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Transforming Ways of Knowing about Interprofessional Education: A Single Exploratory Case Study with Nursing Educators

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Transforming Ways of Knowing about Interprofessional Education: A Single Exploratory Case Study with Nursing Educators

by

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Abstract

Teaching and learning in nursing are changing in response to increased complexity and societal issues in client care (CASN, 2010; Institute of Medicine, 2000). A call for innovation in nursing education is imminent and interprofessional education (IPE) may be the innovative teaching process needed to address a change in nursing education. Change is difficult in a traditional and bounded profession, such as nursing education. The purpose of this single exploratory case study was to explore how 15 nurse educators teaching in undergraduate nursing programs in Alberta, Canada understood and used IPE within nursing education. The intent was to identify the perspectives and meanings of IPE as seen through the knowledge lens of nurse educators, using the theoretical framework of social constructivism, underpinned by adult learning theory. Data collected from semi-structured interviews, field notes, and document review allowed interpretation of how the ways of knowing in nursing education guided the nurse educators to understand and use IPE. Transformative learning theory gave clarity to the meaning of the dissonance experienced by the nurse educators. The nurse educators' exploration of ways of knowing evolved into new ways of knowing about IPE in nursing education. The findings gleaned from this exploratory case study may assist with ongoing development of healthcare policy and education programs.

Acknowledgements

In order to begin and complete this research, I acknowledge my peers in nursing and education as you challenged me to think differently about interprofessional education in nursing education. You encouraged me to seek clarity and understanding on a topic that created a sense of dissonance for me. In particular, I acknowledge the participants of this study from the two nursing programs who willingly contributed their knowledge, time, and expertise.

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Through the support and patience of my husband and family, including my grandchildren, I completed the doctoral program and my research. I extend my heartfelt thanks and love to each and every one of you. Your love is constant.

Dedication

To my father, the late Kenneth Mainland,

who instilled the importance of education...

To my mother, Viola (Bailey) Mainland,

who imparted the importance of family...

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CHAPTER 1: CONTEXT OF THE STUDY

Nursing is a profession that is steeped in tradition and centered on service through a caring and safe practice (McIntryre, Thomlinson, & McDonald, 2006; Canadian Nurses Association, 2008). Strong identities and insular relationships develop from practice; therefore, changes in a traditionally service oriented profession can take time and innovation (Moore, 2009; Steinert, 2005). A re-framing of nursing education and practice may strengthen the process for innovation (Canadian Association of Schools of Nursing, 2010; Canadian Nurses Association, 2008).

Recently, a call for change in nursing education has been made to address the needs of changing population demographics; growing health needs of an aging population, increasing lack of human resources in the healthcare sector, and the ongoing impact of health issues from a global perspective (Boland & Finke, 2009; Canadian Nurses Association, 2009a). Interprofessional education (IPE) is one teaching and learning process that encourages health professionals to learn together in order to address the identified health needs of a population (Health Canada, 2004; World Health Organization, 2010). IPE is an innovative method of teaching and learning, yet "academics who have been educated in close disciplinary bounds frequently display attitudes that are not commensurate with an interprofessional view" (Gilbert, 2005, p. 92). Nursing is one such closed discipline (Matthew-Maich, et al., 2007).

Re-framing nursing education may offer new ways of educating and improving practice. For example, discussions are taking place suggesting students from different professions may improve practice if given the opportunity to learn more about each other's practice, in order to understand how each profession supports the care given by another

profession (Canadian Nurses Association, 2009b; Dubois & Singh, 2009; Health Council of Canada, 2005). However, researchers suggest tradition and tunnel vision in nursing education may stifle innovation (Finke, 2009; McEldowney**,** 2003, Villeneuve, 2012). Nurse educators are called upon to acknowledge the traditional nursing context and challenge the rhetoric of innovation to address re-framing of education and practice (Ashworth, Gerrish, & McNaus, 2001; Boyd & Lawley, 2009; McEldowney, 2003; Thomas & Davies, 2006).

The following sections provide the purpose of the study, definitions of terms used in this research study, and a brief review of the compelling reasons to conduct the research study. The remainder of the chapter affords a synopsis of the research approach and research questions, theoretical framework, as well as the significance of the study for future teaching and learning in nursing education. The conclusion of the chapter includes my personal connection to the study.

PURPOSE OF THE STUDY

The purpose of this study was to explore how nurse educators understand IPE in the context of nursing education, and explore how nurse educators use IPE when teaching in an undergraduate nursing program in Alberta. The intent was to identify the perspectives and meanings of IPE as seen through the eyes of nurse educators, using the theoretical framework of social constructivism, underpinned by adult learning theory. Ultimately, the findings from this case study research may inform future nursing policy and nursing education development.

For clarity of understanding for the reader, I identified definitions of terms used in this dissertation in the next section of Chapter One.

DEFINITIONS OF TERMS

Collaborate: "building consensus and working together on common goals, processes and outcomes" (College and Association of Registered Nurses of Alberta, 2005a, p. 23).

Competency: "the integrated knowledge, skills, judgment and attributes required of a registered nurse to practise safely and ethically in a designated role and setting" (College and Association of Registered Nurses of Alberta, 2005a, p. 23).

Entry-to-Practice Competencies: "the competencies, as amended from time to time, required of the new registered nurse graduate who is entering the workforce for the first time. The College and Association of Registered Nurses of Alberta define these competencies" (Nursing Education Program Approval Board, 2005, p. 7).

Interprofessional education: "when two or more professions learn with, from and about each other to improve collaboration and improve health outcomes" (World Health Organization, 2010, p.13).

Nursing education program: "a program of nursing education offered by an educational institution, leading to initial entry to practice of a registered nurse" (Nursing Education Program Approval Board, 2005, p. 8).

Nursing practice: a synthesis of the interactions between the concepts of persons, health, environment, and nursing, providing a direct service to a variety of patient/client populations throughout the life cycle (College and Association of Registered Nurses of Alberta, 2005a).

Profession: "is characterized by prolonged education that takes place in a college or university and results in the acquisition of a body of knowledge based on theory and

research. Values, beliefs, and ethics relating to the profession are an integral part of the educational preparation" (Killeen & Saewert, 2007, p. 52).

The Rationale for the Study

The following section is a brief review of rationale supporting this research. The reasons stem from global, national and provincial perspectives in order to address the need for exploration in nursing education in Alberta.

Globally

Learning in the 21st century is focusing on interdependent learning skills equipping students to be active participants in a complex world (Ananiadou & Claro, 2009; United Nations Educational, Scientific and Cultural Organization, 2009). Rapid expansion of information, communication, and technology; changing demographics; along with national and global social changes; and economic changes are creating opportunity for students to engage in forms of collaborative learning and enquiry (Ananiadou & Claro; Health Canada, 2004; World Health Organization, 2010). Collaborative learning may offer a new mind set of learning guided by shared knowledge, teamwork, and cooperation to address these indefinable challenges (European Higher Education Area, 2009).

In 1987, the World Health Organization identified IPE as a teaching and learning process that encourages healthcare professionals to learn together in order to respond appropriately to the health needs of a population. The World Health Organization has been influential in identifying the need for multiprofessional education or, the need for health professionals to be "learning alongside each other…[and] collaborating" (Carpenter & Dickinson, 2008, p. 4). IPE is a form of teaching and learning that supports collaborative learning and practice between professions. Collaborative learning and practice may assist

in addressing the societal, economic, and health needs of a changing society within the 21st century (European Higher Education Area; World Health Organization). In Canada, IPE is one way to begin to address the changing health needs of Canadians with a call for higher education institutions to include interprofessional curricula (Canadian Association of Schools of Nursing, 2010; Health Canada, 2007).

Nationally

The Standing Senate Committee on Social Affairs, Science and Technology (2002), also known as the Kirby Report, highlighted the possibility of forthcoming shortages of human resources in the health sector. The Romanow Report (Privy Council, 2002) identified IPE as a way to meet the health needs of Canadians and a possible coordinated approach to manage human resources in the health sector. The First Ministers' Accord on Health Care Renewal (Health Canada, 2003) built on the work from these two reports and made recommendations that IPE may be an innovative teaching and learning tool to address issues on patient safety and strategies to manage health human resources.

One strategy, the Pan-Canadian Health Human Resources Strategy, guided and supported the development of the Interprofessional Education for Collaborative Patient-Centered Practice in Canada (Health Canada, 2004). The objectives developed for the Interprofessional Education for Collaborative Patient-Centered Practice initiative included: promote and demonstrate the benefits of Interprofessional Education for Collaborative Patient-Centered Practice, increase the number of educators and health professionals using IPE, stimulate networking and sharing of Interprofessional Education for Collaborative Patient-Centered Practice, and facilitate interprofessional collaborative care in both the education and practice settings (Health Canada, 2004).

Nurse educators, albeit all educators, in healthcare are encouraged to integrate and embed IPE within curriculum (Accreditation of Interprofessional Health Education, 2011; Canadian Nurses Association, 2009b). The Canadian Association of Schools of Nursing (2010), the national voice for nursing education in Canada, endorses the use of IPE in nursing education as one of the curricula-focused solutions to prepare nursing graduates for the complex practice setting. The integration is resulting in a variety of changes to, and delivery of, healthcare education in some provincial higher education institutions (Charles, Bainbridge, & Gilbert, 2010; Cook, 2005; McMurtry, 2010; Salm, Greenberg, Pitzel, & Cripps, 2010).

Provincially

The Government of Alberta is part of the refrain for IPE integration into healthcare education (Alberta Health and Wellness, 2011; Province of Alberta, 2010). In 2011, Alberta Health and Wellness proposed a Collaborative Practice and Education Framework for Change to guide Alberta healthcare providers, educators, and regulators "with a common vision and set of principles" to support collaborative and interprofessional learning and practice in healthcare (p. 5). Nursing education is one of the key participants creating this common vision as nursing represents the largest regulated healthcare profession in Alberta (Canadian Institute for Health Information, 2010).

Nurse educators of an approved nursing program develop current curriculum for undergraduate nursing education. The curriculum is structured to provide educational experiences necessary for students to achieve the *Entry-to-Practice Competencies* as defined by the College and Association of Registered Nurses of Alberta, the regulatory body of registered nurses in Alberta (College and Association of Registered Nurses of

Alberta, 2006). *Entry-to-Practice Competencies* outline the competencies required of a recent graduate from a nursing program to practice as a registered nurse. Collaborative practice is a required competency to facilitate care of clients and develop team relationships, including knowledge and support of other professionals' practice competencies.

In addition to IPE inclusion in nursing curriculum**,** Alberta Health and Wellness (2011) supports policy alignment of higher education institutions with workplace and regulatory bodies and suggests without this alignment change for collaborative learning and practice will not be successful. Moreover, there is an expectation that nurse educators will integrate IPE within curriculum to meet accreditation expectations for IPE therefore playing a pivotal role in the design of nursing curriculum in undergraduate nursing programs (Accreditation of Interprofessional Health Education, 2009; Canadian Nurses Association, 2009a; Canadian Nurses Association, 2009b).

However, there seems to be no specific direction on how to integrate IPE into a nursing curriculum. Identifying how nurse educators understand and construct knowledge about IPE within nursing education in undergraduate programs in Alberta may offer direction on integration of IPE in nursing curriculum. In addition, gaining information on integration of IPE into nursing curriculum may inform future nursing education and policy.

Currently, IPE is an identified aspect for increased collaborative learning and practice. Competencies to address this form of learning are guided by the National Interprofessional Competency Framework and faculty development is considered a prerequisite in the Alberta framework, Collaborative Practice and Education Framework for Change, yet there is relatively little understanding of how educators understand and use

IPE within nursing education (Alberta Health and Wellness, 2011; Canadian Interprofessional Health Collaborative, 2010).

Creating innovative pedagogical constructs to support collaborative learning and practice takes time, continuous learning, and resources (Blackmore & Kandiko, 2011; Gardner, Chamberlin, Heestad, & Stowe, 2002; Lattuca, 2002; Oandasan & Reeves, 2005; Steinert, 2005). Educators teaching in an integrated IPE context express positive attitudes toward the use of IPE but experience a lack of confidence in teaching and assessing students in an integrated course (Anderson, Cox, & Thorpe, 2009; Anderson & Thorpe, 2010; Boix Mansilla & Dawes Duraising, 2007; Curran, Sharpe, & Forristall, 2007; Derbyshire & Machin, 2010; Jinks, Armitage, & Pitt, 2009). Exploration of how educators, such as nurse educators, construct new knowledge within a traditional profession will contribute to current knowledge on how IPE integration is experienced and developed by educators (Benner, Sutphen, Leonard, & Day, 2010; Bennett, et al., 2011).

THEORETICAL FRAMEWORK

Coming from a social constructivist perspective, I sought interpretation of nurse educators' experiences and the meanings of these experiences while retaining the characteristics inherent in the context (Merriam, 2009; Yin, 2009). The theoretical lens of social constructivism (Vygotsky, 1978), underpinned by adult learning theory (Knowles, 1980), created a framework to identify how a nursing education context influences the nurse educators' understanding and experience of creating meaning about IPE. Social constructivism assisted with the exploration of the social and cultural aspects in nursing education and the construction of IPE in nursing education (Kanaka & Anderson, 1999).

Using a dialogic process, individuals learn from more skilled members of a specific culture how to socially construct their knowledge and understanding of that culture (Driver, Asoko, Leach, Mortimer, & Scott, 1994). The dialogue establishes formal knowledge derived from the "politics, ideologies, values, the exertion of power and the preservation of status, religious beliefs, and economic self-interest" of that specific group (Phillips as cited in Richardson, 2003, p. 1624). Construction of the knowledge develops through use of symbols and language from that specific culture (Merriam, Caffarella, & Baumgartner, 2007; Vygotsky, 1978).

Although a social constructivism lens offers a way to understand how knowledge is constructed and gives meaning in relation to the social and cultural aspects of the experience to that individual, each individual may view the experience differently. Constructing the meaning of the experience differently suggests there is no one reality of an experience, rather a variety of understandings of what was heard and seen (Kanuka & Anderson, 1999).

Adult learning theory, also known as andragogy, is a model of assumptions about how adult learners learn (Knowles, 1980). Malcolm Knowles, a well-known writer of adult education theory, described these assumptions as self-directed, experienced, ready to learn, centered on solving problems, internally motivated, and need to know (Knowles, 1980). Andragogy encourages adult learners to participate in the development of new learning. In addition, Knowles (1980) asserted adults are self-directed learners in other aspects of their lives suggesting adult learners construct knowledge through experiences in life. I explore social constructivism and adult learning theory further in Chapter Three.

RESEARCH APPROACH

In order to explore how nurse educators understand and use IPE in the context of nursing education when teaching in an undergraduate nursing program in Alberta, I used a qualitative approach. I was interested in understanding how nurse educators experienced IPE within the context of nursing education and therefore chose a research approach that allowed for exploration and interpretation of the world of others using observation, dialogue, recordings, pictures, and self journaling (Denzin & Lincoln, 2011; Marshall & Rossman, 2011).

To gain the depth and richness of the nurse educators' experiences using IPE in the natural setting of nursing education, I chose to use a case study strategy (Marshall & Rossman, 2011; Merriam, 2009). Using the natural setting of nurse educators in nursing education offered a fertile ground for interpretation and understanding of the "complex social phenomenon" such as IPE in nursing education (Yin, 2009, p. 4). It is within the boundary of the natural setting that I interpreted a real-life, complex phenomenon (Merriam, 2009) and maintained "the holistic and meaningful characteristics of real-life events" (Yin, 2009, p. 4). This allowed me to understand the phenomenon as the nurse educators express currently.

The descriptive road map for the case study research is within the case study protocol. Further explanation about the research methodology is in Chapter Three.

Research Questions

The three main research questions guiding the study were:

- How do nurse educators define their understanding of IPE within nursing education?

- How do nurse educators make sense of the experience constructing this new knowledge paradigm of IPE?
- What social and collaborative processes influence construction of IPE knowledge in the environment of nursing education?

SIGNIFICANCE OF STUDY

The significance of this case study research is the contribution to nursing and education knowledge related to how nurse educators understand and use IPE in nursing education. The intended contribution is to inform policy changes in nursing education and practice made by nursing education leaders in Alberta as future nursing education needs are considered. Furthermore, the information gleaned from this exploratory study may be transferable to teaching and learning in other provincial nursing and healthcare education programs [e.g. Curriculum development]. Teaching and learning, in nursing, are changing in response to increased complexity and safety issues in client care (Canadian Association of Schools of Nursing, 2010; Institute of Medicine, 2000). Therefore, the intent of the knowledge gained from this research study is to assist in the ongoing development of healthcare educators and education programs, including nursing.

PERSONAL CONNECTION TO THIS STUDY

My personal interest in examining how nurse educators construct new knowledge and meaning of this new knowledge evolved from over 30 years experience as a practicing registered nurse in the community setting and as a nurse educator. As a practicing registered nurse, I sensed complacency about innovative ideas within the nursing profession. My Masters degree was the catalyst for reflection on this complacency and led me to explore possible misalignment between current practice of a registered nurse and

management expectations for future practice. The outcome of my study rested on misalignment of communication skills and professional identity between the registered nurses and healthcare management.

My current position as a nurse educator in an undergraduate nursing program set the stage for ongoing reflection about nursing education in the future, with the inclusion of IPE. As I consider the global, national and provincial influences on integration of IPE into nursing education, I wondered how nurse educators understood IPE and the use of IPE in nursing education in order to address potential education needs of the future workforce.

Throughout this research process I gained understanding of how nurse educators came to understand IPE in nursing education. In addition, I gained a deeper appreciation of the complexity and uncertainty a traditional profession experiences with change and innovation. I found myself reflecting on how I understand IPE in nursing education and how I incorporate the values of innovation in my teaching processes. My intent is to share the knowledge gained from this research and encourage ongoing dialogue for nurse educators to open the door to innovation in nursing education.

SUMMARY

This chapter provides a synopsis of the context, purpose and approach of the research study in order to set the stage for the reader and bring clarity to the problem explored. The purpose of this single exploratory case study research is to explore how nurse educators understand and use IPE in the context of an undergraduate nursing program in Alberta. Qualitative methodology allows for exploration and interpretation of the world of the nurse educators and case study strategy supports a road map to interpret a real-life, complex phenomenon within the boundary of a natural setting—nursing education. The theoretical

framework of social constructivism, underpinned by adult learning theory, guides the exploration and interpretation of the case study research. In addition, as a nurse educator, I hope to offer transparency and trustworthiness as I share my personal connection to the research context with the reader.

CHAPTER 2: REVIEW OF THE LITERATURE

To examine how nurse educators understand and use IPE in the context of nursing education, I reviewed both nursing and IPE literature. Five themes frame this literature review. The first theme is an exploration of IPE and use in higher education, as well as nursing education. A brief synopsis of nursing knowledge and discourse establishes the second theme. The third examines factors influencing the use of IPE in nursing education at a national and provincial level. The fourth theme offers considerations of how nursing educators develop new knowledge in nursing education. Discussion on the future view of IPE and nursing education concludes the literature review.

INTERPROFESSIONAL EDUCATION

This section provides an overview of current definitions of IPE, including the definition used for this study. I explored the literature about the use of IPE in higher education as well as in nursing education, notably in the province of Alberta.

Definition of IPE

The definition of IPE used for the purpose of this study was, "when two or more professions learn with, from and about each other to improve collaboration and improve health outcomes" (World Health Organization, 2010, p.13). Although IPE was first mentioned as early as the 1960's, it is not until 1987 that the World Health Organization identified IPE as a teaching and learning process for healthcare professionals to learn together in a collaborative manner (Carpenter & Dickinson, 2008). In Alberta, IPE is synonymous to collaborative education and occurs "when learners from two or more health programs or disciplines learn about, from and with each other to enable effective collaboration and improve health outcomes" (Alberta Health and Wellness, 2011, p. 8).

The definition of IPE is not to be confused with teamwork defined as "a process whereby a group of people work together with a common goal" (Howkins & Bray, 2008, p. xviii) or multidisciplinary that "involves bringing professionals with different perspectives together in order to provide a wider understanding of a particular problem" (Howkins & Bray, 2008, p. xviii). Rather, it is a teaching and learning process that offers a way for healthcare professionals to learn about, with, and from each other in order to attain positive outcomes.

In Canada, IPE provides a foundation for the accreditation standards established between eight professional groups in Canadian healthcare education (Accreditation of Interprofessional Health Education, 2009). The intended outcome of IPE is to address interprofessional competencies through the use of interprofessional collaboration, "the process of developing and maintaining effective interprofessional working relationships with learners, practitioners, patients/clients/families and communities to enable optimal health outcomes" (Canadian Interprofessional Health Collaborative, 2010, p. 8).

Interprofessional Education in Higher Education

IPE, identified as an innovative form of learning, may address some of the needs in society through knowledge transfer (Europa, 2003; World Health Organization, 2010). The goal of interprofessional work is "to integrate knowledge or modes of thinking in two or more disciplines or established areas of expertise to produce a cognitive advancement...in ways that would have been impossible or unlikely through single disciplinary means" (Boix Mansilla & Duraising, 2007, p. 219). Integration of learning can be a catalyst for solving complex problems as the interprofessional learning process is not owned by one discipline and creates opportunity for collaborative learning experiences

(Harris & Holley, 2008; Havas, 2009; Sá, 2008). How this innovative learning process is to be integrated remains elusive.

Historically, each profession establishes a unique identity sustained and maintained by higher education through types or forms of boundaries (Harris & Holley, 2008; Holley, 2009). The uniqueness of the profession includes power, voice, discourse, and status (Moore, 2009). Each profession's uniqueness offers structure and symbolism to how each profession functions, establishing a space for those involved in the profession to create their own identity. There is sense of status and uniqueness for the professional group. However, this unique status may also create a form of isolation from other professions.

Isolation establishes a space for educators to practice their expertise and create a silo effect with educators becoming dependent on their own professional conventions (Lattuca, Voigt, & Fath, 2004; Harris & Holley). This unique space may support differences from philosophical and cultural viewpoints; moreover physical aspects such as the university buildings housing the professions suggest a structural barrier to each other (Harris & Holley, 2008; Sá, 2008). Although there is a need for knowledge and services related to a specific sector to be centralized, there is also recognition that the professionals will need to learn how other sectors work in order to improve knowledge transfer (Canadian Council on Learning, 2009).

The culture within higher education institution changes slowly to address the development of IPE (Oberg, 2009; Sá, 2008). Facilitation of IPE is supported in theory but higher education institution barriers remain, for example, rigid curriculum and timetabling, lack of resources for cross professional teaching, and lack of perceived value (Curran, Deacon, & Fleet, 2005; Gardner, Chamberlin, Heestand, & Stowe, 2002). Currently, the

logistics of administering an IPE process is married to the institutional agenda suggesting a re-framing in values and processes of the higher education institution is required (Holley, 2009; Kezar & Eckel, 2002). Moreover, there is a sense of "disincentives" to develop IPE in higher education institutions (Sá, 2008, p. 540).

Sá (2008) argued that professions in higher education institutions will not experience a re-framing to support the use of IPE as long as there are entrenched and perpetuated traditional ideals of the individual professions, and no change in funding structure. In addition, through gathering information from 100 university documents, Sá reported that IPE support is apparent in universities if funding incentives for research is from outside sources. Sá suggested radical change in policy will allow for administrative process change. Holley's study (2009) of 21 higher education institutions supported Sá's research noting a change in policy will influence the priorities of the higher education institution.

An environment scan, commissioned by the World Health Organization, collated information from 41 countries of the World Health Organization's 193 member states on how, where, and why IPE is offered (Rodger & Hoffman, 2010). Of the 396 responses received, IPE is learned voluntarily in 22%; learning is not assessed in 63%; and 69% offer IPE without trained facilitators. The most responses from one country came from Canada (n=98). The high response rate may be reflective of the national reform initiatives promoting "inter-disciplinary provider education" (Health Canada, 2003, para 24). The First Ministers' Accord on Health Care Renewal led to Canada becoming a leader in IPE with the development of Interprofessional Education for Collaborative Patient-Centered Practice (Health Canada, 2007). Health Canada (Canadian Interprofessional Health Collaborative, 2008) provided support for learning projects over a five year period to

address health human resource issues in Canada. The evaluations of these projects, some of which include nursing students, built evidence to support IPE and collaborative practice.

In Canada, support for IPE programs varies due to different provincial funding and policy supports. Ontario, British Columbia, and Newfoundland have provided substantial funding support and staff to encourage the development of IPE in higher education institutions and healthcare institutions [e.g., College of Health Disciplines at the University of British Columbia, University of Toronto's Office of IPE, and Memorial University of Newfoundland's Centre for Collaborative Health Professional Education] (Gilbert, 2010). In Alberta, health science students have opportunity to learn together using an IPE process through face to face and social networking opportunities (King, Greidanus, Carbonaro, Drummand, & Patterson, 2009) as well as clinical learning units in acute care (Sommerfeldt, Barton, Stayko, Patterson, & Pimlott, 2011).

Interprofessional Education and Nursing Education

Although the recent call for innovation in healthcare education is prompting a rethinking of nursing curriculum and pedagogy for nurse education, there remains an absence of collaborative learning processes within medical and nursing curricula (Finke, 2009; Hopkins Kavanagh, 2003; Scaia & McPherson, 2010). In a recent landmark study of nine higher education institutions in the United States of America that included three national surveys of faculty and students, Benner, Sutphen, Leonard, and Day (2010), recommended nurse educators need support and time to reflect on and improve teaching practice to address this paucity of collaborative learning processes. In addition, Steinert and Mann (2006) proposed, in order to teach in the 21st century and address the expectations for students, educators will need to move beyond the insular knowledge of

their own profession. Without this move, the result could be a closed profession with "nurse…educators lack[ing] the necessary preparation for their academic roles…[and teach] as they were taught" (Matthew-Maich et al., 2007, p. 76).

However, a lack of agreement exists on the usefulness of collaborative learning. Dutton and Worsley (2009) found for some nurse and social work educators, IPE compliments their scope of practice with acceptable blurring of practice boundaries, whereas others consider the blurring threatening to their practice. The researchers concluded how educators construct and develop the meaning of IPE will influence how students construct knowledge and identify with IPE.

Although researchers suggest healthcare educators need to teach interprofessionally within the health sciences, little is known about how nursing educators learn to teach interprofessionally (Curran et al., 2005; San Martin-Rodriguez, Beaulieu, D'Amour, & Ferrada-Videla, 2005; Morison, Boohan, Moutray, & Jenkins, 2004; Schaffer, Lei, & Paulino, 2008; Sheehan, Robertson, & Ormond, 2007). What researchers know is that nurse educators experience difficulties moving from clinical skills to teaching skills where they experience role confusion (Baxter & Brumfitt, 2008; Boyd & Lawley, 2009; Dutton & Worsley, 2009; McArthur-Rouse, 2008). Lack of role clarity along with lack of research to guide nursing educators in teaching IPE may create a sense of ambiguity in the teaching and learning process of a traditional profession.

NURSING KNOWLEDGE

Chinn and Kramer (2008), well-known nursing scholars, claimed knowledge in a profession "represents what is collectively taken to be a reasonable and accurate understanding of the world as it is understood by the members of the discipline" (p. 2).

This suggests knowledge in the nursing profession represents what nurses know, create and demonstrate about their work. The understanding of nursing work guides nursing theories, models, and practice (Chinn & Kramer; Gunther & Creasia, 2007). Nurses collectively share knowledge, or what they call 'ways of knowing'.

Ways of Knowing

The epistemology of nursing knowledge, originally described by Carper (1978) as nursing ways of knowing, create the foundation for nursing knowledge and identity (Chinn & Kramer, 2008; Fawcett, Watson, Neuman, Walker, & Fitzpatrick, 2001; Vandeveer, 2009; Zander, 2007). Initially, Carper's seminal work on nursing knowledge, categorized four ways or patterns of knowing—empirical or knowing grounded in scientific knowledge, aesthetics or use of creativity to provide effective care, personal knowledge in nursing or knowing oneself to develop a therapeutic relationship, and ethics or the moral knowledge in nursing. Carper believed these four patterns identified "what it means to know and what kinds of knowledge are held to be of most value in the discipline of nursing" (p. 13).

Further Thinking on Ways of Knowing

White (1995) added to Carper's patterns, or ways, of knowing with a socio-political pattern of knowing that "lift[s] the gaze of the nurse from the introspective nurse-patient relationship and situate[s] it within the broader context in which nursing and healthcare take place" thereby opening the debate on how nursing influences "practice, the profession, and health policies" (para 52). The concept of unknowing or de-centering, identified by Munhall (1993), constructs possibilities by being open to "a much deeper knowledge of another being, of different meanings, and interpretations of all our various perceptions of

experience" (p. 128). Chinn and Kramer (2008) explored emancipatory knowing or the influence of nursing on the invisible pressures of injustices in society. However, Bonis (2009), as well as Chinn and Kramer (2008), argued not one way addresses nursing knowledge but rather it is the interweaving of ways or patterns that creates the picture of how nursing knowledge is understood by nurses.

Knowledge from ways of knowing assists nurse educators to construct and share learning opportunities with nursing students to understand the human experience. The perspective of multiple ways of knowing provide a framework for the profession of nursing to understand the human experience, answering questions that may not be addressed by science (Meleis, 2012; Van der Zalm & Bergum, 2000). For example, the experience of child birth through poems and story-telling using personal and aesthetic ways of knowing; understanding how nurses know there is a major problem with a newborn child with use of empirical, aesthetic and personal knowing; and understanding how cardiac nurses know when to intervene with life saving procedure using aesthetic, empirical and ethical knowledge (Hunter, 2008; Kremser & Lyneham, 2007; Rubarth, 2005). Reciprocally, these experiences further develop nursing knowledge and the socialization experience of what it means to be a nurse (Killeen & Saewert, 2007; MacIntosh, 2003; Ware, 2008). However, there is no identified way of knowing about how to understand and use interprofessional education and practice.

Rethinking Ways of Knowing

Although ways of knowing are considered the epistemologic foundation for how nurses know and share knowledge, recently, there is reconsideration of the traditional ways of knowing to ways of knowing that address the needs of society in the 21st century

(Budgen & Gamroth, 2008; Canadian Association of Schools of Nursing, 2010; Canadian Nurses Association, 2008). This reconsideration is creating a rethinking of philosophies and processes for nurse educators (Boyd & Lawley, 2009; Johnson, 2008; Matthew-Maich et al., 2007; Ryan et al., 2004). The rethinking of nursing philosophy and processes will challenge and inform educators within a traditional profession (Benner, Sutphen, Leonard, & Day, 2010; Bennett, et al., 2011).

However, educators in a traditional profession teach from a discourse through expertise and membership in a specific field of knowledge and practice (Gee, 2008; Tonkiss, 2008). Gee (2008) questioned if discourse can be "resistant to internal criticism and self-scrutiny" (p. 161). This lack of self scrutiny may suggest a silo effect with educators dependent on their professional conventions for knowledge (Lattuca, Voigt, & Fath, 2004). Sandlin (2005) agreed and argued that adults continue to learn as taught with little regard to political and cultural influences. She proposed most teaching and learning perpetuates current discourse with little regard to what influences knowledge construction.

RETHINKING NURSING EDUCATION

Traditional nursing education may stifle innovative learning and practice skills (Finke, 2009; McEldowney**,** 2003). Some researchers argued this traditional environment offers certainty of specialized knowledge and skills with rhetoric of innovation (Ashworth, Gerrish, & McNaus, 2001; Boyd & Lawley, 2009; Thomas & Davies, 2006), whereas others suggested knowledge translation may be hindered by some of the processes in nursing education and practice. Traditional curriculum and ways of knowing will no longer be effective in this technology driven world as "nursing…lacks a ready and able

group of leaders waiting in the wings…to fit the new reality" (Porter-O'Grady & Krueger-Wilson, 1998, p. 298).

Although educators in nursing value knowledge and ongoing education, the movement toward updating and changing nursing education discourse is slow due to the tunnel vision created in a traditional organizational culture. Nurse educators need to "challenge truths imposed" and "take responsibility for…own truths and actions" (McEldowney, 2003, p.219). For example, Cragg and Andrusyszyn's (2005) study of how Canadian nursing students in a Masters nursing program develop and transform knowledge found "some shift in habitual habits of mind but there was little evidence of changes in point of view" (p. 12) suggesting a comfort in the original frame of reference of nursing practice. Five years later, a study of recent graduates of another Masters program found learning was a re-formation rather than transformation, suggesting an expansion of knowledge but not a deep transformation of values or understanding of nursing (Faulk, Parker, & Morris, 2010). These researchers as well as others, suggest values and identity of a nurse begins by the role modeling of the nurse educator, however, how change is demonstrated remains ambiguous (Billay & Yonge, 2004; Rogan, 2009).

National Perspective

Government, often, directs incentives for change in policy through new funding structure or research proposals (Oandasan & Reeves, 2005). Canadian decision makers have followed this top-down approach in order to establish policy on IPE in Canada. To diffuse the idea of IPE across the professions in Canada, Health Canada (2003) made a call for research to identify effective IPE and interprofessional practice education processes. The result of this call was 20 research studies across Canada. One of the outcomes from

this national research was the development of a national healthcare professions group strategizing on effective interprofessional competencies for education and practice (Accreditation of Interprofessional Health Education, 2009).

Although provincial ministries manage policy for education and health practices, a national perspective supports accreditation standards for health education. During the past four years, integration of IPE principles and practices into the accreditation standards of eight organizations, representing six health and human service professions, support achievement and maintenance of reasonable and appropriate standards of education for healthcare professionals (Accreditation of Interprofessional Health Education, 2009). Oandasan & Reeves (2005), well-known authors on IPE, noted accreditation standards are crucial for the implementation of IPE in education. Recent funding from Health Canada (2011) provided further support for IPE accreditation with the development of an Interprofessional Health Education Accreditation Standards Guide. The intent of this guide is to create a common language for the integration of IPE into healthcare education programs.

Furthermore, support from the national voice for nursing education, research and scholarship, the Canadian Association of Schools of Nursing (2010), indicated IPE is a solution to prepare future nursing students for complex nursing practice settings. The Canadian Association of Schools of Nursing has made changes to the accreditation standards of nursing programs by reviewing and embedding IPE in expected standards of nursing curriculum (Accreditation of Interprofessional Health Education, 2011).

Provincial Perspective

In Alberta, policy development in the provincial agenda signaled changes (Government of Alberta, 2010). The change supports partnerships across professions. For example, the Minister of Advanced Education and Technology and the Minister of Health and Wellness signed a 10 year strategy supporting health research agenda in an effort to align research across professions and sectors to meet the needs of a complex health system (Government of Alberta). In addition, the province of Alberta introduced the Alberta Health Act endorsing collaborative learning and practice by encouraging professionals to practice in a manner that will maximize their skills and competencies (Province of Alberta, 2010).

Provincial policy provides a foundation for change but the gate keepers of change appear to be the higher education institutions and the regulatory body for registered nurses in Alberta. In an effort to address the need for change in the education and practice systems, Alberta Health and Wellness (2011) proposed the Collaborative Practice and Education Framework for Change. The framework provides direction to the interconnectedness of professional agencies and suggests leaders at all levels, competent in interprofessional education and practice principles, are key to facilitate change in Alberta. Identification of the process to develop leaders in education needs to be developed.

Although recognized by international and national leaders and government, the fit of IPE in nursing education in Alberta remains ambiguous. Accreditation standards support the use of IPE in education, but it is the regulatory body for nursing in Alberta that guides content for nursing education curriculum. The College and Association of Registered Nurses of Alberta remains relatively quiet on the issue of IPE. There is a sense of

uncertainty in a profession that embraces a culture of self regulation and decision making. During times of uncertainty, professionals retreat to the familiarity of own professional culture and discourse (Beales, Walji, Papoushek, & Austin, 2011). The Collaborative Practice and Education Framework for Change may offer a vehicle for dialogue between the regulatory body, education, and practice to identify salient issues and solutions to develop IPE in nursing education in Alberta.

NURSE EDUCATORS

Educators and preceptors, or expert practicing nurses, share nursing knowledge with students in the practice setting (Carlson, Pilhammar & Wann-Hannson, 2010; Rogan, 2009). The effectiveness of the learning will depend on how the knowledge is constructed and the meaning given to the knowledge shared between the nurse educator and the student. Carlson et al. suggested the knowledge shared by nurse educators is a reflection of how they "view their own profession and professional identity" (p. 767). Meaning given to this view is through use of occupational language or occupational slang; demonstration of busyness equated to being a good nurse, and demonstration of task completion as being a good practicing nurse.

Ashworth, Gerrish, and McManus (2001), who studied how nurse educators described Master level students, found the nurse educators extolled the virtues of pioneering new nursing roles and being leaders in practice and technical skills; yet, the educators refrained from encouraging students to explore how change could influence traditional practice. The researchers indicated the traditional practice of nursing influences how nurse educators acknowledge characteristics of Master level performance in nursing

education and suggest the rhetoric of pragmatism in nursing practice may suppress innovation.

This pragmatism is present in McArthur-Rouse's (2008) study of new educators learning new skills through faculty development. The educators felt a loss of identity as a practicing nurse while developing teaching skills as an academic within the new environment of a higher education institution. In addition, the academic environment's cultural values and attitudes are different from the practice setting. The difference in identity as a nurse in the practice setting and the difference in values and attitudes within the teaching environment caused the nurse educators to believe they lacked credibility within the nurse educator environment. Moreover, new nurse educators experience a sense of deskilling, lack of credibility with a sense of role blurring as new members of nursing education (Boyd & Lawley, 2009; Manning & Neville, 2009). Finke (2009) suggested innovation will be difficult in nursing education as long as there is a perceived lack of identity and resistance to challenging the status quo.

Development of Nurse Educator Knowledge

Bligh (2005) proposed current faculty education will not meet the needs of the future until educators have the opportunity to describe their learning needs and have active participation in the educational process. Ryan, Hodson Carlton, & Ali (2004) found in their study of nurse educators from eight higher education institutions, a plan for faculty development will help educators maintain a sense of credibility and identity while learning a new teaching process. Johnson (2008), who expanded this study to faculty members teaching in a graduate program, found experiential learning helped to maintain a sense of

credibility. Experiential learning provided educators with the ability to rethink how clinical nursing and formal knowledge interact (Dillard et al., 2009).

Similarly, McDonald (2010) suggested the construction of new knowledge requires a socialization experience with role modeling and mentoring as possible communication processes. Manning and Neville (2009), in their study of nurse educators' experiences transitioning from staff nurses to clinical nurse educators, suggested without appropriate communication and skill development there is a lack of credibility and increased stress. Although occasional networking and mentoring opportunities exist, the nurse educators struggled to understand the expectations of a nurse educator. On the other hand, other researchers suggested nurse educators demonstrate certain traits such as being passionate for teaching; fitting with the needs of the organization, having a sense of confidence about knowledge, possessing credible practice based skills, and having awareness of professional boundaries (Dattilo, Brewer, & Streit, 2009; Gillespie & McFetridge, 2005). These traits suggest a bounded profession—one with clear boundaries and rules.

Adams (2011) noted identity crises occur from the confusion about whether one is a nurse or an educator. She queried if the combined roles of nurse and educator are essential for nurse education. Rather, Adams proposed, the academic program draw on several professional sources to make the fit between theory and practice for students. She suggested curriculum development drawing from different professionals may allow for acknowledgement of nurse educator expertise, yet prevent the threat of role blurring by sharing knowledge across professional boundaries. Some authors have suggested nursing, as known today, may be entering an era of increased tribalism or extinction if change is not recognized in nursing education (Barrett, 2002; Baxter & Brumfitt, 2008; Wieck, 2000).

Steinert (2005), a well-known Canadian researcher on faculty development, suggests educator development needs to reflect the creation of opportunities for educators to identify what and how they need to learn. Through their motivation for learning, the educators are able to refer to experience, consider new ideas, and construct new knowledge to solve real life issues. Nevertheless, Villeneuve (2010), a well-known writer in nursing literature, warned nurse educators to be cognizant of ways of knowing constructed to support tradition as it may hinder innovative and creative ways to re-frame nursing education.

FUTURE VIEW OF INTERPROFESSIONAL EDUCATION

The role of leadership in higher education institutions is critical to the introduction of IPE into the education offered at higher education institutions (D'Amour & Oandasan, 2005). Gaining support from senior leadership is integral to the identification and administration of resources required for the development of IPE within a higher education institution. Without earmarked resources, IPE can appear as an add-on directed by a few champions.

Leadership has traditionally offered guidance to the institution through personal and interpersonal processes but with the increasingly complex nature of knowledge development and transfer, there is a sense of confusion and uncertainty resulting in the potential to impede innovation (Martin & Marion, 2005). When dealing with uncertainty, professionals may retreat to familiar processes such as traditional governance. The resulting retreat could be a potential barrier to innovation by sheer traditional processes (Begun & White, 2008; Martin & Marion).

However, in a study of senior academic administrators at eighty-two Canadian higher education institutions, the researchers found administrators agreed with the idea of IPE but

suggested further investigation to identify the system barriers to the implementation of IPE (Curran et al., 2005). Gardner, Chamberlin, Heestand, and Stowe (2002) surveyed 93 administrators from nursing, medicine, and pharmacy programs in the United States and also found positive attitudes toward implementing IPE but also agreed barriers to IPE remain significant. Ho, et al. (2008) found key IPE implementation drivers are finding the champions within senior academic administration and faculty suggesting beliefs and values for IPE are held by champions at all levels of the organization.

Higher education institutions are in the business of student learning and with added pressure from student bodies to support and resource IPE, the administrative processes may pause and reconsider the value and appropriateness of traditional teaching and learning approaches. For example, a Swedish study on 616 students from four undergraduate programs, concluded that students had a positive learning experience in an interprofessional course and developed increased communication and teamwork skills. This suggested a positive value for a future workforce (Hallin, Kiessling, Waldner, & Henriksson, 2009). Also, doctoral students engaged in an IPE program recommended enhancement of IPE for graduate learning, including institutional support for doctoral level research (Graybill et al., 2006).

Understanding the value placed on IPE will help identify the mechanisms required to bridge administrative processes and remove barriers (Gardner, et al., 2002). IPE creates another new domain for leaders to construct as the 21st century learning environment becomes increasingly complex. No longer will leading by mission and vision statements be enough as each profession tends to march to its own drummer (Fugazzotto, 2009).

Leadership in higher education institutions may need to identify a new vision for higher education—a new way of doing business (Begin & White, 2008).

Faculty Development and IPE

Teaching from an IPE perspective requires a sense of motivation. Motivation or the willingness to take action stems from two perspectives—intrinsic and extrinsic (Eccles & Wigfield, 2002). Individuals are intrinsically motivated if the activity has personal value; extrinsically motivated if the activity offers incentives. Blackmore and Kandiko (2011) reported educators from a variety of disciplines involved in IPE experienced motivation mainly from intrinsic factors; there was no exploration of specific personality traits in the study. There was a sense educators are intrinsically motivated due to curiosity and intellectual challenge in the exploration of new and engaging knowledge. Often this motivation results from the original exploration of new knowledge moving beyond the educator's professional boundary and into the context of another profession resulting in IPE.

Mid-career educators, who have tenure, often are interested in exploring new ideas and challenges (Blackmore & Kandiko, 2011). However, extrinsically there is a paucity of motivation for educators to participate and support IPE in higher education institutions (Blackmore & Kandiko, 2011; Gardner, et al., 2002; Lattuca, 2002). Barriers such as tenure, publishing expectations, and workload tend to block interest in IPE by younger educators.

Interprofessional studies have been part of the higher education institution system, in one format or another, since 1970's (Ellis, 2009) bringing two or more groups together to learn. Contact between groups suggests opportunity to teach and learn interprofessionally

(Carpenter & Dickinson, 2008). However, Hewstone and Brown (1986) countered this idea suggesting more than contact is needed; rather there is a need to explore and learn about the values and knowledge of the other group to gain clarity of one's values in comparison to another professional (Sargeant, Loney, & Gerard, 2008). A form of psychological tension or dissonance is required for educators to learn together and construct meaning of IPE (Festinger, 1957).

Cognitive dissonance is a catalyst for a professional to explore own and others' identity (Anderson, Thorpe & Hammick, 2011). Creating opportunity for educators to construct meaning is essential. Cavaleri (1994) claimed things are seen differently and the world can be viewed in an objective manner when individuals are "continually challenged by competing alternative perspectives" through dialogue (p. 263). Dialogue offers time and space to gain confidence in self and trust in others within an IPE learning environment. Steinert (2005), a well-known Canadian researcher on faculty development in the health sciences, discerned that without development of faculty in IPE, "teaching in this area is bound to fail" (p. 72).

Nikitina (2005) discovered when educators from different professions interacted and learned about each other, the result is an increase in understanding of each other's values and philosophies. He suggested if educators have the opportunity to learn together, they become more curious about each others' profession. This study would be useful in identifying how nursing educators become curious and learn about other professions.

Currently, several IPE programs for healthcare educators have developed in Canada, such as IPE teaching certificate at University of Western Ontario, clinical educator workshop at British Columbia College of Health Disciplines, and interprofessional

educator workshop at University of Toronto. Evaluation of these programs is ongoing but consideration of what influences nursing educators or how nursing educators understand IPE remains elusive. Although the model of IPE care and delivery is considered to be "in its infancy" (Barrett, Curran, Glynn, & Godwin, 2007, p. ii), there remains a gap in understanding and teaching interprofessionally; and a gap in how to implement the process of teaching interprofessionally (Curran et al., 2005; Kwan, Barker, Richardson, Wagner, & Austin, 2009).

FUTURE VIEW OF NURSING EDUCATION

Future nursing education aims to prepare registered nurses for complex practice settings with the integration of IPE in nursing education (Canadian Association of Schools of Nursing, 2010; Canadian Nurses Association, 2009a; 2009b). In addition, the Government of Alberta endorsed collaborative learning and practice in the Alberta Health Act encouraging professionals to practice in a manner that will maximize their skills and competencies (Province of Alberta, 2010).

For example, there is a call to integrate IPE into nursing education as one way to address the impending workforce shortage (Canadian Association of Schools of Nursing, 2010; Canadian Nurses Association, 2009a). In Canada, there will be a shortage of almost 60,000 full-time equivalent registered nurses by 2022, therefore creating a need for nursing education to explore delegation and collaborative learning practices (Canadian Nurses Association, 2009a). A change in workforce structure may require increased interprofessional understanding and communication skills. In addition, research shows safety concerns develop in healthcare due to lack of clear communication between professionals, notably in situations when care is complex (Canadian Association of

Schools of Nursing, 2010; Health Quality Council of Alberta, 2010; Institute of Medicine, 2000).

Re-framing of nursing education may offer ways to integrate IPE in nursing education. However, there appears to be a perceived lack of identity and resistance to challenging the status quo. Zonneveld spoke to this issue by noting "the danger of falling back into monodisciplinarity is not imaginary; it is the way of least resistance, the entropy of science" (cited in Sherren, 2008, p. 2). Challenging the current discourse could result in a deeper entrenchment of a traditional profession resulting in entropy of the profession (Baxter & Brumfitt, 2008; Burke, 2008). The natural tendency is to live and work in a stable environment and when entropy is experienced there is a sense of confusion and uncertainty (Schein, 1999).

Collaborative learning and practice to address complex health issues and meet the needs of the 21st century workforce is supported by provincial and national bodies that influence nursing education (Accreditation of Interprofessional Health Education, 2009; Alberta Health and Wellness, 2011; Canadian Association of Schools of Nursing, 2010; Health Canada, 2007; Province of Alberta, 2010). Integration into nursing curriculum is encouraged; however, how nurse educators define and understand IPE within nursing education in order to integrate IPE remains obscure.

SUMMARY

This literature review provides a brief account of IPE from a global, national and provincial perspective. Globally, recognition of IPE is an innovative teaching and learning process to enhance how health professions learn and work together to address health outcomes. From a Canadian perspective, the federal government supports IPE with

incentives to create new education and workplace practices. The government of Alberta addresses IPE as a way for health professionals to learn collaboratively in order to improve health outcomes. Although IPE is part of higher education institutional curricula, there is a lack of clarity of the fit in some traditional professions, such as nursing education.

Nurse educators mentor and support students in learning how to improve health outcomes; students learn to meet graduate competencies to address healthcare needs of society. However, teaching and learning in nursing education may need innovation and rethinking in order to address complex care of a changing society. IPE, supported by national and provincial agendas, may be one innovation to address the changing healthcare of the 21st century. Exploration of how nurse educators understand and use IPE may create the catalyst for re-framing the ways of knowing in nursing education.

Chapter 3: Research Methodology and Design

The purpose of this study was to explore how nurse educators understand interprofessional education in the context of nursing education, and explore how nurse educators use interprofessional education when teaching in an undergraduate nursing program in Alberta. The intent was to identify the perspectives and meanings of IPE as seen through the eyes of nurse educators, using the theoretical framework of social constructivism, underpinned by adult learning theory. In addition, the findings from this case study research may inform future nursing policy and nursing education development.

This chapter begins with a description of the research paradigm, including my worldview framing this research study. The second section provides a road map to the reader to explain the rationale for using qualitative methodology for this case study research followed by the reasons for using a single exploratory case study approach. Third section provides explanation about data collection and data analysis. The chapter concludes with a discussion on trustworthiness and credibility, as well as ethical considerations of this case study research.

Research Paradigm

The interpretive paradigm guided this study. Research explored through the interpretive paradigm situates knowledge in a particular context, socially constructed by those who participate within that context (Merriam, 2009; Willis, 2007). Although the interpretive paradigm does not allow for generalization or universal laws to be explored or developed, the paradigm does allow for the "construction of contextual knowledge or local knowledge" (Willis, 2007, p. 99). The findings in this study may inform nurse leaders and

policy developers about the social world of nursing education and what influences nurse educators' construction of knowledge and use of IPE within nursing education.

Researcher Paradigm

My worldview or paradigm is from an interpretivist perspective. The interpretive paradigm offers a worldview congruent with my curiosity of how others understand and make meaning of knowledge. I believe individuals socially construct their reality as perceived and created through their senses within a particular context. In order to gain an understanding of this reality, I listened for multiple realities from multiple voices while reflecting on my practice and assumptions. The interpretivist paradigm allowed me to explore ideas in order to gain understanding and clarity without creating certainties (Willis, 2007). The result is interpretation of how individuals perceive their context and what influences these perceptions.

ROAD MAP GUIDING THE RESEARCH

Interpretation rests on epistemological and theoretical lens informing and guiding the research (Merriam, 2009). Charmaz (2004) suggested a theoretically informed study offers opportunity to explore and produce "new theoretical insights" (p. 985). Scaffolding of these interrelated aspects—epistemology, theoretical perspective, methodology, and research strategy—creates a guiding process (Crotty; 1998). The following section provides such a road map.

Epistemology

The epistemology of this study is grounded in constructivism. Constructivism, defined by Crotty (1998), is "the view that all knowledge, and therefore all meaningful reality as such, is contingent upon human practices, being constructed in and out of

interaction between human beings and their world, and developed and transmitted within an essentially social context" (p. 42). In other words, the participants describe and define reality in their world. Holstein and Gubrium (2011) described constructivism as a practice of engaging in "the hows and the whats of social reality", how people construct their experience and what influences the construction of these experiences (p. 342).

Experiences are constructed, not discovered; neither objective nor subjective, rather the experiences are interactions between the objective and subjective worlds of the participants (Crotty, 1998). The interactions between these two worlds offer interpretation and meaning of the experience. The interpretation is dependent on the individual who experiences the interaction, therefore only understood in the social context (Crotty; Holstein & Gubrium). The theoretical framework of social constructivism allowed for exploration of how the nurse educators construct their knowledge about IPE through experiences in nursing education.

Theoretical Framework

A theoretical framework provides "the underlying structure, the scaffolding or frame" of the study (Merriam, 2009, p. 66). This frame provides a guidepost to illuminate expectations of the study, explore the data, and identify the relationships between the findings, as discovered through the researcher's stance or orientation to the study (Marshall & Rossman, 2011; Merriam; Miles & Huberman, 1994). However, Anfara and Mertz (2006) suggested "any framework or theory allows the researcher to 'see' and understand certain aspects of the phenomenon being studied while concealing other aspects" (p. xxviii). It is important to acknowledge that there may be certain meanings and understandings concealed and some revealed, dependent on the framework. Further

discussion of possible concealed aspects in this case study research unfolds in Chapter Four.

I used social constructivism, underpinned by adult learning theory, as the framework to explore and understand findings in this case study research. Social constructivism offered a framework to identify how nurse educators construct knowledge and meaning of IPE, make sense of the experience of constructing the meaning of IPE within the social and collaborative environment of nursing education. The lens offered by social constructivism framed learning as a social and collaborative process constructed through exposure to language and artefacts of a culture (Adams, 2006; Vygotsky, 1978). Through this social interaction and dialogue with skilled members of the culture, consensus of understanding is achieved (Adams; Merriam, Caffarella, & Baumgartner, 2007).

Social Constructivism

Social constructivism emerges as one of the two schools of thought on constructivism—psychological constructivism and social constructivism (Driver, Asoko, Leach, Mortimer, & Scott, 1994; Merriam, Caffarella, & Baumgartner, 2007; Richardson, 2003). In psychological constructivism, a learner constructs new knowledge and translates the meaning of this new knowledge by using the individual learner's mental processes and experiences as reference points (Driver, et al.). Creation of meaning in the second perspective, or social constructivism, is through "a dialogic process involving persons-in-conversations, and learning is seen as the process by which individuals are introduced to a culture by more skilled members" (Driver, et al., p. 7). The dialogue establishes formal knowledge derived from the "politics, ideologies, values, the exertion of power and the preservation of status, religious beliefs, and economic self-interest" of that specific group

(Phillips as cited in Richardson, 2003, p. 1624). Both perspectives share the assumption that there is active construction of knowledge by the human mind. However, construction of knowledge through a social constructivist orientation employs social and cultural aspects of a specific group (Kanaka & Anderson, 1999).

In the early twentieth century, Vygotsky proposed learning constructed with others is through the use of symbols and language from that specific culture (Merriam, Caffarella, & Baumgartner, 2007). Vygotsky believed learning and development evolves from how one is externally and internally oriented to the symbols and language of a particular culture (Vygotsky, 1978). During Vygotsky's time, he suggested a child learned through the dialogic interaction with an adult, resulting in understanding the symbols of that culture. Vygotsky's foundational work as viewed through the eyes of adult learners, suggests internalization of knowledge is from the individual's standpoint as constructed through a lived experience (Fosnot & Perry, 2005). The individual organizes the internal thoughts and links them to other experiences and knowledge (Fosnot & Perry). Subsequently, the individual interprets and categorizes the experiences. Language and dialogue in the social context with others of a culture assists the individual to construct knowledge from what is heard and seen (Adams, 2006; Fosnot & Perry, 2005; Vygotsky, 1978).

Although a social constructivism lens offers a way to understand how knowledge is constructed and gives meaning in relation to the social and cultural aspects of the experience to that individual, each individual may view the experience differently and construct the meaning of the experience differently suggesting there is no one reality of an experience, rather a variety of understandings of what was heard and seen (Kanuka & Anderson, 1999). "Learners are believed to be enculturated into their learning

environment and appropriate knowledge, based on their existent understanding, through their interaction with the immediate learning environment" (Liu & Matthews, 2005, p.388). What may be questionable is the external or social influences on the learning shared between communities of learners (Liu & Matthews, 2005).

However, using the lens of social constructivism allowed for exploration of how nurse educators orient learning from external and internal perspectives. As a result interpretation focused on how nurse educators defined their understanding of IPE and made sense of the experience of constructing new knowledge on IPE within nursing education.

Adult Learning Theory

Adult learning theory, also known as andragogy, is a model of assumptions about how adult learners learn. Malcolm Knowles (1980), a well-known writer of adult education theory, described these assumptions as self-directed, experienced, ready to learn, centered on solving problems, internally motivated, and need to know. Andragogy encourages adult learners to participate in the development of new learning. This approach is different from pedagogy when the teacher decides what the student needs to know and when the learning will take place (Chan, 2010).

Knowles (1980) suggested the learner enters adult learning with a sense of dependency on an educator. As a child, an individual participates in learning, but an educator plans and directs the learning. Knowles claimed this form of learning initiates a sense of dependency by the learner, resulting in dependency as an adult learner on the educator. However, Knowles asserted adults are self-directed learners in other aspects of their lives suggesting adult learners construct knowledge through experiences in life.

Merriam, Caffarella, and Baumgartner (2007), also well-known writers of adult learning theory, view self-directed learning as "situation-specific" (p. 87). These authors argued the adult learning assumptions do not consider the social, historical, political, and economic contexts and the influences these contexts have on the experiences of adult learners. Sandlin (2005) argued, with little regard to political and cultural influences, adults continue to learn as taught resulting in a non-neutral stance on new knowledge. She proposed new perspectives in adult learning would allow for insight and critical awareness of the larger social and political context.

McEldowney (2003) noted nurse educators tend to be creatures of tradition and habit with "issues of power, race, gender, and class to consider within a hegemonic education institution" (p.219). Teaching as taught carries over to implicit expression of values through socialization in the profession—suggesting implicit content of a curriculum. "Values are thought to be acquired through explanation, moralizing, modeling or manipulation…can be supported or reinforced by one's societal, peer or professional group" (Glen, 1999, p. 203).

Yet, in a non-traditional undergraduate program, the assumptions of adult learning supported positive learning outcomes for adult students (Harper & Ross, 2011). In order to address the learning needs of students who did not have the correct credentials to complete a major to graduate, the educators developed a new undergraduate program. The researchers found by using adult learning theory, the educators were able to create a successful program, meeting the needs of the students. These non-traditional learners and mature students were able to identify their learning needs, and use previous learning

experience to embrace a new learning experience all within and across the boundaries of their professions.

The use of adult learning theory assumptions provided a road map to gain insight into how nurse educators construct and understand IPE through the use of self-directedness, experience, willingness to learn, centering on solving problems, internal motivation, and having a need to know. Underpinning social constructivism with adult learning theory assumptions guided the exploration of how nurse educators understand and use IPE in nursing education. Assumptions about the nurse educators include that they are: self-directed, experienced, ready to learn, centered on solving problems, internally motivated, and learn new ideas because they have a need to know. These assumptions about nurse educators learning within the context of nursing education guided the development and execution of this qualitative research study.

Research Methodology: Qualitative Research

Merriam (2009) asserted qualitative research does not have a simple definition but rather is a term used to describe research that interprets how people understand, and describe their experiences. Denzin and Lincoln (2011) describe qualitative research as "a situated activity that locates the observer in the world" (p. 3). Within this situated activity, a researcher explores and interprets the world of others using observation, dialogue, recordings, pictures, and self journaling (Denzin & Lincoln; Marshall & Rossman, 2011).

Through the use of these research tools, the interpretations of the participants' experiences emerges within the natural setting (Marshall & Rossman). Qualitative research offers an appropriate methodology for inquiry into "the meaning individuals or groups ascribe to a social or human problem" (Creswell, 2007, p. 37), such as the meaning

nurse educators share about IPE within nursing education as the exploration is in a natural setting of a unique group with a specific issue.

Research Strategy: Case Study

There are five research strategies associated with qualitative approaches including narrative research, phenomenology, case study, ethnography, and grounded theory (Creswell, 2007). These approaches begin with assumptions about an issue, use a research paradigm and a theoretical framework to study a problem experienced by a group of individuals (Creswell). After consideration of the five qualitative approaches, it was a case study strategy that allowed for in-depth description of an activity by a group of individuals (Creswell, 2007).

Narrative research allows for exploration of an individual's experience, not an experience of a bounded group; phenomenology explores the essence of the lived experience shared by individuals; grounded theory allows for the development of theory; and ethnography seeks understanding of cultural patterns from a specific group after prolonged exposure to the group (Creswell, 2007; Merriam, 2009). However, it is case study research that allows for in-depth description and analysis of a contemporary social phenomenon or case within a bounded system (Creswell, 2007; Merriam, 2009; Yin, 2009).

It is within the boundaries of a case that the researcher is able to interpret a real-life, complex phenomena, notably when clarity between phenomenon and context is blurred (Merriam, 2009; Meyer, 2001; Yin, 2009). A bounded system is a unit that has established cultural and social boundaries created by individuals in a specific group, an organization, or society (Merriam). The bounded case is in a particular context or situation, within a

particular timeframe (Hancock & Algozzine, 2006; Merriam, Yin). Case studies allow for examination of current events through multiple sources such as direct observation, documents and reports, audiovisual, and interviews of the individuals involved in the event (Yin, 2009).

The goal of case study research is to gain understanding of a phenomenon experienced by a particular individual or individuals in a particular context; how they address the phenomenon in order to identify how to address the same phenomenon in a similar context (Bailey, 1997). Although selection of the case is purposeful, the researcher has little or no control over the event, retaining the holistic and meaningful characteristics of the event (Merriam, Meyer, Yin). Through the use of multiple sources of information, the researcher obtains rich description of the phenomenon taking place in the natural setting (Hancock & Algozzine, 2006).

Special characteristics of case study are particularistic, descriptive, and heuristic resulting in the case study providing a concrete and contextualized report to the reader (Merriam, 2009). Offering a highly descriptive report on a particular or bounded case over a specific time frame allows the case to come alive for the reader and increase understanding about this particular phenomenon. The reader is able to reflect, consider one's own experiences and relationship to the case study. In addition, the reflection sets the stage for the reader to consider how the report relates to another population.

Case study research has been criticized for lack of rigor, confusion between case study teaching and case study research, potential for bias by the researcher, lack of generalization, length case study reporting, and lack of cause and effect relationship (Yin, 2009). However, case study does not establish the cause and effect; instead this form of

research provides opportunity to explore themes and categories to complement other research studies (Hancock & Algozzine, 2006; Yin). In addition, case study research utilizes a protocol as the descriptive road map to establish systematic procedures demonstrating rigor and transparency, as well as researcher trustworthiness (Yin, 2009). The protocol includes the purpose, the questions, procedures and general rules to collect data in the field and analysis of the data (Merriam, 2009; Yin).

Moreover, case study strategy is a recognized qualitative research strategy used in several disciplines such as sociology, political science, business, education, and nursing (Yin, 2009). Familiarity of case study strategy may allow for transferability for further research in other professions or disciplines. A case study strategy is a fit for this research as it offers a systematic process to explore a complex phenomenon in nursing education.

Single Exploratory Case Study

There are three main purposes for qualitative research including descriptive, explanatory, and exploratory (Marshall & Rossman, 2011). Descriptive and explanatory purposes identify, explain, and describe a known phenomenon. The purpose of an exploratory research study is to investigate a little understood phenomenon by seeking understanding and meaning rather than explanation of the phenomenon (Marshall & Rossman; Yin, 2009). The purpose of this research study was exploratory—to explore how nurse educators understand and use IPE in the context of nursing education, and what social and collaborative process influence the constructions to IPE knowledge within nursing education.

There are four basic types of case study including holistic single case, embedded single case, holistic multiple case designs, and embedded multiple case designs (Yin,

2009). For the purpose of this study, a holistic single case study addressed the research questions. Holistic single case study allows for the study of a typical situation, capturing "the circumstances and conditions of an everyday or commonplace situation" (Yin, 2009, p. 48). Thus insight is gained into a bounded profession using a commonplace yet innovative teaching and learning process. Through a commonplace perspective, interpretation was made of how one profession constructs understanding and meaning of a teaching process within a bounded system.

CASE STUDY DESIGN

According to Yin (2009) there is no prescribed research design for case studies, rather the design is the blueprint of the study. Yin referred to this blueprint as the protocol of the study and the data collection processes. The protocol includes the purpose, the questions, and key components of the study (the instrument, the procedures, and the general rules to be followed in using the protocol), and general organization of data collection and analysis. A case study protocol provides a logical plan increasing reliability of the research and providing a guide to the researcher during data collection for the study (Yin). The following sections describe the key components of the protocol for this case study, including unit of analysis development, procedures for entering the field, data collection procedures, data analysis processes, ethics and confidentiality, and limitations.

Unit of Analysis

The purpose of this study was to explore how nurse educators understand IPE in the context of nursing education, and explore how nurse educators use IPE when teaching in an undergraduate nursing program in Alberta. In order to interpret how the nurse educators

understand and use IPE as described by nurse educators, the unit of analysis was nurse educators teaching in an undergraduate nursing program in Alberta.

Yin (2009) stated the selection of a unit of analysis needs to be in response to the primary research questions. Therefore a unit of analysis within the context of nursing education was required, and a group of nurse educators teaching within this context in order to address the three research questions. Choosing undergraduate education provided a narrower focus for the purpose of this research study. In addition, the execution of the case study was during the school term—March to May in 2012. This intentional timing was to allow for exploration of real time experiences of the nurse educators rather than during a time when they are able to reflect and consider possibilities.

Research Questions

The three main research questions that guided this study are:

- How do nurse educators define their understanding of IPE within nursing education?
- How do nurse educators make sense of the experience constructing this new knowledge paradigm of IPE?
- What social and collaborative processes influence construction of IPE knowledge in the environment of nursing education?

This set of substantive questions reflected the inquiry of this study (Patton, 2002; Yin, 2009). Overall examination of the research questions revealed the unit of analysis for this case study (n=15) is nurse educators in nursing education who have an interest or understanding in IPE.

Procedure for Entering the Field

Sampling Strategies

Purposive sampling was the sampling strategy used in this single exploratory case study; that is, a sampling strategy that offered the most and richest information from the phenomenon studied (Creswell, 2007; Patton, 2002). The individuals with the richest information on teaching IPE in nursing education, at the undergraduate level, are the nurse educators in higher education institutions. Two higher education institutions from the Alberta Advanced Education and Technology listing of post secondary institutions were the sites used (Government of Alberta, 2011). In order to achieve homogeneous samples from these sites, recruitment of volunteer participants came from undergraduate programs that use the same curriculum (Patton, 2002). A list of attributes or criteria for participants focused the case study on nurse educators with understanding or experience with IPE in the education setting (Merriam, 2009).

Criteria included nurse educators who have taught a minimum of three years in an undergraduate nursing education program within higher education institutions in Alberta. The assumption with three years experience is that the nurse educator has experience and expertise in their current teaching position. In addition, the nurse educators were registered nurses. Furthermore, in keeping with the case study protocol and addressing the study questions, participants were required to meet at least one of the following criteria: (a) have read about interprofessional education, (b) have participated in teaching interprofessional education content, (c) used a form of student evaluation recognizing interprofessional education, (d) participated in the development of course content that supports interprofessional education, (e) having a curiosity about interprofessional education.

Process for Recruitment

In order to obtain access to individuals who would volunteer to become participants in this case study, I planned an appointment for a telephone conversation with the deans/department heads of the two undergraduate nursing programs in this study, in addition to sending an email to the deans/department heads, describing the research project at the time of making the appointment (see Appendix A: Letter of Introduction to Dean/Department Head). The purpose of the telephone conversation was to discuss the research project and request support for participation of the nurse educators in the nursing department (see Appendix B: Telephone Script for Introductory Conversation with Dean/Department Head). This process proved to be successful with the Dean and Department Head of one higher education institution as they readily gave support for the research and agreed to forward the letter of introduction to the nurse educators in their undergraduate program. The Vice Dean of the nursing program of the other higher education institution preferred to correspond by email (the Dean was away at the time of the original email and the Vice Dean was given authority to respond to requests made of the nursing department). One follow-up email was required to successfully answer the questions posed by the Vice Dean.

Within five working days after the phone call, the Dean/Department Head received a follow-up email from me confirming support for the research study (see Appendix C: Follow-up Email with Dean/Department Head). As part of the follow-up email, I attached a letter of introduction and asked the Dean/Department Head to forward this letter of introduction to the nurse educators in the undergraduate program (see Appendix D: Letter of Introduction to Nurse Educators). Within a two weeks span, 11 individuals who met the

inclusion criteria responded to the letter of introduction. In my original ethics application n=10 was the minimum number. However, at the two week point, I chose to ask the Dean/Department Head to resend the letter of introduction one more time. The result was five more participants who met the inclusion criteria contacted me to participate in the case study research. I am a nurse educator and recognize how an email can go unread during a busy teaching term. Thus, the second call for participants was to provide another opportunity for nurse educators to read and consider the letter of introduction in order to participate.

A total of sixteen individuals volunteered by their response to the letter of introduction sent by the Dean/Department Head. I contacted each respondent by email, confirmed participation in the research study with the exception of one, who declined due to personal time constraints.

Data Collection Procedures

Data collection procedures for this case study research fell into two parts. One part focused on the preparation in order to do the research and the second part offered attention to the case study protocol. In the second part, the case study protocol included the instrument, the procedures and general rules for the study (Yin, 2009). Use of the protocol guided my process as the researcher and offered a mechanism for me to refocus on what the study was about thereby increasing reliability of the study as well as provide a paper trail on the research study (Merriam, 2009).

Preparation phase afforded me time to review the literature on being a skilled case study researcher (Kvale & Brinkmann, 2009; Merriam, 2009; Yin, 2009). In addition, a

pilot case study interview validated the proposed data collection protocol (Bailey, 1997, Marshall & Rossman, 2011).

Pilot Case Study Interview

A pilot case study interview created opportunity to review and address the case study procedures and plans, such as interview protocol and clarity of the semi-structured interview questions (Yin, 2009). In addition, the pilot provided a mechanism for a pretest of the process and use of digital recording equipment. Yin (2009) suggested pilot case study interviews be completed to confirm research plans prior to ethics approval; however, this pilot interview was conducted following ethics approval protocol. The intent of post ethics approval was to demonstrate transparency and set the stage for confidentiality and trust with the nurse educator volunteer.

A nurse educator volunteer participated in piloting the case study process and semi-structured questions resulting in appropriate revisions made to the procedure with feedback from the volunteer. Some introductory questions required minor revisions. In addition, further development of prompts used in the semi-structured questions offered clarification of the meaning behind the question. As a result of the pilot case study interview, there were minor changes to the case study protocol.

Sources of Evidence

Yin (2009) suggested six sources of evidence for case study research: direct and participant observation, physical artifacts and archival records, documentation, and interviews. For this single exploratory case study semi-structured interviews, field notes and document review determined the data sources. These sources are common sources of

evidence for convergence and comparison of the data collected to interpret the phenomenon being studied (Merriam, 2009; Yin, 2009).

Semi-structured Interviews

The use of semi-structured interviews for this single exploratory case study provided a flexible format to the interview process, offering me the ability to ask and respond to emerging ideas from the participant (Merriam, 2009) (see Appendix E: Semi-structured Interview Questions). As well, the flexibility of the semi-structured questions allowed for further exploration of issues and ideas that may enrich the data collected.

As noted in the letter of introduction, completion of the interviews took place at a place and time requested by the nurse educator. Thirteen interviews were face to face at the participant's workplace; one interview at the participant's home, one interview by phone at the participant's request with Consent Form completed by email. Fifteen nurse educators completed the interview. I assigned a pseudonym for each participant while conducting data analysis. Pseudonyms provide anonymity of the participant's data. Explanation of pseudonym use is on the Consent Form (see Appendix F: Consent Form for Nurse Educator).

Interview Protocol

The nurse educator/participant contacted the researcher and arrangements made to schedule a 60 to 90 minute audio-recorded interview at a location of the participant's choosing. The consent form (see Appendix F: Consent Form for Nurse Educator) was sent by email to the nurse educator prior to the interview for review. Prior to initiating the interview, each participant verbally confirmed informed consent and signed the Consent

Form. I digitally recorded each interview and saved a copy on my password protected computer in my home. Two transcriptionists signed a confidentially form and assisted with transcription of the recording (see Appendix G: Confidentiality Agreement for Transcriber). I transcribed five interviews and the remainder completed by the transcriptionists. I reviewed each transcript for accuracy by listening to the digital recording and reading the transcript prior to returning the transcript to the participant to confirm accuracy.

Within seven to ten days following the interviews, the participants received the verbatim transcripts to their password protected email address. The participants reviewed the transcripts to validate, delete, change, or add to the transcript information for confirmation of accuracy. Lack of response in one week indicated approval of the transcript. Two participants replied with word corrections, four responded by email agreeing with wording in transcripts, and the remainder did not respond to email of verbatim transcripts indicating approval. I made corrections to the transcripts of the two participants who had indicated a change and acknowledged the changes by email to those participants.

Data are stored in a locked cupboard in my home with transcription of the digital recordings on my password protected computer. A separate locked cupboard establishes further security of the data in my home, including the list of participants, password protected email addresses, and pseudonyms. Reported data are aggregate; however, due to the small number of nurse educators in each faculty in the province of Alberta, confidentiality regarding participation is not a guarantee (see Appendix F: Consent Form

for Nurse Educator). As the researcher, I sought to maintain confidentiality to ensure anonymity of the individuals and organizations.

Field Notes

Highly descriptive field notes provided a written account of observations made during the interview (Fetterman, 2010; Merriam, 2009). Utilization of field notes capture nuances such as the physical setting, participant tone of voice, and the researcher's behaviour that may influence data analysis (Merriam). Although the unit of analysis did not include the physical setting, I developed a working sheet to write reflective comments during the interview, following the interview, and during the review of the digital recording and transcription. I listened to and completed notes on each transcription a total of four times. The reflective comments allowed me to capture nuances exhibited by the participants, notably the pauses and hesitations.

However, "the researcher is the primary instrument for data collection and analysis" (Merriam, p. 15) and as such, I recognize my worldview may influence how I interpret the collected data. Journaling my thoughts and reactions was essential to support reliability and trustworthiness of my interpretation of the findings.

Document Review

Public documents reviewed allowed for further interpretation of meanings or inferences in the transcriptions of the nurse educators related to this case study (Marshall & Rossman, 2011). Reviewing documents augment and support evidence from other sources; as well, these documents address a specific issue and address another audience therefore offering another form of interpretation (Yin, 2009).

Organizing and Analyzing the Data

To organize the data, the raw data from the interviews included contact summary sheets, personal journaling, and document summary sheets. This raw data constructed the initial development of the case study database. Establishing a database sets the stage for effective and organized analysis (Merriam, 2009; Yin, 2009).

Yin (2009) identified four general strategies for data analysis: relying on theoretical propositions, developing a case description, using both quantitative and qualitative data, or testing rival explanations. For the purpose of this research study, the analysis strategy was oriented in the theoretical proposition of social constructivism, underpinned by adult learning theory. The theoretical proposition, social constructivism, allowed for exploration of the "how" and "what" questions of nurse educators' knowledge and understanding of a little known phenomenon therefore guiding the research questions: how nurse educators understand knowledge of IPE in nursing education; how nurse educators make meaning of IPE in nursing education; and how the social and collaborative processes in nursing education influence construction of this knowledge.

Analysis, guided by the theoretical framework, flowed from three analytical processes: data reduction, data display, and conclusion drawing and verification (Miles & Huberman, 1994). Data reduction, a process to focus and simplify the data, occurred through written summaries of document summary forms, contact summary forms, summary of personal journaling, and through coding process iteratively constructed from the raw data. In order to organize and summarize the information from these summaries, data displays offered further insight into interpretation of the data. Data displays exposed categories not initially apparent in the coded data requiring further analysis. Conclusion

drawing and verification, the third analytical process, occurred throughout the analysis. The use of these three analytical processes in this research study was iterative.

Data Reduction

Contact Summary Form

One source of data for this case study was verbatim transcripts of semi-structured interviews. Miles and Huberman (1994) suggested the researcher use a contact summary form to capture reflective thoughts in response to focused questions about each interview. For the purpose of this study, I developed a two page contact summary form with focused questions to encourage my reflection on the interview and to develop overall summary of main points shared by the participant (see Appendix H: Contact Summary Form). I completed the sheet immediately following each interview, and reviewed for further reflection as soon as the transcripts were completed. Each contact summary form attached to the corresponding transcription for easy retrieval, allowed for planning for next interview, consideration for revision of codes, and to re-orient myself to the interview when returning to the data.

Codes and Coding

Coding is a form of labeling of phrases or ideas in the data that summarizes an idea or meaning (Miles & Huberman, 1994). Coding allows for quick retrieval and sorting of ideas to be placed in data displays. Development of an initial list of codes, structured from the theoretical framework, guided the initial coding process (Merriam, 2009; Miles & Huberman, 1994). However, there was revision of codes as further data emerged. The process was iterative with many returns to the data and review of the codes.

I initiated the process of coding by re-listening to each digital recording and reading the corresponding transcript, starting with the theoretical proposition of social constructivism, underpinned by adult learning theory. The initial codes or "bins" of conceptual variables to guide my analysis (Miles & Huberman, 1994) included: definition of IPE by nurse educators, definition of IPE in nursing education, barriers to IPE in nursing education, enablers to IPE in nursing education, social and cultural processes influencing IPE in nursing education. I repeated this process using codes described by adult learning theory: self-directed, experienced, ready to learn, centered on solving problems, internally motivated, and having a need to know (see Appendix I: Example of Initial Coding Bins). With the process complete for each transcript, I created data displays with the coded data.

Document Summary Form

In addition, I reviewed and tested public documents "against another to strip away alternative explanations" (Fetterman, 2010, p. 94) and "shed a light on a theme or perspective" (Creswell, 2007, p. 208). The document summary form provided a way for me to summarize the document and identify its significance to the research study (Miles & Huberman, 1994). I attached a document summary form to the corresponding document for easy retrieval (see Appendix J: Document Summary Form).

Data Displays

Data displays provide a visual format of the data gathered, preliminary conclusions, and suggestions for new data (Miles & Huberman, 1994). Yin (2009) referred to this format as word tables providing structure and uniformity to support a systematic presentation and explanation of the data. Coded data provided structure for the data

display and the data displays provided a way to identify new codes from the data. Data displays developed for this case study correlated with the research questions, guided by the theoretical framework.

Considering the exploratory nature of this study, the initial data display was a partially ordered display, "one that does not demand much pre-specification of variables" (Miles & Huberman, 1994). The initial data display, based on the theoretical framework and research questions, was a word table to identify the similarities and contrasts in responses by each participant. The initial coding illuminated definition of IPE, leadership in nursing education, nursing identity, experience, language, values, motivation, expectations of higher education, and nursing knowledge. This process, using a cross source display, illuminated key differences and similarities between each nurse educator and allowed me to further identify codes.

As the coding developed from the initial data display, I began to realize outliers or data that did not fit within the theoretical framework of social constructivism underpinned by adult learning theory. I highlighted and made notes in the margins directly on the transcript. These outliers included dissonance, silenced voices, relevance, lack of clarity for future nursing practice, lack of direction for nurse educator, and excitement for new learning. In recognition of the exploratory nature of this case study, I recoded the transcriptions looking for themes within the outliers. I excluded personal stories about the development of nursing education within the specific higher education institution to maintain anonymity. In addition, the intention of the case study was to represent nursing education in the province rather than exploration of how IPE is part of individual nursing education programs.

The themes emerged as identity, language, feelings, dissonance, the future in nursing education, and a need for re-framing of ideas. I discovered an illumination of a sense of transformation at mid-point of nearly all the interviews. At this point in the analysis, I decided transformational learning theory, as a second theoretical framework, was required as the analytical strategy to give clarity to the findings of this study. Further data coding added rich and in-depth data to the data display (see Appendix K: Example of Data Display).

Data Interpretation

The analytic technique used for this exploratory case study is explanatory building. Explanatory building is one of five general analytic techniques for case study analysis (Yin, 2009). Although most often used for explanatory case studies, explanatory building used for exploratory case studies begins a hypothesis through the use of 'how' and 'why' questions in order to generate a process for future studies (Yin).

Patton (2002) noted "interpretation means attaching significance to what was found, making sense of the findings, offering explanations, drawing conclusions, extrapolating lessons, making inferences, considering meanings, and other-wise imposing order" (p. 480). My intent was to analyze the nurse educators' responses in a manner that would illuminate the questions explored, interpret the responses of the nurse educators responsibly, and begin to consider further investigation.

TRUSTWORTHINESS AND CREDIBILITY

Trustworthiness is established using data from multiple sources, participant validation of transcript accuracy, in addition to a detailed description of the setting

(Creswell, 2007; Merriam, 2009). The detailed description provides a way for the reader of the study to understand the context and consider transferability to a similar situation. Personal journaling and note taking offered transparency and credibility to my position as the researcher (see Appendix L: Personal Journaling Example). Discussions as shared by the participants, and confirmed by the participants, supported the dependability and transferability of the understandings gained by this study (Creswell, 2007; Merriam, 2009). Therefore in order to establish trustworthiness, each participant confirmed the verbatim transcripts with the exception of one participant. One participant made corrections and I used the corrected transcript in the data analysis. Accuracy of verbatim transcripts by the participants created a sense of trustworthiness of the quotes used in the research study.

Triangulation of the data from the 15 interviews, public documents, and field notes supported credibility of the findings by comparing and cross-checking the data (Merriam, 2009). Credibility of the findings is supported with the use of a case study data base, including field notes and documents (Yin, 2009). The case study database demonstrates the chain of evidence, or paper trail, of all collected data and evidence (Marshall & Rossman; Merriam, 2009). Creating the chain of evidence demonstrates how the evidence developed from initial questions in the research study to the case study conclusions (Yin).

Ethical Considerations

The Conjoint Faculties Research Ethics Board for the University of Calgary granted ethical approval on February 6, 2012. In addition, the Research Ethics Board of one higher education institution on February 14, 2012 granted ethics approval. The second higher education institution did not require local Research Ethics Board approval to access the nurse educators as the Conjoint Faculties Research Ethics Board for the University of

Calgary had granted approval. In addition, the researcher completed the Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans Course on Research Ethics online workshop on January 8, 2012.

All participants were provided with an informed consent, which was signed by the participant and researcher; and a copy given to the participant for reference. The informed consent outlined the purpose of the study, what would be asked of the participants, the type of personal information collected, request for audio recording of interview, the risks and benefits of participation, and disposal of data. Participation in this study was voluntary with participants assured they could refuse to participate altogether, or withdraw at any time during the study.

Confidentiality

Confidentiality was with the highest ethical standards. Each interview was private, taking place on a date and time convenient for the participant. Only the transcribers and I read the transcripts or heard the interviews. I as well as transcriptionists transcribed interview data. Transcriptionists hired to transcribe, signed a confidentiality form (see Appendix G: Confidentiality Agreement for Transcriber).

During the time of the study, the written data has been kept in a locked cupboard in my home, only accessible by me. As well, the list of participants' names and respective pseudonyms were in a locked cupboard separate from any written data stored in my home. Storage of the transcripts are on my password protected computer. The electronic files containing the audio recorded interview data and transcripts will be deleted and paper data shredded by me after successful completion of the dissertation and attainment of Doctorate of Education. In addition, high ethical standards are an integral part of my professional

practice; therefore, these processes and standards reflect the competency level expected of me in my profession.

SUMMARY

In Chapter Three, a road map was provided on how this qualitative research study utilized a single exploratory case study to explore: (a) how nurse educators construct knowledge about interprofessional education in nursing education (b) how nurse educators construct the meaning of interprofessional education in nursing education, (c) how social and collaborative processes influence construction of interprofessional education knowledge in the environment of nursing education. The intention was to understand IPE in nursing education and what IPE means individually and collectively, as shared by the nurse educators, through the richness of the natural setting. The socially constructed paradigm provided a way to see the world as others see their world and interpreted how they see the world guided by case study protocol.

Clarity of data collection procedures provided a road map on the procedures used to enter the research field; the data collection procedure; and sources of evidence. In addition, I explained the organization and analysis of the data. Ethical considerations conclude Chapter Three.

CHAPTER 4: THE CASE REPORT

Data in this single exploratory case study research is from three sources of evidence including semi-structured interviews, field notes, with document review and analysis. The case, 15 nurse educators teaching in nursing undergraduate programs situated in two Alberta higher education institutions (Government of Alberta, 2011), provided a bounded unit—bound by context, time, cultural and social expectations of the nursing profession. It was within this boundary, during a specific teaching timeframe, that I collected data on this real-life and complex phenomenon to inform the case report of findings (Hancock & Algozzine, 2006; Merriam, 2009; Meyer, 2001; Yin, 2009).

Three broad themes structure the findings shared in Chapter Four. The report of the themes is reflective of the case study research questions. Using the order of the case study research questions is a suggested format for case reports (Yin, 2009). The themes are: understanding IPE; making sense of IPE; and re-framing about IPE. The first theme, understanding IPE, focuses on how the nurse educators recognized and understood IPE. The influences effecting how the nurse educators make sense of IPE in nursing education is the second theme. The last theme captures exploration of a transformation experienced by the nurse educators as they searched for further meaning and knowledge about IPE in nursing education.

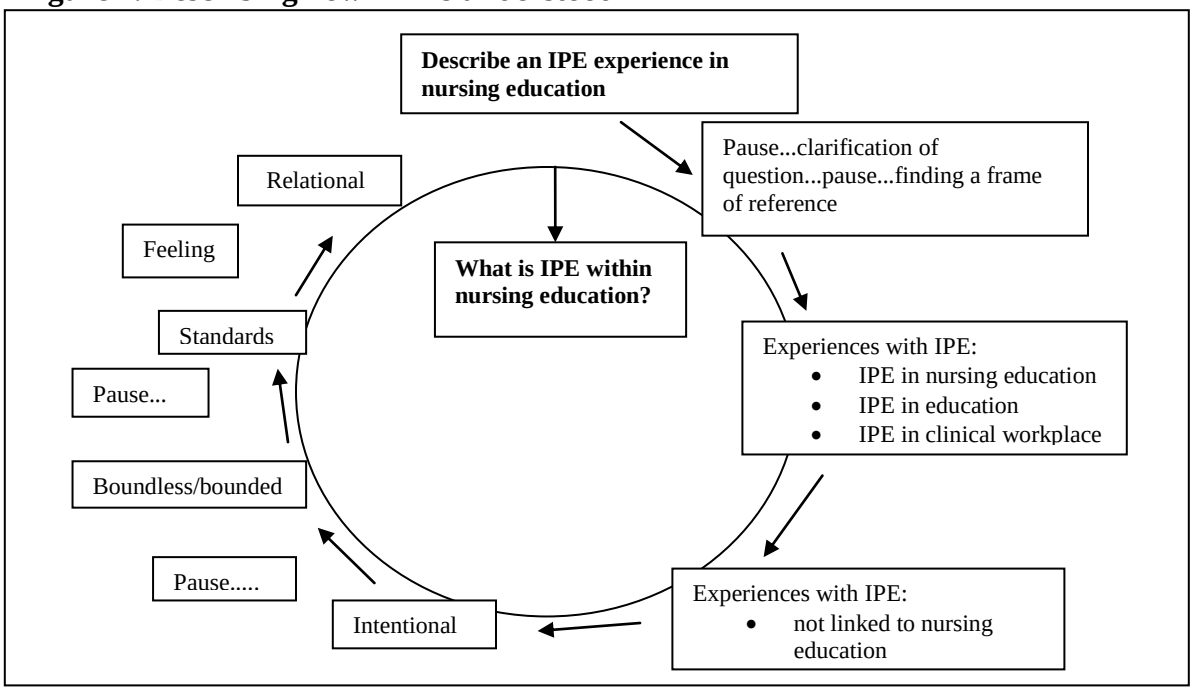
THEME 1: UNDERSTANDING IPE

The reflections and ideas shared by the nurse educators gave insight into how each understood and used IPE in nursing education. To establish a baseline for the case study, I was interested in learning how nurse educators orientated their definition and

understanding of IPE. I assumed a personal experience in an education setting had informed the nurse educators about IPE as each had self-identified as having knowledge about IPE in order to participate in the case study. In addition, I wanted to explore with the nurse educators how they use IPE in current nursing education.

Figure 1.0 provides a visual representation of the findings for Question One—how do nurse educators define their understanding of IPE within nursing education? The nurse educators shared how personal experience guided individual definition and understanding of IPE. As each nurse educator explored their experiences through response to the interview questions, a consistent pattern emerged. Albeit the research questions guided the discussion, the reflections and responses by the nurse educators brought each nurse educator to the query "what is IPE within nursing education". The following section illuminates how professional and personal experiences in the environment exposed them to IPE and informed the development of a personal definition for IPE for each nurse educator.

Figure 1. Describing how IPE is understood



Exposure to an IPE Environment

In order to establish a focus on IPE for the interview process, I began the semi-structured interviews by asking the nurse educators to describe a time when they participated in, or observed, an IPE experience in nursing education. The question caused all of the nurse educators to pause; furthered by clarification of the question and sometimes more silence. The nurse educators appeared to need time for reflection on the question; further clarity and reflection suggested a sense of uncertainty about how or when they understood IPE happening within nursing education. Some appeared puzzled by the question.

The sense of uncertainty surprised me as each nurse educator self identified as having knowledge about IPE. I had assumed each nurse educator came to the interview with knowledge and experience to share about how they understood IPE within nursing education. This assumption evolved from my knowledge that registered nurses are "knowledge workers" with advanced knowledge created by education and experience to provide safe and ethical care (College and Association of Registered Nurses of Alberta, 2011, p. 4) and thus I expected advanced knowledge about IPE within nursing education. I began to wonder about what informed the nurse educators in the development of knowledge about IPE within nursing education.

As shown in the circular pattern in Figure 1.0, each nurse educator began by trying to connect an IPE experience to nursing education in the higher education institution. For some, the experience was in the educator role in nursing education; some were as a student in a course within the higher education institution, and for others the IPE experience was

related to non-nursing life experiences. The description of IPE within nursing education was the least common of those reported.

IPE in Nursing Education

Helen and Edna, two experienced nursing educators, purposely included some form of IPE in nursing education. Their personal beliefs about holistic healthcare motivated them to influence the teaching environment in a manner that encouraged students to learn about other professionals. Helen explained she uses IPE in her teaching process by creating learning opportunities for the students. These learning opportunities are purposeful interactions with other professionals, e.g. pharmacist. Her intent is to assist the nursing student to recognize role clarifications. Helen talked about the need for students to recognize that they hold a unique role as a registered nurse but may not fully understand the role until they share experiences with other professionals:

> I will coach the student to go with the client to the pharmacist and have these conversations so that they can follow it up and interact with it, and then I will explicitly point out that this is an interprofessional encounter. So there will be communication happening, there's role clarification.

Edna, who self identified as learning about IPE recently, offered this insight into how she uses IPE in her teaching:

> For instance, in my new awareness of things I will ask different questions to the students...comes back to me as the educator to ask different questions that is going to shake it up a little bit...it is exploring more [of] what are we contributing to the whole.

Edna shared her belief that registered nurses are part of the whole healthcare team and we need to look at the whole to identify the fit of the registered nurse. Exploration of the whole through critical thinking questions shaped her teaching processes. Role clarification appeared to be part of this exploration.

Neither, Helen or Edna suggested that curriculum content drove their inclusion of IPE in nursing education. Instead, it was their values and beliefs that IPE needs to be part of nursing knowledge. These values resulted in the nurse educators encouraging students to explore learning through an IPE lens to recognize holistic care.

IPE in Education

Across the interviews, there appeared to be minimal experience of IPE driven by nursing education or curriculum. About half of the nurse educators explained their experience with IPE was through participation in a stand-alone course offered to nursing students in conjunction with students from other professions, and as graduate students. The nurse educators believed the intent of such courses was to bring students from different professions together to learn about each other and how each profession influences care for the client. For one nurse educator, the experience was exciting and informative for the students and for herself:

> It was a stand-alone course…and students within the nursing faculty were required to attend it…seeing our students engage with that, and hearing "oh we do that too!"...uhhh..."I don't know you did that, that's incredible! Or asking them the questions of each other about "what do you take, what do we take?" (Lois).

There was a sense from most of the nurse educators that although the stand-alone course created an environment for students to learn about each other there was no outcome or direct connection to nursing education. The perception was that the format offered a place for students of different professions to come together to learn together. However, there was a sense from the nurse educators a stand-alone course was only that—a place to put students together leaving the learning outcome elusive. Annie reflected on the outcome of the course in that specific higher education institution, "I think that we talk about communication and practice, but I don't know that we've actually put it into practice very well".

Exploration of an experience of IPE provided insight into the nurse educators' frame of reference for IPE. They viewed the IPE experience as a way to bring students together and discuss a learning scenario common to the professions. The nurse educators viewed these experiences as a method to learn about other professionals, however, they did not perceive this format as a way to learn how to work and communicate interprofessionally or as the nurse educators indicated, "collaboratively". For several of the nurse educators, the clinical workplace set the stage for IPE.

IPE in the Clinical Workplace

The clinical workplace, or acute care institution, provided the nurse educators with tangible examples of how they understood IPE in nursing. These examples anchored their definitions of IPE and offered credibility to the use of IPE. For example, Betty noted, "In real life in nursing we do work with a number of professions". Not only was working with other professions noted, but Janet shared how her experiences in the workplace setting required knowledge and collaboration with other disciplines, "Being a bedside nurse, you

have to know what each of these different disciplines are going to give...'cause as a nurse, I do not have all the answers".

Throughout the interviews, the discussion of clinical workplace continued to surface. The nurse educators articulated the need to use IPE in order to assist students to know how to work with other professions, however, the experiences of teaching IPE remained intangible.

IPE in Life Experience

Personal life experiences were most influential on how nurse educators understood and used IPE. Betty summed up the influence of personal experiences by stating, "I don't know if my experience as a nurse educator, necessarily informs [the definition]. I think my background as a parent and my graduate education informs it". Initially, the nurse educators defined IPE in relation to their nursing education experiences and how working together is part of graduate competencies from the regulatory body. But, at this point in the interview they began to identify frames of reference of IPE outside of the practice and classroom realm of the nursing environment.

The most poignant reflection came from the nurse educators who had observed care given to a family member in the practice setting by a healthcare team. For example, one nurse educator who experienced interactions with a team working interprofessionally described, "I've seen and been the recipient of some excellent interprofessional collaboration…they do it right before you and they do it with you" (Fran). Lois' experience "as a consumer for an extended period of time and being involved as a family member and seeing it in play…all of those pieces really, really reinforce to me how important it was". The nurse educators described these personal experiences as a sense of

confidence in the care provided and the use of effective team decision making by all the professionals involved.

In all of the experiences shared, it was life experiences that illuminated how care was seamless yet intentional. The context of life experiences had emotional significance for the nurse educators and offered context for them to explore underlying assumptions about IPE. Their exploration revealed that the frame of reference for IPE was from an individual perspective rather than the collective perspective of nursing.

Intentional Process

As the nurse educators explored how they understood IPE, they began to reflect on how IPE could be part of nursing education. The majority of nurse educators spoke of IPE as an intentional process of learning and working together rather than serendipitous learning. For example, Edna shared:

> I think it is an intentional way, constantly looking at what I am doing and why am I doing it. And how do I enhance the environment in learning in such a way that each individual profession, with the interprofessional piece, learns to see beyond themselves; that they are not within a silo.

Janet concurred and suggested IPE needs to be intentional to assist student preparation for the practice area, "Otherwise, they get out there and they will be practicing and...they do not understand what these different people, what they can offer nursing, how we can work together to get to an outcome". There was a consensus that in order for students to gain insight into how other professionals learn and practice, there needs to be an intentional teaching and learning format.

Lois did not think IPE is part of the current curriculum and suggested that placing an intentional piece in the curriculum may be advantageous, "If we had it more intentionally incorporated and more of a conversation about it, it would be more at the front. And I don't know if we all are on the same page of our understandings of what it is". Lois continued with: "Some people have told me they see it as an add-on...and I worry they think it's – it's a "nice to know", not a "need to know". Mary believed IPE is an afterthought that tends to be an add-on when time allows, not integrated into the curriculum.

Moreover, some believed that nurse educators do not use IPE in nursing education. Fran noted that some nurses may practice interprofessionally in the workplace but questioned if nurse educators use IPE. Mary emphatically responded, "Certainly not in education, I don't see us working interprofessionally because we're teaching in isolation, that's nursing, right? So our curriculum doesn't allow for [IPE] so why would we be working as educators interprofessionally?" Although the nurse educators experienced IPE as a process useful for nursing practice, agreement on the intentional teaching process was elusive.

The lack of agreement about IPE in nursing education seemed enmeshed in the practice of the nurse educators. Nursing practice is a catalyst for how nursing education is developed and maintained (College and Association of Registered Nurses of Alberta, 2005b), and this relationship between practice and education is operative in how nurse educators explain their understanding of IPE. For example, the nurse educators referenced experiences in the practice setting, and language in practice documents as influential in how they understood IPE. Despite the nursing practice standard in regard to team building

development and collaboration (College and Association of Registered Nurses of Alberta, 2005a) and a definition of collaboration in the practice documents, a definition or description of working interprofessionally is missing. Thus as the nurse educators explored collaborative practice, their reflection on how they knew IPE in their practice of teaching revealed this lack of consensus.

Defining IPE: Boundless or Bounded

The uncertainty of IPE in nursing education did not deter the nurse educators in answering the following question: "How would you define IPE?" Asking this question provided opportunity for each nurse educator to express how they understood IPE as individual educators. Also, this question opened up opportunity for the nurse educators to consider how they might, or did, create opportunity to use IPE in their teaching processes.

Again, there was a noticeable pause following the question. Slowly, each nurse educator offered a definition of IPE. Overall, personal definitions of IPE included key phrases such as: different professions learning together; professions working together; shared knowledge and perspectives. For example, "For me, IPE means that you have people from different professions come together to study an issue, examine an issue, discuss an issue or a need or whatever, quite focused, I would say on clients" (Pearl). Mary concurred by saying IPE is "a group of professionals working and learning together about and with the client or the family to provide the best care possible, the best outcomes for the patient".

Although, most of the nurse educators included learning and working together in their definition, there appeared to be two different perspectives on the meaning of the phrase. In one perspective, recognition of IPE appeared to be boundless; a creative

learning atmosphere that is dynamic and varied with few barriers between professions. The other perspective suggested IPE is a bounded concept; a controlled learning environment shared with other professions.

More than half of the nurse educators interviewed described IPE as part of an environment that is boundless; supporting learning inside and outside a unique body of nursing knowledge. Some descriptors were fluid, dynamic; an intermeshed form of teaching and learning existing under an umbrella of knowledge held by different professions. Edna described this environment as a colorful tapestry where a different color represents the knowledge of each profession woven together in a manner, "not losing...own identity but creating a tapestry that is colorful and secure". Helen described IPE as a "viscous fluid, the elements within that gel change and alter or the colors change. I don't really see it as this is done and there's another layer and then there's another".

Dell (2012) considered integration of IPE as "one of those basic skills a student needs to know along with taking a blood pressure and talking to a client". There was a sense IPE is not a separate opportunity but rather a process of learning between professions and students to develop skills as a "group of professionals working and learning together about and with the client" (Mary).

However, for some of the nurse educators, nursing education is a unique body of knowledge and IPE is a separate process to learn as a bounded concept. Pearl, who considered nursing education as a unique body of knowledge, suggested nurses "tend to get focused on what they bring that's unique and distinct to the discussion. I define IPE when you have different professions coming together to learn together but coming up with it from their body of knowledge". Others shared similar thoughts about nursing uniqueness

as they noted IPE allows for "bringing together groups of people who complement nursing in our care" (Janet) and "prepar[ing] the student for working within an interprofessional team...knowing the roles and skills of the other members, knowing also some things about their relationship with nursing" (Dell). The uniqueness of nursing indicates a focus or a place to start to learn. Although difficult to articulate, there was recognition that IPE included more than sharing knowledge on a topic between professions. Rather IPE is "not a one off deal, but let's work together. You bring your knowledge, I will bring my knowledge and together we will figure out what students need to learn" (Viola).

Regardless of whether viewed as bounded or boundless, the nurse educators agreed that IPE needs to be an intentional process, however, the intentionality of IPE was not clear. Opinions varied as to the best approach, as a form of learning that encourages learning about each others' profession, or other professions learning about nursing.

Standards

The nurse educators suggested that learning interprofessionally may happen in the clinical setting, however, they did not believe that IPE is intentionally included in the curriculum of the theory based courses. They wondered if the IPE requirement is not explicit in the curriculum, or graduate competencies. Several sources of information add facts and further questions to this curriculum consideration.

The Nursing Education Program Approval Board (2005), in Alberta, sets the standards for nursing education curriculum; "a systematic and comprehensive plan of learning activities including the individual courses, their sequencing, and the integration of key concepts" (p. 7). The structure of the curriculum in the approved nursing program guides the educational experiences necessary for students to achieve the Entry-to-Practice

Competencies (College and Association of Registered Nurses of Alberta, 2006). The Entry-to-Practice Competencies, based on Nursing Practice Standards (College and Association of Registered Nurses of Alberta, 2005a), include direction to work collaboratively with other healthcare team members. Interestingly, the standard set by the Nursing Education Program Approval Board (2005) does not clearly indicate interprofessional experiences are required as learning experiences in the curriculum.

The Nursing Practice Standards (College & Association of Registered Nurse of Alberta, 2005a) corroborates the importance of collaboration and working together in the workplace setting. The standard to collaborate and work with other professionals is a practice competency for registered nurses in Alberta. The nurse educators referenced this standard for practice several times during the interviews to explain the importance of relationships in the workplace setting.

Relational

Nursing practice in the workplace seemed to provide a frame of reference for the experience of working with other professions, or the relational work in nursing practice. Annie reflected, "You sort of know each other and quite quickly…you know people's capabilities…it becomes a little more personal…you could call up people and interact with them and ask questions". Fran explained this form of interaction essential for providing care in that "we depended on each other". Furthermore, Lois believed her relationships in the clinical workplace shaped her definition and beliefs about IPE as she experienced the value and perspectives of other professionals.

In contrast, one nurse educator questioned if getting to know another professional or developing a relationship with them is an accurate account of working interprofessionally.

Minnie stated "You form these relationships like that with the physician or the respiratory therapist but it is because of the situations that you are in…I do not know that I would exactly call it interprofessional practice". This nurse educator seemed to not equate relationships as working interprofessionally; rather she suggested relationships developed as a result of knowing a specific person's strengths and knowing how to use the strengths effectively in the workplace.

However, graduate school for the nurse educators seemed to offer experiences for learning new concepts and ideas; exploring and sharing differences between graduate students from different programs. The resulting dialogue between the graduate students from various professions and the nurse educators created new ways of thinking which two of the nurse educators referred to as "broader thinking" (Betty; Minnie).

Nurse educators suggested broader thinking is a catalyst for increased appreciation and understanding of the perceptions and roles of other professionals. There was a sense that increased appreciation opened up possibilities on how healthcare professionals can work together. Betty commented:

> I did take an interdisciplinary course, they called it interdisciplinary at that time and there was all the different professions…social work...physician...we had some dentists and we had different individuals from different professions teaching us about things. And then we would work on case studies, and we would all talk about it and what our…each one of our parts were, what our different perspectives were. And so as a result of that I am a proponent of having different professions teach.

The nurse educators found graduate classes created a template for how professionals work together or provided a new way of knowing how to develop relational work.

This section of Chapter Four summarized how nurse educators initially described their knowledge of IPE within nursing education. At the outset of the interviews, knowledge construction about IPE in nursing education evolved from the larger collective of the profession of nursing. Guided by the theoretical framework of social constructivist theory, I began to understand how exposure to nursing education and practice environment, where the learning takes place with others, created opportunity for construction of knowledge about IPE (Fosnot & Perry, 2005; Vygotsky, 1978). Although able to identify IPE experiences, IPE experiences in nursing education were difficult to articulate. Forms of team work or course work created a frame of reference.

Consistently, the most significant influences on how nurse educators understood the meaning of IPE were through individual life experiences that illuminated the emotional side of care. Although understanding the need for IPE to be part of nursing education there was a sense that something was missing. The next section of Chapter Four explores how the nurse educators made sense of what they understood about IPE.

THEME 2: MAKING SENSE OF IPE

The theoretical framework of social constructivism suggests that construction of knowledge is through a lived experience, linked to other experiences and knowledge resulting in interpretation and categorization (Fosnot & Perry, 2005; Vygotsky, 1978). Creation of the shared consciousness is through dialogue, guided by the social and cultural aspects of a specific group (Kanaka & Anderson, 1999; Vygotsky, 1978). In order to explore the understanding, interpretation, and categorization of IPE by the nurse educators,

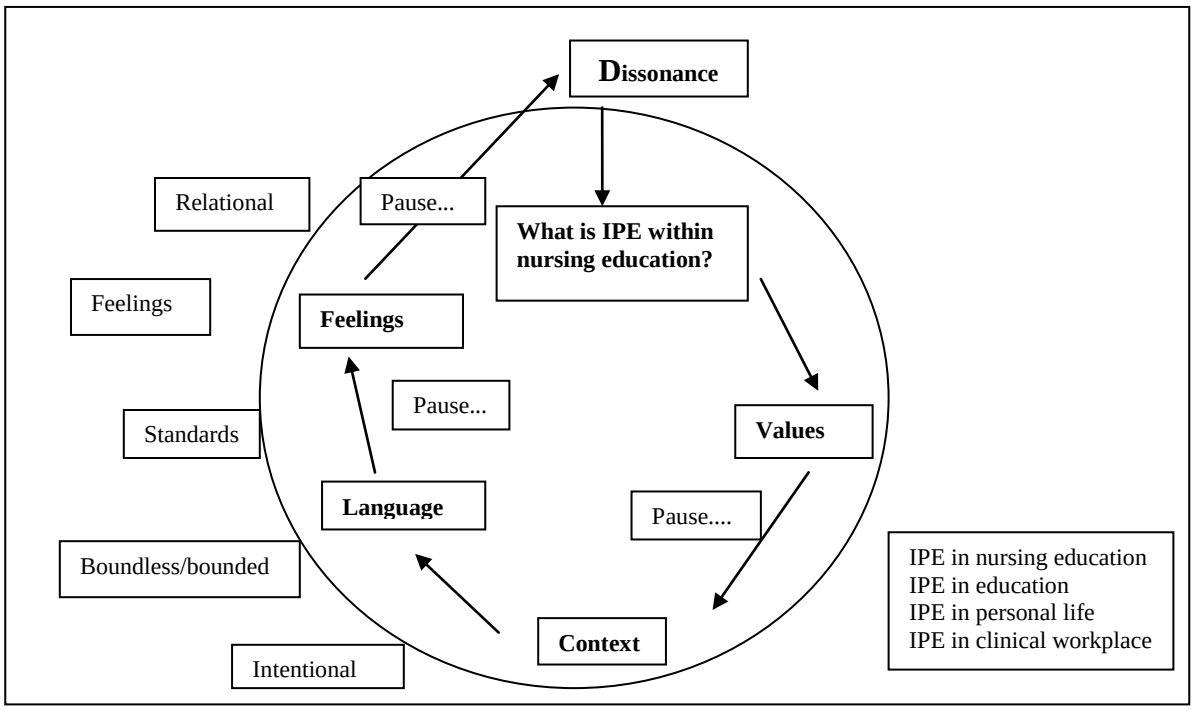
I asked the nurse educators the second research question, "How do nurse educators make sense of the experience constructing this new knowledge paradigm of IPE?"

This question seemed to return the nurse educators to the question, "what is IPE in nursing education?" and again, they began to refer to nursing standards and graduate competencies. A circular pattern occurred in the discussion and I found myself wondering if I was not asking clear questions; was I assuming different answers would be forthcoming; was more information needed? Part way through the circular process, a new introspection seemed to develop and the nurse educators began to explore how they know IPE.

Interview data from the nurse educators reflected four themes of the process of making sense of IPE: making sense through values; making sense through context; making sense through language; and making sense through feelings. The following section provides insight into how the nurse educators integrated the experience of constructing new knowledge through these overarching themes.

Figure 2.0 provides a visual representation of these themes within the context of the findings from Theme One of Chapter Four.

Figure 2. Beginning to make sense of IPE



Making Sense through Values

All the nurse educators referenced positive patient outcomes as the guidepost for nursing education. Clear direction for this guidepost is evident in the nursing practice standard to provide "safe, competent, and ethical nursing care to Albertans" (College & Association of Registered Nurses of Alberta, 2005a, p. 1). As registered nurses, nurse educators recognize and value client outcomes and processes required for client outcomes; the focus of the Code of Ethics for Registered Nurses (Canadian Nurses Association, 2008) and the Nursing Practice Standards (College & Association of Registered Nurses of Alberta). In exploration of how IPE makes sense in nursing education, the nurse educators shared thoughts on how relationships, perspectives, and collaboration inform the use of IPE.

Relational or Isolationist

Nurse educators valued relational work in the practice setting in order to meet client outcomes; "you're truly looking at it in an interprofessional way...[it] is relational, right?" (Mary). Interactions between professionals appeared to be a mechanism valued by each nurse educator in accordance with the professional values. Despite this overall common value, the specifics varied regarding how each nurse educator articulated this value. Helen suggested working relationships are on a continuum; performance or relational work of the profession of nursing at one end of the continuum and the multiple perspectives of different professions sharing in the work at the other end of the continuum. This perspective may create a 'them and us' dimension to how nurses work with other professionals.

Minnie's reflection suggested a common understanding is required as part of the relationships between healthcare providers and nurses:

> I see that when nurses work on teams that it is very important to understand how others have learned in order to understand how to relate to them and how to work with them. So if you do not have the understanding that common understanding of a concept, I do not know if you will come to the same page always.

Viola suggested that relationships are about knowing how each other's role affects the role of the other professional while giving care, "My experience tells me that if I work in a silo, which is think nursing is able to do it all, I'm not really meeting the needs of the patients". For these nurse educators, the value of their work improves through working relationships with other professionals in order to provide safe and competent care.

However, the nurse educators began to question that the process of teaching and learning in nursing education may not support this value. There was a sense that nurse educators educate in a manner that isolates nursing from other professions. For example, they suggested isolation develops by teaching undergraduate nursing students in an environment that singles them out to learn as a unique group. Mary asked if there is a perceived lack of reality between practice and education. She suggested students exposed to one type of thinking—the uniqueness of nursing—may believe that they are the only ones who care about patients and lack a true understanding of nursing.

Nurse educators seemed disturbed by thoughts of a disconnection between the expectations of practice and education regarding how students learn to develop professional relationships. Viola questioned the practice of teaching:

> Students graduate and they are out there working together, how have we role modeled that here, how did we prepare them for that? I think in education, you have to somehow replicate and prepare students in what they will be doing out there in the healthcare system here rather than keeping them all segregated and then we mush them all together after they graduate.

A sense of negative impact of isolationism began to emerge, and the potential of silencing different perspectives.

Perspectives or Silenced Voices

The nurse educators valued perspectives from different professions. Valuing different perspectives correlates with the Code of Ethics for Registered Nurses (Canadian Nurses Association, 2008, p. 5). Within the Code of Ethics, registered nurses are encouraged to work with other healthcare professionals in order "to create the moral

communities that enable the provision of safe, compassionate, competent and ethical care" (p. 5). The nurse educators shared how different perspectives create an enrichment of knowledge required to give good client care:

> I see [other professionals] bring a view and a perspective, and then I bring my view and perspective, and I think if you bring in all these views and perspectives, you have a good overall understanding of the client. I become more informed from their view and perspective because I can see where they're coming from and then I can use that and it can inform my practice (Lois).

Pearl furthered this idea by saying:

> One comes with their understanding and strengths and the skills and knowledge that they have that should be somewhat distinct or focused. So there is a greater enhancement of everybody's understanding by knowing what the other professions would view and see and what knowledge they would bring to the discussion. So I think an outcome, though, is that when they get out to practice there is a respect for what other professions know and what they can do.

Notably missing from the perspectives discussed was any articulation of how they teach the exploration of biases and points of view in nursing education. Rather they talked about how they encourage students to participate with other professions and talk about what they believe the nursing profession does. Lois shared, "I kind of worry cause sometimes we just say 'and then you collaborate with your colleagues and then you do this with your colleagues' and so it's not really always talking about how do you do that". Nurse educators agree that the context of nursing education offers a place for students to

begin to identify their role and roles of other professionals but remain uncertain about how to develop this learning. Pearl wondered if there is a need to expose students to other professionals rather than a dialogue:

> It's a communicating of as opposed to hearing directly from the person. So it's kind of no different than reading about what somebody would do…so I think that is one of the challenges, it really is, when you're not in an environment where there's very many other health professionals.

As the nurse educators spoke of a disconnection between nursing knowledge and the perceptions about other professions, some of the nurse educators surfaced the possibility of other voices silenced in the process of sharing knowledge. For some of the nurse educators, power relationships influenced knowledge sharing. Mary emphatically stated, "there's so much power that comes out of working on teams and whose voice is heard and how decisions are made...to really work interprofessionally, I think it takes a lot of work and education and recommitment and renegotiation". There was a sense that some professionals' voices are louder and heard before others:

> How do you reflect within a dynamic that silences voices because of the structure of meritocracy or the socialized role or the constructed position, social position? How do you reflect and what voices are being silenced, and which voices are being sought, and all that kind of reflection as an interprofessional competency (Helen).

For some of the nurse educators it was the voice of the registered nurse not heard therefore they spend time teaching nursing students to be assertive in communication in a team setting. "We talked about how important it is, as a nurse, to be able to assert your

voice and be part of that team because that is your requirement and your responsibility" (Lois). For others, it was the physician that held the power of the team. "As long as the physicians are the gatekeepers then I think it is very difficult for nursing to have a role, a significant role in the delivery of healthcare or wellness care" (Jane). Annie recognized the value and significant role registered nurses offer; she reflected "it's almost sometimes like we don't really have the confidence to step into that role".

Viola suggested that silenced voices may exist between the nursing disciplines such as undergraduate nursing students, practical nursing students, and healthcare students:

> I've been hearing negative comments from the [undergraduate nursing] students about the [practical nurse] students and some hierarchy perspectives and whatnot...probably it is around some anxiety from where and what is the role of nurses as the [practical nurse] role expands. Where is our role expanding? What are we doing to broaden what we do as some of our work gets taken away and is now being done by others? What is left for registered nurses? So that develops some fear.

A sense of unease or dissonance appeared as the nurse educators continued to explore their values in nursing education; some practices in nursing education did not necessarily support the development of practice expectations, or the values and ethics established by the Code of Ethics (Canadian Nurses Association, 2008). Courtney (2012) summed up the feelings, "So there's a disconnect and what's really the biggest disconnect, is nursing talks about holism as if nobody else in the world has heard about it and claims to be holistic at the same time remaining fixed [as] uni-professional".

Consideration of relationship and isolationism along with perspectives and silenced voices seemed to call the nurse educators back to reviewing how they understood collaboration in practice and education. The circle of reflection continued.

Collaboration in Practice and Education

Registered nurses "collaborate[s] with the client/significant others and other members of the health-care team regarding activities of care planning, implementation and evaluation" (College and Association of Registered Nurses of Alberta, 2005a, p. 4). Nurse educators valued collaborative practice as a competency expected of graduates entering the workforce from nursing education. Betty explained "the best care that can be provided to a patient is in collaboration with all of these different professions". Courtney agreed: "Our fundamental beliefs are that we care and that we want the best for patients and if that's true then you have to work collaboratively with other people, with other groups". Even with all this agreement on the importance and value to healthcare, how to teach and learn collaboration in nursing education seemed difficult for the educators to identify.

There was recognition by the nurse educators that practice requires a graduate from a nursing program to understand collaborative practice. The meaning of collaboration and its relationship to how the nurse educators understood the meaning of IPE was another distinction in the exploration. As discussed by the nurse educators, there was a distinct difference between how they described the required practice competency of collaboration, and how they described learning with IPE. For example, Pearl suggested that IPE prepared students for collaboration, "I think when you go out to practice, then [you've got to] collaborate. I think IPE is the preparation to do that, to do the collaborating".

Although the nurse educators situated collaboration in the practice setting and provided examples of how nurses work in collaboration with others, less than half of the nurse educators provided examples of how to teach in order to help students understand how to collaborate. Moreover, for some of the nurse educators there was a sense that nursing education does not understand IPE, "I think we're all for collaboration in practice but we don't know a lot about IPE in nursing education" (Fran).

However, as the interviews progressed a growing uneasiness developed; they paused and reflected on how collaboration is part of undergraduate nursing education. Questions surfaced by the nurse educators about how IPE fit within the nursing education environment. Edna suggested that the importance of IPE in nursing education is to guide new graduates in how to work differently, "We have to work smarter; and smarter is no longer considered in isolation with the experts which we did in the '80's…we need to work together to be able to accomplish a higher complexity within nursing". Each nurse educator expressed the value of IPE as a 21st century skill required by nursing students in preparation for the reality of the workplace. Viola concluded:

> I think [IPE] is definitely where we need to go, again we send students out and they need to be doing interprofessional collaboration when they get out and graduate. In a sense we are almost doing a disservice to students by not preparing them for that. I think we need to.

Annie furthered this thought that IPE may offer opportunity to explore and better understand the role of nursing:

> I'm [kind of] thinking almost from a patient perspective, that the nurse they see probably seems to be doing the same kinds of things we've done for a long

time. But I actually think that probably interprofessional is destabilizing us a bit and that's one of the things that will force us into an expanded role or maybe a…let me change the wording a bit, will allow us to move into that expanded role (Annie).

Without development of this skill, Betty questioned if students will have difficulty identifying their role in practice or knowing their 'fit' in practice. In her practice, she found there seems to be an increased "blurring of boundaries…every time I do go to work, especially at the hospital, it's like, so what do you do and what do I do that's different". She wondered how the students will know their role if not exposed to other professions.

In addition, exploration of currently taught nursing skills by the nurse educators resulted in more questions about nursing education practice and how IPE informs education on current practice. When asked how IPE fits in nursing education, more than three quarters of the nurse educators replied they were unclear about the role of the registered nurse in practice. After giving some thought to her own question about the role of a registered nurse, Mary stated "How do we ... visualize, or imagine, or ... see what nursing is? What's the role of a nurse? And I think that's been…situated in…old ways of thinking what a nurse is!"

There was a sense that in order to identify the use of IPE in nursing education, the role of a registered nurse required a refocus for current practice and education. For example, Viola suggested teaching traditional content remains a focus of current nursing education:

We are still teaching bed baths, as much as I think there is a tremendous amount of positive and relationship building and assessment, the fact is nurses

> are not doing bed baths...I have regrets that we've lost that but it seems that we have, others are taking on that chore, that task, so maybe some of those things that we have done, that we really hold quite dear or at least some of us anyways, the old guard…it will be a tough one to let go.

Nurse educators appeared to sense a mismatch between traditional nursing education and how IPE fits in current nursing education. This perceived mismatch in the identity seemed to create a dissonance or discomfort for the nurse educators. In her discussion about nursing identity, Helen suggested that a discussion about change in nursing identity creates a sense of discomfort for her. Despite this discomfort, she believed that nurse educators need to stimulate the dialogue about change in order to address the needs of the future. Helen suggested these discussions would guide nurse educators to create discussions with students about "power structures, hierarchies, stereotypes, negotiating power, conflict management, and all those kind of things". She questioned where and when these issues are taught in an undergraduate nursing program. Annie concurred with Helen and implied nurse educators are isolated from practice, "I think that we talk about communication and practice but I don't know that we've actually put it in to practice, I think that we still tend to be pretty isolated, in the clinical area and in the classrooms".

The isolationist perspective and potential silencing of voices appeared to cause some of the nurse educators to pause once more, and consider the ethical implications of not only the gap between education and practice but the gap of knowledge between healthcare professionals in how each profession shares and addresses the care of the client. As Helen noted:

> We generate all kinds of knowledge, it has to come together ultimately to benefit the patient or the individual...but [nursing] knowledge generation is so far removed from the practice situation [it] becomes irrelevant or is not seen without a great deal of work connected to it.

Mary questioned if nurse educators teach and share the value of caring through an IPE lens, "by teaching them to learn to be isolationists, they think the value they bring is that they care about their patients...it continues to feed into the isolationist [perspective]". There was a beginning sense that education and practice may not be addressing client care in a full and ethical manner when IPE is included in the how nurses understand patient care.

Making Sense through Context

The reality of the higher education context appeared to influence how the nurse educators constructed IPE knowledge and used IPE. The location of the departments and faculty in the higher education institution appeared to impact how nurse educators construct IPE in nursing education. In addition, the physical separation from the clinical environment and reality of nursing practice from nursing theory courses suggested one of the reasons for having difficulty fitting IPE within current nursing education.

Annie implied nurse educators are isolated from practice: "I think that we talk about communication and practice but I don't know that we've actually put it in to practice…I think that we still tend to be pretty isolated, in the clinical area and in the classrooms".

Location

Although the nurse educators spoke of working together in the practice setting, they were not sure how to develop IPE in a higher education institution. One area of concern

was the physical space of a higher education institution. The nurse educators contemplated the influences of physical space and proximity to other professions on how IPE is used. For example, educators of different professions in one higher education institution are located in a close geographical proximity offering opportunity for educators of different professions to meet and come together.

Betty suggested a smaller sized higher education institution would not support teaching IPE as variety of professions may not attend the institution, "What can we do within what we have for education here, and because we're smaller, we don't have all of those other teams". Fran agreed a smaller institution would offer less opportunity for IPE due to less exposure to other professions but reflected, "Now having said that, you think maybe [IPE] should be easier then but it seems to have some difficulty". Fran considered that the close proximity of the departments in smaller higher education institutions may actually offer more opportunity for educators of different professions to chat and consider how to bring students together.

In contrast, another nurse educator suggested having professions in close proximity does not influence how educators construct knowledge about IPE:

> I remember when…we were going to be working more collaboratively and it was going to be easier because we were in close proximity and one of my thoughts and questions, at that time, is 'what are we going to do in the meantime to change our attitude so we're ready for that?' Because I don't think we are, even in nursing…I don't know if we're ready in any profession. It isn't going to be a [place], it's going to be the attitudes, I think that bring it together (Annie).

The relative merit of the proximity of the professions in a higher education institution was a point of difference of opinion for the nurse educators; and as well, there was no consensus on the type of space needed to support IPE in a higher education institution—be it a large or small institution. But there was consensus that the time needed to explore and develop IPE within a faculty was overwhelming (Annie; Betty; Edna; Janet; Minnie).

Nursing Faculty

For some of the nurse educators there was a sense that a change in nursing education may be difficult to do as some individuals may wish to keep the "party line" (Minnie) maintained by the "the old guard" (Viola). The status quo may run counter to development of a new teaching vision in a traditional profession, such as nursing. The reasons for this varied but for two nurse educators, aging demographics suggested a disinclination to change. "There's a lot of retiring faculty who maybe don't want to invest a lot in change at this point, leave that to the younger folks" (Fran). In addition, Courtney shared this sentiment:

> We're talking about attitudinal change and that's the trickiest thing of all, if you think about the demographic of faculty then why should somebody who's two, three, five years away from retirement want to engage with that? A lot of people at that stage are winding down, not taking new things.

Along with the changing demographics was a concern for how the less experienced or younger faculty constructed knowledge in nursing education. Helen indicated there was a political awareness within faculty; be part of the old guard or be part of innovation:

> I have talked to younger faculty that have to be very politically astute [about] where they throw their support. And so within a teaching team or within a

faculty or whatever, there are political implications of where you align some of your views and I think we have to be aware of those, it's one of the realities.

However, Pearl did not believe it is time to explore worldviews of other professions, "I'm not sure we necessarily want to…I think that's the strength I bring to the situation, this is the nursing point of view". There were varied reasons for how new knowledge is gained in the nursing faculty. For some, it was seeking not to challenge the power of the 'party-line' or traditional processes in nursing education. Others may find it time consuming and not a focus for their current plans in teaching. There was a sense of individuals were constructing knowledge about IPE; not guided by a collective understanding of IPE.

Making Sense with Language in Nursing Education

Initially, the nurse educators defined IPE as a form of learning and working together. However, as the interviews progressed, the nurse educators interchanged the words interprofessional, interdisciplinary, and collaborative suggesting the meaning of the words were the same for some of the nurse educators. For example;

> I don't know if I would make big definitions amongst those 3 terms, no, I can't say that I do I mean we work hopefully collaboratively, we recognize different disciplines, we work as a healthcare team, and we work as an interdisciplinary team. I don't see it as a big distinction…a lot of terms, does it make a difference? **(**Hazel).

Lack of consistency in the meanings of words used throughout each interview was apparent. Some of the nurse educators suggested the need for clearer meanings and expectations of these words for nursing education. Lois, an experienced educator,

proposed it may not be the meaning of interprofessional, rather a need to explore the level of engagement for collaborative processes, "I think people think that they collaborate and so that they're interprofessional...the interprofessional piece is understanding the level of collaboration that you're having".

Collaboration in the practice setting seemed to be a source of expectations in the education setting; suggesting that the language of the practice setting may subsume language used in nursing education. Practice as a source of the language, to support a teaching and learning process to assist students to learn and work together with other professionals, did not appear to be clear. The language did not adequately describe the process. As Mary noted "I think we need to use the language…we need to use interprofessional, right? Like I really think that would be important cause then people would go, 'oh, interprofessional, right' okay so what is that, not just collaboratively".

Throughout this discussion there were pauses and questions raised by the nurse educators. They appeared to be searching for the meaning of IPE in nursing education. The circle of reflection had a feeling of getting tighter into a vortex of focus.

Regulatory Body and Guiding Documents for Practice

The nurse educators described how the regulatory body guided their thinking and understanding of nursing knowledge and language. Reference to the language in Nursing Practice Standards (College and Association of Registered Nurses of Alberta, 2005a) and the Entry-to-Practice Competencies (College and Association of Registered Nurses of Alberta, 2006) suggested that it is the language from these documents that guide nurse educators in how they teach and that this source of influence is paramount. Despite this expression of the importance of the language in the regulatory documents, the nurse

educators expressed ambiguity in any common meaning for the terms. The relationship between what the nurse educators taught and the nursing language used in the documents from the regulatory body appeared to be paramount.

Nevertheless, the meaning of the language became ambiguous. For example, the nurse educators quoted the word "collaboration" from the Nursing Practice Standards (College and Association of Registered Nurses of Alberta, 2005a) and the Entry-to-Practice Competencies (College and Association of Registered Nurses of Alberta, 2006), noting that the ability to collaborate is an expectation of graduates from the undergraduate program, but the nurse educators were not in agreement about how to teach collaboration.

Hazel explained that the documents offer a framework when teaching from an IPE perspective, "To me, [IPE] is within the framework of our practice, [IPE] is within the framework of our practice standards, and [IPE] is in the course objectives". Although Helen supported this idea, she did so with some reservation:

> Well [IPE is] part of our own competence… but the way to get there is not necessarily mandated. It's expected that nurses, in standards of practice, collaborate with other healthcare team members. [It] is the language they use...it implies that you know how to collaborate, right. It doesn't have in parenthesis—negotiate power differentials.

Further adding to the professional body documentation, a recent statement called Scope of Practice for Registered Nurses identified "preparation at the baccalaureate level provides the foundation necessary for effective interdisciplinary practice...required to enter the profession" (College and Association of Registered Nurses of Alberta, 2011, p. 7). The College and Association of Registered Nurses of Alberta has several statements that

communicate a value in working with others and understanding collaborative working relationships. Despite all this professional association and regulatory language the clarity of the fit of IPE within nursing education remained elusive for the nurse educators.

There was agreement that registered nurses adhere to the competencies expected for practice. Two camps of interpretation appeared to emerge: one camp stating there is clarity of expectations about IPE stated in these documents; the other camp suggesting ambiguity exists on how to teach with an IPE focus. The ambiguity centered on the lack of an IPE definition in the documents.

Clarity of expectations

In the first camp, there was a sense the words in the documents provide clarity of expectations to nursing education. For example, Pearl noted:

> Majority or at least all of the course objectives that I have seen [refer to] working in an interdisciplinary team. So to me that gives me direction in terms of why the students should be educated within that framework of working within the interdisciplinary team. So the fact that it is within the course objectives is very important to directing us to where our education should be.

Ambiguity of expectations

The second camp of nurse educators struggled to interpret the meaning of the words in the documents guiding their teaching. Interpretation of the words became ambiguous as nurse educators reflected on the expectations and use of IPE within the teaching or practice process. Courtney, an experienced practicing nurse and expert nurse educator, speculated:

> Collaboration can mean different things, can't it? I mean if you collaborated with the Nazis, it would be very different collaborating. And I think that's one

> of the problems with regulatory bodies, it's not a failure…but a reluctance, if you will, to engage in serious definitions of the terms being used to describe things.

The individual differences surfaced in the understanding of the language used in the documents of the regulatory bodies. There did not seem to be a collective understanding of the meaning of collaboration in the education environment. Although experience shaped their understanding of IPE, the nurse educators began to question the language used to explain IPE in the context of nursing education:

> Things are so general, it's hard for us to say 'this is exactly what we do in nursing'. And I think for that reason we always feel a little bit off-balance, maybe, would be a word or just, not quite as confident to say, 'well this is what we do' (Annie).

It was at this point in the interviews, nurse educators shared personal feelings about IPE in nursing education rather than referring to the guiding documents used in nursing education. They began to explore their feelings and make sense of the experience of constructing knowledge about IPE in nursing education as individuals.

Making Sense through Feelings

To gain further understanding about IPE and how the nurse educators understood and used IPE in nursing education, I asked the following question, "how do you feel about IPE and nursing education?" There were varied responses from the nurse educators. For one educator, there was a sense of uncertainty and a feeling that several questions remained unanswered, "I think it is a great idea but, how do we do it, how do we set it up for a

positive experience and who do we do it with is another question" (Viola). Minnie quietly reflected on IPE and shared her feelings:

> Hopeful...(however) I sometimes feel discouraged; I think we are not moving fast enough to be in that place. But I think that as far as nursing education, I think we have great potential to move our students to a different place and hopefully then when we get to the practice environment, they won't lose that.

More than half of the nurse educators affirmed this feeling of being hopeful; there was a sense of excitement and positive future outcome in the development of nursing students. "It makes me feel excited and solid…it's something so solid because it is so much more than a style of education or a buzz word or anything, it is how practice happens" (Fran). "I think it's critical to our profession. Actually, I don't know how you can function as a nurse and not work in an interprofessional role" (Betty). Courtney stated "It seemed to me that to teach nurses about nursing as if it existed in the absence of other disciplines was not a sensible thing to do".

Again, each nurse educator paused and reflected. For some, they shared feelings of moral distress. The distress seemed to arise from the nurse educators knowing there may be another way to teach yet there were documents guiding their practice that compromised this new way of teaching (Canadian Nurses Association, 2008). The distress seemed to be experienced at various levels; from intense to minimal but all of the nurse educators shared some degree of moral distress or dissonance.

Dissonance

For the majority of the nurse educators interviewed a sense of dissonance developed with the recognition that there is minimal to no exposure to collaboration in nursing

education. For Viola, the need for IPE was apparent, feeling without exposure to learning with IPE, students will lack preparation for the workplace. Minnie believed nursing students are disadvantaged as they graduate from nursing education without effective exposure to other professions:

> I often think our students go away from here feeling quite empowered and quite sure about their ability to engage in practice, in interprofessional practice, or interdisciplinary practice, maybe more so. And then I think it sometimes falls apart for them, they lose their confidence, they lose their hope for that.

The suggested disservice and student disempowerment upon graduation created strong feelings for the nurse educators. They spoke about how nursing students may not have had an opportunity to explore interprofessional learning in nursing education. Mary considered her dissonance and connected it to curriculum, "Our whole curriculum needs to be re-thought, and re-evaluated, and that's one of the struggles I have is, if I'm [going to] stay here and teach. Because it's like you know, that it's either dissonance or moral distress or whatever".

For the majority of the nurse educators interviewed, it was at this point that I experienced another pause; some shook their heads and commented on how they wondered if they could offer different learning opportunities for the students to understand collaborative practice. There were questions about whether IPE might be a catalyst to develop a new way of thinking or re-framing of nursing education.

This section provided a summary of the themes interpreted from how the nurse educators made sense of the experience constructing their understanding of IPE. The four themes included: through values; through context; through language; and through feelings.

The findings from this data suggest IPE was a professional norm for the nurse educators but a sense of dissonance surfaced as they explored their understanding of IPE further. The dissonance surfaced questions about how to develop and offer nursing education to meet the needs of the 21st century.

Through a process of reflection and dialogue, I found each nurse educator explored values and feelings about how they teach and use IPE. Each sought to make meaning about IPE as part of an explanation of current nursing education that is valued by both nurses and society. The expression of individual feelings and values initiated a re-framing or transformation of their understanding of nursing education with IPE. Mezirow (2009) referred to this form of exploration as a required element for transformative learning.

Transformative learning appeared to influence the process of nurse educators moving from understanding IPE in relation to current nursing practice to discovering how they feel about IPE in relation to current nursing education. Discussion follows regarding the processes that influenced a re-framing of IPE in the environment of nursing education.

THEME 3: RE-FRAMING ABOUT IPE

In order to explore the collaborative processes that reflect the co-construction of knowledge, I asked the question, "what social and collaborative processes influence construction of IPE knowledge in the environment of nursing education?" The theoretical framework for this case study, social constructivism, indicates cultural and environmental factors, as well as groups of people functioning together by virtue of their shared cultural practices and language, are essential to constructing knowledge (Kanuka & Anderson, 1999; Palincsar**,** 1998; Powell & Kalina, 2009). In other words, meaning negotiated

through conversational language results in shared knowledge and understandings of the group.

In this case study, as the interviews concluded, the shared knowledge of nursing education by the nurse educators began to change as the nurse educators critically reflected on how nursing education prepares students for the practice setting. There was both awareness of collaborative practice requirements and questioning of the methods of teaching collaborative practice in nursing education. An increased sense of dissonance developed amongst the majority of the nurse educators as they spoke and reflected. This process of dialogue and reflection appeared to set the stage for nurse educators to experience a change or transformative learning about their practice.

Transformative Learning Theory

In order to gain understanding of how nurse educators understood their feelings and experiences about IPE, I turned to transformative learning theory for insight. Social constructivism, underpinned with adult learning theory, guided my interpretation of the initial discussion of IPE in nursing education but did not explain further findings shared by the nurse educators as they began to explore and share ideas.

Transformative learning is "learning that transforms problematic frames of reference to make them more inclusive, discriminating, reflective, open, and emotionally able to change" (Mezirow, 2009, p. 22). Frames of reference are filters used by adult learners to sort experiences, feelings, and beliefs thereby establishing expectations and assumptions. Development of the frames of reference is not a conscious effort; rather it is the result of the assumptions developed from the frames that are conscious. Mezirow (2009), a well-known writer on transformative learning theory, posited that there are ten stages or phases

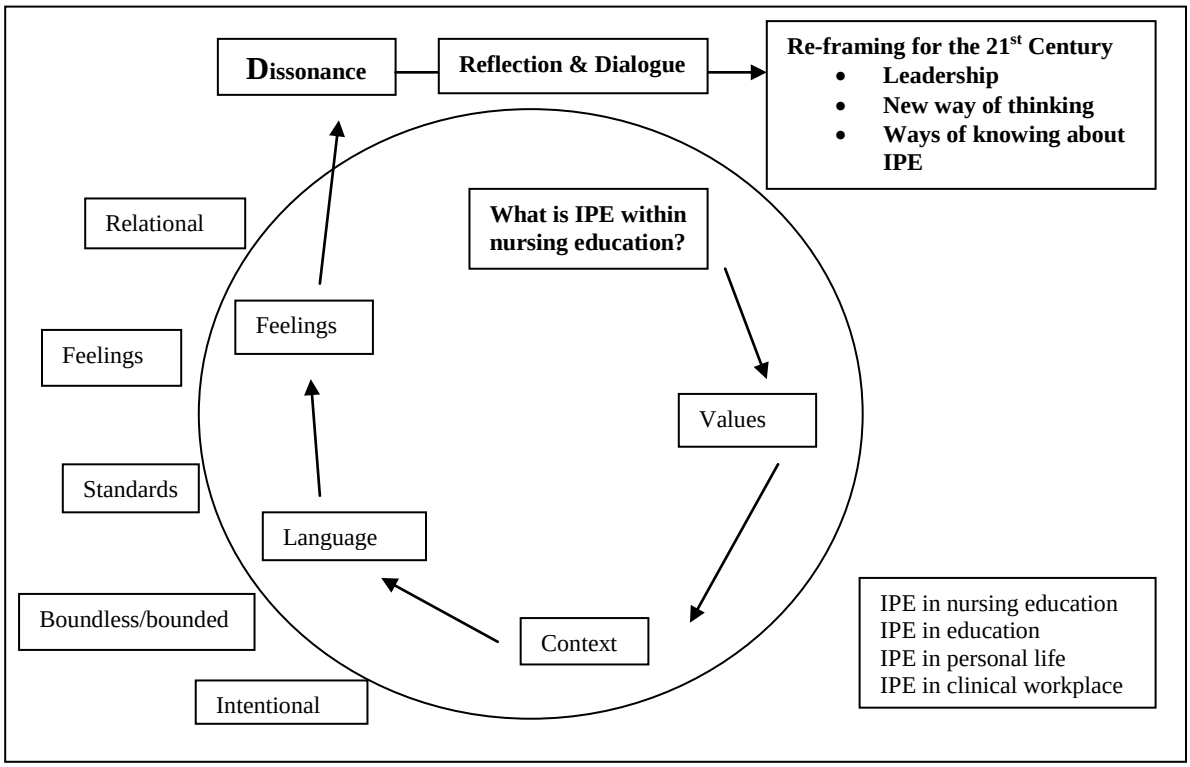
in the process of transformative learning: disorienting dilemma; self-examination; critical assessment of assumptions; recognition of a connection between one's discontent and the process of transformation; exploration of options for new roles, relationships, and action; planning a course of action; acquiring knowledge and skills for implementing one's plan; provisional trying of new roles; building competence and self-confidence in new roles and relationships; and a reintegration into one's life on the basis of conditions dictated by one's new perspective (p. 19).

These ten phases offer structure to understanding how one begins to consciously explore transformative learning by adult learners. Through reflection on the content, process, and premise, one is able to consciously identify how and if transformative learning is taking place. More specifically, Mezirow (1994) suggested it is reflection on premise that transforms the meaning perspectives. In order to interpret and understand what the nurse educators explained as their understanding of IPE, the lens of transformative learning theory provided further structure to the analysis and discussion in this research study.

In the previous section, the nurse educators had begun to express feelings of dissonance concerning IPE in nursing education. Critical assessment of assumptions in nursing education resulted from the feelings of dissonance. In the following section, transformative learning theory provided the theoretical framework: recognition of a connection between one's dissonance and the process of transformation; exploration of options for new roles, relationships, and action; planning a course of action; and acquiring knowledge and skills for implementing one's plan. This last section of Chapter Four provides a discussion about how the nurse educators look at nursing in the 21st century; and

how they began to re-frame IPE in nursing education. Figure 3.0 provides a visual representation of these findings.

Figure 3. Re-framing with the use of IPE



Connecting Nursing to the 21st Century

The nurse educators articulated an awareness that nursing will need to change in order to address the complex healthcare needs of a changing society. Without change, Betty surmised "I actually see at some point in time, RNs being eliminated". Viola agreed by commenting on how little room there is in the system for silo work:

> I think [silos] became more and more evident in the last couple of years, thinking about, as the [licensed practical nurse] role has expanded and now the healthcare aide role has expanded, we are all getting scrunched into a little space.

The silo effect appeared to be a disincentive as everyone seemed to be doing a similar job. The nurse educators began to ask why registered nurses were not looking beyond what they currently do. For Janet, it is energy, "Whether it is personal or professional life, I think we have the energy to do what we have to do, we do not have the energy to look beyond". She continued with:

> Maybe it is easier to stay with the status quo and not fix, or not look beyond and how can we do this better. Because we need to do this IPE better because we cannot do it in isolation, we can't. Nurses don't have all the answers.

The nurse educators appeared to be calling for change, however change in a traditional profession can be daunting. For the nurse educators, change began to appear as an add-on to their teaching processes. Currently, the epistemological foundation for traditional nursing education and practice are the ways of knowing; maintaining stability and the status quo in nursing.

Despite this traditional base, the nurse educators questioned if it is time for change in their ways of knowing in order to address the health needs of society. Meeting the health needs of society is an ethical responsibility of registered nurses therefore requiring exploration of change in nursing education. A re-framing of nursing practice and IPE became part of the dialogue by the nurse educators.

Re-framing Nursing

During the exploration of defining their understanding of IPE, making sense of the experience of understanding IPE, and identifying the processes influencing construction of IPE knowledge, the nurse educators began to re-frame the way of knowing about IPE within nursing education. Re-framing included exploration of options for new roles,

relationships, and action; and planning a course of action—a new way of knowing. There was a sense of excitement from the majority of the nurse educators as they shared insights about ownership of creating a new way of knowing within nursing education.

Throughout the discussion, most of the nurse educators retained the perspective that nursing is a unique body of knowledge. At the same time, they recognized the need to create opportunities to educate in nursing using IPE. There was a belief that IPE will assist nurses to practice collaboratively. The nurse educators suggested that there may be opportunities to educate using IPE in clinical and theory courses. For example, Minnie identified:

> We may have different roles to enact some of that but I think that as educators, we plant the seed around that. We talk about other professions, in a very respectful manner, give them what is theirs, explain how we fit and how we mesh. As much as possible, role model and encourage that collaboration whenever we can. And in a lot cases, because we are nurse educators, not only within the [higher education institution], we are nurse educators whenever we have students in the clinical area. We are still to educate, so to make opportunities, I think to actually encourage them to collaborate with these people, these other professions.

Although re-framing nursing and the role IPE plays in nursing education was not clear; the awareness of the importance of meeting the graduate competencies in relation to collaboration remained. Mary summed it up, "If our students were actually working interprofessionally, say right from first year or whatever, it would

force us to work interprofessionally with other instructors because how do we...how would we then facilitate their learning?"

For some, there was a sense of curiosity; for others a sense of fear with change. There was uncertainty about the support and direction from the collective knowledge of the nursing profession.

Examining the Status Quo and Exploring Options

A need for information and support began to surface in the interviews; knowing how to teach interprofessionally in nursing education was not clear. For example, Betty felt individuals who come to teach from the clinical setting understand IPE because "they've actively [been] doing it". In nursing education, the sense was nurse educators do not have the mandate or education to teach from an IPE focus. "There isn't any education around it, to help instructors get more information. The onus is on you to be able to figure it out and to learn about it" (Mary). The lack of faculty development and need for such was spoken about by each nurse educator.

Although there appeared to be a lack of knowledge about IPE, the nurse educators were enthusiastic in identifying innovative ways to begin to explore this teaching process. For example, Lois felt nursing education could set the standard and encourage other professions to participate in the development of IPE in the higher education institution. "I think that we should be more involved, nursing should be much more present and involved...runners and leaders in these areas". To develop IPE, the nurse educators believed intentional promotion of IPE in nursing education is needed in order to become "one of those things that you introduce and you build on, you build on, and you build on" (Minnie).

However, there was a suggestion that the policy, set by the Nursing Education Program Approval Board (College & Association of Registered Nurse of Alberta, 2011), that only registered nurses can teach in an undergraduate nursing program may constrain creative ways of teaching and learning in nursing education:

> One of the negative influences relates to the policy that requires teachers of nursing to be registered nurses and the logic behind that is if you're going to have interprofessional, if you're going to have interprofessional learning or teaching or curriculum then it needs to be taught by people from different professions of the facilitated nursing learning. It doesn't make sense for them all to be nurses but...there's a requirement for the teaching of nurses to be undertaken primarily by registered nurses (Courtney).

In addition, clinical placements are changing which demands development of new and diverse ways of learning and teaching. Dell talked about how student placements have changed and students are working side by side with someone other than nursing to learn how to care for clients, "Maybe that word interprofessional is going to get morphed or enlarged into something else…that is very interesting in clinical because when the students are in the agencies…they don't work with nurses they work with umm…different workers of all different types".

The majority of nurse educators expressed interest in creating innovative ways of learning in nursing education. What became apparent was the perception of the level of risk associated with an innovative idea in nursing education. Edna shared her feelings on letting go of the unique perspective of nursing in order to share teaching and learning with others:

> I think that is when we are working together [in an] interprofessional way; I think that is part of that vulnerability and the fear of what would it be like to say that I do not know and what would it be like not to have control. I think if we are teaching within like I have control over the audience and...I have no idea what they are going to say, that is a lack of control and how do I internalize that because sometimes my control equals my measureable output.

Minnie shared how skill development for nurse educators is well documented concerning the move from expert to novice; and the move from clinical expert to novice educator. Minnie reiterated this process in relation to the use of IPE in nursing education, "We are realizing what knowledge we need to know...maybe where we are at with IPE. [It] is that there is this beginning understanding amongst faculty about the importance of it but [we] do not know exactly how to get there".

Plan of Action and Acquiring Skills

Edna believed personal courage may be the catalyst for change. She considered pushing the boundaries in order to find new ways of teaching, "You need to be courageous enough to ask questions, that you are not just going with the status quo". Although considered a risk, the nurse educators saw the opportunity to develop courage through knowledge development (June; Minnie) acquired through mentoring and role modeling (Mary; Viola). In addition, there is sense that dialogue may increase visibility and understanding of IPE in nursing education.

> I'm not so sure that we're coming out and saying, "hey we're doing this" or the research that we might be doing on an interdisciplinary level, which I know

we're doing...I don't think anybody's standing up and saying, hey – look at this. (Annie).

The need for leadership in nursing education and the higher education institution to increase knowledge about IPE was apparent. Using dialogue and role modeling by leadership may be the keys to assist the nurse educators to begin to understand how to use IPE in nursing education.

Leadership by the Regulatory Body

The current guiding document, Nursing Practice Standards (College and Association of Registered Nurses of Alberta, 2005a), guides registered nurses in providing "safe, competent and ethical nursing care to Albertans" (p. 1). One of these standards is "provision of service to the public" (p. 4). This standard includes the following statement: "The registered nurse provides nursing service in collaboration with the client, significant others and other health professionals" (p. 4). The intention of this collaboration is to support service to the public. Nursing programs in Alberta must provide a curriculum designed to ensure nursing students gain skills to meet the Nursing Practice Standards, including provision of service to the public (College and Association of Registered Nurses of Alberta, 2011).

In addition, the document Entry-to-Practice Competencies for the Registered Nurses Profession outlines the need for new graduates to "collaborate with all members of the health-care team" (College and Association of Registered Nurses of Alberta, 2006, p. 14). This includes: appropriate assignment of care; supervision of unregulated health-care providers; and maintenance of professional relationships.

Nurse educators were familiar with the word collaboration in the graduate competencies. They referenced the Entry-to-Practice Competencies for the Registered Nurses Profession as a guiding document for curriculum. However, they were unsure how IPE fit to support this document. As Minnie lamented after a recent review of the graduate competencies:

> We were looking at the graduate competencies, which is really what helps to determine our curriculum. We have some basic understanding of the curriculum and the layering and all of that but we have to make sure that the curriculum addresses all of the competencies as well. And the thing that we noticed was missing in the graduate competencies was interprofessional practice. There is a note in there about teamwork. That was really all that we could find.

There seemed to be an increased awareness developing for each nurse educator about the meaning of collaboration and interprofessional practice. As the interviews progressed, I sensed increased curiosity and frustration related to the meanings of words. Courtney suggested:

> If nursing in this province is determined by a scope of practice that is inconsistent with interprofessional working then there is an obligation it seems to me for those bodies that regulate to be talking together to adopt the essence of collaborative working and amend if necessary the scopes, the respective scopes of practice accordingly. Otherwise IPE is never going to get out of that that secularization. So what I am saying here is quite radical because what I am suggesting is that regulatory bodies are actually obstructing the

> development of IPE by remaining isolated and saying this is what nurses can do and this is what nurses can't do and I think it's a failure to learn from history.

The nurse educators made a strong call for leadership by the regulatory body. There was a sense that clarity of words, education and direction by the regulatory body is needed to provide a way of knowing about IPE in nursing education. As one nurse educator commented, "Certainly as we look at those competencies for how our students are performing in clinical and we level them...if that was stronger language in there that might influence how we do things or the way we do things" (Jane). "Needs to come from CARNA, I think...it needs to be a value" (Mary).

The College and Association of Registered Nurses of Alberta guide the practice of the nurse educators and influence teaching through the graduate competencies. But the context of the higher education institution molded the process of teaching IPE in nursing education.

Leadership by the Higher Education Institution

Workload recognition, and time needed to develop IPE in nursing education were concerns cited by the nurse educators. As Lois shared:

> I think there's more understandings and more conversation needed regarding IPE. I think more formally, I think more credit for people who take and who involve themselves in these types of activities...Not seen as an add-on, but part of your role...So I think there's formal and informal supports that are needed.

For some, without formal workload recognition, there may be impact on achieving continuous or tenure position at the higher education institution. A sense of fear began to

surface, “What is it going to look like, are they willing to go there or do we have different evaluation on instructor performance because it ties together with job security” (Edna).

Reference to administration in the higher education institution by the nurse educators was limited but Courtney pointed out “There are structural, institutional barriers to interprofessional working and education, and there seems to be a lot of negotiation required for different faculties and departments to work together collaboratively as academics, never mind, projects and research”. Courtney, an experienced nurse educator, found turf protection existed in academia and suggested efforts are needed between faculties to address collaboration. For Viola, a vision for moving forward is needed, “Some vision I think, some willingness to try some things out, but again I suspect once this becomes more familiar territory there will be ways around that or an acceptance”.

The nurse educators believed innovation will require some risk taking by leadership. However, the nurse educators were unable to identify how to initiate the risk taking for innovation. Annie suggested “Maybe we need a plan that says we’re looking at how we can collaborate interprofessionally and then having a plan about how we could make that work. Because I think at the dean level that’s probably being done a bit”. Fran explored the idea of the nurse educators creating an attitude conducive to IPE within the higher education institution:

> [IPE] has to be a priority in the institution or in the program. It has to be a part of the philosophical framework of the program…that it’s worthy of instructors or faculty’s time and student time and that innovation needs to be supported…to say ‘can you guarantee this is going to mean inter-collaborative or interprofessional practice’…well we don’t know yet…we just need a little

bit of time and money and support to try a few things. I guess that there's someone that is willing to tolerate a bit of risk.

The nurse educators shared a few ideas about how educators from all faculties could work interprofessionally. One area identified was research and the support offered by provincial and federal governments. Viola proposed "I think we are going to have to, here, look at not so much within health disciplines…I think more intersectoral…I think that would be part of it...another area perhaps interprofessional could work, is simulation". Creating an environment to bring students together, such as simulation, appeared to set the stage to bring educators together. In addition, Annie believed educators needed to socialize through a variety of activities in order to learn more about each other informally first. However, finding ways for formal leadership to provide direction remained elusive for the nurse educators.

Leadership by Individuals

An unexpected finding from this case study research was how the nurse educators refer to their personalities and how personality influences construction of this new knowledge paradigm. What is interesting to me is how they recognize personal capacity as a catalyst for IPE development and leadership. As they explored IPE use, they shared aspects of their personalities they believed are useful for new knowledge development.

Fran shared how she developed an assignment with an interprofessional focus. She reflected on how she enjoyed teaching with IPE several years ago:

It was exciting because the students were doing the same thing they were both interested in the… people and what they had to say and they had this concrete task and people participated too… so that was when I was really quite excited

> about this… Some of my colleagues didn't understand it. Another nursing instructor worked with me, she got it, at least got my vision… some of the other team members just didn't [get it] really, [said] "you can do what you want".

Fran furthered her comment with, "I know that I'm not really weird but I'm not exactly mainstream either". The experience with innovation for this nurse educator inferred something different yet not accepted in nursing education.

But in order to develop an innovative idea such as IPE, Fran suggested "You have to be very curious and very... unsure in order to get that dialogue going". Key aspects for IPE to make sense were relationships and the ability to dialogue despite discomfort or fear to dialogue about looking at different ideas and ways of teaching. As noted earlier in Chapter Four, Edna suggested one needs courage to be a leader:

> I think initially you need to be courageous enough to ask questions that you are not just going with the status quo. I think you need to go with your gut, why are we doing what we are doing and have that willingness to explore things that are different than what the status quo is.

A question surfaced from one of the nurse educators, "What are we going to do in the meantime to change our attitude so we're ready for that?" (Annie). Another said, "It seems to me the logic of interprofessional working and thus so IPE is so rational, I've struggled to understand why there is any resistance to it all" (Courtney). The nurse educators transformed how they individually believed nursing education addresses nursing in the 21st century and began to explore how the profession of nursing, as a collective, may re-frame the ways of knowing about IPE. Direction is sought from the regulatory body and nursing

education. They valued the needs of the public but questioned how nursing education is meeting the needs of the public in the 21st century without a clear understanding of how to teach with IPE. "We are going to have to look at how is it that people are going to learn to be the nurse required for the 21st century" (Edna).

The concluding theme of Chapter Four described the findings identified from the third research question. As the nurse educators experienced transformation of how they understood IPE in nursing education, they called for a re-framing of nursing and the use of IPE knowledge in the environment of nursing education. The nurse educators suggested that without leadership from the regulatory body, higher education institutions, educators, and courageous individuals, change for healthcare in the 21st century may be at a standstill. The nurse educators believed that a new way of knowing about IPE may begin to address the health needs of society.

SUMMARY OF CHAPTER FOUR

The findings from this single exploratory case study allowed me to begin to interpret how nurse educators understand IPE in the context of nursing education, and explore how nurse educators use IPE when teaching in an undergraduate nursing program in Alberta. The theoretical framework of social constructivism guided the initial discussion in this chapter but as feelings and insights became personal, transformative learning theory allowed for further and expanded interpretation.

Throughout the themes explored in Chapter Four, nurse educators searched for the meaning of IPE and use of IPE in nursing education. Language in nursing was identified as a possible constraint on how nurse educators understand the expectations of the regulatory body as well as the higher education institution. A sense of dissonance was

shared as the interviews progressed. Nurse educators appeared to be asking for clarity of language and direction in education and practice in the 21st century. Transformative learning theory offered opportunity to the nurse educators to further develop their understanding of the experience of constructing IPE knowledge from the reality of practice and within the context of nursing education.

CHAPTER 5: DISCUSSION

As the nurse educators experienced transformation in their understanding of IPE in nursing education, I realized that the nurse educators were reviewing ways of knowing from a nursing perspective as they engaged in the reflection connected to answering the interview questions. I began the study with assumptions derived from the literature review, the theoretical framework, and my experience. The assumptions apprised from the literature included: traditional professions may be insular and reject innovative ideas therefore not supportive of innovation; innovative ideas are needed to to meet the needs of the 21st century. The theoretical framework, social constructivism underpinned by adult learning theory, provided partial guidance to understand how knowledge about IPE is constructed and used. In addition, my experience as a registered nurse and nurse educator partially supported these assumptions. However, throughout this study, I found both support and contradiction from the nurse educators in regard to these assumptions. I wondered if the influences, whether supportive or contradictory, were simultaneously correct.

BACKGROUND

Three broad themes emerged from this single exploratory case study research but it was the reflective processes by the nurse educators that offered insight into how nurse educators understand and use IPE. The pause before replying was the time used for reflection, and the individual internal process was palpable. The pause seemed to allow the nurse educators to find a frame of reference for how they personally understood IPE; and their thoughts and beliefs about whether and how nursing education responds to the use of IPE.

The initial frame of reference was the nursing profession or knowledge socially constructed through a learning process with others in the community of nursing (Adams, 2006; Fosnot & Perry, 2005; Vygotsky, 1978). Interestingly, many of the formative influences were drawn from nursing practice rather than any application of a construct of IPE within nursing education; or from experiencing interprofessional practice. At this point, the lack of a collective understanding of IPE within nursing education and the presence of both a personal perspective and professional practice frame of reference resulted in a sense of uncertainty or dissonance. Concurrently, the nurse educators sought a frame of reference specific to IPE within nursing education.

The resulting dialogue to make sense of the dissonance prompted critical thinking and reflection by the nurse educators. The ongoing dialogue by the nurse educators began a transformation or re-framing of these perspectives (Mezirow, 2009). The re-framing appeared to create space for exploration of the epistemological understanding of IPE in nursing education—ways of knowing.

WAYS OF KNOWING

The ways of knowing are patterns of nursing knowledge "expressed in a form that can be shared or communicated with others" (Chinn & Kramer, 2011, p. 3). Ways of knowing, including empirical, aesthetic, personal, ethical and emancipatory, assist registered nurses to recognize and understand the collective knowledge of the profession of nursing; and to communicate this knowledge to others (Chinn & Kramer, 2011; Fawcett, Watson, Neuman, Walker, & Fitzpatrick, 2001; Vandeveer, 2009; Zander, 2007).

Using dialogue, the collective knowledge of nursing guided the exploration of IPE by the nurse educators. In the following sections, I discuss my interpretation of this exploration using ways of knowing.

Empiric Knowledge

Nursing is a performance based profession focused on client centered care creating the expectation that the focus of education is also client centered care (Nursing Education Program Approval Board, 2005). The nurse educators began their exploration of IPE through the lens of empirical ways of knowing. For example, the nurse educators referenced collaborative practice between professionals as a process to provide better health outcomes for patients. Their awareness and responses corroborate with the increased volume of research studies on the importance of collaborative practice (Barrett, Curran, Glynn, & Godwin, 2007; Reeves, et al., 2010; Zwarenstein, Goldman, & Reeves, 2009). However, the pause and uncertainty when asked about their understanding and use of IPE in nursing education suggested a lack of knowledge, or evidence, about IPE in nursing education.

Evidence based practice is partially built on the empirical ways of knowing or the science of the profession; "scientific principles, facts, laws, and generally quantifiable parameters that govern practice" (Averill & Clements, 2007, p. 391). Carper (1978) described empirical ways of knowing as "factual, descriptive and ultimately aimed at developing abstract and theoretical explanations...exemplary, discursively formulated and publicly verifiable" (p. 15). Although the empirical ways of knowing in nursing appeared to guide the nursing educators' understanding of IPE, there was a gap in the nurse educators' empirical knowledge about IPE in nursing education. At this point, the lack of

knowledge about research on IPE in nursing education became apparent (Benner, Sutphen, Leonard, & Day, 2010; Finke, 2009; Hopkins Kavanagh, 2003; Scaia & McPherson, 2010).

Aesthetic Knowledge

The nurse educators identified the need to work with other professionals in order to address complex client needs as part of the art of nursing, aesthetic ways of knowing. Aesthetic ways of knowing involve a sense of depth or deep understanding of the individual and/or event. Carper (1978) described aesthetic ways of knowing as the "capacity for participating in or vicariously experiencing another's feeling" (p. 17); the art of nursing. The nurse educators shared the perspective that professionals working together in the practice setting is a form of art; a symphony of caring. They described this form of work as relational. However, reflection on this relational form of nursing seemed to create angst for the nurse educators as they questioned how and whether they teach 'working together'.

The art of nursing, as described by the nurse educators, included a creative form of working with others, described as boundless. However, as they spoke about using this art, they also described nursing education as bounded, thereby limiting exposure and use of innovative ideas. The limiting elements described were more typical of control or isolationism rather than the creative art of nursing. Limiting exposure to innovative ideas, such as IPE, may stifle the creativity or art of nursing resulting in a greater lack of understanding how nursing may fit with other professions within the healthcare setting (Atkins, 1998; Orchard, 2010).

In addition, the nurse educators commented that their understanding of collaborative practice is directed by the regulatory body. Although collaborative practice is one of the standards identified in the Standards of Practice, the nurse educators appeared to be unsure of how to educate for the purpose of collaborative practice. There seemed to be a gap of knowledge about innovative ways to learn collaborative practice, such as the use of IPE in nursing education. In order to achieve a focus on IPE, the nurse educators changed their frame of reference to personal ways of knowing.

Personal Knowledge

In an effort to identify how they understood IPE, the nurse educators used a frame of reference familiar to them. Adult learners will refer back to personal knowing of a situation or information familiar in order to understand new information (Knowles, 1980; Mezirow, 2009). Chinn and Kramer (2008) described personal knowing as the ability to know "one's own self and the self of others" (p. 7). The knowing of one's self suggests one is able to develop self-awareness, honesty, and be genuine. Although essential to ethical nursing practice, Carper (1978) believed personal ways of knowing are the "most difficult to master and to teach" (p. 18).

Exploration of personal ways of knowing guided the nurse educators as they shared their personal stories of how they understood and experienced IPE, in education, and in their lives. The nurse educators are expert nurses with several years of nursing experience. The years of experience are frames of reference and become personal ways of knowing. The internal knowledge about nursing and the education associated with nursing practice is well entrenched in the personal knowledge of each nurse educator (Carlson, Pilhammar & Wann-Hannson, 2010; Rogan, 2009). Personal frame of reference allowed the nurse

educators, as adult learners, to establish their perception of IPE; to compare and contrast personal knowledge with professional knowledge (Knowles, 1980).

While nurse educators were able to identify their nursing knowledge of working with others, and their personal knowledge further informed their nursing knowledge, they were at a loss to define how this translated to teaching IPE in nursing education. There seemed to be an increased sense of frustration as the nurse educators began to identify their lack of knowledge about how to teach from an IPE perspective. They became acutely aware of the importance of this knowledge and of their role in working with the education process for these skills that enables students to graduate with the competency to collaborate with other professionals. This lack of knowledge appeared to create a form of ethical distress for the nurse educators.

Ethical Knowledge

Ethical distress "arises when one is unable to act on one's ethical choices, when constraints interfere with acting in the way one believes to be right" (Canadian Nurses Association, 2003). The constraint appeared to develop as the nurse educators talked about how they understood the use of IPE in practice and the lack of knowledge or direction on how to teach and use IPE in nursing education. This mismatch became a catalyst for the nurse educators to consider how the ethical ways of knowing guide decision making about the use of IPE in nursing education.

"Ethics in nursing is focused on matters of obligation: what ought to be done" (Chinn & Kramer, 2008, p. 6). The Code of Ethics and Standards of Practice guide this obligation. The principles of the Code of Ethics and the standards set in the Standards of Practice guide registered nurses in how they make decisions and judgements about how to practice.

Yet, as the nurse educators talked about how they understood IPE in nursing education, they appeared to experience confusion; possibly an ethical dilemma between the empirical ways of knowing and the aesthetic ways of knowing.

The aesthetic ways of knowing, or art of nursing, created a mechanism for the nurse educators to explore new ways of learning, using IPE. However, with minimal to no empirical knowledge about IPE in nursing education, they perceived a void in knowledge. Registered nurses refer to the Code of Ethics to guide thinking when confronted with ambiguity of a situation (Canadian Nurses Association, 2008). The ambiguity manifested by the mismatch of empirical and aesthetic ways of knowing, along with the clarity of personal understanding of IPE in nursing education, created a sense of dissonance.

In addition, as the nurse educators shared their understanding of education and practice, they began to identify a gap in knowledge between nursing education and practice, and between nursing knowledge and the knowledge of other professions. These gaps in knowledge caused the nurse educators to reflect on how they address the value of safe and competent care for patients—asking themselves if they address this value to the best of their ability as nurse educators. This query created a sense of dissonance for some of the nurse educators.

It was at this place in the dialogue (see Figure 2), the dissonance, that the nurse educators began to express ideas on how to address the gaps in their ways of knowing. A transformation took place in how they viewed ways of knowing. Mezirow (2009) suggested dissonance enables adult learners to use problem solving skills to change a situation that is valued. The personal ways of knowing about the value of IPE began to suggest a re-framing of reference in a traditional profession.

Emancipatory Knowledge

Educators in a traditional profession teach from a discourse of expertise and membership in a specific field of knowledge and practice, and may be "resistant to internal criticism and self-scrutiny" (Gee, 2008, p. 161). Due to pressures arising from the needs of society in the 21st century, nursing education is reconsidering the traditional ways of knowing (Budgen & Gamroth, 2008; Canadian Association of Schools of Nursing, 2010; Canadian Nurses Association, 2008). Emancipatory ways of knowing may provide a mechanism "to critically examine the social, cultural, and political status quo and to figure out how and why it came to be that way" (Chinn and Kramer, 2008, p. 4). Chinn and Kramer (2008) believed for nurses to reflect and enact the ways of knowing, there needed to be a form of "praxis" or emancipatory ways of knowing (p. 5).

As the nurse educators explored how they understood and used IPE within the unique body of knowledge of nursing education, they began to identify a silo or isolationist perspective. For some, there was a sense of following "the party-line", possibly silencing other voices. Recognition of the isolationist perspective, counter intuitive to collaborative practice, created a sense of unease from the perspective of emancipatory ways of knowing.

A lack of empirical ways of knowing about IPE; informed by personal and aesthetic ways of knowing about IPE, guided by ethical ways of knowing about IPE; appeared to cause the nurse educators to critically reflect on how they understood IPE through emancipatory ways of knowing. Emancipatory ways of knowing opened the dialogue on how ways of knowing inform nurse educators about IPE in nursing education. The feelings of dissonance challenged the nurse educators to transform how they used their

ways of knowing in nursing education. The transformation allowed space for a re-framing of ways of knowing to explore IPE.

NURSE EDUCATORS RE-FRAMING KNOWLEDGE

The knowledge gained from the collective of the nursing profession structured how the nurse educators explored IPE in nursing education (Adams, 2006; Fosnot & Perry, 2005; Vygotsky, 1978). However, review of language and dialogue through ways of knowing suggested a mismatch between how the nurse educators understood IPE in nursing education and how they believed IPE fits in nursing education.

In order to gain clarity of understanding, the nurse educators became self-directed to resolve the dissonance experienced in their frames of reference. Frames of reference, or filters used by adult learners, sort experiences, feelings, and beliefs establishing expectations and assumptions (Knowles, 1980). However, the frame of reference for ways of knowing seemed to become problematic for the nurse educators.

When individuals experience problematic issues, such as IPE not fitting in ways of knowing, a form of transformational learning may initiate a change (Mezirow, 2009). Through critical reflection on the content, process, and premise, the nurse educators began to consciously identify how to re-frame ways of knowing about IPE. Although ideas shared about the content and process of IPE in nursing education offered explanation, it was reflection on the premise of IPE that appeared to transform the meaning perspectives of ways of knowing about IPE (Mezirow, 1994).

Making Meaning

Mezirow (1994) claimed "the process of learning to make meaning is focused, shaped and delimited by our frames of reference" (p. 223) thus suggesting that frames of

reference develop from meaning perspectives, or assumptions; and meaning schemes, or beliefs. Language, context, values, and feelings appeared to shape the meaning schemes of the nurse educators about IPE (See Figure 2). Mezirow (1994) argued that individuals may resist learning about an issue that causes angst but tend to want to understand the experience of the angst albeit limited by meaning structures. In an effort to make sense of the angst or dissonance, the nurse educators reflected to substantiate rationale for what they knew about IPE. The rationale began to conflict with their personal meaning or way of knowing about IPE.

Meaning schemes and meaning perspectives appeared to be in conflict resulting in the nurse educators critically reflecting on the premise of how each understood IPE in nursing education. Mezirow, (1994) believed "the most significant learning involves critical premise reflection of premises about oneself" (p. 224). Reflection on the premises of IPE in nursing education may have changed the meaning perspectives. A review of meaning perspectives through dialogue allowed the nurse educators to begin to think differently and explore beyond current frames of reference about ways of knowing IPE.

CREATING A NEW WAY OF KNOWING

At the beginning of this study, I wondered how nurse educators understood and used IPE in current education practice. As a nurse educator, my interest stemmed from personal experiences in community nursing and graduate studies. I believed that collaborative practice is an expectation and is achieved, for the most part, by expert registered nurses. However, I was uncertain how to teach collaborative practice in nursing education. My frame of reference of nursing education delimited my meaning perspectives of IPE.

In exploration of the nurse educators meaning perspectives in nursing education, I began to understand the need for dialogue. Dialogue provided the space for the educators to explore and share. During the exploration, I heard the nurse educators reflecting on why they did not use IPE. There was a sense of internal motivation to teach with IPE and they began to question how the external motivating factors support a new way of knowing in nursing. The experience of dialogue appeared to allow for exploration of the premise of IPE in nursing education.

Dialogue

David Bohm (1998) suggested dialogue is "a stream of meaning flowing among and through us and between us" (p. 6). Bohm believed dialogue is how individuals make sense of meaning in order to create new understanding. He goes on to say, the new understanding becomes a shared meaning that "holds people and societies together" (p. 6). Dialogue among nurse educators may offer a way to learn and create new ways of knowing about IPE.

As individual nurse educators dialogued, there was a sense of transformation and creation of a new understanding of how IPE fits within nursing knowledge. At times, I wondered if the dialogue experienced was the nurse educator dialoguing with self rather than with me. Their critical thinking processes and reflection appeared to turn inward as the nurse educator considered how they know what they know. The opportunity to dialogue allowed a mechanism for aesthetic ways of knowing to create new meaning. New meaning can equal change or unlearning resulting in a "sense of threat, crisis, or dissatisfaction" (Schein, 1999). Reflection on dissatisfaction allowed for further unleashing of aesthetic ways of knowing about IPE.

Reflection

Reflection on opportunities will require reflection-in-action, as well as reflection-on-action (Schőn, 1987). Schőn, a well-known researcher, suggested that reflection happens during an event as well as following an event. However, reflection is not an automatic step related to an event: in particular, "healthcare professions live in cultures in which 'doing' and 'being productive' are highly valued, and quiet reflection is neglected or devalued" (Westberg & Jason, 2001, p. 2).

The timing of this case study research was during a teaching term when nurse educators were busy teaching and thus had less time to reflect. Allowing time for reflection on action or the practice of teaching during the interview appeared to give space for reflection on the premise of IPE. As a result, the nurse educators assessed feelings and values they had not explored previously. The ability to self-assess creates opportunity to review ways of knowing about nursing practice and integrate new understanding (Westberg & Jason, 2001). Without self-assessment, nurse educators may neglect to adopt or develop innovative ways of teaching and continue to teach as taught.

In addition, reflection by the collective on skills and knowledge of teaching by the collective may offer opportunity to critically think about the language used in current teaching practice and how current teaching and learning addresses the needs of the 21st century. Without this form of dialogue and reflection, the cycle of ways of knowing may remain entrenched in the current perspectives of the collective (See Figure 1). The resulting maintenance of the status quo suggests that transfer of external or social experiences on learning from other professions may be improbable as the "social

collectivity is a qualitatively different entity from the total sum of isolated individuals" (Liu & Matthews, 2005, p. 398).

The leadership in nursing and the higher education institution seemed to influence and socially construct the understanding of IPE for the nurse educators. There appeared to be a gap between the expectations of formal leadership and individual experiences of the nurse educators. Intent and action of IPE in nursing education were not synonymous for teaching in the 21st century.

Leadership

Although the dialogue and reflection by the nurse educators created a mechanism to transform ways of knowing about IPE within nursing education, it was an individual transformation. Transformative learning allowed each educator to explore her/his frame of reference but without dialogue as a professional group there is a potential that each nurse educator will understand and use IPE in nursing education differently. However, to make effective change, the majority of the nurse educators suggested leadership support is essential for the development of nurse educator knowledge in IPE.

Leadership in Nursing

Leadership may offer the power to write the policy and enact directives but with further reflection, I am suggesting that creative ways of knowing about IPE manifested a form of leadership within the nurse educators. Driven by the emancipatory ways of knowing to meet the needs of the students and society, the aesthetic ways of knowing will stimulate processes that the personal ways of knowing already know and feel, thus transforming ways of knowing about IPE.

Leadership in nursing is a well-oiled machine that standardizes nursing practice and education. With this certainty of specialized knowledge and skills, a fear of innovation may exist (Ashworth, Gerrish, & McNaus, 2001; Boyd & Lawley, 2009; Thomas & Davies, 2006). As a result of the dialogue and reflection shared by the nurse educators, I am proposing the analysis that fear of innovation may be a factor in the traditional culture of nursing, but is not an operative factor for the nurse educators. In a culture guided by principles about beneficence and non-maleficence, ongoing examination of innovative processes is a requirement—not only a requirement but an expectation of society.

Through the process of transformation resulting from reflection, I found that the nurse educators became animated about IPE and not fearful of innovation in the use of IPE. A basic premise of practice for a registered nurse is to critically think and reflect on processes used in practice. Reflecting on the use of IPE suggested new ways of knowing for registered nurses in the objective of addressing an ever more complex healthcare system. IPE, seen as a way to support safe and competent care, motivated the nurse educators to consider ways to understand and use IPE in nursing education. The nurse educators appeared intrinsically motivated as IPE had personal value; however lacked extrinsic incentives or motivation to develop and use IPE.

Leadership in nursing education may need to explore how nurse educators will learn to understand and use IPE within nursing education in order to support the curricula-focused solutions and accreditation requirements. Without exploration of how nurse educators learn about IPE, there is potential that nurse educators will retreat to the familiarity of their own professional culture and discourse (Beales, Walji, Papoushek, & Austin, 2011). There was an air of risk taking by the nurse educators as they considered

their internal meaning perspective in relation to the collective meaning perspective—the party-line.

Although lacking a way of knowing about IPE, I heard a passion for creating a way of knowing to meet the needs of society in the 21st century. I began to wonder if nursing is silencing itself by the perception that innovation is a threat to the safety of society. Within this definition of threat, change may be considered a dangerous innovation in nursing practice rather than a mainstay for diversity of learning. The influence of the traditional way of knowing may subject nursing to a form of entropy of the profession (Moore, 2009; Sherren, 2008). To create a sense of negative entropy, or a state of non-equilibrium, attention to imbalance may be required in order to create change and growth in the nursing profession (Wheatley, 2006). There may be a need for leadership to consider the meaning perspective of innovation in nursing, including the premise of maintaining the status quo. Policy development may be a catalyst for negative entropy, not only in nursing education but within the regulatory body of the profession of nursing in Alberta.

Leadership in Higher Education Institute

As mentioned previously in this thesis, IPE is recognized as a teaching mechanism to improve communication and understanding between professionals (Institute of Medicine, 2000); and is endorsed as one of the curricular-focused solutions to prepare nursing graduates for the complex practice setting (Accreditation of Interprofessional Health Education, 2011; Canadian Nurses Association, 2009b; Canadian Association of Schools of Nursing, 2010). Conversely, there appears to be external motivation to avoid institution of IPE due to a perceived threat of boundary blurring between professions as a result of using IPE.

Boundary blurring suggests possible loss of the uniqueness of the profession; however, I am suggesting that the blurring may not be as much a concern as the existence of the boundary. There appears to be growing interest in understanding other professions and how professions work together but each profession may be functioning with outdated boundaries or meaning perspectives. For example, researchers have found that students enjoy learning together in order to gain understanding about each others' profession, including undergraduate students (Ateah, et al., 2011; Hallin, Kiessling, Waldner, & Henriksson, 2009; Lait, Suter, Arthur, & Deutschlander, 2011). Undergraduate students appear to gain clarity of role when they have an opportunity to dialogue and reflect on how they understand what they are learning with students from other professions. When supported by expert facilitation, exposure to others may increase the ability to critically think about one's profession or professional boundary in comparison to others.

In addition, researchers have found administrators of higher education institutions have positive attitudes toward implementing IPE but agreed there are several barriers to the implementation of IPE that remain significant (Curran, Deacon & Fleet, 2005; Gardner, et al., 2002). IPE creates another new domain for higher education leaders to construct learning in the 21st century. No longer will leading by mission and vision statements be enough as each profession tends to march to its own drummer (Fugazzotto, 2009). Leadership in higher education institutions will need to identify a new vision for higher education—a new way of knowing (Begin & White, 2008). This new way of knowing may mean the development of resource capacity within the organization; such as development of the educators.

Experienced educators may offer expert facilitation; however, one of the supporting reasons for IPE is the changing demographics in society with a large proportion of the population retiring. As the expert nurse educators retire there may be a paucity of knowledge about how one balances the uniqueness of the role of nursing while teaching with an interprofessional focus. I found that the expertise of the nurse educators was foundational to how they explored IPE using personal ways of knowing. As novice nurse educators come forward to replace this expertise there may be a tipping point where personal ways of knowing may be outweighed by the current empirical ways of knowing that has little to no information on how nurse educators use IPE within nursing education.

Consideration by leadership in higher education to balance the expert and novice ways of knowing is essential otherwise there may be potential of perpetuating the cycle of meaning perspectives (See Figure 1). Researchers have determined perpetuating the cycle is not an unusual experience for educators in higher education institutions; leadership to create dialogue and reflection is needed (Blackmore & Kandiko, 2011; Gardner, et al., 2002; Lattuca, 2002). Ho, et al., (2008) found key IPE implementation drivers are champions within senior academic administration and faculty but locating champions can be difficult. Utilizing a sense-making process within an organization may offer a solution to not only identify champions but create an environment within the higher education institution for people to share and make meaning of IPE. Sense-making, underpinned by adult learning theory and social constructivism, "is a reciprocal process" through the use of dialogue and reflection to understand and use innovative ideas" (Kezar & Eckel, 2002, p. 314). Time for dialogue and reflection about ways of knowing is critical.

The rhetoric of IPE has been part of higher education documents for several years, however, higher education institutional culture changes slowly to address the development of interprofessional studies (Oberg, 2009; Sá, 2008). Facilitation of IPE is supported in theory but higher education institutional barriers remain; such as rigid curriculum and timetabling, lack of resources for cross professional teaching, and lack of perceived value (Curran, Deacon, & Fleet, 2005; Gardner, et al., 2002). The research corroborates with the meaning perspectives of the nurse educators, however, the logistics of administering IPE processes may be married to the institutional agenda of a higher education institution suggesting that change will require a paradigm shift in values and processes (Holley, 2009; Kezar & Eckel, 2002).

Investment by higher education institutions into faculty development programs about IPE are surfacing. Development of expertise about IPE by the educators will role model to students how IPE offers a broad perspective to enhance their knowledge in order to address the complex healthcare needs of society (D'Amour & Oandasan, 2005; Gilbert, 2005). Gaining support from senior leadership is integral to the identification and administration of resources required for the development of IPE within a higher education institution but gaining knowledge to support a new way of knowing will require faculty development.

Currently, there are gaps in the literature about faculty needs in learning how to teach IPE (Horsburgh, Perkins, Coyle, & Degeling, 2006; Steinert, 2005). In order to teach in the 21st century and address the expectations for students, educators will need to move beyond the insular knowledge of own profession (Steinert & Mann, 2006). Faculty development within nursing can assist in the exploration of attitudinal competencies for IPE in nursing education in order to move IPE forward.

A New Way of Knowing about IPE

With dialogue and reflection, the nurse educators seemed to grasp the need for re-framing the epistemological stance of nursing knowledge relative to IPE. Consideration of a re-frame of the ways of knowing ignited dissonance. The dissonance resulted from a knowledge gap in the current ways of knowing. Although the current ways of knowing provided a frame of reference for the nurse educators to explore their understanding and use of IPE in nursing education, there remained uncertainty about how the regulatory bodies and higher education institutions fit within that frame of reference.

The goal of interprofessional work is "to integrate knowledge or modes of thinking in two or more disciplines or established areas of expertise to produce a cognitive advancement...in ways that would have been impossible or unlikely through single disciplinary means" (Boix Mansilla & Duraising, 2007, p. 219). Integration of learning can be a catalyst for solving complex problems as the interprofessional learning process is not owned by one discipline and creates opportunity for collaborative learning experiences (Harris & Holley, 2008; Havas, 2009; Sa, 2008). How this innovative learning process is to be integrated into the educational process remains elusive.

Nurse educators will need support from leadership in nursing and higher education institutions to dialogue and reflect on the premise of IPE. The nursing profession is a collective voice offering safe and competent care to meet the needs of society. If IPE offers the opportunity for innovative teaching and learning processes, and is a learning accelerator available to address the complex needs of society, nurse educators will need development in a way of knowing about IPE.

MY EXPLORATION OF WAYS OF KNOWING

As I mentioned earlier in this thesis, my frame of reference of nursing education delimited my meaning perspectives of IPE. As I began my journey as a nurse studying within Faculty of Education, I realized that current system structures, possibly underpinned by ways of knowing, delimited my exposure to opportunities normally offered to a researcher in nursing or education.

For example, as a graduate student, I applied for scholarships to help meet the financial expectations of the program. I soon learned that being a registered nurse in an education faculty delimited my ability to apply for some of the scholarships established by nursing groups. Scholarships were limited to registered nurses who were studying in a recognized nursing program. Although I am a registered nurse researching how nurse educators understand and use innovative learning processes for nursing education, I was not eligible to apply for some nursing scholarships. However, there are other scholarships in nursing that fully support innovative research in nursing education. I am a recipient of such scholarships.

The other epiphany came to me while registering with the regulatory body this past year. Each year, registered nurses in Alberta state their practice hours, including hours for education in nursing, in order to maintain registration. My doctoral program in education did not meet the recognized requirements for education credit, which resulted in writing a letter to the Registration Committee for credit consideration. Both of these examples suggest ways of knowing about nursing may delimit opportunities to explore and learn with, from, and about other professions.

However, experiencing the doctoral program in the education faculty allowed me to explore how I felt about being a nurse and how other educators understood an educator, such as me, from another profession. I spent time explaining how and why I chose to enter the education faculty to my peers in the doctoral program as well as shared how the profession of nursing is more than bedside nursing. Initially, I found I had few words to explain the changing role of the nursing profession but as I spent more time explaining my role, my articulation of my role became more defined. I gained a new appreciation for my profession as I shared what I do as a nurse educator and how I envision capacity building between nursing and other higher education faculties.

The tension of being a novice in a profession unknown to me created a sense of dissonance for me as I realized I called myself an educator yet remained bound within the profession of nursing. I was living an interprofessional experience while learning in the doctoral program. I felt privileged to learn with others yet vulnerable not knowing the norm for the education profession. Reflection, dialogue, and journaling of thoughts allowed me to express and explore my feelings to gain insight into this unique experience. Moreover, I gained an appreciation for the uniqueness of my profession within the larger picture of society while learning with, from and about other professions.

I have learned that learning with, from, and about other professions is not an easy task. The different epistemological perspectives, the perceived need to protect the uniqueness of a profession and the lack of knowledge about how to begin to entertain partnerships within a higher education institution can appear overwhelming. However, I have been intrigued and enthralled with the keenness displayed by the nurse educators to try an innovative way of knowing in order to meet the healthcare needs of society. The

will and interest exists within the nurse educators; the energy is waiting to be harnessed by leadership.

Socialization into the culture of a profession such as nursing "means acquiring the knowledge, skills, values, roles, and attitudes associated with the practice of a particular profession" (Drinka & Clark, 2000, p. 65) through curriculum, language, technical skills, and artefacts (Benner, Sutphen, Leonard, & Day, 2010; Finke, 2009). A unique culture evolves and offers a meaning perspective on how we know nursing. In the interests of adding to this established culture of nursing, I am suggesting it may be timely to explore a way of knowing about IPE in nursing as an addition to the characteristics and ways of knowing of this profession. Without this exploration, nursing may remain a bounded profession where nurse educators teach as taught (Matthew-Maich et al., 2007). As the nurse educators suggested, this new way of knowing may require risk taking and motivation but it may be time for nurse educators to move beyond the insular knowledge of the traditional profession in order to teach in the 21st century (Steinert & Mann, 2006).

LIMITATIONS

Like all research studies, there are limitations to this case study research. Recognition of the limitations allowed me to identify the boundaries set for this research study; in other words, what it is and is not about (Bailey, 1997; Marshall & Rossman, 2011). Although bound by case study method and theoretical framework, my intent was to encourage transferability of the findings and encourage further research on this topic. This study, rooted in nursing education, evidences four limitations.

First, the sample was from publicly funded higher education institutions in the province of Alberta thus limiting the data to a specific group of higher education

institutions. In addition, this limited the findings to perspectives of nurse educators in one provincial education system.

This case study is limited to nurse educators teaching in higher education institution nursing programs therefore limiting the discussion to the profession of nursing. These limitations do not allow for acknowledgement of how educators from other higher education institution programs or professions construct knowledge about IPE.

Thirdly, the study is limited to nurse educators teaching in nursing theory education, not nurse educators teaching in clinical practice. Clinical educators' knowledge of IPE is not addressed. Moreover, the data collected was from nurse educators who self-identified as registered nurses with over three years teaching experience. This limitation does not address knowledge constructed by less experienced nurse educators.

Lastly, I am a nurse educator in a nursing program in Alberta and recognize the potential for bias. As the primary instrument for the data collection and analysis, there is a potential to limit the interpretations of the data (Merriam, 2009). The use of meticulous note taking, deep self-reflection, and personal journaling diminished potential for biased interpretations. Despite such efforts to reduce bias, eliminating it is difficult and bias may influence interpretation of the findings. Alternately, my experience as a nurse educator may have supported accuracy of findings as I interpreted the dialogue and reflection shared by the nurse educators.

My passion for clarity of understanding about IPE surfaced during the interviews with the nurse educators. As the nurse educators struggled to understand and define IPE, often I found they looked to me to help them define IPE and confirm their understanding of IPE. Fueling of my passion for IPE is sharing my knowledge and influencing change

within my profession of nursing. However, aware of this passion, I held back from sharing my ideas with the nurse educators to support trustworthiness and credibility of the findings.

With consideration of the limitations, this case study research offered a mechanism to explore how nurse educators understood and used IPE. The exploratory nature of this single case study captured the thoughts, ideas and feelings of nurse educators while teaching in a nursing program. The findings of the study and suggestions offered by the nurse educators identified directions for possible future research.

Future Research

Future research may illuminate how language guides nursing education to the outcome of nursing practice. This research may offer insight into how language used in the regulatory and education documents guides how nurse educators know IPE in nursing education and practice. Research seeking clarity of the diverse language used within these documents may offer clarity to nurse educator practice.

Research exploring how current nursing policy influences the use of IPE will highlight how the national and provincial healthcare documents are affecting current policy. This exploration may offer opportunity to identify possible barriers and enablers of IPE between provincial, national, and regulatory bodies.

Furthermore, the information gleaned from this exploratory study may offer ideas transferable to teaching and learning in other provincial nursing and healthcare education programs. However, a repeat of this case study research in other professions is required to gain further understanding of IPE and may highlight similar and/or different findings. In addition, research studies seeking further understanding of ways of knowing about IPE from novice educators will add to the developing knowledge about IPE.

As well, exploration of how IPE allows for nurses' voices to be heard may further assist nursing to learn a new way of knowing about IPE; and further inform and develop how nurses understand their role and identity within nursing education and practice. The role of the registered nurse is evolving as we participate in the 21st century workplace and research in this area may offer increased stability to the core role and to the collective body of registered nurses.

A WAY OF KNOWING FOR THE FUTURE

There appeared to be a readiness to explore a new way of knowing in nursing education. A lack of congruence within the current ways of knowing in nursing education was the catalyst that triggered the nurse educators in the identification of a new way of knowing about IPE. The resulting transformation in thinking by the nurse educators surfaced a perceived need for leadership direction and policy change.

Moving forward to embrace the potential of IPE in nursing education, nursing leadership within the higher education institutions may need to explore current and future partnerships. Creative skills and risk taking can encourage opportunities for dialogue and reflection between educators within the higher education institution in order to create partnerships. A move beyond mission or vision statements to dialogue between professions hold the potential to initiate a new way of thinking about teaching and learning; a new way to educate learners in order to address the complex healthcare needs of the 21st century. Faculty development may be the touchstone to develop knowledge about reflective teaching practice and stimulate dialogue to explore the possible disassembly of the professions' silos.

The time may be ripe for faculty development about IPE in nursing education in Alberta. National and provincial documents are in place to support IPE in nursing education (Canadian Association of Schools of Nursing, 2010; Canadian Nurses Association, 2009a; 2009b; Province of Alberta, 2010). Clarity of language about IPE is required in regulatory and education documents in order to provide direction for the teaching and learning processes in the education and practice of registered nurses in Alberta.

As a result of this case study research, the catalytic capacity of dialogue and reflection allowed the nurse educators to deconstruct how they understood IPE in personal, practice and education experience and begin to rebuild ways of knowing about IPE in nursing education. Passion, motivation and expert knowledge enabled the nurse educators to transform their ways of knowing and engage with an expanded way of knowing about IPE. A re-framing of the ways of knowing may offer opportunity for new ways of knowing about IPE in nursing education in the future.

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APPENDIX A

Letter of Introduction to Dean/Department Head

Dear (*insert the name of the dean/department head*)
My name is Marian George and I am a doctoral student at the University of Calgary pursuing a Doctorate in Education. As part of my doctoral studies, I am exploring interprofessional education in nursing education in undergraduate programs in Alberta.
I have set an appointment to have a telephone conversation with you to discuss my research and the possibility of participation by the nurse educators in the undergraduate nursing program in your institution. This email is intended to provide background information to you before the telephone conversation.
The purpose of my dissertation research is to explore the following:
(a) how nurse educators construct knowledge about interprofessional education in nursing education;
(b) explore how nurse educators construct the meaning of interprofessional education in nursing education; and
(c) explore how social and collaborative processes influence construction of interprofessional education knowledge in the environment of nursing education.
The findings from this study will inform nursing education leaders in Alberta, such as the Nursing Education Program Approval Board, about the knowledge and skills nurse educators require to use and teach interprofessional education in nursing education. In addition, the findings from this study will identify and describe how the context of nursing education influences the construction of knowledge about interprofessional education and the use of interprofessional education. Gaining understanding of how nurse educators understand and use this innovative teaching process offers information needed by nursing education leaders to develop future nursing education. Changes in nursing education will guide nurse educators in assisting nursing students to become better practitioners and professionals addressing the health care needs of society.
The criteria for participation is nurse educators who are registered nurses with a minimum of three years teaching experience in the undergraduate nursing program; teaches curriculum; has password protected email; and self identifies having knowledge about interprofessional education. Criteria for this self identification for having knowledge about interprofessional education is (a) having read about interprofessional education or, (b) having participated in teaching interprofessional education content or, (c) used a form of student evaluation recognizing interprofessional education or, (d) participated in the development of course content that supports interprofessional education or, (e) having a curiosity about interprofessional education.

I will not be asking you to identify or recruit the nurse educators. The recruitment will be done through an introductory letter sent by email to the nurse educators. The nurse educators will be able to respond to me if interested in participating.
I will be pleased to answer any questions you have during the telephone conversation.
Thank you for your time and consideration.
Sincerely,
Marian George, RN, MCE, Doctoral student
403 357 0788 (C)
mj.george@shaw.ca

APPENDIX B

Telephone Script for Introductory Conversation with Dean/Department Head

Hello (*insert the name of the dean/department head of undergraduate nursing program*)
My name is Marian George and I am a doctoral student at the University of Calgary pursuing a Doctorate in Education. As part of my doctoral studies, I will be exploring interprofessional education in nursing education in undergraduate programs in Alberta. I sent an email to you providing a brief background on my research but I would like to review the information with you as well as answer any questions you have about the research.
The purpose of my dissertation research is to explore the following:
(a) how nurse educators construct knowledge about interprofessional education in nursing education;
(b) explore how nurse educators construct the meaning of interprofessional education in nursing education; and
(c) explore how social and collaborative processes influence construction of interprofessional education knowledge in the environment of nursing education.
The findings from this study will inform nursing education leaders in Alberta, such as the Nursing Education Program Approval Board, about the knowledge and skills nurse educators require to use and teach interprofessional education in nursing education. In addition, the findings from this study will identify and describe how the context of nursing education influences the construction of knowledge about interprofessional education and the use of interprofessional education. Gaining understanding of how nurse educators understand and use this innovative teaching process offers information needed by nursing education leaders to develop future nursing education. Changes in nursing education will guide nurse educators in assisting nursing students to become better practitioners and professionals addressing the health care needs of society.
Two sites have been chosen, and you have been selected as one of the participating organizations.
The criteria for participation is nurse educators who are registered nurses with a minimum of three years teaching experience in the undergraduate nursing program; teaches curriculum; has password protected email; and self identifies having knowledge about interprofessional education. Criteria for this self identification for having knowledge about interprofessional education is (a) having read about interprofessional education or, (b) having participated in teaching interprofessional education content or, (c) used a form of student evaluation recognizing interprofessional education or, (d) participated in the development of course content that supports interprofessional education or, (e) having a curiosity about interprofessional education.

I am not asking you to identify or recruit the nurse educators. The recruitment will be done through an introductory letter sent by email to the nurse educators. The nurse educators will be able to respond to me if interested in participating. I am asking for support to send a letter of introduction to the nurse educators in the undergraduate nursing program.
I understand this request may require some reflection on your part, and I would like to follow-up this telephone call with an email outlining the information that I have given to you. I would like to confirm your email address as _____.
If you have any questions that you would like to pursue with my advisor or the University of Calgary Ethics Board, the contact information will be included in the follow-up email you will receive within the next five working days.
Thank you for your time and consideration.

Specific Information for the Department Head: if you are in agreement, I am asking you to forward a letter of introduction on my behalf to all nurse educators in the undergraduate program. This introductory letter offers an invitation to the nurse educators to participate in my study. My contact information is on the letter of introduction and the nurse educators are free to contact me if they are interested in participating in the study.

APPENDIX C

Follow-up Email with Dean/Department Head

Dear (insert the name of the dean/department head)

Thank you for speaking with me by telephone conversation about my research project. As we discussed, I am conducting research to address the requirements to attain a Doctorate in Education at the University of Calgary. I will be exploring interprofessional education in nursing education in undergraduate programs in Alberta. Two sites have been chosen, and you have been selected as one of the participating organizations.

The purpose of my dissertation research is to explore the following:

(a) how nurse educators construct knowledge about interprofessional education in nursing education;

(b) explore how nurse educators construct the meaning of interprofessional education in nursing education; and

(c) explore how social and collaborative processes influence construction of interprofessional education knowledge in the environment of nursing education.

The findings from this study will inform nursing education leaders in Alberta, such as the Nursing Education Program Approval Board, about the knowledge and skills nurse educators require to use and teach interprofessional education in nursing education. In addition, the findings from this study will identify and describe how the context of nursing education influences the construction of knowledge about interprofessional education and the use of interprofessional education. Gaining understanding of how nurse educators understand and use this innovative teaching process offers information needed by nursing education leaders to develop future nursing education. Changes in nursing education will guide nurse educators in assisting nursing students to become better practitioners and professionals addressing the health care needs of society.

The criteria for participation is nurse educators who are registered nurses with a minimum of three years teaching experience in the undergraduate nursing program; teaches curriculum; has password protected email; and self identifies having knowledge about interprofessional education. Criteria for this self identification for having knowledge about interprofessional education is (a) having read about interprofessional education or, (b) having participated in teaching interprofessional education content or, (c) used a form of student evaluation recognizing interprofessional education or, (d) participated in the development of course content that supports interprofessional education or, (e) having a curiosity about interprofessional education.

I am not asking you to identify or recruit the nurse educators. The recruitment will be done through an introductory letter sent by email to the nurse educators. The nurse

educators will be able to respond to me if interested in participating. I am asking support for a letter of introduction to be sent to the nurse educators in the undergraduate nursing program.
You have indicated to me that you are in support of this research. A letter of introduction will be forwarded, on my behalf, to the nurse educators in the undergraduate nursing program.
If you wish to discuss the research or if you have any questions, please feel free to contact me at (403) 357-0788; email mj.george@shaw.ca.. You can also contact my supervisor Dr. Helen Mahoney, Faculty of Education, (403) 220-3181; email hmahoney@ucalgary.ca. Or contact the Senior Ethics Resource Officer, Research Services Office, University of Calgary at (403) 220-3782; email rburrows@ucalgary.ca.
Thank you for your time and consideration.
Sincerely,
Marian George, RN, MCE, Doctoral student
403 357 0788 (C)
mj.george@shaw.ca

Specific Information for the Department Head to be added to the email: I have attached to this email a letter of introduction to the nurse educators, and ask you to forward this letter of introduction on my behalf to all nurse educators in the undergraduate nursing program. This introductory letter offers an invitation to the nurse educators to participate in my study. My contact information is on the letter of introduction and the nurse educators are free to contact me if they are interested in participating in the study.

APPENDIX D

Letter of Introduction to Nurse Educators

Dear Nurse Educator,

My name is Marian George and I am a doctoral student at the University of Calgary pursuing a Doctorate in Education. As part of my doctoral studies, I am exploring interprofessional education in nursing education in undergraduate programs in Alberta. Two sites have been chosen, and you have been selected as one of the participating organizations. The purpose of my dissertation research is to explore the following:

(a) how nurse educators construct knowledge about interprofessional education in nursing education;

(b) explore how nurse educators construct the meaning of interprofessional education in nursing education; and

(c) explore how social and collaborative processes influence construction of interprofessional education knowledge in the environment of nursing education.

The intent of my research results is to inform policy and nurse education leaders in the development of future nursing education.

I am interested in interviewing nursing faculty who are registered nurses currently teaching curriculum in an undergraduate nursing program with a minimum of three years teaching experience and have a password protected email address. In addition, you are able to self identify with one of the following criteria: (a) read about IPE, (b) participated in teaching IPE content, (c) used a form of student evaluation recognizing IPE, (d) participated in the development of course content that supports IPE, or (e) have a curiosity about IPE.

Your participation is completely voluntary. All aspects of your participation will be held strictly confidential and be anonymous. I will assign a pseudonym to protect your identity. You may withdraw at any time from the study and any data collected prior to your withdrawal will be retained and used.

The interview process should take approximately 60 to 90 minutes of your time at a location of your choosing. It will be a semi-structured interview which will be audio-recorded, with consent, and transcribed. The Consent Form will be forwarded to you prior to the interview. The interview will not commence until all questions are answered and the Consent Form is signed. As well, I will require a password protected email address from you in order to establish a meeting date and time.

In addition, within seven to ten days following the interview, I will send the verbatim transcript to your password protected email address. I will ask you to review the transcripts to validate, delete, change, or add to the transcript information for confirmation of accuracy. I would ask that you respond within one week of the transcript being sent. A lack of response in this timeframe will indicate your approval

of the transcript. The transcripts will be the only documentation sent to you during the research.

During the time of the study, the data will be kept in a locked cupboard in the researcher's home, only accessible by the researcher. The transcripts will be kept on the researcher's password protected computer. This study meets the requirements of the University of Calgary Conjoint Faculties Research Ethics Board as well as the Ethics Board of your home institution. Themes, concepts, and results from the interview will be used in my dissertation, future publication and conference presentations.

If you are willing to participate in this study, please contact Marian George at (403) 357-0788 or mj.george@shaw.ca. If you wish to discuss the research or if you have any further questions, please feel free to contact me. You can also contact my supervisor Dr. Helen Mahoney, Faculty of Education, (403) 220-3181 or at hmahoney@ucalgary.ca. Or contact the Senior Ethics Resource Officer, Research Services Office, University of Calgary at (403) 220-3782; email rburrows@ucalgary.ca.

Thank you for your time and consideration.

Sincerely,

Marian George, RN, MCE, doctoral student
Faculty of Education
Graduate Division of Educational Research
University of Calgary, Calgary, AB.

APPENDIX E

Semi-structured Interview Questions

1. How do nurse educators define their understanding of IPE within nursing education?
   a. How do you define IPE?
   b. What influenced you to identify with this definition?
   c. Tell me, how you understand IPE in nursing education?
   d. Some people would say nurses work interprofessionally already, what are your views on this statement?
   e. What opportunities have you sought to experience or increase your understanding of IPE?

2. How do nurse educators make sense of the experience constructing this new knowledge paradigm of IPE?
   a. How do you see IPE fitting within the profession of nursing?
   b. What are your thoughts on the usefulness of IPE in nursing education today?
   c. How does your experience as a nurse educator inform how you participate in IPE?
   d. Are there supports needed to assist nurse educators participating in IPE?
   e. How does current nursing education policy support the development of a framework for teaching with IPE?
   f. How is IPE important to you in your nursing practice?
   g. How do you feel about IPE in nursing?

3. What social and collaborative processes influence construction of IPE knowledge in the environment of nursing education?
   a. What current nursing education policy supports the development of a framework for teaching IPE?

APPENDIX F

Consent Form for Nurse Educator

Name of Researcher, Faculty, Department, Telephone & Email:

Researcher: Marian George (Doctoral student), Faculty of Education
Phone: 403-357-0788
Email: mj.george@shaw.ca

Supervisor:

Supervisor: Dr. Helen Mahoney, Faculty of Education

Title of Project:

Nurse Educators Constructing the Meaning of Interprofessional Education: A Single Exploratory Case Study

Sponsor:

Non-funded project

This consent form, a copy of which has been given to you, is only part of the process of informed consent. If you want more details about something mentioned here, or information not included here, you should feel free to ask. Please take the time to read this carefully and to understand any accompanying information.

The University of Calgary Conjoint Faculties Research Ethics Board has approved this research study.

Purpose of the Study:

The purpose of this study is to explore how you, as a nurse educator, currently understand interprofessional education and how the context of nursing education influences this understanding.

The primary objective of this study is to determine how you, as a nurse educator, define interprofessional education within nursing education.
A secondary objective is to identify what informs your understanding and use of interprofessional education in nursing education.

By participating in this study, you are self identifying as: an educator in an undergraduate nursing program at a Post Secondary Institution in Alberta with minimum of three years teaching experience in the program; a registered nurse; teaching curriculum; having some knowledge about interprofessional education. The interprofessional knowledge will include one or more of the following: a) read about interprofessional education, b) participated in teaching interprofessional education content, c) used a form of student evaluation recognizing interprofessional education, d) participated in the development of course content that supports interprofessional education, e) have a curiosity about interprofessional education.

What Will I Be Asked To Do?

You will be asked to participate in a face to face individual interview. The interview process should take approximately 60 minutes of your time at a location of your choosing. It will be a semi-structured interview which will be audio-recorded with consent and transcribed. Within seven to ten days following the interview, I will forward the verbatim transcript of the interview to you by a password protected email address confirmed by you. Please review the transcripts to validate, delete, change, or add to the transcript information. Changes will be incorporated when received.
I would ask that you respond within two weeks of receiving the transcript. A lack of response in this timeframe will indicate your approval of the transcript.

You will be asked to identify documents from your institution that you believe the researcher needs to review to inform the study.

Participation in this study is voluntary and you may refuse to participate or continue to participate at any time. Your refusal to participate will not adversely affect your relationship with the investigator, the University of Calgary, or your employer. You may withdraw at any time during the study; all data gathered to the point of withdrawal will be used in the study.

What Type of Personal Information Will Be Collected?

Should you agree to participate, you will be asked to provide your password protected email address in order to share transcripts and to answer any other questions you may have about the study.

Your organization shall remain anonymous in the final report of findings.

To remain anonymous as a participant, I will use a pseudonym, not your name, in the study.

Please indicate your agreement to have your interview audio recorded by placing a check mark on the corresponding line.

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

Are there Risks or Benefits if I Participate?

There are no known risks for you to participate in this study but due to the small participant pool, there is a potential limit to anonymity.

There will be no cost to you for participating in this study other than the investment of your time.
You will not receive payment for your participation.

The benefits from your participation is to add to the information required to inform policy and nursing education leaders on the knowledge and skills nurse educators need in order to conceptualize interprofessional education in nursing education.

What Happens to the Information I Provide?

The main use of the data collected in this study is to satisfy the requirements of the doctoral program the researcher is engaged in through the University of Calgary.
Participation is completely voluntary, anonymous and confidential. You may discontinue participation at any time during the study. No one except the researcher, her supervisor, and the transcriber will be allowed to see or hear any of the answers on the interview tape. The transcriber will sign a confidentiality agreement. Only pseudonyms will be used during the interview. Only group information will be summarized for any presentation or publication of results.
During the time of the study, the data will be kept in a locked cupboard in the researcher's home, only accessible by the researcher. The transcripts will be kept on the researcher's computer that is password protected. The raw data will be destroyed after the researcher's completion of the dissertation and attainment of Doctorate of Education.
Findings from this study will be the basis for conference presentations and publications.

Signatures (written consent)

Your signature on this form indicates that you 1) understand to your satisfaction the information provided to you about your participation in this research project, and 2) agree to participate as a research subject.

In no way does this waive your legal rights nor release the investigators, sponsors, or involved institutions from their legal and professional responsibilities. You are free to withdraw from this research project at any time. You should feel free to ask for clarification or new information throughout your participation.

Participant's Name: (please print) _____

Participant's Signature _____Date: _____

Researcher's Name: (please print) _____

Researcher's Signature: _____Date: _____

Questions/Concerns

If you have any further questions or want clarification regarding this research and/or your participation, please contact:

Marian George
Faculty of Education
403-357-0788
georgemj@ucalgary.ca

Supervisor: Dr. Helen Mahoney
Faculty of Education
403-220-3181
hmahoney@ucalgary.ca

If you have any concerns about the way you've been treated as a participant, please contact the Senior Ethics Resource Officer, Research Services Office, University of Calgary at (403) 220-3782; email rburrows@ucalgary.ca.

A copy of this consent form has been given to you to keep for your records and reference. The investigator has kept a copy of the consent form.

APPENDIX G

Confidentiality Agreement for Transcriber

Name of Researcher: Marian George

Title of Project: Nurse Educators Constructing the Meaning of Interprofessional Education: A Single Exploratory Case Study

Before I can hire you to transcribe research interviews, I must obtain your explicit consent not to reveal any of the contents of the tapes, nor to reveal the identities of the participants and their place of employment.

If you agree to these conditions, please sign below.

_____	_____	_____
Print Name	**Signature**	**Date**

APPENDIX H

Contact Summary Form

Contact type: Site_____

Visit_____ Contact date_____

Phone_____ Today's date_____

Written by_____

1. what were the main issues or themes that struck you in this contact? Notes on non-verbals?

2. provide rich description of environment

3. summarize the information you got (or failed to get) on each of the target questions?

1. How do nurse educators define their understanding of IPE within nursing education?
2. How do nurse educators make sense of the experience constructing this new knowledge paradigm of IPE?
3. What social and collaborative processes influence construction of IPE knowledge in the environment of nursing education?

4. Anything else that struck you as salient, interesting, illuminating or important in this contact? Identify social constructivism; adult learning.

5. What new (or remaining) target questions do you have in considering the next contact with this site?

APPENDIX I

Example of Initial Coding Bins

Initial codes	Definition of codes	Findings
Definition of IPE by nurse educators	A definition identified by nurse educators, including descriptors of how IPE is understood	Learning together and working together; a mosaic of knowledge; different professions coming together to share what they know about own role and others' roles
Definition of IPE in nursing education	Definition and examples of IPE in nursing education theory courses	A one or two day course when students from different professions come together to learn; part of teaching in nursing; not sure how to teach in theory course
Barriers to IPE in nursing education	Any barrier identified that may cause a nurse educator to not use IPE	Practice guidelines; lack of knowledge as a nurse educator; ambiguity of language; uncertainly of support from higher education and nursing leadership
Enablers to IPE in nursing education	Any enabler identified that may support a nurse educator to use IPE	Practice guidelines; knowledge as a nurse; Code of Ethics
Social and cultural processes influencing IPE in nursing education	A social and/or cultural concept related to the culture of nursing	Uniqueness of the nursing profession; traditional profession; control of risk taking; ethics; practice and graduate competencies
Self-directed	Interested to learn	Sought to understand from personal perspective and from professional perspective
Experienced	Has a reservoir of nursing experience	Shared stories about graduate studies; teaching students in practice setting; family experiences
Readiness to learn	Part of identity; part of social role as a nurse educator	Considered IPE part of professional role; part of a nursing value about client care
Centered on solving problems	Seeks to identify an issue and begins to develop strategies to address issue	Questioned gap in knowledge; offered strategies to address the gap
Internally motivated	Relevancy to individual and is important to that person	Used the word "I" to describe interest and initiative to use and develop IPE
Having a need to know	Focused on IPE	Asking questions about IPE to gain clarity

APPENDIX J

Document Summary Form

Date: _____

Name of document: _____

Description of document:

Event or contact, if any, with which document is associated:

Significance or importance of document:

Social constructivism:

Adult learning principles:

Other:

Brief summary of contents:

APPENDIX K

Example of Data Display

Broad Themes	Themes and definition	Sub-themes	Data Examples
Understanding IPE	Exposure to an IPE environment - Experience guided by a variety of factors – personal, professional	IPE in nursing education IPE in education IPE in clinical workplace IPE in life experience	Grad school; observing others Teaching others Conferences Reading Family/personal experience
	Process - Intentional or not - purposeful way to teach; add-on	Boundless, dynamic creative, few barriers Bounded, controlled learning environment shared with other professions	Fluid, threaded, a way of being, creation of dialogue and relationships, part of the bigger whole Increased workload Use in the workplace
	Standards – identified by nursing documents; what guides definition and understanding of IPE	Relational vs interprofessional	Relational working or is knowing IP different Broader thinking with exposure to others
Making sense of IPE	Making sense through values – what is valued and what guides the values	Relational or isolationist Need each other or a silo Perspectives or silenced voices Collaboration in practice and education – roles and boundaries	Working with others, on a continuum, need common understanding – teach with a unique perspective, isolate Lack of exploration of bias Whose voice is heard or not Holism vs uni-professional All for collaboration in practice but uncertain about teaching collaboration in education
	Making sense through context – how does context influence use of IPE; how is context described	Location in HEI Nursing faculty	Close proximity or not Aging faculty; disinclination to change; political awareness; not collective investment
	Making sense with language – what words are used and what do the words mean to the nurse educators	Regulatory body and guiding documents	Variety of words; need for clarification Language in documents unclear (clarity vs ambiguity of expectations)
	Making sense through feelings – what does this mean to the nurse educator	Dissonance	Uncertainty; hopeful; excitement; moral distress Disservice to students
Re-framing about IPE; transforming	Connecting nursing to the 21st century – what is needed in the 21st century	Change is needed yet daunting in traditional profession	Possible entropy; silo work
	Re-framing nursing – what does this mean; what is needed for education	Examining status quo and exploring options	Need to meet graduate competencies; sense of curiosity; fear of change Need for FD; Level of risk
	Plan of action and acquiring skills –what is needed	Leadership by regulatory body; higher education institution; by individuals	Personal courage; clarity of the meaning in documents; workload; time; personal capacity; innovator

APPENDIX L

Personal Journaling Example

I am surprised at the lack of IPE integration explained to me and the potential of barriers to integrating IPE. I now wonder if I need to see what small pieces exist and how those work and how are they maintained. There seems to be a lack of core of IPE, it seems to be a possibility or nice to have. Is there a critical mass of understanding? It can be difficult to identify use yet there is an apparent need for the client.

I have begun to recognize my preconceived ideas suggesting nurse educators did not want to change. I now realize they may not be aware of IPE. Where is our curiosity to learn about new ideas – better still where is my curiosity – how do I develop my curiosity to ensure I am hearing all what the educators are intending? I must be patient to allow ideas to percolate and lift from the pages of the interviews and from the dialogue of the interviews.

How am I bracketing myself or monitoring myself to ensure I hear? If I share information with individuals, will that give them confidence about what they know about IPE or will it taint the stories? I believe I must not teach about IPE during the interview process in order to gain understanding of how and what the nurse educators understand about IPE. There is a sense of accomplishment or pride in knowing about IPE if I affirm their ideas but I am here to learn about their current knowledge within this moment of time and place...there is so much to learn about the process and myself...