communication with colleagues within a CoP was indicated as an important part of integrating HFS into teaching practice.

Ongoing dialogues about HFS may help with its integration into the undergraduate nursing curriculum. Many of the participants indicated they were unprepared and unfamiliar with their

role in HFS. Ongoing discussion of the faculty role throughout the term may help develop comfort and understanding of this role.

Both informal and formal training sessions were provided by nursing administration, although many of the participants still felt unprepared to teach with HFS. Many participants did not take part in formal training. This may have been due to the timing of the training sessions or their discomfort with the idea of teaching with HFS. Using HFS in clinical practice education was contrary to what some participants believed was a valuable learning experience for the students, although most of the participants felt HFS was valuable after they had integrated it into their teaching practice.

Communication within the CoP was mentioned by the participants as being important to integrating HFS. Many participants commented on their peers' opinions about HFS, which either made them feel more comfortable about using HFS, or resulted in them feeling uncomfortable about their own beliefs. One of the participants described her struggle with her peers' negativity and the effect it had on her experience. Another participant found her peers inspired her to use HFS. The importance of communication within the CoP in influencing the integration of HFS was identified in this study.

Fostering Pride

Many of the participants described a sense of pride in the institution, the SLC, the adoption of HFS, and achievement with HFS. The analysis and interpretation of the results also indicated the importance of pride in the acceptance of a new teaching innovation. The participants who felt a sense of accomplishment were more likely to support HFS. Those who shared the vision of HFS with nursing administrators were more likely to be positive about integrating it into their teaching practice.

The SLC was a source of pride for the participants. Many felt comfortable there because it was realistic and very similar to a hospital setting. The participants were impressed with the resources and the work that went into developing it. Some participants commented on how well designed it was, and they appreciated all the work that went into setting it up. Many participants used the word "awesome" when describing the SLC. The appreciation and pride nurse faculty had for the SLC may have helped make their experiences better.

A couple of the participants who were advocates for HFS in nursing education spoke with pride about their accomplishments. One nurse faculty helped design a scenario that was

appropriate for her student group and was proud about being involved in scenario development. Some nurse faculty integrated HFS fully into their course. Even though they were discouraged by the time commitment, they felt rewarded that the administrators of the program were pleased with their accomplishments. The participants who were able to speak about their accomplishments with HFS were more likely to have a good experience.

Many of the participants shared the School of Nursing vision of integrating HFS into the curriculum. These nurse faculty felt the administrators were positive and promoted buy-in. Some of the participants were proud of the institution for building the SLC. Pride may have been a positive motivator for faculty adopting the new teaching innovation.

Recommendations

Recommendations based on the findings are made for nurse faculty adopting a new teaching innovation, education administrators integrating a new teaching innovation into the curriculum, and future research.

Recommendations for Nursing Faculty

1. Take the time to prepare. Read literature and research on HFS. Watch videos about how to run a scenario and spend time in the SLC becoming comfortable with the environment.
2. Find a mentor who is comfortable with HFS. Go with your mentor into the SLC and observe an HFS scenario. Expert faculty should offer to mentor new faculty.
3. Participate in discussion blogs or team meetings about HFS. Go to training sessions offered by the institution. Discuss your learning needs with administrators.
4. Advocate for the time you need to become comfortable and competent.

Recommendations for Educational Administrators

1. Provide ongoing education and support to nurse faculty. Offer regular training sessions at different expertise levels throughout the year. Plan educational activities, both in advance of faculty needing to integrate HFS into practice and again as they move through the different levels of engagement with HFS. Provide faculty with research that promotes pedagogy and understanding of best practices in order to encourage understanding and use of HFS.

2. Involve nurse faculty in discussions from the initial investment in HFS. Engage a core group of nurse faculty to provide mentorship and support to other faculty while they are learning HFS. Develop and encourage leaders in HFS theory and practice. Provide time and support for reflection and discussion about teaching experiences with HFS.
3. Understand that each faculty member has a different level of experience and understanding of the technology. Therefore, educational opportunities must be offered for different levels of expertise, and some faculty may need more support than others. Provide a psychologically safe learning environment where faculty can express their discomfort and receive additional supports, if needed.
4. Provide time away from other responsibilities for the faculty to learn and become comfortable. Build time into faculty schedules for observing or buddying in the SLC.
5. Set up formal mentoring opportunities and encourage informal mentoring for faculty new to HFS.
6. Foster pride by acknowledging accomplishments of individual faculty or groups who have shown initiative or attained a specific level of skill.

Future Research

The researcher recommends further studies be conducted with nurse faculty to gain a more comprehensive understanding of the experiences of integrating HFS into teaching practice. A survey of a larger sample of nurse faculty should be conducted to assess the extent to which similar findings might be uncovered. The following areas are suggestions for further research:

1. There were some indications in the transcripts of being an outsider in the SLC. This emerging theme should be explored more fully to determine if this is a common feeling among nurse faculty who take their students into a separate teaching area such as the SLC.
2. Another area not well covered by this study was the effect previous experiences with technology had on the experiences of integrating HFS into teaching practice. It did not appear to have a direct effect on the learning of HFS, but it may have had an effect on faculty attitudes towards integrating it into their teaching practice. Being an early adopter or a late adopter of technology may have an effect on the experience of adopting a teaching innovation.

3. A conceptual framework was developed based on the analysis and interpretation of the study results. More research is required to assess the usefulness of the framework in describing the experience of integrating HFS into teaching practice.
4. This researcher recommends repeating this study in other institutions or across institutions and at different times while diffusing an innovation to develop a broader understanding of the experiences of nurse faculty integrating HFS into teaching practice,
5. This type of research would be of interest to other professions. An exploration of the integration of new teaching innovations in other fields and the experiences of instructors in those fields would add to knowledge related to adoption and integration of teaching innovations.

Reflections

The participants in this study entrusted the researcher with their thoughts and feelings about their experiences integrating HFS into teaching practice. This was a heavy responsibility. Would their experiences be accurately interpreted? Would they agree with the recommendations and conclusions? These feelings were compounded by conducting insider research. Representing colleagues who placed their trust in the researcher as they shared both their uncertainties and their accomplishments was a weighty responsibility. Doing insider research added another dimension to the research process.

Reflections on Conducting Insider Research

The experience of conducting insider research was very rewarding. The support and interest from colleagues about the research was inspiring. Due to insider status with the potential research participants, a decision was made to include all nurse faculty who responded positively to the initial email invitation. The importance of this decision was emphasized by the following: Some time after the invitations were sent out, a colleague asked why she had not been invited to participate. It was discovered the email had gone to a spam folder and the colleague had been invited. Thus, it was very important to give all nurse faculty who met the inclusion criteria an opportunity to participate in the research so that everyone felt their experiences were valued.

There were difficulties associated with insider research. It was difficult to maintain anonymity of the participants, but participants were informed of this prior to entering the study.

Most of the interviews were conducted outside of the workplace; however, there were participants who found it easier to have the interview at work. There was a lot of curiosity about the research and how it was proceeding. Although this interest was very rewarding, it also created an awareness of how difficult it was to maintain anonymity. The research stimulated discussion about experiences with HFS which may have resulted in some participants being identified by others, and participants would drop by the office during work hours to discuss HFS or the research project.

Knowing the context of HFS at Saskatchewan Polytechnic may have provided the researcher with a better understanding of the phenomenon. Throughout the analysis and description of the participants' experiences, the researcher paid particular attention to bracketing any underlying assumptions and beliefs. However, during the interpretation and synthesis of the data, a deeper and richer understanding may have developed due to the researcher's familiarity with the context of HFS at Saskatchewan Polytechnic.

In summary, conducting insider research was very rewarding, and it allowed more insight and understanding into the phenomenon; but it resulted in difficulties maintaining anonymity, and a separation of work and this research study. The openness and willingness of the participants to discuss their experiences was inspiring. It has strengthened personal relationships because of the knowledge that was shared, but it may also have had the opposite effect if the participants felt they were not represented fairly. Every one of the participants provided valuable information to this study.

Reflections of a Phenomenological Researcher

It is crucial to reflect on the experience as a novice phenomenological researcher so that others may determine where difficulties were encountered and what techniques were employed to overcome them. The interviews were easy to conduct. The atmosphere was comfortable and there was a familiarity with the participants. As an insider, the researcher was able to use common terminology, and there was an understanding between the researcher and the participant of the workplace culture. The interviewees were willing to speak freely and openly about their experiences.

The methodology used for this research posed some challenges. Moustakas' (1994) modified Van Kaam method of analyzing the transcripts called for each transcript to be analyzed separately, ending in a description of each participant's experience. Initially, an attempt was

made to transcribe and analyze the interviews as they were completed. This resulted in changing the way questions were asked at the next interview and felt as though the participant was being influenced based on the understanding gained from the previous interview. Based on the methodology chosen, it was determined that all the interviews should be conducted prior to any transcription or analysis occurring. As a result, the recorded interviews were set aside until all the participant interviews were completed, then transcription and analysis commenced.

It was difficult to ensure each analysis was accurate. As the interviews were analyzed, the same themes began to come up over and over again. This required a pause between transcripts so the next interview could be approached without expectations of what would be found. The process of analyzing the interviews took much longer than expected. The transcripts were returned to again and again, each time looking at the narrative from a different perspective. A lot of time was spent with the interview data in order to feel comfortable that the analysis was accurate. Even though this process was time-consuming, it was the most enjoyable part of the study. It was exciting to experience the data resulting in themes and the essence of the experiences becoming known.

The interviews were all transcribed by the researcher which provided extra exposure to the data and the ability to write down thoughts about the experiences while they were being transcribed. The process of transcribing allowed the researcher to hear the lived experiences of the participants again, thus developing an understanding of the experiences without the added pressures and distractions of interviewing; such as paying attention to the audio recorder, focusing on interview skills, prompting conversation, and being distracted by unrelated details.

The researcher's background with the studied phenomenon allowed a reliving of those experiences which were written down in the field notes and in reflections by the researcher so they could be easily identified and set aside (bracketed). The experience of conducting this research study was akin to what the participants had experienced when integrating HFS into their teaching practice. The researcher went through a cycle of unknowing-frustration-communicating-moving forward at each step of the dissertation process. This provided an awareness and understanding of the participants' experiences, and it was an "ah-ha" moment. Upon reflection, a transformational change in understanding of phenomenology and of this phenomenon had occurred.

Concluding Comment

In Saskatchewan Polytechnic School of Nursing Saskatoon Campus, being nurse faculty integrating HFS into teaching practice meant engaging in professional learning within a CoP while striving for self-efficacy and trying to maintain autonomy. It meant feeling either frustrated and powerless at times, or confident and proud. Teaching with a new technology meant engaging in a cycle of unknowing, frustration, communication, and moving forward.

Being a phenomenological researcher meant reflecting on the participants' experiences and opening up to new experiences and understandings about the phenomenon. It meant learning the phenomenological process and moving through that process with each participant. It meant seeking guidance and support when unsure or confused. It meant being frustrated at times and excited at others, and it meant developing the confidence to write about the findings and conclusions and share them with others. As a result, a deep understanding of the experiences of nurse faculty integrating HFS into their teaching practice was developed.

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APPENDICES

Appendix A: Ethics Approval



UNIVERSITY OF
SASKATCHEWAN

Behavioural Research Ethics Board (Beh-
Certificate of Approval

PRINCIPAL INVESTIGATOR
Michelle Prytula

DEPARTMENT
Educational Administration

BEH#
13-251

INSTITUTION(S) WHERE RESEARCH WILL BE CONDUCTED
SIAS (Saskatchewan Institute of Applied
Science and Technology)

STUDENT RESEARCHER(S)
Madeline Press

FUNDER(S)
INTERNALLY FUNDED

TITLE
The Lived Experience of Nurse Educators Who are Required to Integrate Clinical Simulation Scenarios into Their Teaching Practice:
A Phenomenological Study

ORIGINAL REVIEW DATE	APPROVAL ON	APPROVAL OF:	EXPIRY DATE
	04-Sep-2013	Application for Behavioural Research Ethics Review Sample Mass Email Semi Structured Interview Questions Documentation for Experience Coder Participant Consent Form Demographic Questionnaire Transcript Release Form	03-Sep-2014

Full Board Meeting Delegated Review

CERTIFICATION

The University of Saskatchewan Behavioural Research Ethics Board has reviewed the above-named research project. The proposal was found to be acceptable on ethical grounds. The principal investigator has the responsibility for any other administrative or regulatory approvals that may pertain to this research project, and for ensuring that the authorized research is carried out according to the conditions outlined in the original protocol submitted for ethics review. This Certificate of Approval is valid for the above time period provided there is no change in experimental protocol or consent process or documents.

Any significant changes to your proposed method, or your consent and recruitment procedures should be reported to the Chair for Research Ethics Board consideration in advance of its implementation.

ONGOING REVIEW REQUIREMENTS

In order to receive annual renewal, a status report must be submitted to the REB Chair for Board consideration within one month of the current expiry date each year the study remains open, and upon study completion. Please refer to the following website for further instructions: http://www.usask.ca/research/ethics_review/

XXXXXXXXXX

Beth Bilson, Chair
University of Saskatchewan
Behavioural Research Ethics Board

Please send all correspondence to:

Research Ethics Office
University of Saskatchewan
Box 5000 RPO University, 1602-110 Gymnasium Place
Saskatoon SK S7N 4J8
Telephone: (306) 966-2975 Fax: (306) 966-2069

Appendix B: Participant Consent Form

Project Title: Nurse Faculty Experiences with Integrating Human Patient Simulation into Clinical Practice: A Phenomenological Study

Researcher: Madeline M. Press, PhD candidate
XXXXXXX
XXXXXXX

Supervisor: XXXXXXXXXXXXXXXXXXXX
XXXXXXX
XXXXXXX

Purpose(s) and Objective(s) of the Research:

The purpose of this research is to explore nurse faculty experiences with integrating human patient simulation into their clinical practice.

Procedures:

You will be asked to participate in one or two interviews lasting 30 minutes to one hour. During the first interview, we will discuss your experiences integrating simulation into your clinical practice. A second interview may be necessary to clarify a point in the discussion, to further understanding of a concept, or to check my understanding of your experiences. This second interview may take the form of an email, letter, or visit. With your consent, a voice recorder will be used to record conversations.

Please feel free to ask any questions regarding the procedures and goals of the study or your role.

Potential Risks:

You may feel uncomfortable describing your experiences with integrating simulation into clinical practice within the work setting. There may also be a risk of loss of anonymity if you are identified as being interviewed by the researcher in the workplace. Therefore, interviews will take place outside of SIAST in a non-threatening environment of your choice.

As you and I engage in talking about your experience, you may feel unexpected emotions. If this should occur and you are uncomfortable with the conversation, you may withdraw at any time. Please be aware that you should only answer those questions that you are comfortable answering.

Potential Benefits:

By participating in this research, you may contribute to nursing knowledge about HPS and administrative knowledge about integrating HPS into a nursing curriculum. You may also benefit from the opportunity to describe your experiences and to explore your understanding of the role of HPS in clinical nursing education. Please be aware that these benefits are not guaranteed.

Compensation:

In order to defray the costs of transportation and/or inconvenience associated with your participation in the study, each participant will receive an honorarium of \$15.00.

Confidentiality:

The research will be part of my dissertation for my doctoral studies. I will also publish research articles and presentations. A master list will be developed will link the participant with an anonymous identifier. The anonymous identifier will be used for all recorded and transcribed interview data. The interviews will be recorded with a voice recorder, and I will take notes throughout the interview. However, you may request that the voice recorder be turned off at any time during the interview.

Your personal interview script will remain confidential with the following exception. During the write-up of the data, quotations from interview transcripts may be presented to support the results. The source of the quotation will remain anonymous or a pseudonym will be used; however, you may identify it as your data. Because the participants for this research project have been selected from a small group of people, all of whom are known to each other, it is possible that you may be identifiable to other people on the basis of what you have said.

After your interview, and prior to the data being included in the final report, you will be given the opportunity to review the information you have provided, and to add, alter, or delete any of the information you do not agree with.

If you withdraw from the study at any time prior to completion of data collection, all data previously provided by you will be destroyed and will not be used in the study. Any documents with identifying information on it, such as the consent form and master participant list, will be kept separate from the data collected. The master participant list will be destroyed beyond recognition after data collection is complete.

Storage of Data:

The data for all uses will be handled in compliance with the University of Saskatchewan Research Ethics Office. I will keep the data from this study in a locked cabinet in my secure office for a minimum of five years following completion of the research project. After this time the data will be destroyed beyond recognition and in a way that ensures privacy and confidentiality.

Right to Withdraw:

Your participation is voluntary and you can answer only those questions that you are comfortable with. You may withdraw from the research project for any reason, at any time without explanation or penalty of any sort. Whether you choose to participate or not will have no effect on your position or how you will be treated.

Should you wish to withdraw, you will be able to do so at any time without penalty. Your right to withdraw from the study will apply until the data has been pooled and the master participant list has been destroyed. After this date, it may not be possible to withdraw your data.

Follow up:

To obtain results from the study, please contact the researcher.

Questions or Concerns:

If you have any questions or concerns, please contact the researcher using the information at the top of page 1. This project has been approved on ethical grounds by the University of Saskatchewan Behavioral Research Ethics Board on September 4, 2013. Any questions regarding your rights as a participant may be addressed to the committee through the Research Ethics Office ethics.office@usask.ca (306) 966-2975. Out of town participants may call toll free (888) 966-2975.

Consent:

Your signature below indicates that you have read and understand the description provided.

I have had an opportunity to ask questions and my questions have been answered. I consent to participate in the research project. A copy of this Consent Form has been given to me for my records.

I grant permission to be audio taped: Yes: ___ No: ___

_____ *Name of Participant* _____ *Signature* _____ *Date*

_____ *Researcher's Signature* _____ *Date*

A copy of this consent will be left with you, and a copy will be taken by the researcher

Appendix C: Documentation of Experienced Coder

To whom it may concern;

RE: The lived experience of nurse educators who are required to integrate clinical simulation scenarios into their teaching practice: A phenomenological study.

I have reviewed the coding for two interviews in the above-named research project. As a researcher with experience in coding, I verify that the coding is accurate.

Signature

Printed name

Date

Appendix D: Sample Mass Email

Dear Nurse Faculty;

As a part of my doctoral studies, I am doing a research project entitled, “The lived experience of nurse faculty who are required to integrate clinical simulation scenarios into their teaching practice: A phenomenological study.”

The purpose of this research is to explore nurse faculty experiences with integrating human patient simulation (HPS) into clinical practice. I am looking for volunteers to participate in this research project.

If you give your consent to participate in this study, you will be asked to participate in one or two interviews lasting 30 minutes to one hour. During the first interview, you will complete a brief demographic questionnaire and we will discuss your experiences integrating simulation into your clinical practice. A second interview may be necessary to clarify a point in the discussion, to further understanding of a concept, or to check my understanding of your experiences. The second interview may take the form of an email, letter, or visit. With your consent a voice recorder will be used to record conversations.

All interviews will take place outside of SIAST in a place where you feel comfortable and an honorarium of \$15.00 will be given to each participant to cover costs associated with travel and parking.

If you choose to participate, please contact me directly as follows:

Email: xxxxxx

Phone #: xxxxxx

Thank you for your consideration,
Madeline M. Press, Doctoral Candidate

Appendix E: Demographic Questionnaire

Only answer those questions you feel comfortable with answering:

1. Please indicate your gender

- Male Female

2. Please enter your age category:

- 20-29 years 50-59 years
 30-39 years 60-69 years
 40-49 years

3. How long did you practice as a nurse prior to becoming a nurse faculty?

- Less than 2 years 11 to 15 years
 2 to 5 years 16 to 20 years
 6 to 10 years Over 20 years

4. How long have you been a nurse faculty?

- Less than 2 years 11 to 15 years
 2 to 5 years 16 to 20 years
 6 to 10 years Over 20 years

5. Please indicate your highest level of education:

- Diploma Bachelor's Degree Master's Degree Doctorate

Appendix F: Transcript Release Form

Title: The lived experience of nurse faculty who are required to integrate clinical simulation scenarios into their teaching practice: A phenomenological study.

I, _____, have reviewed the complete transcript of my personal interview in this study, and have been provided with the opportunity to add, alter, and delete information from the transcript as appropriate. I acknowledge that the transcript accurately reflects what I said in my personal interview with Madeline Press. I hereby authorize the release of this transcript to Madeline Press to be used in the manner described in the Consent Form. I have received a copy of this Data/Transcript Release Form for my own records.

Name of Participant

Date

Signature of Participant

Signature of researcher

Appendix G: Individual Textural and Structural Correlates

ELLEN	
Textural Correlates (What?)	Structural Correlates (How/Why?)
<p><i>Core concept</i></p> <ul style="list-style-type: none"> • Being unfamiliar with the role “not an actor” “didn’t know what to expect...didn’t know what to do” “uncertain” • Being uncomfortable “uncomfortable” • Being unprepared “I could have been better prepared for it” • Fear of looking bad in front of students “How do I respond? How do I answer questions? Will I be prepared?” • Being a novice “Puts you back to where you were a while ago” • Being in an unfamiliar environment “didn’t know where to go” • Needing more time to learn “more time...exploring...watching... buddying” “not to start right away” “quickly shown things...next time you do it...here it is, here you go” • Being overtasked “time and workload” 	<p><i>Striving for self-efficacy</i></p> <ul style="list-style-type: none"> • Struggling to define role • Feelings of inadequacy • Being a learner • Needing more resources
<p><i>Core concept</i></p> <ul style="list-style-type: none"> • Feeling unimportant “Need to play fair and be generous” “Thought we were very important” “our importance waned” • Being disappointed “not the same as practice” “could have been better” “Scheduling a problem” “disorganization, differences between groups... change-over in personnel” 	<p><i>Struggling to maintain autonomy (human agency)</i></p> <ul style="list-style-type: none"> • Struggling with change • Loss of autonomy
<p><i>Core concept</i></p> <ul style="list-style-type: none"> • Coming to terms with reality “wonder...changed with the reality” • Accepting “it is what it is...not what I had hoped, but okay” “it was okay” “improvised and carried on” “get over it, things will be different each time” • Understanding limitations of technology “cameras may not work...some glitches” • Sticking it out “we just did it” 	<p><i>Adopting HFS as a teaching Innovation</i></p> <ul style="list-style-type: none"> • Acceptance • Understanding

<i>Core concept</i>	<i>Being an advocate</i>
<ul style="list-style-type: none"> • Being excited “Loved the idea...really exciting” “an enhancement” • Being supportive of student learning “awesome opportunity for students” “excellent...for students” “changed dialogue with students...enhancement to clinical” • Being an advocate for nursing education and practice “appropriate to nursing education” “good thing for nursing practice” 	<ul style="list-style-type: none"> • Being an advocate for student learning • Being an advocate for nursing education and practice • Being an advocate for HFS
<i>Core concept</i>	<i>Being part of a community of practice (CoP)</i>
<ul style="list-style-type: none"> • Being inspired by peers “positive attitudes...sharing of how they themselves use simulation” “truly inspiring” • Being mentored “time with someone who has done it before, to buddy, to see what it was all about” 	<ul style="list-style-type: none"> • Being mentored and supported
<i>Core concept</i>	<i>Being proud</i>
<ul style="list-style-type: none"> • Appreciating the environment “I’m home...let me stay here” “physical set-up, awesome” 	<ul style="list-style-type: none"> • Being proud
BONNIE	
Textural Correlates (What?)	Structural Correlates (How/Why?)
<i>Core concept</i>	<i>Striving for self-efficacy</i>
<ul style="list-style-type: none"> • Being uncertain “Mixed feelings” “Struggles and challenges” “Very hesitant” • Being overwhelmed “Negative feelings” “very stressful” “never felt comfortable on own” “not a good experience” • Needing to be prepared “Steep learning curve” “Understanding roles” “How things work” “How it would benefit students” “Review scenario” “Review clinical” “Look up in textbooks” • Needing to be the expert “Important to be an expert” “Knowing situation ahead of time” “good clinical skills” “Keep up to date with evidence and theory” 	<ul style="list-style-type: none"> • Feelings of inadequacy • Being a learner

<i>Core concept</i>	<i>Struggling to maintain autonomy (human agency)</i>
<ul style="list-style-type: none"> • Being forced “Used it minimally initially” “forced to use” • Being asked to go against beliefs “Better in the clinical setting” 	<ul style="list-style-type: none"> • Loss of autonomy • Conflicting beliefs
<i>Core concept</i>	<i>Adopting HFS as a teaching Innovation</i>
<ul style="list-style-type: none"> • Getting better over time “Improved greatly” “Comfortable with help” “Last SIM excellent” “cohesiveness starting” • Understanding “Change takes time” “Normal process” • Suggesting changes “Better buyin” • Accepting “Make the best of it” “Good for students to practice” • Adjusting to own needs 	<ul style="list-style-type: none"> • Acceptance • Understanding • Reinventing
<i>Core concept</i>	<i>Being proud</i>
<ul style="list-style-type: none"> • Appreciating leadership “Leadership promotes buyin” “Leadership positive” “Leadership accepts feedback” 	<ul style="list-style-type: none"> • Being positive about institution
<i>Core concept</i>	<i>Being part of a community of practice</i>
<ul style="list-style-type: none"> • Being supported by colleagues “Colleagues are in favor” “Colleagues compliment my skills” “Important to keep positive” “All on the same page” • Being supported by SLC staff “SIM center excellent” “Happy and enthusiastic [SLC] faculty” 	<ul style="list-style-type: none"> • Being mentored and supported • Appreciating expertise of SLC staff
ANNA	
Textural Correlates (What?)	Structural Correlates (How/Why?)
<i>Core concept</i>	<i>Striving for self-efficacy</i>
<ul style="list-style-type: none"> • Being unprepared “not knowing what they wanted of me ahead of time” “being able to prepare yourself ahead of time” “first year there wasn’t much prep for us” “the work I did before never really touched on simulation. I never even thought about simulation” • Being uncomfortable “I don’t like stepping in and being put into it without knowing” 	<ul style="list-style-type: none"> • Being a learner • Feelings of inadequacy

<p>“fear of the new and not knowing what to do”</p> <ul style="list-style-type: none"> • Knowing expectations “nothing unexpected is thrown at you” • Fear of looking bad in front of others “you don’t want to look stupid” “you don’t want to say or do the wrong thing” • Needing to learn by doing “actually run through a scenario” “it would be better if faculty could observe and watch and see how it’s done” • Needing to be prepared “whatever the students were going to look at, I looked at” “went into the lab itself...talked to the staff there” “I had questions...” 	
<i>Core concept</i>	<i>Struggling to maintain autonomy (human agency)</i>
<ul style="list-style-type: none"> • Being asked to go against personal beliefs “I am ending up with only six clinical shifts in this practicum” “I find it disruptive” “I would like to see [simulation] out of clinical” 	<ul style="list-style-type: none"> • Conflicting beliefs
<i>Core Concept</i>	<i>Adopting HFS as a teaching Innovation</i>
<ul style="list-style-type: none"> • Becoming comfortable “I don’t have apprehension anymore, I am past all that.” • Acknowledging benefits “makes things more real” 	<ul style="list-style-type: none"> • Acceptance
<i>Core concept</i>	<i>Being an advocate</i>
<ul style="list-style-type: none"> • Preparing the students “making sure the students had a good explanation ahead of time” • Making connections to practice “I make more effort to bring in what we covered in the simulation” “enhances what you are doing in the real clinical setting” 	<ul style="list-style-type: none"> • Being an advocate for student learning • Being an advocate for nursing education and practice
<i>Core concept</i>	<i>Being part of a community of practice</i>
<ul style="list-style-type: none"> • Being motivated by peers “motivation and support for using simulation and developing it in our new program, there was lots of enthusiasm” “you sort of internalize it yourself and be happy about it” • Being mentored “I’ve had some good mentors” • Being supported by SLC staff “will be able to direct you and guide you” “they have 	<ul style="list-style-type: none"> • Appreciating expertise of SLC staff • Being mentored and supported

grown in their roles and their knowledge of their jobs”	
CONNIE	
Textural Correlates (What?)	Structural Correlates (How/Why?)
<i>Core Element</i>	<i>Striving for self-efficacy</i>
<ul style="list-style-type: none"> • Knowing expectations “Didn’t even know what it was” “Didn’t know what to expect” “Didn’t know if I would like it” • Understanding the rules “All kinds of rules” “Had lots of questions” • Feeling uncomfortable “Some reservations” “Almost killed me” • Feelings of inadequacy “Scared I wouldn’t be ready” “Worried about making a mistake” “Worried about feeling inadequate” “Worried about them asking me a question and not knowing the answer” “Don’t have same skill set as others” “Feeling inadequate” “Cried every single week” “Didn’t have the right background to teach those students” “Not very techy” “I would never be [SLC] faculty, never work in [SLC]” • Needing to be prepared “Lots and lots of reading” “Reviewed all nursing care” “Looked at student expectations” Watch first” “Should come to my debriefing” “Let them run the debriefing” “Ridiculous preparer” • Being hesitant “Developing scenarios would be painful” “Still hesitant” “Didn’t voice my opinion” “I’m a follower” “Scared to say I don’t like it initially” 	<ul style="list-style-type: none"> • Being a learner • Struggling to define role • Feelings of inadequacy
<i>Core concept</i>	<i>Struggling to maintain autonomy (human agency)</i>
<ul style="list-style-type: none"> • Being asked to go against beliefs “Real patient more valuable” “Not looking after manikins” “Too much time away from clinical” “Not as valuable as clinical” “Would have looked at literature to support my position against simulation” “Don’t like replacing clinical with sim” “More value in the labs than clinical” 	<ul style="list-style-type: none"> • Conflicting beliefs • Pushing back

<ul style="list-style-type: none"> • Pushing back “Not flexible” “Not flexibility in the schedule” “Had to fight for times” “Want academic freedom” “Want a choice of whether or not to do SIM” “Too prescriptive” “Don’t like mandated simulation” 	
<i>Core Concept</i>	<i>Adopting HFS as a teaching Innovation</i>
<ul style="list-style-type: none"> • Sticking it out “Not being a quitter” “Suck it up and do the best you can” • Becoming comfortable “Became more comfortable over time” “More comfortable with debriefing” • Modifying the rules “Tell students not to do some of the steps” “More freedom” “Take more freedom with more comfort” “Nice to have options” “Patient scenario should be consistent with clinical” 	<ul style="list-style-type: none"> • Acceptance • Reinventing
<i>Core Concept</i>	<i>Being an advocate</i>
<ul style="list-style-type: none"> • Seeing the value of HFS “Allows you to plan things students may never experience” “Can see where simulation is valuable” “Philosophical change” 	<ul style="list-style-type: none"> • Being an advocate for HFS
<i>Core Element</i>	<i>Being part of a community of practice</i>
<ul style="list-style-type: none"> • Being supported by SLC staff “She would help” “Felt I was supported” “[SLC] faculty becoming more valuable” “Accept them with open arms” “Advocate for their presence” “[SLC] faculty helpful” “Supply resources” • Being aware of peers “Varied opinions about simulation” “Colleagues don’t sway me” 	<ul style="list-style-type: none"> • Appreciating expertise of SLC staff • Being aware of peers’ opinions
<i>Core concept</i>	<i>Being proud</i>
<ul style="list-style-type: none"> • Appreciating the physical environment “Like the facility, more comfortable with facility, know the facility” 	<ul style="list-style-type: none"> • Being proud
INA	
Textural Correlates (What?)	Structural Correlates (How/Why?)
<i>Core concept</i>	<i>Being an advocate</i>
<ul style="list-style-type: none"> • Seeing the value of HFS “One of the greatest technologies” “Will enhance my practice” • Being supportive of student learning “Want students to feel good” “Want to make 	<ul style="list-style-type: none"> • Being an advocate for HFS • Being an advocate for student learning

it a positive experience for students” “Gave students a real life experience” “Wish had it as a student”	
<i>Core concept</i>	<i>Being proud</i>
<ul style="list-style-type: none"> • Being impressed by the technology “One of the greatest technologies” • Appreciating the physical environment “Center is state of the art.” • Enjoying the experience “Enjoyed it” “Added to what we did” 	<ul style="list-style-type: none"> • Being proud • Being positive about HFS
<i>Core concept</i>	<i>Being part of a community of practice</i>
<ul style="list-style-type: none"> • Recognizing the discomfort of others “Some colleagues are uncomfortable” • Being supported by peers “Some colleagues are supportive” • Appreciating support from SLC staff “rely on simulation technicians” “need support of the [SLC] faculty” “[SLC] faculty can be the constant” “[SLC] faculty enhance the student experience” “[SLC] faculty make the experiences consistent” 	<ul style="list-style-type: none"> • Being aware of peers’ opinions • Being mentored and supported • Appreciating expertise of SLC staff
<i>Core concept</i>	<i>Striving for self-efficacy</i>
<ul style="list-style-type: none"> • Being uncomfortable “floundering foundlings” “uncomfortable being on the spot” “it scares me” “unfamiliar with other course content” • Needing to be an expert “thinking I had to know the answers” “always want to be competent” 	<ul style="list-style-type: none"> • Feelings of inadequacy
<i>Core concept</i>	<i>Struggling to maintain autonomy (human agency)</i>
<ul style="list-style-type: none"> • Identifying the challenges “scheduling is key” “scheduling is restrictive” “we should have priority in scheduling” “should be optional if they can’t make it fair to all” • Struggling against the process “bit of a rebel” “don’t like being told” “I resisted” “I felt pressured” “I still said no” • Lacking autonomy “more autonomy” • Pushing back against the rules “rules are harsh” “rules make me uncomfortable” 	<ul style="list-style-type: none"> • Struggling with change • Loss of autonomy • Conflicting beliefs • Pushing back • Regaining autonomy

<p>“relax some of the rules” “make it more welcoming”</p> <ul style="list-style-type: none"> • Being asked to go against beliefs “don’t do excessive simulations” “clinical comes first” “use simulation when can’t go to clinical” • Being negative “change should be positive” “thrown into something that is half thought out” “work out the kinks first” • Making suggestions for change “We can still do better” “should observe one first” “use guide as an outline” 	
SARAH	
Textural Correlates (What?)	Structural Correlates (How/Why?)
<i>Core concept</i>	<i>Striving for self-efficacy</i>
<ul style="list-style-type: none"> • Being uncomfortable “Like to feel more comfortable” • Not knowing what to expect “Don’t know what is going to happen” • Being frustrated “Frustrating” Feels tech gets frustrated with her because she interfered • Being unfamiliar with environment “New place” “Big changes” • Needing to be prepared “Look at what students read” “Look at pre-readings” “Read articles” • Needing more support “Need more but don’t know what” “More instruction” “More repetition for students” “Always feel like not done” “It just ends” 	<ul style="list-style-type: none"> • Feelings of inadequacy • Struggling to define role • Being a learner • Needing more resources
<i>Core concept</i>	<i>Struggling to maintain autonomy (human agency)</i>
<ul style="list-style-type: none"> • Needing more say “More faculty input” “More realistic reports” “More like a real hospital” “Nice to be involved” “Follow along and throw things in” “Need input into scheduling” “More variety of dates” “Should be able to book when you want” “Competition for booking” “One at the beginning and one at the end” • Being disappointed “feel let-down afterwards” 	<ul style="list-style-type: none"> • Loss of autonomy • Struggling with change

<i>Core concept</i>	<i>Adopting HFS as a teaching Innovation</i>
<ul style="list-style-type: none"> • Becoming comfortable “Every [SLC] faculty does it differently” “Not a standardized approach” “More organized approach now” “Some of the chaos is gone” “Feeling more comfortable” “I know scenario now” “I can anticipate now” • Getting better over time “Takes time to get things sorted” • Suggesting changes “more education and practice linking 	<ul style="list-style-type: none"> • Acceptance • Reinventing
<i>Core concept</i>	<i>Being an advocate</i>
<ul style="list-style-type: none"> • Seeing the value in using HFS “value in simulation because of my background” 	<ul style="list-style-type: none"> • Being an advocate for HFS
<i>Core concept</i>	<i>Being proud</i>
<ul style="list-style-type: none"> • Being impressed by the technology “Became enthusiastic about idea” “Awesome resource” 	<ul style="list-style-type: none"> • Being proud
WILLA	
Textural Correlates (What?)	Structural Correlates (How/Why?)
<i>Core concept</i>	<i>Striving for self-efficacy</i>
<ul style="list-style-type: none"> • Needing to be prepared “Like to see how it works before I try” “Like to feel comfortable” “Being well prepared helps me a lot” “Nice to have information ahead of time” • Needing support “Need to work in collaboration” 	<ul style="list-style-type: none"> • Being a learner • Needing more resources
<i>Core concept</i>	<i>Maintaining autonomy (human agency)</i>
<ul style="list-style-type: none"> • Taking control of teaching “Modified it to suit my students” “SIM didn’t match clinical area...so expanded” 	<ul style="list-style-type: none"> • Regaining autonomy
<i>Core concept</i>	<i>Being an advocate</i>
<ul style="list-style-type: none"> • Being attentive to students’ learning needs “Great learning method” “A need to expand learning innovations” “Added romance to the learning” • Ensuring students have a good learning experience “Students more comfortable with care” “Try to find out why the students don’t want to be there” “Supplements patient scenarios” “If students not committed, not a good experience” “Like students to have time to prepare” “All day too much for students” 	<ul style="list-style-type: none"> • Being an advocate for student learning

<ul style="list-style-type: none"> • Identifying with students' learning experience "Would have enjoyed as a student" 	
<i>Core concept: Faculty</i>	<i>Being part of a community of practice</i>
<ul style="list-style-type: none"> • Being mentored "Glad for the [SLC] faculty support" "[SLC] faculty are mentors" 	<ul style="list-style-type: none"> • Being mentored and supported
<i>Core concept</i>	<i>Being proud</i>
<ul style="list-style-type: none"> • Appreciating the environment "Wonderful center" • Enjoying the experience "Enjoyed as an faculty" 	<ul style="list-style-type: none"> • Being proud • Being positive about HFS
ZOE	
Textural Correlates (What?)	Structural Correlates (How/Why?)
<i>Core element</i>	<i>Striving for self-efficacy</i>
<ul style="list-style-type: none"> • Being uncomfortable "Comfort level 4 or 5" "Would like to be at 8 or 9" • Being an outsider "Feel like a fifth wheel" "Like to be in the room with the operator" "Discuss in real time what's going on" "Not the one running the show" "Feel out of kilter" "Isn't my operation" "That's difficult at times" • Needing to be prepared "Talked to the person who ran the SIM center" "Asked lots of questions" "Read the scenario" • Needing support "Have to have the support and training" • Needing more time "Time to do scenarios" "Not just an add-on to the end of desk" 	<ul style="list-style-type: none"> • Feelings of inadequacy • Struggling to define role • Being a learner • Needing more resources
<i>Core concept</i>	<i>Struggling to maintain autonomy (human agency)</i>
<ul style="list-style-type: none"> • Pushing back against policies "People afraid of having a pen" "A cup of coffee across the threshold" "Rules stifle people's comfort level" "Put the fear of god into you" "Students are already nervous in there, rules don't help" • Lacking autonomy "Control freaks" "Want to be in control of things" "Don't have a lot of autonomy in there" "Live for autonomy" "Very different when we are manipulating things" 	<ul style="list-style-type: none"> • Loss of autonomy • Struggling with change

<i>Core concept</i>	<i>Adopting HFS as a teaching Innovation</i>
<ul style="list-style-type: none"> • Identifying problems “Being utilized to its max” • Suggesting changes “I would like to see specific to my area” “Going to textbook companies” 	<ul style="list-style-type: none"> • Understanding • Reinventing
<i>Core concept</i>	<i>Being an advocate</i>
<ul style="list-style-type: none"> • Making connections to practice “used it in practice” • Being attentive to students learning needs “Might forget there is a real person on end of what they are doing” 	<ul style="list-style-type: none"> • Being an advocate for nursing education and practice • Being an advocate for student learning
<i>Core concept</i>	<i>Being part of a community of practice</i>
<ul style="list-style-type: none"> • Appreciating support from the SLC staff “Professionals or dedicated people there” “Lead the debriefing afterwards” “Very good discussions with [SLC] faculty” 	<ul style="list-style-type: none"> • Appreciating expertise of SLC staff
<i>Core concept:</i>	<i>Being proud</i>
<ul style="list-style-type: none"> • Being impressed by the technology “its positive” “I’m a believer of it” “always taken advantage of its availability” “I’m ahead of most folks” “colleagues positive” • Appreciating HFS as a teaching innovation “Refer back to the simulation in clinical” • Appreciating the physical environment “Step up in realness” “It’s expensive” “It’s new” “It’s shiny” 	<ul style="list-style-type: none"> • Being proud • Being positive about HFS
FRANCES	
Textural Correlates (What?)	Structural Correlates (How/Why?)
<i>Core concept</i>	<i>Striving for self-efficacy</i>
<ul style="list-style-type: none"> • Needing to be prepared “Lot of information gathering” “Read a lot of literature” “Talked with colleagues” • Needing lots of education and support “A lot of education needs to occur” “Time has to be set aside to learn” “Should go for orientation” “Being within the simulation center, learning the processes, the correct way simulations should run” “Education with someone who knows the research behind simulation learning” “What’s lacking is 	<ul style="list-style-type: none"> • Being a learner • Needing more resources

<p>education across the board, we need education”</p> <ul style="list-style-type: none"> • Needing more support “Not utilizing scenarios as they should be” “Pretty poor” “Not standard across the board” “Need adequate staffing levels” • Needing better equipment “If manikins could talk as well as the patient does” “There’s lots more to come when you look at manikin interactions” • Needing more time to learn “No time to learn” “You need the time” 	
<p><i>Core concept</i></p>	<p><i>Adopting HFS as a teaching Innovation</i></p>
<ul style="list-style-type: none"> • Acknowledging the dichotomies in own understanding “I have assessed myself as knowing nothing about technology” “If you don’t get up and get interested in the technology and start using it, you’re never going to learn it.” “Late adopter” “Now I would think I’m an early adopter” “I like technology but I also hate technology” “I hate to change” “You either get on board with change and you try to make things better or you’re a snail, you’re a dinosaur” “I never want to be in that rut” • Understanding limitations of organization “Cost prohibitive” “We need money” “We need people at the top of the organization to understand how important it is” “You need the support of the program head” 	<ul style="list-style-type: none"> • Understanding
<p><i>Core concept</i></p>	<p><i>Being an advocate</i></p>
<ul style="list-style-type: none"> • Being supportive of student learning “Ensure content of simulation is meeting where students are” “Should be agreeable to what you are teaching” • Seeing the value of HFS “Safe learning environment” “Active learning innovation” “Valuable for students” “You can do anything there, and it can be effective” “There’s a place for it in clinical” “They don’t get the experience” “It’s safe” “I really, really love clinical” “I really, really love simulation” “Could have a clinical right in our school and not even go to the hospital or acute care center” “I would use simulation if it was accessible” 	<ul style="list-style-type: none"> • Being an advocate for student learning • Being an advocate for HFS

<i>Core concept</i>	<i>Being part of a community of practice</i>
<ul style="list-style-type: none"> • Being supported by peers “If I wouldn’t have had nurse faculty colleagues that always had very open minds, I wouldn’t have even thought about utilizing technology as much as I did” • Being a support to peers “I bring new information to the SIM center” • Being aware of peers “come with an agenda” “very few people interested in how simulation should be run” “A lot is not understanding” “has to be an interest of yours” “you have to want to be able to have active learning practices” 	<ul style="list-style-type: none"> • Being mentored and supported • Being aware of peers’ opinions • Being a role model
MONA	
Textural Correlates (What?)	Structural Correlates (How/Why?)
<i>Core concept:</i>	<i>Striving for self-efficacy</i>
<ul style="list-style-type: none"> • Needing to be prepared “Read the manual” “Did webinars” “Read about the manikins” “Being prepared before, going to the SIM center before, learn about it before” • Making connections to previous experiences “Had some experience as a clinical facilitator” • Needing more support from colleagues “Abdicate their role” “Faculty that didn’t know anything and preferred not to know anything” “There was no working together” “It makes things flow better when faculty are prepared” • Needing more consistency “Not universal thinking about simulation” “Everyone has their idea about how it should go” “It isn’t consistent” “There are conflicts amongst the technicians, amongst the nurses that are faculty” ”Technicians focus on skills” “Faculty were looking at not just the skills, but communication, critical thinking, the assessments” 	<ul style="list-style-type: none"> • Being a learner • Needing more resources
<i>Core concept</i>	<i>Struggling to maintain autonomy (human agency)</i>
<ul style="list-style-type: none"> • Being frustrated “A lot of negative experiences because faculty were hesitant or 	<ul style="list-style-type: none"> • Struggling with change • Pushing back • Regaining autonomy

<p>uninterested” “Faculty responsible for clinical knowledge and expertise”</p> <ul style="list-style-type: none"> • Being negative “Everyone’s excited” “Mass chaos at the beginning” “No patience for that” “Too confusing” “A lot of anxiety and fear of it” • Pushing back “Rules could be revisited” “Some of the rules are a little ridiculous” “Mandatory simulation doesn’t help” “It irritates me” • Making suggestions for change “Needs to reflect what the students are being taught” “Faculty should have opportunity to make scenarios more towards the students’ experiences” “More realistic manikins” “Use it in more creative ways” “Should be integrated during course development” 	
<p><i>Core concept</i></p>	<p><i>Being an advocate</i></p>
<ul style="list-style-type: none"> • Being attentive to the students learning needs “Students seemed to really like it” “Students learn better with the hands on” “To be in control of what they do” “Learn in a contextual situation” “Students are so labor focused” “Communication and inter-professional is lacking” • Appreciating teaching innovation “Critical thinking seems to come alive” “Get opportunity they may not necessarily get” 	<ul style="list-style-type: none"> • Being an advocate for student learning • Being an advocate for HFS
<p><i>Core concept</i></p>	<p><i>Being part of a community of practice</i></p>
<ul style="list-style-type: none"> • Being supported by SLC staff “Lots of opportunities to go to [SLC]” “Lots of information sent out” “Staff really helpful” 	<ul style="list-style-type: none"> • Appreciating expertise of SLC staff
<p><i>Core concept</i></p>	<p><i>Being proud</i></p>
<ul style="list-style-type: none"> • Enjoying the experience “I liked simulation” “I’m happy to use it” “At first I thought with simulation, you’ll never get what it’s like in the real world. But we can get pretty darn close” “I liked the flow of the high-fidelity” • Appreciating the physical environment “Similar to hospital” “User-friendly” 	<ul style="list-style-type: none"> • Being positive about HFS • Being proud

OLIVIA	
Textural Correlates (What?)	Structural Correlates (How/Why?)
<i>Core concept:</i>	<i>Striving for self-efficacy</i>
<ul style="list-style-type: none"> • Being unfamiliar with the role “Haven’t been involved as a participant” “Only seen it through students” “Was a family member” • Not understanding the rules “Unclear defining lines as to what they are leading and what I am leading” “Didn’t want to impede on their process” • Needing support “I need a little support” • Making connections to previous experiences “Did own simulation in clinical” 	<ul style="list-style-type: none"> • Struggling to define role • Being a learner • Needing more resources
<i>Core concept</i>	<i>Struggling to maintain autonomy (human agency)</i>
<ul style="list-style-type: none"> • Feeling frustrated with the policies “I was told ’s the way it is” “Time lines seem to be a bit restrictive” “Only allowed so many hours” “Simulation has to be utilized for many different programs” “Restriction of the way they run it” “Would have been better later than when I first did it” • Being frustrated “Dictated as to when you can go” “I would have had free range to book whenever, which is not realistic” “They need to fine tune better” 	<ul style="list-style-type: none"> • Loss of autonomy • Struggling with change
<i>Core concept</i>	<i>Adopting HFS as a teaching Innovation</i>
<ul style="list-style-type: none"> • Acknowledging benefits “Could not believe the transition of group over the week of simulation” “Improved collaboration and teamwork” “Not able to do that in clinical setting” “I thought it was easy” “Experiences in real life help” “There should be more” “Concept is very good” • Suggesting changes “Set up specific to area” “There’s more work that needs to be done with how they’re running the scenarios” 	<ul style="list-style-type: none"> • Acceptance • Reinventing
<i>Core concept</i>	<i>Being an advocate</i>
<ul style="list-style-type: none"> • Being an early adopter “I jump on the bandwagon and try things” “I would never sit there and complain” 	<ul style="list-style-type: none"> • Being an advocate for HFS • Being an advocate for student learning

<ul style="list-style-type: none"> • Being aware of student learning “Amazing to see difference in students” “They transformed as a team” 	
<i>Core concept</i>	<i>Being part of a community of practice</i>
<ul style="list-style-type: none"> • Recognizing the discomfort of others “Not easily influenced by others” “Some don’t even want to do it” “Maybe they haven’t seen the benefits” 	<ul style="list-style-type: none"> • Being aware of colleagues opinions
<i>Core concept</i>	<i>Being proud</i>
<ul style="list-style-type: none"> • Feeling pride in contributions “Helped design a scenario” “They took the lead but we had input” • Appreciating as teaching innovation “It becomes more authentic then” “Realized how good simulation was” 	<ul style="list-style-type: none"> • Being proud • Being positive about HFS
QUINN	
Textural Correlates (What?)	Structural Correlates (How/Why?)
<i>Core concept</i>	<i>Striving for self-efficacy</i>
<ul style="list-style-type: none"> • Linking to previous learning “Had used it before” • Needing more time to learn “It takes time to learn” “I don’t have time” “Development part that was very time consuming” • Appreciating new learning “Teaching has opened my eyes” “Has helped me to develop my own nursing skills much better” “No idea what SIM was prior” 	<ul style="list-style-type: none"> • Being a learner • Needing more resources
<i>Core concept</i>	<i>Struggling to maintain autonomy (human agency)</i>
<ul style="list-style-type: none"> • Identifying the challenges “Scenario needs to be developed properly” “Some scenarios way beyond student” “Just took it from SIM book and didn’t adapt it” “They didn’t know the level of the students” “If there’s no communication they just go by the book” “Staffing in the [SLC] is off” “Scheduling is a barrier” • Taking control of teaching “I like it right at the beginning” “Then I like to do it at the end” “We developed our own” “Overstepped my bounds” “Went free flow” “Changed scenario as we went to meet goals” “I like it so I just go in and do my thing” 	<ul style="list-style-type: none"> • Conflicting beliefs • Regaining autonomy

<ul style="list-style-type: none"> • Identifying where beliefs may conflict “Clinical is very important time for the students” “I don’t want too much simulation” “I do believe it should be incorporated” 	
<i>Core concept</i>	<i>Adopting HFS as a teaching Innovation</i>
<ul style="list-style-type: none"> • Understanding own limitations “I’m kind of a lathish adopter of tech” “I need to learn more techy stuff” 	<ul style="list-style-type: none"> • Understanding
<i>Core concept</i>	<i>Being an advocate</i>
<ul style="list-style-type: none"> • Appreciating teaching innovation “I love it” “Awesome” “Needs to be there” • Being supportive of student learning “I could see the growth from day one to the end of the term” “They were getting in there and doing their thing, critical thinking, it was really good” 	<ul style="list-style-type: none"> • Being an advocate for HFS • Being an advocate for student learning
<i>Core concept</i>	<i>Being proud.</i>
<ul style="list-style-type: none"> • Appreciating leadership “Institution is pretty buff” “Want SIM cause that’s the new thing” “Very happy that we are incorporating SIM into our new curriculum” • Appreciating the environment “Big beautiful [SLC], like holy man that’s awesome” 	<ul style="list-style-type: none"> • Being positive about institution • Being proud
<i>Core concept</i>	<i>Being part of a community of practice</i>
<ul style="list-style-type: none"> • Being aware of peers “Colleagues excited but nervous and scared” “A lot of faculty probably wouldn’t do that [take control]” “Depends on nursing background” “Faculty nervous at beginning” “They don’t have that experience” “They didn’t understand what simulation was about” • Recognizing areas where peers need more education “Some faculty just want to get it done” “Needs to be useful to students” “Some did both on the same day” “Don’t know if that’s useful” • Appreciating the support from peers “My co-worker is techy, so she taught me things” • Appreciating support from SLC staff “Oriented with the SIM people” “They were very awesome” “They went through things with us” “They discussed how it was supposed to run and what the students were supposed to get out of it” “They knew how I 	<ul style="list-style-type: none"> • Being aware of peers’ opinions • Being mentored and supported • Appreciating expertise of SLC staff

<p>clicked” “I knew how she clicked” “We worked together” “We’re so comfortable with each other” “It was a lot of guidance” “[SLC] faculty is positive and very willing to work with us”</p>	
<p>VERA</p>	
<p>Textural Correlates (What?)</p>	<p>Structural Correlates (How/Why?)</p>
<p><i>Core concept</i></p>	<p><i>Striving for self-efficacy</i></p>
<ul style="list-style-type: none"> • Being unfamiliar with the role “Didn’t know what I could say” “Told to basically observe and not say much” “Still unsure of my role” • Fear of looking bad in front of others “You don’t want to look like you don’t know anything” • Needing information “Initially not much information” “First time for them as well” • Making connections to previous experiences “Simulation is kind of like what we do” • Needing more support “Someone who runs through it, knows the equipment, knows the scenario” • Needing more information “Faculty promoting it” “More communication about it” “Bringing up the research with it” 	<ul style="list-style-type: none"> • Struggling to define role • Feelings of inadequacy • Being a learner • Needing more resources
<p><i>Core concept</i></p>	<p><i>Struggling to maintain autonomy (human agency)</i></p>
<ul style="list-style-type: none"> • Beginning to stand up for self as educator “As I got more secure I could ask more questions and say I’m not ok if this happens” “Now I will say something and find out more about what my role is” 	<ul style="list-style-type: none"> • Regaining autonomy
<p><i>Core concept</i></p>	<p><i>Adopting HFS as a teaching Innovation</i></p>
<ul style="list-style-type: none"> • Becoming comfortable “More confident” “Less intimidating” • Suggesting changes “Run through the scenarios before” “Go through and actually practice them” “That would have been better” • Getting better over time “Things got better by the end” “Started to change” “We get more of an outline” 	<ul style="list-style-type: none"> • Reinventing • Acceptance

<i>Core concept</i>	<i>Being an advocate</i>
<ul style="list-style-type: none"> • Being aware of student learning “Safe environment” “Advances student knowledge” “Increases student comfort” “Better to practice in safe environment” 	<ul style="list-style-type: none"> • Being an advocate for student learning
<i>Core concept</i>	<i>Being part of a community of practice</i>
<ul style="list-style-type: none"> • Empathising with peers “Colleagues are leery” “Colleagues are apprehensive” • Being supported by SLC staff “Open to getting feedback from us” “Able to speak up at any time” “It’s been really good” 	<ul style="list-style-type: none"> • Being aware of peers’ opinions • Appreciating expertise of SLC staff
YVONNE	
Textural Correlates (What?)	Structural Correlates (How/Why?)
<i>Core concept</i>	<i>Striving for self-efficacy</i>
<ul style="list-style-type: none"> • Needing to be prepared “Doing it over and over really helped” “Helped to go in and learn how they run the scenarios, program into computer, watching on screen” “Helped to organize myself by watching” “Take little bit more time to prepare myself” “Really think about what are we going to assess” “Familiarizing self with technology” • Linking to previous learning “Anything related to previous field was easier” • Lacking experience “Didn’t have much experience with it” 	<ul style="list-style-type: none"> • Being a learner • Needing more resources
<i>Core concept</i>	<i>Struggling to maintain autonomy (human agency)</i>
<ul style="list-style-type: none"> • Lacking autonomy “Prescribed” “This is what scenario you are going to do” “Still kind of that way” • Taking control of teaching “Been able to get time for clinical whenever I want” “Like to do it near beginning of clinical” “Like to do it later on as well” “Like carrying on scenario from where we left off” “Trying to enhance the technology that I’m using to prepare myself” “I can change them as I need to” “You could kind of run it how you wanted to” 	<ul style="list-style-type: none"> • Loss of autonomy • Regaining autonomy
<i>Core concept</i>	<i>Adopting HFS as a teaching Innovation</i>
<ul style="list-style-type: none"> • Suggesting changes “They are beginning to make new scenarios” “Thinking about needs 	<ul style="list-style-type: none"> • Acceptance • Reinventing

<p>of students” “Little bit of ways to go for the clinical part of it”</p> <ul style="list-style-type: none"> • Getting better over time “Didn’t need as much preparation as I became more comfortable” “Little more time if I was unfamiliar with content” 	
<i>Core concept</i>	<i>Being an advocate</i>
<ul style="list-style-type: none"> • Being excited “Look forward to it” “Enjoy doing simulation” “I love when students start to put it all together” “Overall really positive experience” “Really enjoyed the technology part” “It’s a great educational innovation” • Being an advocate for student learning “Such a great experience for students” 	<ul style="list-style-type: none"> • Being an advocate for HFS • Being an advocate for student learning
<i>Core concept</i>	<i>Being part of a community of practice</i>
<ul style="list-style-type: none"> • Being disappointed by peers opinions “I struggle with the idea of faculty not being open to simulation” “Struggle when I am trying to convey the importance” “When they are not on the same page as you and they’re not on board, it’s really hard to get them to believe that” “Not sure other faculty want to be there because they’re complaining” “You’re trying to really enjoy the experience” 	<ul style="list-style-type: none"> • Being aware of peers’ opinions
<i>Core concept</i>	<i>Being proud</i>
<ul style="list-style-type: none"> • Appreciating the physical environment “[SLC] is great” “Can’t believe how well they designed it and built it” “Never seen anything like that before” “Getting the [SLC] built was a huge venture” “Set up of hospital experience is fantastic” • Enjoying the experience “Love the way that you actually do report from the RNs at an actual station” “Love the idea that the carts are really similar to what you would see in the patient rooms” “Make it as realistic as possible, for sure” 	<ul style="list-style-type: none"> • Being proud • Being positive about HFS
GERRI	
Textural Correlates (What?)	Structural Correlates (How/Why?)
<i>Core concept: self</i>	<i>Striving for self-efficacy</i>
<ul style="list-style-type: none"> • Being uncomfortable “Didn’t like it” “Uncomfortable experience” • Being unprepared “Didn’t do a lot to prepare, next to nothing” “Went in with the 	<ul style="list-style-type: none"> • Feelings of inadequacy • Being a learner • Struggling to define role

<p>same prep level as the students” “Thought that was on purpose” “Didn’t know I could access the information”</p> <ul style="list-style-type: none"> • Feeling “tested” “Thought they were sitting back there and laughing” “Thought they were testing me to see if I would know what to do” “Thought they were making it more difficult” • Being an outsider “I would have to leave the room” • Being frustrated “It was very frustrating” • Making connections to previous experiences “Run classrooms like low-fidelity simulation all the time” “Technology doesn’t bother me 	
<p><i>Core concept</i></p>	<p><i>Struggling to maintain autonomy (human agency)</i></p>
<ul style="list-style-type: none"> • Pushing back “Lot of antagonism between myself and [SLC] faculty” “I butted heads so much” “Let them under my skin” “Had some ‘discussions’” • Loss of autonomy “No control over what we were doing in simulation” “Didn’t like not having control” “When they take away autonomy it decreases my motivation to be engaged in the process” “I would have been more engaged if I had input” “Lack of faculty input was the biggest problem” “I need ability to control scenario myself” “Didn’t like that we couldn’t pick scenarios specific to clinical” • Undermining the experience/ struggling against the process “I would tell the students not to bother with the readings” “Maybe I was helping the students too much” “The simulation faculty would call me out of the room” • Being asked to go against beliefs “Philosophical differences with how they are running the scenarios” “Prep materials isn’t relevant to what’s going on” “I didn’t see the relevance” “It fits with my teaching style to give feedback in the moment” “Need to look at the pedagogy surrounding that” “The relevance isn’t there” “We are doing things 	<ul style="list-style-type: none"> • Pushing back • Loss of autonomy • Struggling with change • Conflicting beliefs

<p>not appropriate for that level or that clinical area” “I found it a little baffling” “Does it really have to be completely on their own?” “Giant waste of our time” “Would rather have been in clinical” “Scenarios not applicable or relevant” “Even if you’re having a really good experience in clinical you still have to pull them out”</p>	
<p>Core concept: HPS</p>	<p><i>Adopting HFS as a teaching Innovation</i></p>
<ul style="list-style-type: none"> • Identifying problems “Problem with the execution” “Problems with how they would run the scenarios” “Bogged down by only using prepackaged stuff” “Simulation itself was the problem, not the fact that we are being asked to do simulation” “Couldn’t get the days that worked for clinical” “Scheduling was difficult” The way its organized is poor” • Getting better over time “Last time they sent out the information ahead of time” • Acknowledging effect own responses has on students “Students won’t be engaged if they are getting that vibe from me” 	<ul style="list-style-type: none"> • Understanding • Acceptance
<p><i>Core concept</i></p>	<p><i>Being an advocate</i></p>
<ul style="list-style-type: none"> • Liking the idea of HFS “Simulation is a great additional activity we can do in clinical to capture those experiences you are not going to get” “No problems with debriefing” • Appreciating teaching innovation “Awesome learning opportunity” 	<ul style="list-style-type: none"> • Being an advocate for HFS
<p><i>Core concept</i></p>	<p><i>Being part of a community of practice</i></p>
<ul style="list-style-type: none"> • Being aware of her own negative effect on peers “Doesn’t bother me what other people think” “I may have influenced other people’s opinions by ranting about my terrible experiences” 	<ul style="list-style-type: none"> • Being aware of peers’ opinions

KELSEY	
Textural Correlates (What?)	Structural Correlates (How/Why?)
<i>Core concept</i>	<i>Striving for self-efficacy</i>
<ul style="list-style-type: none"> • Needing to be prepared “I looked online” “Watched some YouTube videos” “Orientation is ongoing” “Booked in with the techs” “Watched one simulation and then did it on my own” “I’m learning as I’m going” “Helpful to meet them ahead of time” • Being unfamiliar with the role “Need to know exactly what role is” “I didn’t have a clue” “No idea what it was” “Thought I would have to run the manikins or come up with scenario” “Worried about my role” “Wasn’t sure what I needed to do” “Wasn’t sure what I needed to do with the students” • Feelings of inadequacy “I accidentally told the students what they were doing before they went in, they didn’t progress any quicker” “I worry that it wasn’t going to be appropriate for their learning level” • Being uncertain “Confusion about what we can and cannot offer” • Fear of things going wrong “Worried manikins are going to stop working” “Worried students are going to ‘get it’ right away” • Being overwhelmed “If never been here before might be a bit confused” “Where to go and what they need to do up here” “If never used its overwhelming” “Overwhelmed thinking about bringing my clinical group” 	<ul style="list-style-type: none"> • Being a learner • Struggling to define role • Feelings of inadequacy
<i>Core Concept</i>	<i>Adopting HFS as a teaching Innovation</i>
<ul style="list-style-type: none"> • Identifying problems “Scenario development is on our radar” “Expanding our SIMS so that we have unfolding case studies” “Right now we just can’t offer more than 2 a term” “Space is here, staff is here, nothing ready for them” “Can’t offer as much as we want” “Nothing more to offer until they progress” “Need more variety so that faculty can choose” “Can only use what we purchased” “A hundred hours to develop one 	<ul style="list-style-type: none"> • Understanding

entire simulation” “It’s a lot of work” “Need time to develop	
<i>Core concept</i>	<i>Being an advocate</i>
<ul style="list-style-type: none"> • Appreciating teaching innovation “I have a different relationship with them now” “I can see how nervous they are” “They share that more in SIM than in clinical” • Seeing the value of HFS “Didn’t know it was an option or existed when I was a student” “It sure would have been nice” “Practice those skills you don’t practice very often” • Being concerned about the students “Don’t want to waste their time up there” “I’m more aware of how nervous they are going into simulation” “I never saw that side of it in clinical” “Don’t want students to spend any more money” 	<ul style="list-style-type: none"> • Being an advocate for HFS
<i>Core concept</i>	<i>Being part of a community of practice</i>
<ul style="list-style-type: none"> • Being supported of peers “Supportive team here” “Faculty was supportive and positive about experience she had” “Another faculty didn’t have a good experience” “I took out of it what I needed to” • Empathising with peers “Don’t want to coerce faculty into using a different textbook” • Being a role model “We can do it ourselves” 	<ul style="list-style-type: none"> • Being mentored and supported • Being aware of peers’ opinions • Being a role model
<i>Core concept</i>	<i>Being proud</i>
<ul style="list-style-type: none"> • Appreciating the physical environment “Really like SIM center because everything’s new” “It’s really exciting” 	<ul style="list-style-type: none"> • Being positive about the institution
DELLA	
Textural Correlates (What?)	Structural Correlates (How/Why?)
<i>Core concept</i>	<i>Striving for self-efficacy</i>
<ul style="list-style-type: none"> • Becoming familiar with the technology “Looked at trends in simulation” • Connecting with previous learning “Always taught with scenario-based” • Developing comfort with the technology/ needing to be prepared “First get comfortable with environment” “Making sure I was comfortable with technology” “Being 	<ul style="list-style-type: none"> • Being a learner • Needing more resources

<p>really comfortable with your content” “Knowing your audience, your equipment, the knowledge required” “Get people teaching material they are not comfortable with” “Always going back to look at scenario and objectives” “Getting the students to those objectives”</p> <ul style="list-style-type: none"> • Needing more support “Not a lot of support for getting people prepared to go in and do simulation” “Left to the lab people to run simulation” • Needing more time “It was exhausting trying to find the time” “2 years of designing scenarios” “Tons and tons of extra hours” “ a lot of our own time” “not enough time” “Ton of work, ton of prep” “Little bit of time for curriculum development” “Lot of work prepping and implementing” “Debriefing always takes longer than you expect 	
<p><i>Core concept</i></p>	<p><i>Struggling to maintain autonomy (human agency)</i></p>
<ul style="list-style-type: none"> • Feeling frustrated “At first lab was very rigid” “They didn’t want to adapt to how we wanted to teach” “I’ve had negative experiences” • Needing more say “Faculty don’t have autonomy to do that” “Mentality in the lab at the beginning that hindered us” • Taking control of teaching “Now they’ve adapted to us” “We run our own simulations there” “I should have a role more than the [SLC] faculty” • Being a change agent “Decided to integrate it into curriculum” 	<ul style="list-style-type: none"> • Struggling with change • Advocating for own needs • Regaining autonomy
<p><i>Core concept</i></p>	<p><i>Adopting HFS as a teaching Innovation</i></p>
<ul style="list-style-type: none"> • Suggesting changes “Specialize the scenario to whatever unit you’re on” “Room for different basic scenarios for assessment and skills you need to practice” “Can be very unit specific” “Put in some time with them at the beginning” • Becoming comfortable “Being able to adapt, improvise” “Being adaptable is key” “Thinking on your feet” 	<ul style="list-style-type: none"> • Acceptance • Reinventing

<i>Core concept:</i>	<i>Being an advocate</i>
<ul style="list-style-type: none"> • Seeing the value of HFS “Developed curriculum surrounding high-fidelity simulation” “Did some research decided it would be beneficial” “Saw the benefits of it” “Looked at how things have been taught” • Appreciating teaching innovation “Really strengthened my teaching” “Enhances anyone’s practice” “It was positive” “Everybody was positive” • Being an advocate for students and student learning “Provides huge advantage to students” “Practicing scenarios in a safe environment” “Absolutely valuable to test things in safe environment” • Seeing a need for it in nursing practice “Sad we use it in education and not in practice” “Never get to practice in that safe environment again” “Expected to learn in your work environment” “Lacking in health care” “Hospital nurse faculty don’t know how to use it and are not implementing it.” 	<ul style="list-style-type: none"> • Being an advocate for HFS • Being an advocate for student learning • Being an advocate for nursing education and practice
<i>Core concept</i>	<i>Being part of a community of practice</i>
<ul style="list-style-type: none"> • Being aware of concerns of peers “Hear people say they didn’t like their experience” “It would not be a good environment if you didn’t want to be there” • Being supported by SLC staff “Some [SLC] faculty are positive, helpful and willing” 	<ul style="list-style-type: none"> • Being aware of peers’ opinions • Appreciating expertise of SLC staff

Appendix H: Breakdown of Group Themes into Structural and Textural Correlates

Theme	Structural Correlates	Textural Correlates	
Striving for self-efficacy	Feelings of inadequacy	Lacking comfort	Being uncomfortable
			Being uncertain
			Being frustrated
			Being overwhelmed
		Lacking confidence	Lack of confidence
			Being unprepared
			Being hesitant
			Needing to be an expert
		Being fearful	Fear of things going wrong
	Fear of looking bad in front of others		
	Feeling “tested”		
	Struggling to define role	Being unfamiliar	Being in an unfamiliar environment
			Being unfamiliar with the roles
		Not knowing	Not knowing what to expect
			Not knowing the rules
Being an outsider		Being an outsider	
Being a learner	Expectations	Knowing expectations	
		Needing to be prepared/Being unprepared	
		Becoming familiar with the technology	
	Experiential learning	Needing to learn by doing	
		Linking to previous learning	
		Making connections to previous learning	
	New learning	Being a novice	
		Appreciating new learning	

	Needing more resources	Needing support	Needing support	
			Needing lots of education	
			Needing improved education	
			Needing better equipment	
			Needing more time	Needing more time to learn
				Frustrated with time commitments
		Developing comfort with technology		
		Being overtasked		
		More information	Needing information	
			Being prepared	
			Needing better equipment	
		Struggling to maintain autonomy (Human agency)	Loss of autonomy	
Being forced				
Feeling unimportant				
Against personal beliefs about clinical education				Being asked to go against personal beliefs
				Identifying where beliefs may be in conflict
Advocating for own needs	Meeting needs			Needing more say
				Needing choice
	Improving process			Needing more consistency
				Recognizing ways to improve
Pushing back				Undermining the experience
				Being negative
				Being disappointed
Regaining autonomy			Beginning to stand up for self as faculty	
			Taking control of teaching	
			Making suggestions for change	

	Struggling with change		Being disappointed	
			Being frustrated	
			Struggling against the process	
			Pushing back against the policies	
Adopting HFS as a teaching Innovation	Acceptance	Acceptance	Becoming comfortable	
			Accepting	
			Getting better over time	
			Coming to terms with reality	
			Beginning to see the benefits of HFS	
		Acknowledging benefits		Sticking it out
		Persistence		
	Understanding	Understanding self		Understanding own limitations
				Understanding limitations of technology
			Understanding technology	
				Identifying problems
	Reinventing		Modifying the rules	
			Suggesting changes	
Being an advocate	Being an advocate for student learning		Being supportive of student learning	
			Being attentive to students' learning needs	
			Being aware of student learning	
			Being an advocate for students and student learning	
			Identifying with students' learning experiences	
			Preparing the students	

	Being an advocate for nursing education and practice	Nursing education	Being an advocate for nursing and nursing education	
		Nursing practice	Making connections to practice	
			Seeing a need for HFS in nursing practice	
	Being an advocate for HFS		Being excited	
			Appreciating teaching innovation	
			Like the idea of simulation	
			Seeing the value of HFS	
			Being an early adopter of HFS	
	Being part of a community of practice (CoP)	Being mentored and supported by CoP		Being mentored
				Appreciating mentorship relationships
			Being inspired by peers	
			Being supported by peers	
Appreciating expertise of SLC staff			Being supported by SLC	
			Appreciating support from SLC staff	
Being influenced by peers			Being motivated by peers	
			Recognizing areas where peers need more education	
Being aware of peers' opinions			Being aware of peers	
			Empathising with peers	
			Recognizing the discomfort of others	
			Being disappointed by peers' opinions	
			Being aware of her own negative effect on peers	

	Being a role model		Being a support to peers
			Being a role model
Being proud	Being proud		Being impressed by the technology
			Appreciating the physical environment
			Feeling pride in own contributions
	Being positive about HFS		Enjoying the experience
			Deciding to integrate it into practice
			Appreciating as a teaching innovation
			It's great!
	Being positive about institution	Leadership	Appreciating leadership
			Being supported by leadership
		Organizational restrictions	Being aware of organizational limitations
Understanding organizational restrictions			

Appendix I: Sample HFS Scenario

Cardiovascular Simulation Scenario



Scenario Synopsis

Your patient is a 50 year-old Caucasian male admitted two days ago with cellulitis of his left foot. Yesterday the patient developed chest pain and underwent emergency Percutaneous Transluminal Coronary Angioplasty (PTCA) and stent placement to his circumflex coronary artery the previous evening at 2200hrs. The scenario takes place at 0800hrs the following morning.

Required Readings Prior to Simulation

Saskatoon Health Region Policy #1012. Code Blue. Retrieved from http://www.saskatoonhealthregion.ca/about_us/documents/Nursing%20Affairs/Code_Blue-1012.pdf

Saskatoon Health Region Policy #1069 Code Blue Cart- Contents and Use. Retrieved from: http://www.saskatoonhealthregion.ca/about_us/documents/Nursing%20Affairs/Code_Blue-1012.pdf

Saskatoon Health Region Policy #1159. Airway- Oropharyngeal: Insertion, Maintenance, Suction, Removal. Retrieved from: http://www.saskatoonhealthregion.ca/about_us/documents/Nursing%20Affairs/Airway-Oropharyngeal-Insertion_Maintenance_Suction_Removal-1159.pdf

Skills Checklist: Using a Manual Ventilation Device (found with Lab 4 Information)

Saskatoon Health Region Code Blue Review
-posted on CNUR 305 Course Page under Lab 5

Schedule per Group

- **0900-0915:** Orientation to environment, mannequin, ISBARR, confidentiality, fictional contract
- **0915-0955:** Review of bag-valve-mask, CPR and AED's
- **0955-1005:** ISBARR Report to group
- **1005-1025:** Scenario with Group 1 (1/2 of students)
- **1030-1040:** Scenario 1 with Group 2 repeated(second 1/2 of students)
- **1040-1150:** Post-scenario exercises in Debriefing room with entire group

PT REPORT											
SBARR HAND OFF:	CURRENT TIME AND DAY:			Thursday, 0715 shift report		ADMISSION DAY AND TIME:			2 Days ago		
SITUATION:	NAME:	John Albert									
	AGE:	50	SEX:	M	ETHNICITY:	Caucasian	RELIGION:	NONE			
	PROVIDER:	DR LESA OLSEN									
	ADMISSION DIAGNOSIS:	Cellulitis of the left foot admitted 2 days ago. Yesterday He developed STEMI and underwent emergency percutaneous Trans luminal Coronary angioplasty, and received a stent at 2200H.									
BACKGROUND:	PERTIENT MEDICAL HISTORY:	NIDDM X10 years, Stable angina since 2007, Positive stress test 2007									
	PERTIENT SOCIAL HX:	Married X20 years; No children, lives on acreage 10 minutes outside of Saskatoon with his wife.									
	ALLERGIES:	NKDA									
	CODE STATUS:	FULL CODE									
	VITALS: most recent	TIME	0700	TEMP:	37.2	BP:	118/74	PULSE	84	RR:	20
	OXYGEN THERAPY:	SATS	95%	MODE: RA	Pt wanted Nasal prongs removed			LPM: 0			
	PAIN	RATING:	No chest pain, Pain to Lt foot, 2/10		MOST RECENT PAIN RX:	Pt refused pain for his foot			TIME:		
	OTHER RECENT RX:										

	IVs:	SITE:	Rt arm	SIZE:	20G	ASSESSMENT:	Dry Intact dressing	FLUID	Saline lock
	DRAINS AND TUBES:	SITE:		TYPE:		ASSESSMENT:			
	WOUNDS:	SITE:	Lt foot	TYPE:	Puncture wound	ASSESSMENT:	Dressing dry and intact, No drainage noted and dressing changed last night		
	ADLS:	DIET:	Cardiac		ACTIVITY:	AAT			
	RESTRICTIONS:	ISOLATION	No precautions		FALL RISK:	NO			
ASSESSMENTS:	NEURO:	PMS X 4, GCS 15/15, alert and orientated Pupils PERL							
	CARDIAC:	Pt on monitor was In a normal sinus all night, no chest pain since stents were placed last night.							
	RESPIRATORY:	Free, easy, and regular. No SOB							
	GI/GU:	Up to the bathroom to void, ADB soft non tender, last BM Yesterday morning, Bowel sounds present X 4.							
	INTEGUMENTY:	LT foot dressing dry and intact. Changed last night, no drainage noted							
	ORTHO/MOBILTY:	Pt is able to ambulate on his own, AAT, pt uses cane to help weight bear for his LT foot							
	PHYCHOSOCIAL:	Calm And pleasant							
	OTHER:	Pt is to have repeat blood work drawn at 2100H. Pt. has Tylenol PRN order for foot pain and Nitro PRN for chest pain							

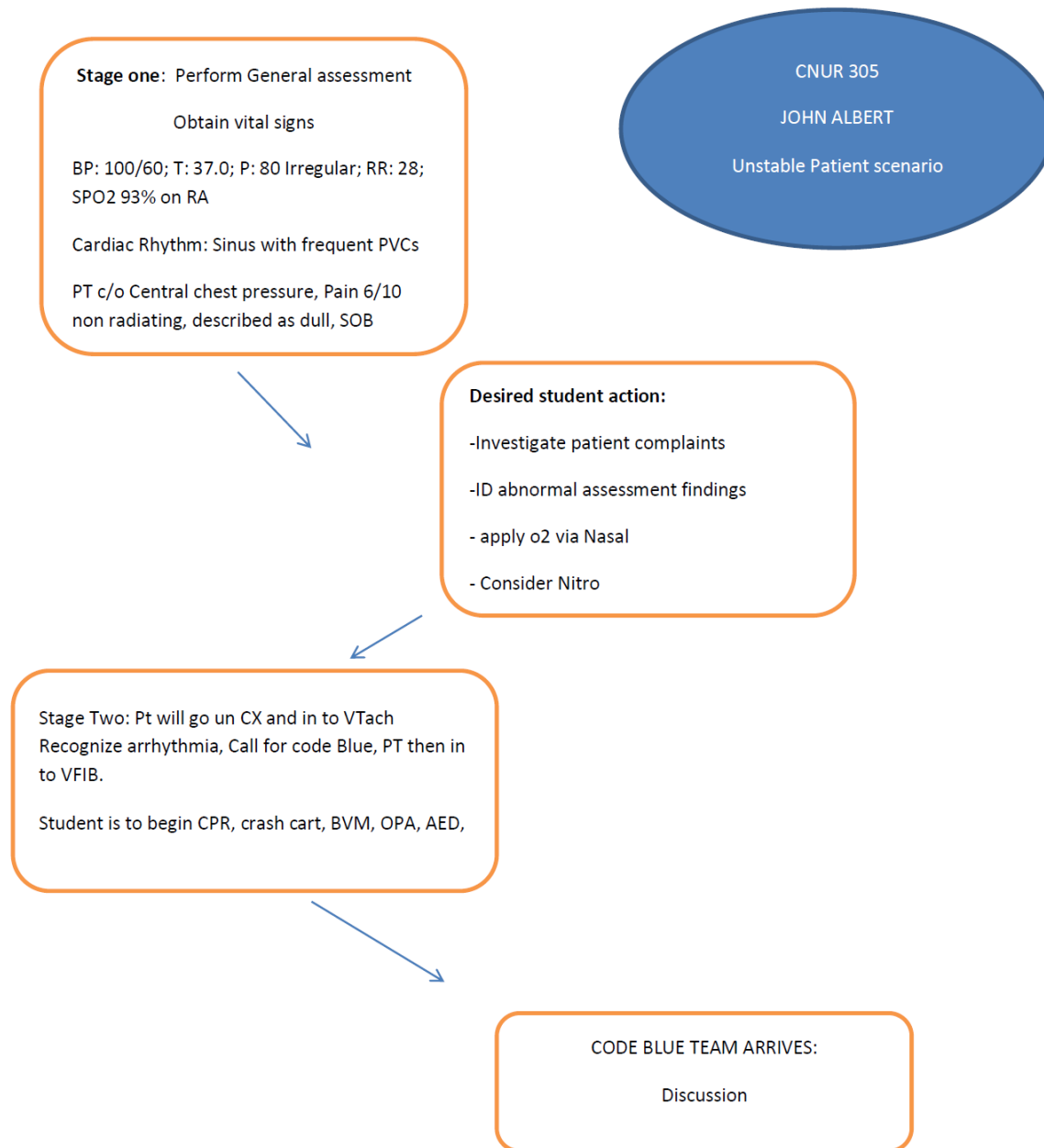
Sample Scenario
Suggested Responses for Patient

<p>General Responses</p>	<ul style="list-style-type: none"> • I am 50 years old • My birthday is March 16, 1963 • Today is Thursday • I am in the hospital • I have no allergies
<p>Stage 1</p>	<ul style="list-style-type: none"> • After 2-3 minutes complain of feeling dizzy and SOB • Denies any chest pain • I was just up for a walk to the kitchen, I was fine till just a minute ago
<p>Stage 2</p>	<ul style="list-style-type: none"> • My chest hurts. It feels like a “pressure” in my chest. It’s 6-7/10 • The nurses gave me Nitro last night and it didn’t seem to help. • Does this mean my blood vessel is blocked again?
<p>If oxygen administered If Nitro is administered</p>	<ul style="list-style-type: none"> • I asked the girls to take the oxygen off before, I don’t like that thing in my nose. • The pressure in my chest is still there...it’s not getting any better? • Why am I so tired? • Am I having a heart attack? Why is this happening to me?
<p>If Nitroglycerine and/or oxygen is not administered</p>	<ul style="list-style-type: none"> • Patient becomes increasingly anxious • Can you help me? • Please help me? • Call my wife? • Where’s the doctor? • I’m scared, am I going to die?
<p>Stage 3</p>	<ul style="list-style-type: none"> • Pt becomes unresponsive

Suggested Responses for Others:

Switchboard Operator	<ul style="list-style-type: none">• Please tell me who you want to page?• What room should the respond to?
Dr. Olsen – Stage 2 <ul style="list-style-type: none">• If ISBAR incomplete • If ISBAR complete	<ul style="list-style-type: none">• Please provide more information What are his vital signs? How many doses of Nitro has he had? Provide me with your assessment?• Please give Morphine 2 mg IV now, STAT ECG, Repeat cardiac enzymes stat. Call me back in 15 minutes with an update.
Switchboard Operator – Stage 3	<ul style="list-style-type: none">• Code Blue for SimRoom X
ER Resident (Confederate – this could be program faculty as well) comes in at end of scenario to intubate.	<ul style="list-style-type: none">• Has anyone checked for a pulse?• Restart compressions?• What’s this patient’s code status?• Tell me a quick history of this patient and what’s happened now?

Scenario Algorithm



Faculty Use Only