8-2016

To Foster a Culture of Curiosity: A Hermeneutic Study of the Experienced Nurse Educator and Student Intellectual Curiosity in the Online Learning Environment

Bedelia H. Russell
East Tennessee State University

Follow this and additional works at: https://dc.etsu.edu/etd
Part of the Higher Education and Teaching Commons, Online and Distance Education Commons, and the Other Nursing Commons

Recommended Citation
https://dc.etsu.edu/etd/3128

This Dissertation - Open Access is brought to you for free and open access by the Student Works at Digital Commons @ East Tennessee State University. It has been accepted for inclusion in Electronic Theses and Dissertations by an authorized administrator of Digital Commons @ East Tennessee State University. For more information, please contact digilib@etsu.edu.
To Foster a Culture of Curiosity: A Hermeneutic Study of the Experienced Nurse Educator and Student Intellectual Curiosity in the Online Learning Environment

A dissertation presented to the faculty of the College of Nursing East Tennessee State University

In partial fulfillment of the requirements for the degree Doctor of Philosophy in Nursing

by
Bedelia Hicks Russell

August 2016

Dr. Sally Blowers, Chair
Dr. Patricia Hayes
Dr. Kathleen Rayman
Dr. Barbara Friesth
Dr. Katherine C. Hall

Keywords: Student Intellectual Curiosity, Experienced Nurse Educator, Nursing Education, Hermeneutics, Online Education
ABSTRACT

To Foster a Culture of Curiosity: A Hermeneutic Study of the Experienced Nurse Educator and Student Intellectual Curiosity in the Online Learning Environment

by

Bedelia Hicks Russell

Skills of inquiry are essential outcomes from a baccalaureate nursing education. Students who demonstrate intellectual curiosity can develop effective skills of inquiry. Nurse educators must place emphasis on teaching and learning strategies which engage student intellectual curiosity. However, the concept of intellectual curiosity is not well-studied across multiple contexts of teaching and learning environments within nursing education. In addition, there is little known about the experienced nurse educator and the meaning of student intellectual curiosity across multiple teaching and learning environments. With the increased emphasis on online teaching and learning in nursing education as a solution for expanding student access and capacity, the concept of intellectual curiosity within the context of online learning needs further exploration. Under the assumptions of philosopher Max van Manen (1990, 1997) and Martin Heidegger (1962), the purpose of this qualitative, hermeneutic phenomenological study was to understand the lived experience of baccalaureate nursing student intellectual curiosity for the experienced nurse educator teaching within the online learning environment. The research question was: What does intellectual curiosity mean to experienced nurse educators teaching in the online environment? A total of eight participants from three different institutions of higher education in the southeastern United States were interviewed through a socratic approach. Diekelmann, Allen, and Tanner’s Steps for Data Analysis (1989) are utilized for data analysis. Three constitutive
patterns and seven relational themes emerged through the data analysis process. Ontological considerations of findings, implications for nursing education, and future research investigations are identified.
DEDICATION

This work did not come to be without several people. It is first dedicated to my children and husband for their sacrifices and support through this process. To my parents for their encouragement and love. To my dear church friends, who helped me manage schedules and made sure they were there for my kids when I wasn’t, for that, I am eternally grateful. Thank you to my dear friend Barbara Jared, who printed off the application materials those many years ago and said, let’s do this together. Finally, I dedicate this to my late grandmother, Margaret Harrell, who was always a light in the darkness. I miss you dearly. Thank you to God for your continual blessings in my life!
ACKNOWLEDGEMENTS

Thank you to my committee members for their guidance, encouragement, and support in developing this study and manuscript. In particular, thank you Dr. Patricia Hayes for being a cheerleader over the years and whose inspiration early on in my doctoral work will forever have a lasting impact on my life.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABSTRACT</td>
<td>2</td>
</tr>
<tr>
<td>DEDICATION</td>
<td>4</td>
</tr>
<tr>
<td>ACKNOWLEDGMENTS</td>
<td>5</td>
</tr>
<tr>
<td>Chapter</td>
<td></td>
</tr>
<tr>
<td>1. INTRODUCTION AND BACKGROUND</td>
<td>11</td>
</tr>
<tr>
<td>Skills of Inquiry and Nursing Education</td>
<td>11</td>
</tr>
<tr>
<td>Intellectual Curiosity and Nursing Education</td>
<td>12</td>
</tr>
<tr>
<td>Intellectual Curiosity, Active Learning Strategies, and Learning Environment</td>
<td>14</td>
</tr>
<tr>
<td>Traditional Learning Environments</td>
<td>14</td>
</tr>
<tr>
<td>Online Learning Environments</td>
<td>15</td>
</tr>
<tr>
<td>Statement of the Problem</td>
<td>16</td>
</tr>
<tr>
<td>Purpose of the Study</td>
<td>16</td>
</tr>
<tr>
<td>Research Phenomenon and Question</td>
<td>16</td>
</tr>
<tr>
<td>Significance of the Study to Nursing Education</td>
<td>16</td>
</tr>
<tr>
<td>Definition of Terms</td>
<td>17</td>
</tr>
<tr>
<td>Experienced Nurse Educator</td>
<td>17</td>
</tr>
<tr>
<td>Intellectual Curiosity</td>
<td>18</td>
</tr>
<tr>
<td>Online Learning Environment</td>
<td>18</td>
</tr>
</tbody>
</table>

6
# Table of Contents

1. **Chapter 1 Summary** ........................................................................................................................................... 19

2. **2. REVIEW OF LITERATURE** .......................................................................................................................... 20

   - Inquiry, Intellectual Curiosity, and Nursing Education .................................................................................. 20
   - Intellectual Curiosity Integrative Review ........................................................................................................ 21
   - Intellectual Curiosity as a Concept in Nursing Education ............................................................................ 23
   - Nursing Education and the Online Learning Environment ........................................................................... 25

3. **Chapter 2 Summary** ......................................................................................................................................... 28

3. **3. PHILOSOPHERICAL FRAMEWORKS AND METHODS** .............................................................................. 30

   - Research Paradigm of Phenomenology ........................................................................................................ 30
   - Tenets of Interpretive Phenomenological Inquiry .......................................................................................... 31
   - Role of the Researcher in Interpretive Phenomenological Inquiry .................................................................. 32
   - Ontological Considerations: van Manen and Heidegger .............................................................................. 33
   - Interpretive Inquiry and Hermeneutics Method ............................................................................................ 34

   - Participant Selection and Data Collection ...................................................................................................... 35
   - Participant Selection and Recruitment ........................................................................................................... 35
   - Protection of Human Participants .................................................................................................................. 37
   - Participants Profile ........................................................................................................................................... 38
   - Data Generation and Collection .................................................................................................................... 39
   - Data Analysis Overview .................................................................................................................................. 41
Biographical Sketch of Data Analysis Team Members ....................... 41

Data Analysis Process ........................................................................................................... 43

Chapter 3 Summary .................................................................................................................. 46

4. DATA FINDINGS AND ANALYSIS ................................................................................. 47

Participants’ Initial Responses to Research and Grand Tour Questions ......................... 47

Constitutive Pattern 1: Relational Reciprocity ................................................................. 50

Relational Reciprocity: Connecting through Knowing Each Other/Knowing Self ...... 51

Relational Reciprocity: Engagement of Student and Nurse Educator ......................... 53

Relational Reciprocity: Connecting to Meaningful Use of Content ......................... 53

Relational Reciprocity: Connecting to the Online Learning Environment Context ...... 54

Relational Theme 1: Commitment ..................................................................................... 55

Relational Theme 2: Reflexivity ......................................................................................... 57

Constitutive Pattern 2: Creative Inquiry ............................................................................. 60

Relational Theme 3: Inquiry .............................................................................................. 60

Relational Theme 4: Challenging Boundaries ................................................................. 62

Relational Theme 5: Creativity .......................................................................................... 63

Constitutive Pattern 3: Quality Improvement .................................................................... 65

Relational Theme 6: Transformation .................................................................................. 66

Relational Theme 7: Compassionate Intentionality ......................................................... 68
Chapter 4 Summary .................................................................................................................. 69

5. DISCUSSIONS, IMPLICATIONS, AND RECOMMENDATIONS ........................................... 71

Discussion ................................................................................................................................. 71

To Foster a Culture of Curiosity: Effective Communication in the Online Learning Environment

Effective Communication ............................................................................................................. 72

Faculty Disposition .................................................................................................................... 72

Student Intellectual Curiosity .................................................................................................... 73

Instructional Strategies and Practices ....................................................................................... 73

Shared Practices and Meanings: Developing Relationships and the Online Learning Environment

Shared Practices and Meanings: Communication Challenges and the Online Learning Environment

Ontological Considerations and Shared Practices and Meanings ............................................ 78

Evaluation of Rigor .................................................................................................................... 79

Nursing Education Implications ............................................................................................... 79

Limitations ................................................................................................................................ 81

Conclusion and Recommendations ........................................................................................... 82

Chapter 5 Summary .................................................................................................................. 83

REFERENCES .............................................................................................................................. 84
APPENDICES ..................................................................................................................102

Appendix A: Documentation of ETSU IRB Approval ............................................................102

Appendix B: Email Participant Recruitment Letter .............................................................104

Appendix C: Informed Consent Document ..........................................................................105

Appendix D: Visual Representation of Data Analysis Team Members Interpretation of
Findings ..................................................................................................................................108

Appendix E: External Reviewers Feedback on Findings .....................................................109

VITA ......................................................................................................................................112
CHAPTER 1

INTRODUCTION AND BACKGROUND

The need for nurse educators to teach skills of inquiry in pre-licensure baccalaureate nursing programs has received increased attention over the past six years. The American Association of Colleges of Nursing (AACN, 2013) and the recent recommendations by the Institute of Medicine (IOM, 2011), address the need for skills of inquiry and analysis as essential outcomes to be gained from a baccalaureate nursing program. According to Merriam-Webster (2016), skills are defined as “the ability to use one’s knowledge effectively in execution or performance” and the ability to “do something that comes from training, experience, or practice.” Inquiry is defined as the “act of asking questions in order to gather or collect information” (Merriam-Webster, 2016). Synonyms for inquiry include examination, investigation, or exploration. Within nursing practice, skills of inquiry include the ability to make observations, classify them, and develop inferences or predictions as they relate to patient care. Integrated skills of inquiry reflect the nurse’s ability to problem solve, interpret data, creatively or critically think, or clinically reason. These essential skills of inquiry are inherent to the provision of safe patient care as described by the American Nurses Association (ANA, 2012) Professional Nursing Practice Scope and Standards of Practice and should be an integral part of nursing education learning environments.

Skills of Inquiry and Nursing Education

The recommendations for nursing education reform by Benner, Sutphen, Leonard, and Day (2010), emphasize clinical reasoning and multiple ways of thinking as a means to promote a student’s ability to learn skills of inquiry. In other words, teaching fundamental skills and content
is insufficient and incomplete. Nurse educators must also encourage students to think, reason, and question, along with modeling how to approach clinical decision-making. To optimize the student’s ability to learn skills of inquiry, nurse educators must use learning strategies within the established learning environment to engage students in the process of inquiry. Various active learning strategies such as problem-based learning, inquiry-based learning, and appreciative inquiry, have been identified within nursing education as pedagogically sound approaches to promote student inquiry (Adhikari, Tocher, Smith, Corcora, & MacArthur, 2014; Chan, 2013; Farid, Naz, Ali, & Feroz, 2012; Flannelly & Inouye, 1998; Holaday & Buckley, 2008; Inouye & Flannelly, 1998; Ling-Na, Qin, Ying-qing, Shao-yu, & Hui-Ming, 2014; Spence, Garrick, & McKay, 2012; Yu, Zhang, Xu, Wu, & Wang, 2013). Inherent to the implementation and use of these active learning strategies is the nurse educator’s ability to engage student intellectual curiosity.

**Intellectual Curiosity and Nursing Education**

Berlyne (1960) defined curiosity as a variable of motivation. Litman and Spielberger (2003) stated that curiosity can be “broadly defined as a desire to acquire new knowledge and new sensory experience that motivates exploratory behavior” (p. 75). Dewey (1910) described three types of curiosity, i.e., physical, social, and intellectual. According to Reio, Petrosko, Wiswell, and Thongsuksom (2006) intellectual curiosity occurs when information is lacking and there is an “interest in both solving a problem and the accumulation of knowledge” (p. 120). Theories of curiosity describe it as having both “statelike and traitlike components” with trait curiosity being an enduring and stable personality characteristic (Giambra, Camp, & Grodsky, 1992, p. 150). Engagement of curiosity will in turn result in exploratory behavior and a desire to
acquire new knowledge (Berlyne, 1960; Litman & Speilberger, 2003). According to Russell (2013), “problem-solving and accumulation of knowledge is inherent to nursing education and nursing practice” (p. 95). With the ever shifting knowledge base of healthcare and evidence-based practice, nursing programs must produce graduates who are flexible and intellectually curious to sustain continuous, lifelong learning and professional development for the practicing nurse, and to positively influence patient health outcomes.

In clinical evaluation of nursing students, the researcher has described students as demonstrating or lacking intellectual curiosity but intellectual curiosity within the discipline of nursing education has not been well studied. A keyword search of intellectual curiosity across three databases yielded a paucity of results. An integrative review, using Whittemore and Knafl (2005a; 2005b) integrative review method, identified published theoretical and empirical research across multiple disciplines to provide a comprehensive understanding of the concept and situated it within the discipline of interest. In this case, the review helped to identify components of intellectual curiosity and determine the concept’s implications for nursing education. Out of 195 full abstracts reviewed, 47 sources were viable for quality appraisal following application of a priori and posteriori inclusion and exclusion criteria. After quality appraisal, 33 articles were included in the integrative review (Abramovich & Grinshpan, 2008; Anderson, 2000; Barker, 2009; Belcher & Hirvela, 2009; Burks, Heidenberg, Leoni, & Ratliff, 2009; Chauvin, 2000; Curry & Montgomery, 2010; Cyr, 1997; Dellenbach & Zimprich, 2008; Erikson-Owens & Kennedy, 2001; Farmer, 2009; Gillies et al., 2009; Guerrero & Riggs, 1996; Hanner-Bailey, 2007; Hojat et al., 1999; Krueger & Noyd, 2008; Kwon, 2010; Leonard, Becker, & Coate, 2004; Lockhart & Borland, 2001; Loewen, 2009; Moss, 1998; Nixon, 1996; Oliver,
The review revealed intellectual curiosity to be an important concept across disciplines and related it to motivation and other cognitive processes such as critical thinking. However, across the nursing education literature, only two of the three sources identified in the CINAHL database related intellectual curiosity to nursing education and the focus was on clinical teaching (Erickson-Owens & Kennedy, 2001; Rich, 2009). Educational environments outside the clinical setting were not studied.

The findings of a principle-based concept analysis on intellectual curiosity suggest the concept is pragmatic and relevant to nursing education (Russell, 2013). Russell (2013) established an inconsistent linguistic use of intellectual curiosity but a consistently appropriate contextual use across disciplines. She further established a tentative, theoretical definition and conceptual model of intellectual curiosity with student and teacher motivation necessary at each point in the cycle of inquiry. The findings further suggest the situational context of the learning environment and the nurse educator’s ability to model curiosity and skills of inquiry, along with exerted student motivation and student metacognition, hold a strong influence on engagement of student intellectual curiosity (Russell, 2013).

**Intellectual Curiosity, Active Learning Strategies, and Learning Environment**

**Traditional learning environments.** The context of traditional, face-to-face, classroom and clinical learning environments has provided multiple opportunities for nurse educators to employ various teaching strategies and pedagogies known to promote skills of inquiry and engage student intellectual curiosity. For example, with problem-based learning, complex cases
and scenarios are often deliberated and problems are solved among student groups via in-class group discussion, pre-and post-clinical conferences, or role-playing (Carrega & Byrne, 2010; Chan, 2012; Chan, 2013; Oja, 2011). Inquiry-based learning also uses student groups to examine case situations and emphasizes situational dilemmas with a goal of situation improvement and generation of additional questions to be addressed (Holaday & Buckley, 2008). However, researchers’ examination of the effectiveness of these active learning strategies emphasizes the relationship of the strategies to student critical thinking and clinical reasoning, but fails to mention the degree of engaged student intellectual curiosity from either the student or the faculty perspective.

**Online learning environments.** Active learning strategies have also been empirically examined in the context of the online learning environment (Carpenter, Theeke, & Smothers, 2013; Guzic et al., 2012; Kardong-Edgren & Emerson, 2010; Langley & Brown, 2010; Mayne & Wu, 2011; McClain, Biddle, & Carter, 2012; Rounds & Rappaport, 2008; Vogt, Schaffner, Ribar, & Chavez, 2010). For example, podcasts (Kardong-Edgren & Emerson, 2010) and reflective journals (Langley & Brown, 2010) were cited as examples of active learning strategies used in the online learning environment. However, these studies focused on instructional strategy effectiveness, course redesign or student satisfaction and not on skills of inquiry or degree of engaged student intellectual curiosity. While additional theoretical or descriptive studies have examined student perception or experience (Carlson, 2011; Caudle, Bigness, Daniels, Gillmore-Kahn, & Knestrick, 2011; Cully & Polyakava-Norwood, 2012), the emphasis has been on perception or experience with the online learning environment itself, with only one study focused on examination of an online case study and the impact on student critical thinking (Guhde,
Rounds and Rappaport (2008) specifically examined problem-based learning for online graduate students as it related to problem-solving and clinical decision-making but also did not address student intellectual curiosity as it related to these skills of inquiry.

**Statement of the Problem**

Given that:

- it is essential nursing students gain skills of inquiry during their educational preparation;
- intellectual curiosity as an isolated concept and phenomenon has not been explored across the various contexts of nursing education learning environments;
- online learning has been proposed as a solution to both the nursing and nurse faculty shortage (AACN, 2012);

this study sought to better understand intellectual curiosity in the context of the online learning environment.

**Purpose of the Study**

Specifically, the purpose of this qualitative, hermeneutic phenomenological study was to understand the lived experience of baccalaureate nursing student intellectual curiosity for experienced nurse educators who teach in the online learning environment. The participants’ lived experience was explored via the language embedded in narrative texts.

**Research Phenomenon and Question**

The research question was: What does student intellectual curiosity mean to experienced nurse educators teaching in the online learning environment?

**Significance of the Study to Nursing Education**
Online delivery of nursing education has been identified by the Institute of Medicine (IOM, 2003, 2009, 2011) and the American Association of Colleges of Nursing (AACN, 1999, 2000, 2003) as a solution to expand program capacity and increase access to nursing education. According to the AACN (2012), in 2011 there were more than 400 nursing programs with partial online components. From 2007 to 2009, Kolowich (2010) reported that fully online degree programs increased from 96 to 129. As nursing programs expand capacity through increased numbers of programs offered through various online modalities, AACN (2003) asserts program and learning outcomes must be comparable to the outcomes in traditional, face-to-face classrooms. Since intellectual curiosity motivates and influences the acquisition of key intellectual skills and is linked with active learning strategies it is vital that nurse educators understand and be able to promote intellectual curiosity. This study provided insight and new understanding of the lived experience of intellectual curiosity for experienced nurse educators who teach baccalaureate nursing students in the online learning environment. In addition, both the AACN (2012) and the IOM (2010) emphasize the need for graduates who are lifelong learners. This study allowed experienced nurse educators to reflect on their ability to create and foster learning environments which may stimulate and sustain intellectual curiosity in their students. The development of a sustained intellectual curiosity holds the potential to influence future professional nursing practice.

**Definition of Terms**

**Experienced nurse educator** There is a paucity of literature on how to define an experienced nurse educator. Rather, studies focus on the preparation and role development of nurse educators (Higbie, 2010; Luoma, 2013) and on the necessary skill acquisition (Benner,
1984, Dreyfus 1980; Ramsburg & Childress, 2012) and competencies (NLN, 2005; Poindexter, 2013; SREB, 2002) required to become a nurse educator. The National League for Nursing (NLN, 2005) has established nurse educator competencies using Benner’s stages of professional development that categorize the level of proficiency required for each competency. For this study, it was assumed that an experienced nurse educator would be likely to possess competencies and have a greater depth of experience with intellectual curiosity. The experienced nurse educator had to be able to speak to the lived experience of baccalaureate student intellectual curiosity in the online learning environment. This required experience in the role of nurse educator as well as experience in the context of the online learning environment. An experienced nurse educator was defined as one who:

- had taught fulltime in a baccalaureate nursing program minimally at the Advanced Beginner level of role development (Benner, 1984); and
- had experience teaching in an online learning environment minimally at the Proficient level of development (Benner, 1984); and
- the researcher identified as meeting the knowledge, skills, and attitudes outlined in the NLN Core Competencies for Nurse Educators (2005).

**Intellectual curiosity** is a motivational state of cognitive stimulation with resultant exploratory behavior to acquire new knowledge or seek clarity in understanding (Russell, 2013). The new knowledge or understanding stimulates an iterative process of inquiry.

**Online learning environment** included the established terms and definitions of distance education (Billings, 2001; AACN, 1999, 2003) and online learning (Allen & Seaman, 2013). It
also included the synonymous and interchangeable related terms of distance learning and online education. The online learning environment is web-based and will be influenced by how various accredited nursing education programs specify, utilize, and implement the construct of online nursing education. For this study, the online learning environment includes courses or portions of a course which are delivered utilizing synchronous or asynchronous technology which allows for separation of the nurse educator and the learner (baccalaureate nursing student).

Chapter 1 Summary

This chapter provided the introduction and background to the study by linking skills of inquiry as essential concepts to nursing education with examples of active learning strategies which engage intellectual curiosity. Intellectual curiosity promotes development of skills of inquiry and has not been investigated fully as a concept within the context of nursing education. In particular, the online learning environment relative to delivery of nursing education has been proposed as a solution to expand nursing program capacity. Intellectual curiosity in the context of the online learning environment was identified as significant to nursing education and key terms of experienced nurse educator, intellectual curiosity and online learning environment were defined. Chapter 2 provides the review of key literature to support the study.
CHAPTER 2
REVIEW OF LITERATURE

Inquiry, Intellectual Curiosity, and Nursing Education

Skills of inquiry are necessary attributes of practicing baccalaureate-prepared registered nurses. Integrated skills of inquiry reflect the nurse’s ability to problem solve, interpret data, creatively or critically think, or clinically reason. These essential skills of inquiry are inherent to the provision of safe patient care as reflected by the American Nurses Association (ANA) Professional Nursing Practice Scope and Standards of Practice (2012) and the AACN Essentials of Baccalaureate Nursing Education (2013).

For students to learn skills of inquiry, nurse educators must model inquiry within the various teaching-learning environments and stimulate a student’s curiosity. Nurse educators can utilize effective learning strategies to engage a student’s intellectual curiosity. Examples of these learning strategies include active learning, problem-based learning, inquiry-based learning as well as appreciative inquiry (Adhikari et al., 2014; Chan, 2013; Farid et al., 2012; Flannelly & Inouye, 1998; Holaday & Buckley, 2008; Inouye & Flannelly, 1998; Ling-Na et al., 2014; Spence, Garrick, & McKay, 2012; Yu et al., 2013).

According to Berlyne (1960), engagement of curiosity is an antecedent to motivation and will result in exploratory behavior and a desire to acquire new knowledge. Litman and Spielberger (2003) stated curiosity can be “broadly defined as a “desire to acquire new knowledge” and “will motivate exploratory behavior” (p.7). Russell (2013) proposed, “problem-solving and accumulation of knowledge is inherent to nursing education and nursing practice” (p.3).
The current healthcare system is complex, ever-shifting, with evidence-based practice continually evolving. This evolution necessitates nursing programs produce graduates who are flexible thinkers and intellectually curious. Without these attributes, the practicing nurse may not adopt an inherent desire to sustain continuous, lifelong learning and ongoing professional development. Currently, nurse educators embrace various teaching-learning strategies which foster student inquiry, one being problem-based learning. According to Russell (2013), problem-based learning has been examined relative to the concepts of critical thinking and clinical reasoning but not relative to the concept of intellectual curiosity.

**Intellectual curiosity integrative review.** An integrative review method informed by Whittemore and Knafl (2005a; 2005b) was used to identify published theoretical and empirical research across multiple disciplines to provide a comprehensive understanding of the concept of intellectual curiosity. An initial keyword search of intellectual curiosity (IC) from 2001-2015 across the CINAHL, ERIC, and PsycINFO databases, yielded a paucity of results. Subsequent searches of ‘IC AND definition,’ ‘IC AND concept,’ ‘IC AND predictors,’ IC AND outcomes,’ ‘IC AND attributes,’ ‘IC AND measurement,’ ‘IC AND measures,’ and ‘IC AND scales,’ yielded 80 results. After cross-list comparisons, 195 full abstracts were available for review. Application of a priori inclusion criteria yielded 83 sources, including 14 dissertations. Posteriori inclusion criterion of date restriction from 1995-2015 resulted in 47 sources available for application of quality appraisal. Subgroups were initially assigned based on the source database. This categorizing provided the following:

- 23 sources from PsycINFO with 14 of these being dissertations and 19 exclusive to the PsycINFO database (Anderson, 2000; Barker, 2009; Chauvin, 2000; Curry &
Montgomery, 2010; Cyr, 1997; Dellenbach & Zimprich, 2008; Farmer, 2009; Hanner-Bailey, 2007; Hojat et al., 1999; Kwon, 2010; Loewen, 2009; Moss, 1998; Nixon, 1996; Roberts & Bogenschutz, 2001; Rose, 2000; Slater, 2010; Sockeel et al., 2006; Wheeler 2008, Winful, 2010);

- 21 articles from ERIC (Abramovich & Grinshpan, 2008; Belcher & Hirvela, 2005; Guerrero & Riggs, 1996; Krueger & Noyd, 2008; Leonard et al., 2004; Lockhart & Borland, 2001; Oliver, 1996; Reeves et al., 1996; Sandhu, 1997; Stephens, 2006); and
- only three from CINAHL with two of them also appearing in the PsycINFO database (Erickson-Owens & Kennedy, 2001; Gillies et al., 2009; Rich, 2009).

Articles were then assigned to a theme/category based upon how the concept of intellectual curiosity was used within the research and reported in the article. Those associated themes were, intellectual curiosity as a characteristic/component, fostering intellectual curiosity, motivation relative to intellectual curiosity, intellectual curiosity related to other cognitive processes, or intellectual curiosity as an outcome.

Of the three sources identified from the CINAHL database, each focused on student populations. Erickson-Owens and Kennedy (2001) was a theoretical study identified as having an overall theme of intellectual curiosity as a characteristic or component. In this work, the authors sought to align the principles of evidence-based care with the goals of clinical teaching and provide a practical approach to helping students learn to apply those principles. Gillies et al. (2009) was an empirical study identified as having an overall theme of characteristics/components of intellectual curiosity. In it, focus groups for first year medical students explored their beliefs about the medical profession. Students described a good doctor as
one who had intellectual curiosity. Rich (2009) provided an empirical study focused on fostering intellectual curiosity. In that study, the purpose of the study was to recognize and define a teachable moment as it related to the athletic training clinical education setting with the importance of a teachable moment being one which enhanced and fostered intellectual curiosity in clinical education. The integrative review provided the underpinning for a principle-based concept analysis completed by Russell (2013).

**Intellectual curiosity as a concept in nursing education.** Russell’s (2013) analysis suggested the situational context of the learning environment and the nurse educator’s ability to model curiosity and skills of inquiry, along with student motivation and student metacognition, together exerted a strong influence on engagement of student intellectual curiosity (Russell, 2013). The findings further established the need for research grounded within the discipline of nursing through examination of the concept of intellectual curiosity from epistemological, pragmatic, linguistic, and logical principles. Russell (2013) identified intellectual curiosity to be a concept pragmatic and relevant to nursing education but established an inconsistent linguistic use of intellectual curiosity with a consistently appropriate contextual use across disciplines. While intellectual curiosity is viewed as a “positive or desirable characteristic” (p.7), the concept depends largely on implied or comparative meaning across disciplines. Within nursing education, intellectual curiosity is viewed as an outcome of clinical teaching or a result of a teachable moment (Erickson-Owens & Kennedy, 2001) but lacks clear conceptual boundaries with other cognitive attributes of critical thinking and intrinsic motivation (Russell, 2013). Russell further established a tentative, theoretical definition and conceptual model of intellectual curiosity (see Figure 1).
Figure 1. Conceptual model of intellectual curiosity (Russell, 2013)

Russell’s (2013) conceptual model of intellectual curiosity includes pre-conditions, attributes, and consequences as they relate to student intellectual curiosity. These pre-conditions, attributes, and consequences were established following a principle-based concept analysis of intellectual curiosity across the disciplines of nursing, education, and psychology. The pre-conditions for the concept of intellectual curiosity must be established before a student would display the attributes of intellectual curiosity. Once the attributes of intellectual curiosity manifest, the result is an iterative cycle between attributes and consequences. The consequences of intellectual curiosity can then impact the pre-conditions of intellectual curiosity for future contexts and situations. Of
note, for the purposes of this study, the motivational context of learning is a pre-condition for intellectual curiosity with student and teacher motivation a necessity at each point in the cycle of inquiry. Therefore, if the learning context does not motivate the student or allow for generation of student curiosity, intellectual curiosity will not substantively manifest. Subsequently, the increase in exploratory behavior which should be a consequence of intellectual curiosity and a precursor for later pre-conditions and attributes of intellectual curiosity will not occur (see Figure 1).

While Russell identified the theme of fostering intellectual curiosity and intellectual curiosity as a characteristic across the disciplines of psychology, education, and nursing, intellectual curiosity as an evaluated cognitive outcome appears only in the education literature (Oliver, 1996; Reeves et al., 1996). Also lacking in the nursing literature is the motivational aspect of intellectual curiosity (Russell, 2013). These findings emphasize the need for closer examination of the teaching-learning environment. Specifically, the situational context for learning and the nurse educator’s role in identification and promotion of intellectual curiosity warrants further attention of researchers. Russell (2013) identified the need for more research on the faculty perspective of student intellectual curiosity and how this may translate into intellectual curiosity among practicing nurses.

**Nursing Education and the Online Learning Environment**

According to the American Association of Colleges of Nursing (1999, 2000, 2003), online delivery of nursing education has been identified as a means to increase access to nursing education and expand program capacity. This position is also supported by the Institute of Medicine (2003, 2009, 2011). In 2011, more than 400 nursing programs had components which
were partially online (AACN, 2012). Online learning is broadly embraced by nurse educators as evidenced by Billings’ (2007) 25 year review of distance education in nursing. The review highlighted the transition of research from technology effectiveness to best practices to the development of theoretical models and the faculty-student experience in the online learning environment. Position papers were developed beginning in 1995 (AACN, Western Interstate Commission on Higher Education, Council for Regional Accrediting Commissions). In 2003, the Alliance for Nursing Accreditation on Distance Education stated online nursing programs must meet the same academic standards as traditional programs (AACN). The Alliance statement is in line with standards of regional accreditation bodies of higher education institutions and requires student outcomes remain consistent across all delivery formats and programs with established assessment and evaluation criteria (Russell, 2015). Billings (2007) reminds us synchronous and asynchronous course delivery practices should remain mindful of established position statements (AACN, 2003) and the “ongoing need to assess distance education … outcomes” (Billings, 2007, p. 121).

While inquiry relative to active learning strategies has been examined in both the traditional and online learning environments, Russell (2015) further extended what we know about nursing education and the online learning environment through examination of evaluation practices within online nursing education. Her findings reflected a broad variety of research emphases with diffuse areas of focus, including concepts related to intellectual curiosity and the affective domains of learning.

According to Russell (2015), the majority of research in evaluation of online nursing education primarily emphasizes perceived versus actual learning with the affective domains
central to researcher inquiry. Further, Russell (2015) found studies often evaluated student engagement and perception with the Social Presence Scale and Classroom Community Scale utilized most frequently among the quantitative studies (Burress, Billings, Brownrigg, Skiba, & Connors, 2009; Cobb, 2008; Mayne & Wu, 2007; Wells & Dellinger, 2011). While there was reference to adult learning theories across the 36 empirical and descriptive studies meeting inclusion and exclusion criteria, Russell (2015) found only three studies that evaluated cognitive outcomes. Researchers sought students’ perception of critical thinking (Guhde, 2010), clinical competence, or clinical preparation relative to effectiveness of instructional strategies and practices in the online learning environment (Robbins & Hoke, 2008; Rutledge, Barham, Wiles, & Benjamin, 2008). Guhde (2010) examined the impact of an online case study discussion combined with high-fidelity patient simulation’s (HFPS) on critical thinking for baccalaureate students. Course evaluations and writing reflections were used to evaluate this cognitive outcome. Robbins and Hoke (2008) focused on objective structured clinical examinations (OSCE) with graduate students and how this instructional strategy influenced clinical competency. Rutledge et al. (2008) utilized web-based virtual encounters, HFPS, and personal response systems with post-licensure BSN completion students to determine their impact on student perception of clinical preparation. When examining the context of the online learning environment, only one study (Hart & Morgan, 2010) provided a comparison of outcomes to the traditional learning environment and this study was focused on post-licensure BSN student self-reported behaviors of cheating and academic integrity rather than cognitive outcomes.

The populations of interest for research in nursing education and the online learning environment focus predominantly on graduate students at the master’s level and students in post-
licensure baccalaureate completion programs with faculty being the least studied. Johnson (2008) examined the faculty’s experience with online teaching and the need for faculty development in course transition. Kelley and Klopf (2008) and Zsohar and Smith (2008) provided descriptive studies, while Smith, Passmore, and Faught (2009), provided one empirical study, of the faculty experience in transition of courses to an online format and the need for use of technology support during this transition. Langley and Brown (2010) examined faculty perception of student learning outcomes while Reneau (2013) examined development of faculty cultural competency through use of online training modules.

Current evaluation practices within both traditional and online nursing education related to cognitive learning domains, such as intellectual curiosity, to be diffuse and superficial with need of a deeper, more focused investigation (Russell, 2015). How faculty evaluates the concept of intellectual curiosity has not been examined in either the traditional or the online learning environment. The nurse educator’s lived experience of baccalaureate student intellectual curiosity in the online learning environment has not been studied. With online learning emerging as a major solution to address both the nursing and nurse faculty shortages (AACN, 2012), and intellectual curiosity inherent to effective student inquiry, research was needed to better understand the experienced nurse educator’s lived experience of student intellectual curiosity in the context of the online learning environment.

Chapter 2 Summary

This chapter provided a review of the literature to support the central question and purpose of the study. The role of inquiry and the concept of intellectual curiosity have been situated within the context of nursing education. What is known about intellectual curiosity was
established. In addition, what is known about online learning, nursing education, and evaluation practices of online learning within nursing education was also described. The experience of nurse educators who teach in the online learning environment and student intellectual curiosity within that context has not been explored. Chapter 3 provides the philosophical framework and methods for the study.
CHAPTER 3

PHILOSOPHICAL FRAMEWORK AND METHODS

Research Paradigm of Phenomenology

Phenomenology is the study of lived experience (van Manen, 1990). In its broadest sense, phenomenology “focuses on revealing meaning rather than arguing a point or developing abstract theory” (Flood, 2010, p. 7). The premise behind phenomenology is to study phenomena through the eyes of the individuals themselves in order to reveal the meaning of human experiences and how one orients to lived experience (van Manen, 1990). Phenomenology does not seek to merely understand individual perspectives but to take the knowledge gained from understanding to then form a new understanding. The knowledge gained is subject to continuous revision via deconstruction and reconstruction of phenomena through retrospective reflection (van Manen, 1990).

Phenomenology holds that reality and meaning are constructed by individuals as they experience the world, act, and interact on it. Phenomenology asserts that knowledge is “grounded in lived experience” (Omery & Mack, 1995, p. 141) and reality is experiential. The phenomenological paradigm seeks to find commonalities across individuals being studied and seeks to clarify a phenomenon but does not seek to explain the phenomenon. Because phenomenology is the study of lived experience, this research paradigm was thought to best provide the philosophical framework for the phenomenon of interest. To answer the research question of, what does student intellectual curiosity mean to experienced nurse educators teaching in the online learning environment, interpretive phenomenology was selected as the appropriate philosophical framework for the study.
Tenets of Interpretive Phenomenological Inquiry

From an interpretive phenomenological perspective, one tries to explicate understanding and meaning of the phenomenon of interest as it already exists within context (van Manen, 1997). A goal of interpretive inquiry is to create meaning from lived experiences to achieve a new understanding of the experience (Laverty, 2003). The diversity of phenomenological perspectives requires one to align with a philosopher. Based on the research question, the phenomenological perspective for this study is one of interpretive phenomenological inquiry using the philosophical tenets asserted by Max van Manen (1990) whose work is grounded in that of Martin Heidegger (1962). Interpretive phenomenological inquiry moves past description of a phenomenon to the essence of the phenomenon, allowing the text to speak for itself (Heidegger, 1962; van Manen, 1997). Interpretive phenomenological inquiry is often referred to as hermeneutic phenomenology and seeks to answer the ontological question of what it means to be and being in the world (Heidegger, 1962; van Manen, 1990; Wojnar & Swanson, 2007).

van Manen (1990) was influenced by “human science” and the Dutch movement of phenomenological pedagogy (p. 1). The components of human science pedagogical research include practical application of the findings with suggestions for improved praxis (Magrini, 2012). van Manen (1990) indicates we can pursue human science research through six activities: 1) turning to the lived experience; 2) investigating the experience as we live it; 3) reflecting on existential themes; 4) writing and rewriting; 5) maintaining a strong and oriented relation; and 6) balancing context by considering the parts and the whole (pp.30-34). van Manen’s view is consistent with hermeneutic phenomenology with an emphasis on the language of a phenomenon. Through narrative reflection, the phenomenon is revealed and transformed through
the participant language and narrative text (van Manen, 1997). The important concepts central to the tenets of van Manen (1990) include reduction and essences with an aim to produce insights into human experience (Ehrich, 1999).

**Role of the Researcher in Interpretive Phenomenological Inquiry**

Interpretive inquiry requires the researcher’s participation in that which is to be studied and to reveal shared practices, meanings and new understandings of the phenomenon of interest (McConnell, Chapman, & Francis, 2009). It is the lens of phenomenology where the participant and researcher co-create interpretation, understanding, and meaning of a lived phenomenon and fore-structure or presupposition cannot be bracketed from contextual understanding (Dowling, 2004; Heidegger, 1962). Wojnar and Swanson (2007) note this key tenet of interpretive inquiry asserted by van Manen aligns with Martin Heidegger’s (1962) assertions that all beings are pre-reflexive, always already thrown into their worlds, and taking up practices without thinking and through self-interpretation new insight into the phenomenon can result.

Also aligned with Heidegger’s philosophical assertions, van Manen (1990, 1997) holds a central assumption that context situates decision making and influences an individual’s understanding and meaning of a lived experience. McConnell-Henry, Chapman, and Francis (2009) noted van Manen further extended the tenets of Heidegger through interpretation of phenomena via reflection on language and the importance of social dialogue about a phenomenon of interest. In other words, a focus on language and meaning allows for a greater understanding of the phenomenon of interest.

With the assumption that understanding is never without presupposition, or pre-understanding, van Manen (1990) asserts the researcher’s pre-understanding is a valuable
starting point in exploration of the phenomenon of interest. In this study, the researcher is a member of the same profession and meets the same participant selection criteria. Therefore, the researcher had to maintain hermeneutic alertness (van Manen, 1997). Hermeneutic alertness requires the researcher to be both observer and participant at the same time. It requires the researcher to assume a relationship with the participant about the shared phenomenon sufficient to generate dialogue. But within this dialogue and relationship, the researcher maintains an orientation of reflexivity to remain aware of situations revealed by the participant which cause further self-reflection by the researcher.

**Ontological Considerations: van Manen and Heidegger**

Like the participant, the researcher’s own fore-structure is based on previous knowledge and understanding, or corporeality, temporality, spatiality, and historicality, of the same phenomenon of interest. van Manen asserts corporeality refers to the fact we are “always bodily in the world” (1990, p.103) and our mere physical presence reveals something about ourselves to others. Heidegger refers to this aspect of the “dasein” (1962, p.27) as “being there” (1962, p.182; Stanford Encyclopedia, 2016). For example, when one meets each other for the first time, often, there is some physical extension of oneself, i.e., a smile, a handshake, a wave. This in turn impacts our “lived other (relationality)” described by van Manen (1990, p.104). Relationality is the “lived relation we maintain with others in the interpersonal space that we share with them” (van Manen, 1990, p. 104). Heidegger refers to relationality as “care” (1962, p.225). Temporality is in reference to lived time (van Manen, 1990). Temporality is subjective time and relates to “our temporal way of being in the world” (van Manen, 1990, p.104; Heidegger, 1962) and includes our past, present, and future temporal landscape. Heidegger would refer to this as being
“already in the world” (1962, p.78; Stanford Encyclopedia, 2016). According to Heidegger (1962), historicality is rooted in temporality, meaning presupposition is grounded in the history of the phenomenon to be explored. Heideggerian (1962) beliefs are that we are socialized or embedded in common meanings and shared practices, a community, or being as a we before I. Spatiality is in reference to lived, or felt, space (van Manen, 1990). Spatiality is more difficult to articulate “since the experience of lived space is largely pre-verbal” (van Manen, 1990, p.102) and is not something we typically reflect upon. However van Manen (1990) states, the “space in which we find ourselves effects the way we feel” (p.102). Heidegger (1962) refers to this as “thrownness” (p.192), where the mood of where one finds him or herself impacts their being. In other words, the pre-understanding, and what is brought into the hermeneutic circle by both the researcher and the participant cannot be separated. Instead, both the researcher and participants enter the hermeneutic circle through an iterative dialogue about the phenomenon of interest allowing the phenomenon to unconceal itself (McConnell-Henry et al., 2009). According to van Manen (1990, 1997), the researcher’s “self” is an essential source of data, but other data, such as observations, can contribute to the new understanding of the phenomenon. Co-constitutionality results as meaning and understanding surrounding the phenomenon are unconcealed and reinterpreted (Flood, 2010; Laverty, 2003) and the outcome of inquiry becomes a textual explication towards clarity of the phenomenon.

**Interpretive Inquiry and Hermeneutics Method**

While interpretive inquiry does not align with a scripted method of data analysis, it is necessary to describe the design method and process of analysis that led to findings. Hermeneutics is the method associated with Heideggerian interpretive inquiry and further
expanded upon by van Manen (1990). Ajjawi and Higgs (2007) note “hermeneutics adds the interpretive element to explicate meanings and assumptions on the participants’ texts that participants themselves may have difficulty in articulating, for example, tacit practice knowledge” (p. 616). A metaphor for multi-layered inquiry, the hermeneutic circle begins when the researcher and participant examine current understanding of the whole phenomenon in context. This understanding is situated in historical presupposition and current state of being. Therefore, understanding of the whole phenomenon remains tentative as both researcher and participant enter the circle to explore the phenomenon. The researcher’s reflexivity should reflect anticipation of meaning of the phenomenon to then allow for dialogue between the researcher and participant and to help explore the parts of the phenomenon to better understand the whole phenomenon within the context of the participant’s lived experience. This iterative process of examining parts to whole and vice versa reveals clarity of the phenomenon at a much deeper level of understanding and a continuous cycle of analysis to reveal a shared understanding and meaning. The goal of hermeneutics is to “identify the participants’ meanings from the blend of the researcher’s understanding of the phenomenon, participant-generated information, and data obtained from other relevant sources” (Wojnar & Swanson, 2007). van Manen (1997) asserts hermeneutics is a way of understanding human experiences if one considers communication and language to be intertwined and we capture the experience through language and within context.

Participant Selection and Data Collection

**Participant selection and recruitment.** Participants were experienced nurse educators (defined in Chapter 1) and obtained through purposive sampling. Purposive sampling is utilized when the researcher requires participants who can purposefully inform an understanding of the
central phenomenon (Creswell, 2007). In addition, purposive sampling is consistent with the interpretive phenomenological method of inquiry. The participants were recruited from institutions of higher education which held the Carnegie Classification (2015) of Master’s Colleges and Universities, larger programs. This Carnegie Classification was selected based on the researcher’s historical context and experience. Also consistent with the researcher’s historical context, the institutions selected for participant recruitment were located in the Southeastern region of the United States. A search for institutions meeting the criteria was conducted from the Carnegie Classification website (2015). This search provided 29 results of Master’s Colleges and Universities, larger programs, institutions of higher education in the Southeastern region of the United States. To further narrow the number of institutions, but to avoid limiting the participants, four not-for-profit institutions, from one state within the Southeastern region of the United States were selected for recruitment.

Once possible institutions were identified, the researcher completed the ETSU IRB approval process (Appendix A). During the process, the researcher was required to obtain IRB approval at all four institutions. Each of the respective Nursing Administrators (Dean, Director, or Associate Dean) at the four institutions was contacted by the researcher directly via email about their faculty’s participation. Each Nursing Administrator agreed to send out recruitment information to their faculty following the respective institutional IRB approval for the study. The researcher then contacted each institution’s IRB staff and provided the necessary documentation to receive the approvals. These approvals are on file with the ETSU IRB Office.

Following all IRB approvals, an email recruitment letter was sent to the Nursing Administrator at the four institutions for distribution to the faculty (Appendix B). Of the four
institutions recruited from, faculty from three of the institutions responded. To protect anonymity at the institution, participants were asked to contact the researcher directly of their interest in participation. All participants who contacted the researcher provided a brief bio of their teaching background, including courses taught online, and inquired if they qualified for the study. The researcher then provided the informed consent via email for the participants to review. Following interviews were then scheduled with the plan for selection of 10 to 12 participants or until saturation of data was achieved.

**Protection of human participants.** Prior to participation, participants signed an informed consent. The consent included the purpose of the study, procedures to collect data, and the approximate time required (Appendix C). In addition, the informed consent included assertion by the researcher of confidentiality with interview recordings and narrative transcripts being assigned study identification numbers with no personal identification. Participant names and student or faculty names disclosed in the interview were redacted from the transcript. Electronically stored recordings were password-protected on the storage device with only the principal member of the data analysis team with password information. Only the redacted transcripts were shared with members of the data analysis team. While the researcher did not anticipate harm to or discomfort of the participant, the participants could request to have the interview stopped at any point and recording of the information ceased. Participants could choose to withdraw from the study at any point. Participants were also informed second interviews might be required if there was needed clarification following the first interview. The researcher had to contact three of the participants as follow up to clarify their number of years of experience in nursing education and online teaching. Participants were provided a gift card in the
amount of $20 as gratitude on the part of the researcher for their participation in the study. The gift card was mailed to the address the participants provided following the interviews.

**Participants profile.** A total of eight participants were interviewed to reach data saturation. All participants were female and employed as fulltime nurse educators. Participants were from three different institutions of higher education in the southeastern United States. The higher education institutions held the Carnegie Classification of Master’s Colleges and Universities, larger programs. The Carnegie Classification is consistent with institutional employment of the researcher. Two of the institutions were public, not-for-profit institutions and the third, a private, not-for-profit institution. Five of the participants were employed by the public, not-for-profit institutions and the remaining three employed by the private, not-for-profit institution (Table 1).

Participants were identified as experienced nurse educators matching the criteria established in Chapter 1. The number of years in nursing education ranged from a minimum of six years up to 25 years with an average of 15 years of experience in nursing education. Table 1 provides additional information regarding faculty rank, terminal degree, and area(s) of specialization alongside the type of institution where each is employed.

<table>
<thead>
<tr>
<th>Participant Number (PN)</th>
<th>Years in Nursing Education</th>
<th>Faculty Rank/ Terminal Degree</th>
<th>Area(s) of Specialization</th>
<th>Type of Institution (all not-for-profit)</th>
</tr>
</thead>
<tbody>
<tr>
<td>P1</td>
<td>20</td>
<td>Professor/EdD</td>
<td>Community Health, GNP</td>
<td>Private</td>
</tr>
<tr>
<td>P2</td>
<td>6</td>
<td>Lecturer/PhD Student (ABD)</td>
<td>OB, Nursing Education</td>
<td>Public</td>
</tr>
</tbody>
</table>

Table 1: *Participants Profile (NI = Not indicated)*
Table 1. (continued)

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>P3</td>
<td>20</td>
<td>Professor/EdD</td>
<td>Nursing Administration</td>
<td>Public</td>
</tr>
<tr>
<td>P4</td>
<td>25</td>
<td>Professor/DSN</td>
<td>Pediatrics, Nursing</td>
<td>Public</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Education</td>
<td></td>
</tr>
<tr>
<td>P5</td>
<td>7</td>
<td>Associate Professor/PhD Student (ABD)</td>
<td>Neonatal, FNP</td>
<td>Public</td>
</tr>
<tr>
<td>P6</td>
<td>18</td>
<td>NI/DNP</td>
<td>FNP</td>
<td>Public</td>
</tr>
<tr>
<td>P7</td>
<td>7</td>
<td>Assistant Professor/DNP</td>
<td>Pediatric Asthma, FNP</td>
<td>Private</td>
</tr>
<tr>
<td>P8</td>
<td>20</td>
<td>Professor/PhD</td>
<td>Adult Health Nursing</td>
<td>Private</td>
</tr>
</tbody>
</table>

Data generation and collection. Data was initially generated and collected through single, semi-structured face-to-face interviews at a convenient time and location for the participants. Due to the timing of the data collection with the academic calendars (last 4 weeks of the semester), some interviews originally scheduled as face-to-face were rescheduled and conducted via Skype or telephone. Half of the interviews were in person and the other half were conducted via use of technology.

Since hermeneutics gives priority to the question and the dialogue between researcher and participant, a socratic approach to the interview was established. A socratic method of interview is a discourse of shared inquiry consistent with both Heidegger and van Manen’s emphasis on the participant’s language (Ironside, 2005). This means the researcher must be part of the interview, to “reveal as much of herself as the participant does” (Ironside, 2005, p.117) and to check assumptions but be open to assumptions being challenged during the dialogue between
researcher and participant. A benefit of socratic interviews is creation of what Heidegger refers to as an “openness”, where we “leave open what we are waiting for” (1966, p.68).

Prior to the first participant interview, the researcher acknowledged assumptions related to the research question through reflexivity and development of a written reflexive journal. The journal was updated after each interview to include any changes to assumptions, observations of participant non-verbal communication, participant challenges in articulation of thoughts during the interview, repeated key phrases or terms provided during the interviews, and thoughts on theme/pattern emergence. The journal continued to be updated as the researcher moved to data analysis and interpretation and was a means to record summaries of meetings with the data analysis team. The journal was referenced during the writing of the dissertation chapters as well. The purpose of the reflexive journal was to assist with authenticity and trustworthiness of the data and to decrease the risk of researcher bias (Diekelmann, Allen, & Tanner, 1989). The contents summary of the reflexive journal included:

1) Observational notes of the participant and the setting;
2) Summaries of meetings with the data analysis team;
3) Affective views on each interview;
4) Rationale of methodological decisions; and
5) Theme and pattern emergence and any changes.

Participant interviews were audio recorded and transcribed verbatim. The unit of data analysis became the narrative text created from the transcripts of the interviews. During data collection, the researcher had to remain attentive to the linguistics of the phenomenon and to
“hold onto the verbal manifestations that appear to possess interpretive significance for the actual phenomenological description” (van Manen, 1990, p.62). Therefore, data analysis began at the time of data collection.

**Data analysis overview.** Diekelmann et al. steps for data analysis (1989) was utilized to examine themes and constitutive patterns. This seven step method of analysis is derived from the Heidegerrian hermeneutical process of analysis and is consistent with interpretive phenomenological inquiry as asserted by van Manen (1990) where textual essence is created from the lived experience. Diekelman et al. method of analysis requires establishment of a data analysis team who are well-versed in interpretive inquiry. The data analysis team was identified prior to participant selection and approved through ETSU IRB following verification of Collaborative Institutional Training Initiative (CITI) training. The data analysis team included the researcher plus two other expert qualitative researchers. A biographical sketch of the data analysis team members is provided:

**Biographical Sketch of Data Analysis Team Members**

*Team Member One* holds a PhD in Exceptional Learning (Applied Behavioral Analysis) and is a Professor of Early Childhood Special Education, in the College of Education, with a specialization in Qualitative Research at the doctoral level. She is employed by a public, not-for-profit institution of higher education with the Carnegie Classification of Master’s Colleges and Universities, larger programs. While pursuing her doctorate, she was immersed in qualitative inquiry in the 3 course qualitative sequence of her program of study completing a pilot study that informed her dissertation. Over the
past several years, she has taught and mentored students in the first two qualitative
courses in the sequence required for PhD attainment at her institution of employment. As
a result, she now serves as qualitative dissertation support on multiple doctoral projects.
All of her current research endeavors focus on qualitative or mixed method designs and
she has shared study results at the following conferences: International Congress of
Qualitative Inquiry, Ethnographic and Qualitative Research Conference, and the Penn
Ethnography Forum. Her scholarly publications address qualitative inquiry, methods, and
open doors for those who may be skeptics of qualitative work.

*Team Member Two* holds a PhD in Education (Cultural Studies). Her program of
study included numerous research courses including courses specific to qualitative
inquiry. She is a professor of Qualitative Research, Educational Anthropology,
Foundations, Associate Dean of Graduate Studies and Director of an Exceptional
Learning PhD program at a public, not-for-profit institution of higher education with the
Carnegie Classification of Master’s Colleges and Universities, larger programs. She has
been teaching qualitative research in the Exceptional Learning PhD program for 13 years
and in the masters programs for 14 years in the College of Education. The masters
programs require either a qualitative class or a quantitative class prior to the semester in
which students conduct the research for and write up their problem paper (in lieu of a
thesis) and the class is offered every semester. In this class students write the first three
chapters of their problem paper, i.e., introduction, review of literature, and research
design. She designed this class and has taught it 16 times over the past 14 years. She has
also served on numerous master student committees to provide input/feedback on
problem papers as well as help them with their research design. The PhD program includes a qualitative sequence of three courses and a fourth course that prepares students for their dissertation prospectus where they craft the first three chapters of their dissertation (introduction, review of literature, and research design). She helped design this sequence in the program in collaboration with faculty. She has taught these courses a combined 19 times. She has chaired 8 dissertation committees and served on 27 dissertation committees. When she does not chair committees, she typically serves as the research person on the committee. She has been an active member of the International Congress of Qualitative Inquiry since its 2nd conference in 2006. She has more than 50 international and national research presentations since 1998 most dealing with qualitative methodologies and related theoretical perspectives. She also has numerous scholarly publications (journal articles and book chapters) that address qualitative inquiry or use qualitative approaches.

**Data analysis process.** Diekelmann et al. (1989) hermeneutics method of analysis allowed for an iterative process of interpretation and reinterpretation of the parts of the narrative text to the whole through expansion of the circle of understanding. This iterative process continued until a new, shared understanding is unconcealed (Diekelmann & Ironside, 1999). The process of the analysis for this study is outlined here:

1) Each narrative text was read in its entirety, and independently, by all members of the data analysis team to obtain an overall understanding;
2) Each team member wrote interpretive summaries of each interview text to include excerpts from the interview and to code for emerging themes. The team then met to share interpretations and to agree upon early findings and key text examples;

3) Continued independent and group analysis of selected transcripts served to identify and establish a consensus regarding themes;

4) Discrepancies in theme interpretations were clarified through re-reading and re-examination across all texts to identify relational themes and common meanings and a written composite analysis was developed. Further dialogue during team meetings solidified the identified themes;

5) Emergence of constitutive patterns across all interviews was identified and provided an understanding of the related themes;

6) Validation of the analysis occurred through sharing of the findings with the data analysis team, two researchers not on the team but familiar with the content and research method and who could speak to the research question, and all the participants.

7) Development of a report of the findings was prepared using excerpts from the interviews with validation by the reader.

To ensure rigor of the study, the researcher utilized de Witt and Ploeg’s (2006) proposed expressions of rigor for interpretive phenomenology which places emphasis on the process of the inquiry as opposed to criteria to confirm outcomes or findings of the study. The expressions reflect a framework for qualitative, interpretive study rigor through a combined set of sources aligned with an interpretive inquiry method of analysis. The combined sources include the
criteria for rigor outlined by Madison (1988), those of van Manen (1997), and other nursing literature (de Witt & Ploeg, 2006). The five expressions for rigor used to evaluate the study were:

1) **Balanced integration (Comprehensiveness or Coherence)** is an assimilation of Madison’s (1988) criterion of comprehensiveness (de Witt & Ploeg, 2006, p.224). It reflects the essence of balance between the participants, the researcher, and the philosophical tenets appropriate to the research question and findings.

2) **Openness (Orientation to the Phenomenon)** is a consistent orientation to the question and phenomenon being explored throughout the study. It is when the researcher opens up the study for scrutiny.

3) **Concreteness (Contextuality)** occurs when examples provided by the researcher situate the reader to the context. van Manen (1997) refers to this as lived throughness. It is the pragmatic language that connects the reader with the phenomenon but within historical context.

4) **Resonance (Epiphany or Reverberation)** encompasses the “felt effect of the study findings upon the reader” (de Witt & Ploeg, 2006, p.226) and the pragmatic expression of the feeling of the reader.

5) **Actualization (Suggestiveness)** addresses the future realization of the findings. Meaning, there are implications for continued interpretation of the readers.

Transparency of the data analysis process and rigor of the study were ensured through the researcher’s reflexive journal, the team member expertise and involvement in the analysis process, and through disclosure of analysis findings to all members of the analysis team. In addition, two external researchers who met the participant criteria and could speak to the
research question, but were not involved in the study in any way, reviewed the findings for openness, resonance, coherence, and actualization. Further expressions of rigor are supported in the findings in Chapter 4 and in the discussion of Chapter 5.

**Chapter 3 Summary**

This chapter provided an overview of the foundations of phenomenology specifically addressing the tenets of interpretive phenomenological inquiry and those of philosopher Max van Manen and Martin Heidegger. The chapter also provided an explanation of the hermeneutics method selected as appropriate to answer the research question. Participant recruitment and selection was outlined with a profile of the participants provided. The process of data generation and data collection was detailed. The data analysis steps of Diekelmann et al. (1989) were described. The five expressions of rigor, proposed by de Witt and Ploeg, provided assurance of study transparency and rigor of the process that yielded the study findings. Findings and analysis are outlined in Chapter 4.
CHAPTER 4
DATA FINDINGS AND ANALYSIS

The purpose of this qualitative, hermeneutic phenomenological study was to understand the lived experience of baccalaureate nursing student intellectual curiosity for experienced nurse educators who teach in the online learning environment. A total of eight participants allowed for saturation of data through semi-structured interviews that were audio recorded, and transcribed verbatim. The researcher and data analysis team members analyzed narrative text of each transcript by using the hermeneutical method described by Diekelmann et al. (1989) and guided with the philosophical underpinnings of Max Van Manen (1990) and Martin Heidegger (1962). The participants’ profile is included in Chapter 3, Table 1. The participants’ initial responses to the study’s research question are provided followed by the patterns and themes with the supportive narrative text. Findings revealed three constitutive patterns and seven relational themes to answer the research question.

Participants’ Initial Responses to Research and Grand Tour Questions

In response to the research question of what does student intellectual curiosity mean to experienced nurse educators teaching in the online learning environment, each participant provided an immediate, multi-faceted response, but no two participants provided the same definition. The researcher provided the initial grand tour question of: Tell me about your experience with student intellectual curiosity, what does it mean for you as an experienced nurse educator? The annotation of each participant’s initial response to the grand tour question is provided and centers on the concept of intellectual curiosity. The researcher’s questions allowed for the openness described by Heidegger (1962) and responses of participants allowed them the
historicality and temporarility (Heidegger, 1962; van Manen, 1990) to situate to the phenomenon:

“…the motivation to discover something, a question somebody may not be able to articulate but that interests you and you want to know more about it… enough of an interest that you would be motivated to act on it…” (P1)

“…what makes them want to learn…what triggers their learning… something they are interested in… past experience…want to learn more about it…” (P2)

“…asking critical questions when trends appear or when problems are surfacing or when you are not sure there is a problem but a chance for improvement… an opportunity for improvement… exploring a topic to see if there’s big new and better ways of doing something… then apply your problem solving and critical thinking in how to do things better…very close to the next step of innovation.” (P3)

“…wanting to explore past the obvious, to find out the root or more information about a particular phenomenon… when you find a topic of interest or you’re presented with a topic of conversation or lecture whatever the context might be that you want to know more than what is right there…not satisfied with the surface information” (P4)

“…driving force to learn more, to want to discover more… what motivates people to want to go further and spend the time, the commitment to learn the content that they need or they’re searching for.” (P5)
“...the path of discovery. I mean you are always trying to discover things that work things that don’t work...how to do things better...” (P6)

“...can’t leave it the same that it’s always been...drawing new connections between other material or new changes...having new ideas about how we could do things better...” (P7)

“...they’re interested and intellectual curiosity will lead to work harder, dig deeper, and find it for yourself which we all believe is more meaningful than if the student gets handed something.” (P8)

Further dialogue with the participants past the initial response to the grand tour question allowed for development of narratives which captured the nurse educator’s experience of student intellectual curiosity in the online learning environment. Each participant shared with the researcher how student intellectual curiosity is identified, modeled, and promoted within the online learning environment. From the narrative texts, three constitutive patterns and seven relational themes emerged through the data analysis team’s application of Diekelmann et al. method of data analysis described in Chapter 3. A constitutive pattern expresses the relational aspect of the themes and patterns are present in all the interviews and narrative texts with a theme bringing meaning to a recurring manifestation of the experience. The relational themes are necessary to support and scaffold the identified constitutive pattern and possibly, other themes and patterns (Diekelmann et al., 1989). A visual representation of the analysis team’s interpretation of findings which generated the final patterns and themes is found in Figure 2.
Constitutive Pattern 1: Relational Reciprocity

The pattern of relational reciprocity emerged through two relational themes of commitment and reflexivity. The two relational themes emerged at the time of the first participant interview and through narrative text analysis with 43 excerpts identified by the researcher and data analysis team as language which supported the two themes (see Figure 2, Appendix D).
Appendix D). The relational reciprocity of connections between nurse educator and students; with student to content and with meaningful use of content; self-awareness (both nurse educator and student), and within the context of the online learning environment was revealed across all interviews and emerged as early as Participant 1 in response to participants being asked the research question of what student intellectual curiosity means to them as an experienced nurse educator teaching in the online learning environment. The pattern was present across all interviews and within the responses to evolving sub questions of how did the participant identify student intellectual curiosity, how it was modeled, and how they fostered student intellectual curiosity in the online learning environment.

Participants clearly indicated a need for a relational connection with students but the connection had to be mutually constitutive in nature. Both van Manen (1990) and Heidegger (1962) refer to this as temporality and being-in-the world. The connection between student to teacher and teacher to student emphasized the need to know each other, including the need to know self. The connection of student and nurse educator to the content was important related to the degree of engagement by both parties in the relationship as well as meaningful use of content to be learned. The connection relative to the online learning environment also revealed shared practices that would expose student intellectual curiosity to the nurse educator and promote student intellectual curiosity in this learning context.

**Relational Reciprocity: Connecting through Knowing Each Other/ Knowing Self.**

As participants shared stories of student intellectual curiosity, the importance of finding a way to get to know the students and their interests was evident.
[In comparison to the online learning environment] “…when you’re with them you can kind of, you can have more one-on-one sessions with the students and talk to them, get to know more about them, and how they learn, how they prefer to learn, what they like to learn. So I think that has, you just get to know your students better in the more intimate clinical setting.” (P2)

Participants also shared it was important to reveal themselves to the students so the relationship of educator- student could develop and allow for the educator to foster and model intellectual curiosity.

“…I let them get in my mind and I want to get in their mind. I want to see how they’re thinking…it’s the relationships and the interactions that really kind of nurture it [intellectual curiosity].” (P5)

“… we don’t know each other as personally in the online class…I think it’s not as easy, the setup of the online course. I don’t like it as much probably if I’m totally honest… it also doesn’t feel as natural to me to provoke thought and to challenge students ‘cause I don’t know who they are, we don’t have that real time interaction.” (P7)

[On how she models intellectual curiosity] “It’s really important to be on the ground doing what I’m teaching and still grappling with issues. Through doing that I still need to look things up… So, I think just from practicing I have more to offer them in terms of ‘I’m with you guys. I am dealing with these same questions and I have to be curious still’… having that realistic perspective about ourselves that we don’t know everything
and what we think we know sometimes changes should lead to curiosity about what other people think… (P7)

**Relational Reciprocity: Engagement of Student and Nurse Educator.** Participants provided examples of how to best engage the student, including a need for the educator to show interest and enthusiasm in the subject being taught; as well as the importance of providing guidelines for problem exploration.

“[Intellectual curiosity] is always implicit. I never heard the term used. But, even in high school and elementary school there were some instructors so interested in their own topic or what they were about to teach that it was almost like catching an infection. You just, you made them, their excitement and enthusiasm for what they were teaching made you interested in what made them interested” (P1)

“You know you have to engage them. You can’t just give them a topic without giving them some guidelines, you know, about how to explore it… give them good problems to solve and somebody with intellectual curiosity is going to solve those problems…You have to engage them and you can’t do that in a nonchalant way…the courses that were really good courses…actually had guidance…” (P6)

**Relational Reciprocity: Connecting to Meaningful Use of Content.** Participants were clear that the content they presented to students, regardless of learning environment, must be of significance to the student. For students to connect to the content, and therefore engage and propel intellectual curiosity, the content must hold meaning for the student. Several participants provided student examples of learning how to make the connection of meaningful use of content.
“…these students that are real inquisitive and look at things, how to be better and how to be more valuable to whoever I’m working for…they dig…and that brings up another question so they want to see is there any relationship to this…” (P3)

“…if we open up opportunities for those students to look more closely at practice that it stimulates intellectual curiosity…helping them find resources when they need it, you know, asking them questions that will help them think things through.” (P4)

“But this student [in description of a student who is intellectually curious], wants to learn how to assess the article better… to engage in the content of the course better…[student] has a sister who’s ill at home she realized by understanding this article she could eventually put that to work in pediatrics by understanding what the research was teaching her.” (P8)

**Relational Reciprocity: Connecting to the Online Learning Environment Context.**

Participants expressed difficulty in being able to connect with students via the online learning environment. Participant 5 captured well what all other participants could not explicitly articulate in their responses.

“Online learning… you don’t have that personal interaction… learning, imparting material, requires a relationship…The learner is at the, really, the mercy of the skill of the person who is teaching the class…I think that having interactions, some kind of interactions, you have to be able to make the online learning environment make some kind of interaction, meaningful interaction…It has to be some kind of relationship set up even if it’s in the virtual world that you have to kind of know a little bit about who’s
teaching you and you have to know a little bit about who you’re teaching. So I think it is both sides. So it can’t just be in my opinion, it can’t just be [love for a topic] and you’re going to learn it no matter what…I think the relationship, some kind of relationship, some kind of knowing…knowing the person that is teaching you if you’re a student… knowing a little bit about my students helps me try to stimulate curiosity. I know what I am working with… you gotta have some knowing in there.” (P5)

**Relational Theme 1: Commitment.** Relational reciprocity does not occur without commitment of time and energy on the part of student and nurse educator. The relational theme of commitment refers to the student’s and nurse educator’s enthusiasm, excitement, desire, and personal interest in the content presented in the online learning environment. This theme emerged through 18 key narrative text excerpts as participants shared stories of how to engage the student’s intellectual curiosity and what their [educator’s] role was to facilitate that engagement (see Figure 2, Appendix D). Every participant indicated the student needed to have a personal identification with the topic of study but that enthusiasm, a desire to learn, or a topic of study which grabbed their attention was not sufficient for student intellectual curiosity. Rather, the participants identified they each had to have a comparable level of engagement, if not more so, and the need for investment of time and effort on the part of both student and nurse educator. The commitment on the part of the student and educator is a necessary scaffold for the constitutive pattern of relational reciprocity and meaningful use of content.

“[Intellectual curiosity] is the motivation to discover something…that interests me and I want to know more about it. And it’s enough of an interest that you would be motivated to act on it…enthusiasm and the personal excitement kind of endorses the topic…I try to
make the subject matter personal to the student…ask the student to relate something in their own experience…” (P1)

“[Intellectual curiosity] what makes them want to learn…what triggers their learning. It could be something they’re interested in, something they’ve had past experiences with…they want to learn more about it. But I think it comes from their personal interest and maybe some from their past experiences.” (P2)

[In promotion of intellectual curiosity] “Well number one, I really believe is starting off with enthusiasm…and they start to get excited about it.” (P3)

“…when you find a topic of interest or you’re presented with a topic…you want to know more than what is right there…we can promote intellectual curiosity if they’re presenting from their experience…” (P4)

“…intellectual curiosity would be that driving force to learn more, to want to discover more…maybe what motivates people to go further and spend the time, the commitment to learn the content they need. [In how she models intellectual curiosity] Excitement for learning…approach it with this excitement of that we’re never done learning…they’re willing to do that work for what? I think…the person has a goal in mind…they’re willing to put in the time to learn it…we think of curiosity as exciting, and I think that’s part of it. But…you’ve got other reasons in there too…different motivations to learn. So, and maybe when you rise to the top of it…you’re excited about it, maybe that’s the ultimate prize.” (P5)
“…one of the students emailed me… she wants to know how it [compassion] is formally taught in the school of nursing…and so she and I have just begun to have this conversation about that topic because it’s something that interests her. And I think that’s great intellectual curiosity that she wants to take it [a module assignment] more than what the assignment requires ‘cause [sic] she found it interesting.” (P7)

[While describing a student example of intellectual curiosity] “…they got to look for something they were interested in. And, one of the students did something about a sister who is ill at home…They don’t care about evidence-based practice but they got curious about what evidence based practice might mean because they were able to follow an interest of their own.” (P8)

**Relational Theme 2: Reflexivity.** Relational reciprocity also does not occur without reflexivity, or self-awareness. The reflexivity must be present for the nurse educator as well as the student. Reflexivity scaffolds the relational theme of commitment and the need for ‘connections’ and ‘knowing’ outlined previously under the constitutive pattern of relational reciprocity. This theme emerged during the interview of Participant 2 and then again through 25 key participant narrative texts identified by the researcher and research team during the transcript analysis (see Figure 2, Appendix D). Participant 7 used the phrase “intellectual humility” as something which correlates with intellectual curiosity. While this exact language was not used by the other participants, the meaning behind it was beneath the surface of the other participant narratives. The essence of reflexivity in the context of the online learning environment reflected the need for the student’s part in identifying his or her own learning needs to assist the nurse educator to meet those needs through a variety of instructional strategies or practices centered on
choices of learning topics or completion of course assignments. The reflexivity that participants described relates to Heidegger’s (1962) assumptions we are all self-interpreting beings.

“I’m very motivated and I have a strong work ethic…I have my own self curiosity. I think the more education you get the more you know what you don’t know, that you want [to learn] more. I just realize my own limitations and know that I’m the only one who can fix those limitations, I guess.” (P2)

Other participants shared accountability for curiosity and setting standards to be important aspects of the theme of reflexivity.

“It’s [intellectual curiosity] never putting it off on someone else…they’re taking ownership to figure things out. [While describing a student example of intellectual curiosity around a patient interaction] He got so excited about it, you know, what he did [for that patient]. But, he’s so emotionally intelligent and curious…[your research question] is a great question to be asking and to me it is part of the emotional intelligence and the development of a student to the maximum that they can be is to be very, very curious.” (P3)

“…I have pretty high standards and if students don’t reach those standards I blame myself because I feel like that, you know, its’ not my fault but I feel like I could have offered better opportunities for them to learn…if someone has intellectual curiosity they’re educated on what they’ve read maybe but they’re not at the level they have the understanding that they really want to have…the worst knowledge is false knowledge and the only way you find out about false knowledge is to get the people to discuss the
problem...you know, close their gaps in knowledge...I just try to show them all the time that, you know, that number one I don’t know everything ‘cause [sic]I think it is very dangerous that people think they know everything.” (P6)

Participant 7 provided an exemplar of student intellectual curiosity and used the term “intellectual humility” as central to reflexivity. But she also added that within this self-awareness of intellectual humility, we all must become aware of what we don’t know and thinking can change. Both Heidegger (1962) and van Manen (1990) would assert this participant’s response to the temporality of being. Inherent to the participant’s response is Heidegger’s belief of “a clearing” (1962, p.170) which occurs when we are in the middle of being.

“[One] that demonstrates intellectual curiosity, or maybe it’s intellectual humility...intellectual humility is understanding that the way you that you know what you think you know can be fundamentally flawed. And, it’s one perspective and it’s at the mercy of what you’ve experienced or the particular resources that you’ve had...And so, having that realistic perspective about ourselves that we don’t know everything and what we think we know sometimes changes should lead us to curiosity about what other people think or different experts or different panels or research and hopefully that feeds into a desire for lifelong learning. Simply because we are humble we see a need for more inputs and that leads us to taking action which I think that action is predicated on curiosity.” (P7)

Another participant related reflexivity and intellectual curiosity as necessity for professional nursing practice:
“For a college student who’s not intellectually curious that’s kind of a sad thing because you would hope the way you send them out it’s ready to be lifelong learners. And if they don’t think, if they’re not curious about anything, if they don’t leave here realizing that there’s still so much they don’t know that’s a scary thing for taking care of patients for one thing because they won’t ask questions they need to.”(P8)

**Constitutive Pattern 2: Creative Inquiry**

The constitutive pattern creative inquiry emerged through three relational themes of inquiry, creativity, and challenging boundaries. Participant 1 labeled this as the “nursing imagination” and “abstraction” on a continuum. The pattern of creative inquiry was evident across all interviews with 52 excerpts within the narrative text analysis identified by the researcher and data analysis team as language which supported the three themes (see Figure 2, Appendix D). As participants articulated the meaning of intellectual curiosity, each clearly needed to qualify the meaning of student intellectual curiosity with words such as “right,” “better,” “always,” “good,” and “very,” along with the aspect of the student seeking or searching beyond his or her existing cognitive limits. The searching on the part of the student was intended to expand understanding and excavate current thinking capacity but something that was accomplished through the inclusion of creativity.

**Relational Theme 3: Inquiry.** The relational theme of inquiry is iterative and is scaffolded by the two previous themes of commitment and reflexivity. This theme emerged with Participant 2 as she described how she identified student intellectual curiosity. The essence of inquiry resembles someone seeking answers and leads to the subsequent theme of challenging
boundaries. Participants shared stories of how they know a student has intellectual curiosity. Heidegger (1962) would refer to this practice as students revealing “always already who they are”:

“…asking questions, trying to get more information on their own, just taking initiative I guess is the big word that comes to mind is that they have their own enthusiasm and take initiative to learn that particular something they’re interested in…” (P2)

“They’re constantly thinking of questioning what’s status quo…it’s always an integration…not just memory…being curious enough to ask the right questions…and let one question lead to another.” (P3)

“…they [students who are intellectually curious] ask questions for additional knowledge or better understanding.” (P4)

Other participants spoke about the role of the educator in inquiry and the need for student self-direction:

[Online learning] “…you’re going to have to fill in some of the gaps yourself and you provide the environment where they feel comfortable and willing to keep asking the question.” (P5)

[Students who are intellectually curious]…they’re very inquisitive. They ask a lot of questions…ask intelligent questions…they ask good questions…I have one student who is always asking great questions…he researching his own questions, it’s not that he wants
others to do it for him, but a lot of his questions are good for other students to hear. It’s like he’s getting something that other people aren’t.” (P6)

“…I’ll let them guide themselves the best they can…if they can discover it themselves…what you’re really trying to do is to teach them to think for themselves…” (P8)

**Relational Theme 4: Challenging Boundaries.** The relational theme of challenging boundaries emerged with Participant 2 as she discussed ways to promote intellectual curiosity. This theme serves to scaffold the relational theme of inquiry. The essence of challenging boundaries is to move past superficial knowledge and to expand perspectives for a new understanding. Many participants spoke of the need to provide students with questions or problems just out of their reach and students delving deeper into content. As with the theme of reflexivity, challenging boundaries is consistent with Heidegger (1962) reference “a clearing” of being:

“[I] try to promote that curiosity or give them something you know to grasp on to…not to be punitive or anything but just to kind of push them a little bit out of their comfort zone.” (P2)

“They want to delve deeper than what the content that I see is important to learn…they dig” (P3)

[Intellectual curiosity] “…it means wanting to explore past what is obvious…And students who are intellectually curious, I think, will go a step further and bring new information to the topic and really expand the analysis of what they found, the gaps in the
knowledge that they have read about, and explore potential, future…they’re not just satisfied with surface information…they want to know more… do reading on their own.” (P4)

“…what you want the student to do is to kind of wrestle with it…If they’re curious, if they’re interested…that will lead you to work harder, dig deeper and find it for yourself which we all believe is more meaningful than if the student gets handed something.” (P8)

Other participants shared the importance of challenging or expanding a student’s thinking:

“…you need to challenge the way they’re thinking…close their gaps in knowledge…they’re all kinds of resources to fill in the gap.” (P6)

“…It’s double checking myself…going deeper… drawing connections between that thing and things I am teaching…expanding perspectives…I should be open to different perspectives…” (P7)

**Relational Theme 5: Creativity.** The relational theme of creativity emerged early with Participant 1 and integrates the concept of intellectual curiosity and the context of the online learning environment with the other identified themes of commitment, inquiry and challenging boundaries. Participants indicate creativity is an essential characteristic of student intellectual curiosity but also a necessary attribute of the nurse educator so she is able to teach effectively in the online learning environment. van Manen (1990) identifies spatiality as difficult to articulate given it is more feeling than verbal explication. As participants referenced the space of being in the online learning environment, their language reflected the difficulty of the space in which they taught and the need to overcome the space through creativity and storytelling. Participant 1
provided the terms “nursing imagination,” “abstract,” use of “proxies,” or “surrogate,” to capture the creativity necessary for student intellectual curiosity and to be able to effectively engage with the student in the online learning environment. Participant 1 expanded on nursing imagination by relating intellectual curiosity to entering into a patient’s story:

“So for me, real intellectual curiosity would be the kind of question that would have probably some abstraction to it…I think you have to have a certain openness to how things interact. You have to have an openness to other cultures to be competent…You also have to have that openness to other disciplines in cross-disciplinary work…openness is part of curiosity…an attitude of openness…the abstraction serves as a kind of category label…I like to talk about the nursing imagination…I always imagined a future state for my patients that had them advancing in whatever illness, wellness continuum they were on…and students have a very tough time with that, imagining some future state of a patient. So you’re in a narrative where this patient is a character in a story and you’re kind of writing the next chapter of the story…So I think connected to intellectual curiosity would be the nursing imagination or the ability to enter into the storyline of a patient…being able to imagine requires being able to predict…think about contingencies…it’s a very imaginative act and nurses who are good at it…develop an imaginative ability to develop a storyline. (P1)

Participant 6 shared the importance of a mentor who encouraged her to be creative and she in turn models this for students through storytelling to solve clinical problems:
“I guess I am a good story teller so I tell stories about solving problems…She [mentor] encouraged me to be creative…” (P6)

While providing a student exemplar of student intellectual curiosity, another participant related innovation and sophistication to student intellectual curiosity:

“It’s [intellectual curiosity] very close to even taking it to the next step of innovation… He [student exemplar] got into the world of this guy [patient]. Whatever the guy would tell him, he could use that and then be more curious to ask him the next question to what are the barriers… and he hadn’t even seen the patient… and I was like ‘wow, this guy is innovative’.” (P3)

“…they [students who are intellectual curious] bring a more sophisticated approach to topic.” (P4)

Still others spoke of the need for creativity when teaching online:

“Online learning is going to be more abstract…it requires somebody to use a little bit more imagination to get the job done.” (P5)

“It’s not as easy to make them curious in a setting like that [online learning environment] for me. It [online learning environment] takes a little more intentional thought…” (P7)

**Constitutive Pattern 3: Quality Improvement**

The constitutive pattern of quality improvement emerged through development of the two relational themes of transformation and compassionate intentionality. These two themes are scaffolded by the other identified themes already identified. The pattern of quality improvement
was evident across all interviews with 38 excerpts within the narrative text analysis identified by the researcher and data analysis team as language which supported the two themes (see Figure 2, Appendix D). Participants articulated the rationale for, or expected outcome of, student intellectual curiosity in the online learning environment. Participants expressed it was insufficient to simply be curious. Rather, there must be a purpose on why the content needed to be learned and a deliberate effort on both the student and the nurse educator to understand how this related to their nursing practice. This deliberate effort was especially important for student and nurse educator to be able to effectively relate through the online learning environment. Quality improvement is closely aligned with the constitutive pattern of relational reciprocity, particularly as connections to the meaningful use of content or new knowledge is gained. Inherent to the pattern of quality improvement is the emphasis on improvement and betterment of someone or something.

**Relational Theme 6: Transformation.** The relational theme of transformation was embedded in the interview of Participant 1 as she provided details on what was the nursing imagination as it relates to the relational theme of creativity. However, it was Participant 3 who provided the terms “adding value,” “more valuable,” “being valued,” and “bringing value” to capture the outcome of student intellectual curiosity. Inherent to the theme of transformation is the creation of “new” and improved thinking or outcomes and to draw connections between new and existing knowledge. Both van Manen (1990, 1997) and Heidegger (1962) would relate to this theme of transformation as new possibilities or new understandings which develop from the hermeneutic circle and through co-constitutionality. The themes of creativity and inquiry
scaffold the theme of transformation. Participant 1 referred to curiosity as “being open to possibilities” and further related it to the discipline of nursing”

“…curiosity extends to being open to possibilities of connections…students can think in categories that are never integrated with each other…nursing is a highly integrated discipline…you have to have a certain openness to how those things interact…openness is a part of curiosity…connected to intellectual curiosity would be the nursing imagination or the ability to enter into the storyline of a patient in a therapeutic way and help write a chapter that’s going to be the better of several outcomes” (P1)

Many other participants shared how important intellectual curiosity was to nursing practice, providing improved changes to either their own practice as an educator or the student’s clinical practice. Participants spoke of seeking out new learning opportunities and adopting new behaviors intended to add value and positively change outcomes.

[Intellectual curiosity] “is when there’s an opportunity for improvement…opportunity for exploring a topic to see if there’s big new and better ways of doing something…how to do things better…always an integration…You never stop learning in nursing…or you become obsolete or not very valuable…they [students] stimulate themselves…always adding value to whoever, whether it’s students you’re working with, patients you’re working with, or just your own capabilities as a nurse educator so that you’re more curious…” (P3)

“…they [students] ask questions for a better understanding…go a step further and bring new information to the topic and really expand analysis… the most effective way to
promote intellectual curiosity is when they present their perspectives on something is to bring up another perspective and let them compare the two.” (P4)

“…there’s a value there and that really adds to the ‘I want to learn because it’s important’…inspiration to want to learn more…apply the knowledge. Like someday this is going to make sense…the person has a goal in mind.” (P5)

[Intellectual curiosity] “is how to do things better…” (P6)

“…every year when I cover the material, I can’t leave it the same way that it’s always been. I can be very familiar with content but then continue asking ‘Why is that the case?’ and drawing new connections…making sure they’re [teaching methods] still working and having new ideas about how we could do things better…expanding perspectives…” (P7)

**Relational Theme 7: Compassionate Intentionality.** The relational theme of compassionate intentionality was embedded in the interviews of Participants 1 and 2 and emerged as participants articulated how each facilitated and promoted student intellectual curiosity through communication and various course assignments.

“…I think just making sure that the online students, even though they’ve never seen me know that I am approachable and that they can email me…” (P2)

“I’m guiding them on the outline [in reference to an assignment]…I encourage them to email…Lots of communication…having a complete availability…” (P3)

“…depends on the person teaching the course and how much communication…you provide them the environment where they feel comfortable and trust you…it’s allowing
that environment, the trusting environment where they feel that they can ask the question…I stay in touch with my students…check in…reflect back…available…checking in with them regularly…” (P5)

Inherent to the theme of compassionate intentionality is how the educators identified their dispositions in approach to the students, the student response, and how this translated to safe, competent, and compassionate nursing care. van Manen (1990) refers to this aspect of our being as “lived other” or “relationality” (p.104).

“…her [a student example of intellectual curiosity] intellectual curiosity, her compassion, her desire to work well, do the appropriate nursing interventions, the advocacy, the appropriate assessments…the appropriate interventions flowed directly from her combination of curiosity with the compassion and the competence.” (P1)

“I give them a little freedom to explore…freedom to choose…I’m approachable…” (P2)

“…they know I care about them [the students] and my patients…I’m approachable. I’m flexible. I’m kind. I’m caring. I’m intelligent.” (P6)

“…they [students] would probably say [I am] available…I encourage them…be patient with students…the curious person is the safer and better nurse.” (P8)

**Chapter 4 Summary**

This chapter outlines the themes and patterns which emerged from the study. Across eight interviews, three constitutive patterns and seven relational themes emerged through analysis of the participants’ language. One hundred and thirty-three key narrative text excerpts
were identified by the researcher and data analysis team to support the thematic and pattern analysis (Figure 2, Appendix D). The data analysis team as well as the participants reviewed the findings outlined in this chapter. In addition, two other experienced nurse educators who would meet the purposive sampling criteria, could speak to the research question, but were not involved in the interviews or as members of the analysis team were asked to review the findings (see Appendix E). Each reviewer (participants, data analysis team, and external reviewers) was in 100% agreement the findings accurately resonated with their own experience relative to the degree of involvement with the research question, data collection, data generation, and data analysis. Discussion, implications, and recommendations are provided in Chapter 5.
CHAPTER 5
DISCUSSION, IMPLICATIONS, AND RECOMMENDATIONS

Discussion

The purpose of this study was to gain an understanding of the experience of what student intellectual curiosity means to experienced nurse educators teaching in the online learning environment. To answer the research question, three constitutive patterns with seven relational themes emerged from researcher and participant dialogue and researcher and data analysis team members’ explication of 133 key narrative texts (see Figure 2, Appendix D). For experienced nurse educators teaching in the online learning environment, student intellectual curiosity means to foster a culture of curiosity. To identify, engage, and model intellectual curiosity, the experienced nurse educator must give close attention to the dynamics of student engagement and communication in the online learning environment so the culture of curiosity is effectively fostered. The culture encompasses and is influenced by effective communication, student intellectual curiosity, faculty disposition, and instructional strategies/practices which are supported with clarity and scaffolded purpose. Essential to the culture of curiosity is the ability to effectively engage and communicate with the students in the online learning environment. Even if the nurse educator fosters a culture of curiosity, it is dependent upon the receiver (student) to respond to the culture. This indicates the relational themes and patterns inform each other and contribute to a fluid process of development of a culture of curiosity.
To Foster a Culture of Curiosity: Effective Communication in the Online Learning Environment

It was the researcher-participant dialogue about effective communication which allowed for participants to articulate the experience of creating a context that fosters a culture of curiosity in the online learning environment. The narrative text further supported this overarching theme to foster a culture of curiosity with four contributors to this culture. Those contributors were: effective communication, faculty disposition, student intellectual curiosity, and instructional strategies/practices. To foster a culture of curiosity became the experience of student intellectual curiosity for the experienced nurse educator teaching in the online learning environment (Figure 3).

**Figure 3.** Contributors to a culture of curiosity

*Effective Communication.* included the dynamics of communication when the student and faculty were engaged within the context of the online learning environment and about the topic of interest.

*Faculty Disposition.* included attributes of the participants as experienced nurse educators. Professional nursing standards foster common meanings and shared practices such as ethics, safety, caring, and competence and how the nurse educator engaged in the online learning environment shaped the disposition of the nurse educator.
**Student Intellectual Curiosity.** included faculty-identified student attributes of intellectual curiosity including how often and to the extent a student engaged with the faculty and peers in the online learning environment.

**Instructional Strategies/Practices.** included planning and implementation on the part of the nurse educators for teaching in the online learning environment in a manner to promote, model, and facilitate intellectual curiosity.

**Shared Practices and Meanings: Developing Relationships and the Online Learning Environment**

The grand tour question stimulated participants to initially respond with their experience of identifying student intellectual curiosity across the clinical and classroom settings through a broad, non-specific description of the concept of intellectual curiosity and then through student examples and exemplars. However, there were few student examples immediately provided by the experienced nurse educators relative to the online learning environment. Despite the researcher’s attempts to focus the faculty’s experience in the context of the online learning environment, the participants defaulted to more tangible examples from traditional learning environments, especially relative to the clinical education setting. It was almost a reflex response as a means to provide a point of reference or comparison for when the participants shifted dialogue back to the context of online teaching and learning. The researcher felt as though this practice was a means to situate both the participants thinking and to find a way for the participants to develop a beginning relationship with the researcher. When this practice occurred, the participants would provide two primary justifications: 1) the clinical setting was an easier
way to get to know students and their individual learning needs and interests as well as develop relationships; and 2) clinical easily provided ready-to-teach examples to help engage the student and relate the teaching and learning back to a real-time experience. When the researcher attempted to redirect the dialogue to focus on the online learning environment, most all participants had difficulty articulating the experience within the online learning environment.

Participant 7 captured this practice by sharing:

“…we don’t know each other as personally in an online class. There’s not much room for dialogue that flows naturally where one can challenge the student’s perspective in a, you know, real time kind of way that for me has worked well to foster that intellectual curiosity…online piece is very challenging…it’s not an easy setup of the online course. If I am totally honest, it doesn’t feel as natural to me to provoke thought and challenge students cause I don’t know who they are, we don’t have the real time interaction. It’s not as easy to make them curious in a setting like that for me. It takes a little more intentional thought…” (P7)

Participant 2 further shared:

“It [intellectual curiosity] does not look different [in online] but how that’s fostered and how that is facilitated is very different. I find it harder to facilitate intellectual curiosity online because you don’t have that interaction as much with the students. You can still do it, it’s just harder… A lot of times when you’re with them versus online, you can pick up on the nonverbal that they give you and so when you are online you can’t, everything is, you can’t even get the tone of their voice… it’s [online environment] so
unpersonable…sometimes online learning environment can be a cold environment, you know?” (P2)

Shared Practices and Meaning: Communication Challenges and the Online Learning Environment

Further dialogue and explication of the meaning revealed the online learning environment to be a challenging context for the experienced nurse educator to identify and facilitate intellectual curiosity due to communication being an abstract continuum of interchange. But despite the challenges of communication in the context of the online learning environment, the participants’ dialogue about this barrier reflected both implicit and explicit means to overcome it. Participant 1 was the first to describe the need to overcome the environment and indicated “excitement and enthusiasm” to be an important aspect of student intellectual curiosity as well as a way to model faculty intellectual curiosity and emphasized that the enthusiasm of the instructor needs to come loud and clear.

“…a lot of nonverbal communicates that [enthusiasm] and that’s hard to do online… online, you have to find sort of proxies for that… an affective side that sort of functions as a surrogate for that body language in class… there’s a lot of ways to show an affective side in a text world… I just think the online constrains you about how you’re going to communicate that [enthusiasm]” (P1)

Participant 3 indicated the students in the online learning environment “that are real inquisitive” use their “voice” differently compared to traditional learning environments and she has to use writing as her voice:
… “they’ll write me a note in the dropbox”… and I write “lots of notes on their assignment… it’s very time-consuming for me but it’s worth it because the end product [assignment] ends up being much more expanded and developed into many different angles”… “a lot of it’s [communication] by email.” (P3)

Other participants expanded on the need for feedback but also use of resources for additional communication with the student:

Participant 4 shared “I give students a lot of feedback, especially in my online programs”… “I think providing them with some literature that is currently related topic, trying to help them immerse themselves in the literature rather than depending on a textbook, but actually going out and see what’s out there”… “asking them questions that help them think things through” (P4)

While the other participants described the abstract continuum of communication in the online learning environment, Participant 5 was the first to provide the term “abstract.”

“Online learning is going to be more abstract, personally. And you’re going to have to be able to fill in some gaps yourself because you don’t have that personal interaction. So you’re going to have to, to me, take it a little bit further, make the more effort in a way… and then it depends on the person teaching the course and how much interaction and communication they have… it’s harder in the online. There are students I feel like I’m not connected with…” (P5)

Participant 6 shared how she identified intellectual curiosity but through an intuitive process of analysis of written communication and peer dialogue on discussion boards or group assignments:
“Well it’s [intellectual curiosity] a little harder online but generally I can tell from their assignments how they solve problems and…just how they write, how they respond to their peers, what questions they ask of their peers, you know.” (P6)

Participant 8 discussed the needed frequency of communication but also communication which allowed for openings of continued communication and exchange between educator and student.

“But there’s a good bit of email correspondence that goes back and forth…we try to get back to folks within a day…and we dialogue with them well tell me where your question is coming from, where do you think you might find the answer, rather than just answering them”

Participant 8 also was critical of herself for not utilizing sufficient and more diverse communication tools. This practice occurred with many of the participants as they would enter into a period of brief self-reflection as they would respond to questions and dialogue with the researcher. In essence, the dialogue prompted intellectual curiosity on how each could improve their practices to further help their students.

“…one thing we need to do more is have more discussion boards. We’re not real sure how I don’t know if some people do it every week with an online class…I think we could do a better job of encouraging curiosity if we’re talking to them more often…I guess we could do scenarios online. We probably don’t do as much video as we could with our students.” (P8)
Ontological Considerations and Shared Practices and Meanings

The findings of the study have clear association with the ontological assertions of van Manen (1990, 1997) and Heidegger (1962). While ontological considerations were related back to patterns and themes in Chapter 4, there are two larger ontological associations to be discussed relative to the shared practices and meanings identified as developing relationships and the online learning environment and communication challenges and the online learning environment. As mentioned in Chapter 3, both van Manen and Heidegger identify spatiality as something existential, meaning our being is always in relation to time and space. Because the space or context of this study for participants is the online learning environment, the researcher is left to consider if the participants’ emphasis on the need for developing relationships and the communication challenges which emerged from the participant stories is due to an absence of the existential of “lived body (corporeality)” described by van Manen (1990, p.103) when then impacts the “situatedness” of our being as described by Heidegger (1962). Perhaps, because the online learning environment removes the physical presence, the spatiality of our existence, and “situatedness,” between nurse educator and student becomes even more important in the online learning environment with our “thrownness” (Heidegger, 1962, p.192) forcing the nurse educator and student away versus being drawn closer. Possibly, one makes greater attempts to emphasize our existential of relationality when corporeality is absent (van Manen, 1990). As mentioned in Chapter 3, Heideggerian belief is that one is socialized or has common meanings and shared practices, situated historically, and those common means and shared praxis will remain present in one’s presuppositions. As a result, we are ‘we’, before ‘I’, as we exist as a community. So many participants shared the importance of finding ways to first reveal themselves to students, or
the ‘I’ in the online learning environment. Under the belief of Heidegger, the researcher is left to consider if, perhaps, community does not exist in the online learning environment and so shared praxis cannot readily emerge.

**Evaluation of Rigor**

In evaluation of the rigor of the study, the researcher affirms the five expressions of de Witt and Ploeg’s (2006) rigor. The findings reflect a balanced integration of essences between the participants, the researcher, and the philosophical tenets previously outlined. The study allowed for scrutiny of consistent orientation to the question and phenomenon. This was accomplished through the expression of openness as evidenced by the addition of data analysis team members and allowance of the two external reviewers as well as all the study participants being asked to review the study findings. In addition, the data analysis team members, the external reviewers, as well as the research participants affirmed both resonance and actualization of the findings. The external reviewers’ feedback is found in Appendix E. Numerous examples and narrative text excerpts were provided to continually situate the reader to the context of the study and provide concreteness.

**Nursing Education Implications**

The findings of this study provide several implications for nursing education. First, nursing practice requires being able to relate to other people, in particular, patients. Nursing education programs design curricula and course experiences which help support being able to relate to others, whether that is with faculty, peers, other healthcare professionals, and especially patients. The findings suggest the context of the online learning environment requires additional
efforts to be made to overcome the lack of direct interaction, and therefore, the difficulty in connecting with students, the environment, and content. Creativity in how faculty will foster those relationships is necessary and instructional design practices or strategies should be developed to optimize these necessary relationships. While there has been several studies on social presence and community (Burress et al., 2009; Cobb, 2008; Mayne & Wu, 2007; Wells & Dellinger, 2011) in the online learning environment, affirmation that one is present or community exists does not guarantee a relationship. If there is not engagement or efforts made to move from being in and belonging to the online learning environment, to an online learning environment where relationships develop through connections to each other and the content, then have faculty truly influenced the student’s nursing practice in an everlasting and sustainable manner?

Second, the concept of intellectual curiosity continues to be very difficult to articulate and define. It becomes even more difficult when the context of the learning environment changes. Participants affirmed it to be an important attribute for provision of safe patient care and lifelong learning. Participants also recognized student intellectual curiosity through written responses and assignments situated within the online learning environment. However, how to best model and engage intellectual curiosity within the online learning environment proved to be a challenge for the participants.

The findings of this study support Russell’s (2013) conceptual model of intellectual curiosity as it relates to nursing education. Specifically, the themes of reflexivity and commitment relate to the pre-conditions and attributes of Russell’s conceptual model where motivation and engagement of the student and educator become essential to perpetuating
intellectual curiosity. Also, given the participants’ praxis concerns with developing relationships and the challenges with communication in the online learning environment, those findings are also consistent with the importance of situational context of learning and the nurse educator’s ability to model curiosity and skills of inquiry identified by Russell (2013).

Finally, in addition to the implications for nursing education, the findings lend themselves for application to any discipline that utilizes the online learning environment for teaching and learning. In particular, disciplines in which clinical experiences, clinical practica, or lab work is necessary and online learning is being incorporated more into course delivery should consider the findings relative to the relational aspects and communication needs of their respective disciplines.

**Limitations**

Limitations of the study include the researcher’s novice experience in use of both the socratic method of interviewing (Ironside, 2005) and in implementation of the method of data analysis utilized for the study (Diekelmann et al., 1989). The need for technology (audio-video conferencing) to complete a portion of the interviews, versus having them all completed in person, may have impacted the findings. In addition, any research related to intellectual curiosity, faculty experience, and the online teaching-learning environment published past September 2015, and that may have met inclusion criteria for the literature review, was not included in this study.
Conclusion and Recommendations

This study extends the discipline of nursing education with its emphasis on the faculty experience within the context of the online learning environment. The findings reveal the experienced nurse educator’s meaning of student intellectual curiosity in the online learning environment. Aside from the faculty experience related to transition of courses to the online learning environment, little has been known about the experience of online teaching and learning relative to student cognitive attributes or outcomes. This study is significant in that it has allowed for nurse educator self-reflection in how teaching and learning translates from the classroom and clinical setting into the online learning environment. The findings have unconcealed the need to foster a culture of curiosity in the online learning environment. Through a shared need for educators to find ways to develop effective communication and relationships with students in the online learning environment, we can acknowledge there is still work to be done to optimize and best utilize the online learning environment in nursing education.

As online education expands, there will continue to be the need for further explication of what it means to be an experienced nurse educator who teaches in the online learning environment. Future research could include consideration of the findings in comparison to educators at higher education institutions with a different Carnegie classification other than Master’s Colleges and Universities, larger programs. Specifically, purposive sampling of faculty who have taught in courses which utilized frameworks and best practices in online teaching (Billings, 2000; Billings, Connor, & Skiba, 2001; Quality Matters, 2016) may reveal new meaning and practices to further extend this current study and be able to speak better to the experience of the educator in the context of the online learning environment relative to student
cognitive outcomes. The use of course and program level definitions proposed by the Online Learning Consortium (OLC) (2014) would assist with common language of the online learning environment for future research with nurse educators and might also allow for improved purposive sampling of educators who could speak better to the context of interest. While the consideration of the frameworks, best practices, and OLC definitions is suggested for future research, those factors were not a part of this study and therefore can also be considered additional limitations of the study.

Chapter 5 Summary

This chapter concludes the study. It includes discussion of findings related to fostering a culture of curiosity through effective communication in the online learning environment. The chapter relates how the experience for nurse educators revealed difficulty in articulating shared practices. In addition, the ontological considerations, implications for nursing education, including, other disciplines who utilize online teaching and learning, has been provided. Finally, limitations of the study are identified along with concluding statements and recommendations for future research.
REFERENCES


doi:10.3928/01484834-20130924-02

APPENDICES

Appendix A

Documentation of ETSU IRB Approval

IRB APPROVAL – Initial Expedited Review

October 2, 2015

Bedelia Russell

Re: The Meaning of Intellectual Curiosity for Experienced Nurse Educators Who Teach in an Online Learning Environment IRB# 0915.16s ORSPA #:

The following items were reviewed and approved by an expedited process:


The item(s) with an asterisk(*) above noted changes requested by the expedited reviewers.

On October 1, 2015, a final approval was granted for a period not to exceed 12 months and will expire on September 30, 2016. The expedited approval of the study and requested changes will be reported to the convened board on the next agenda.

The following enclosed stamped, approved Informed Consent Documents have been stamped with the approval and expiration date and these documents must be copied and provided to each participant prior to participant enrollment:

• Informed Consent Document (ICD 9/29/2015 stamped 10/1/2015)
Federal regulations require that the original copy of the participant’s consent be maintained in the principal investigator’s files and that a copy is given to the subject at the time of consent.

**Projects involving Mountain States Health Alliance must also be approved by MSHA following IRB approval prior to initiating the study.**

Unanticipated Problems Involving Risks to Subjects or Others must be reported to the IRB (and VA R&D if applicable) within 10 working days.

Proposed changes in approved research cannot be initiated without IRB review and approval. The only exception to this rule is that a change can be made prior to IRB approval when necessary to eliminate apparent immediate hazards to the research subjects [21 CFR 56.108 (a)(4)]. In such a case, the IRB must be promptly informed of the change following its implementation (within 10 working days) on Form 109 (www.etsu.edu/irb). The IRB will review the change to determine that it is consistent with ensuring the subject’s continued welfare.

Sincerely,
George Youngberg, M.D., Chair

ETSU/VA Medical IRB

cc: Sally Blowers, Ph.D., RN
Appendix B

Email Participant Recruitment Letter

Dear ____________________,

I am a doctoral student at East Tennessee State University (ETSU). As you know, skills of inquiry are an essential outcome from a baccalaureate nursing education. Students who demonstrate intellectual curiosity can develop effective skills of inquiry to utilize for future practice as a Registered Nurse. Nurse educators must place emphasis on teaching and learning strategies which engage student intellectual curiosity but the concept of intellectual curiosity is not well-studied across multiple contexts of teaching and learning environments within nursing education. In addition, there is little known about the nurse educator’s perspective and meaning of intellectual curiosity across multiple teaching and learning environment contexts. With the increase of online teaching and learning in nursing education as a solution for increased access and capacity, the concept of intellectual curiosity within the context of online learning needs further exploration as well.

My dissertation study is entitled “The Meaning of Intellectual Curiosity for Experienced Nurse Educators Who Teach in an Online Learning Environment” and will seek to understand the experienced nurse educator’s meaning of intellectual curiosity within the context of the online learning environment. The research study has been approved by ETSU IRB and I am now in the process of participant recruitment. Participants should be experienced nurse educators who have been involved in online teaching at the baccalaureate or masters nursing level. Participation is completely voluntary. Please consider distribution of this email to your faculty or to other colleagues who may interested in participation. I can be directly contacted at russellb@goldmail.etsu.edu, bhrussell@tntech.edu, or (931) 265-3066.

Kindest Regards,

Bedelia H. Russell, PhD(c), RN, MSN, CPNP-PC, CNE
Appendix C

Informed Consent Document

EAST TENNESSEE STATE UNIVERSITY
INSTITUTIONAL REVIEW BOARD
INFORMED CONSENT DOCUMENT (ICD)

This Informed Consent will explain about being a participant in a research study. It is important that you read this material carefully and then decide if you wish to be a volunteer.

PURPOSE:

The purpose of this research study is to understand the meaning of intellectual curiosity to the experienced nurse educator within the context of the online learning environment.

DURATION

Participants will be expected to provide no more than an hour of their time to allow for a face-to-face interview with the principal investigator. A follow up teleconference or face-to-face meeting may be required prior to completion of the study. The follow up meeting will be no longer than 30 minutes.

PROCEDURES

The procedures, which will involve you as a research participate, include a face-to-face, semi-structured interview with the principal investigator. Once you have agreed to participate, an informed consent document will be emailed at least 3 business days in advance of the scheduled interview time. A signed informed consent will need to be returned to the principal investigator (Bedelia Russell) the day of the interview. The interview will be audio recorded with at least digital recorders to ensure accurate capture of data. The recordings will then be transcribed by the principal investigator and redacted interview transcripts shared with members of the data analysis team. A copy of the informed consent will be provided to the participant.

ALTERNATIVE PROCEDURES

There are no alternative procedures to what has already been described.

POSSIBLE RISKS/DISCOMFORTS

There are not possible risks or discomforts to participate in this study.
POSSIBLE BENEFITS

The possible benefits of your participation may be an opportunity to 1) disclose shared
Al) p R Offttes among experienced nurse educators; 2) provide a reflective practice
epxience; and 3) expand the science around online learning environments and
intelectual curiosity.

FINANCIAL COSTS

There are no financial costs to the participant.

COMPENSATION IN THE FORM OF PAYMENTS TO RESEARCH PARTICIPANTS

For your participation in the study, a Starbucks gift card in the amount of $20 will be

distributed. The gift card will be provided as a thank you for your generosity of time
and knowledge of the phenomenon of Interest. The gift card will be delivered within a
week following the completed interview.

VOLUNTARY PARTICIPATION

Participation in this research experiment is voluntary. You may refuse to participate
and you can quit at any time without loss of benefits to which you are otherwise
entitled. If you quit or refuse to participate, you may quit by calling Bedelia Russell,
whose phone number is (931) 265-3066.

CONTACT FOR QUESTIONS

If you have any questions, problems or research-related problems at any time, you may
call Dr. Sally Blowers, at (423) 797-0854. You may call the Chairman of the
Institutional Review Board at (423) 439-6054 for any questions you may have about
your rights as a research subject. If you have any questions or concerns about the
research and want to talk to someone independent of the research team or you can't
reach the study staff, you may call an IRB Coordinator at (423) 439-6055 or (423) 439-
6002.
CONFIDENTIAL

Every attempt will be made to see that your study results are kept confidential. A pseudo name will be assigned to protect your confidentiality. A copy of the records from this study will be stored as digital audio recordings and written transcripts of the recordings on a password-protected computer. Interviews will be transcribed verbatim. Any digital tape recorder will stay locked in a file cabinet. The records will be kept for at least 5 years after the end of this research. Only the principal investigator, two research assistants who will assist with data analysis, and ETSU IRB will have access to the records. The results of this study may be published and/or presented at meetings without naming you as a subject.

By signing below, you confirm that you have read or had this document read to you. You will be given a signed copy of this informed consent document. You have been given the chance to ask questions and to discuss your participation with the investigator. You freely and voluntarily choose to be in this research project.

SIGNATURE OF PARTICIPANT

DATE

PRINTED NAME OF PARTICIPANT

DATE

SIGNATURE OF INVESTIGATOR

DATE

SIGNATURE OF WITNESS (if applicable)

DATE
Appendix D

Figure 2. Visual representation of data analysis team members’ interpretation of findings (image generated by Dr. Martha Howard)
Appendix E

External Reviewer Feedback on Findings

Reviewer 1 Comments:

The main purpose for this review was to determine if the Russell Dissertation draft answered the actual purposed question of what do experienced Nurse Educators believe that the term student intellectual curiosity means while teaching in an online environment.

Upon review of draft chapters four and five, it is this writers’ assurance that the participants responses are congruent with the replies that would have been given by this reviewer. The response given by P5 on page 2 of chapter four, would have been extremely close to my response.

The theme “Commitment” resonated due to experiencing first-hand the time commitment involved by both the student and Instructor by encouraging the student to continuing the learning process. Without the time commitment the learning environment would be fractured with a simple yes or no answer to their intellectual curiosity, instead by allowing questions or giving direction towards furthering knowledge it brings about dialog. This dialog leads to learning, but requires both student and instructor to commit time.

The fostering of Intellectual curiosity in the online environment identifies three major themes: Faculty Disposition, Student Intellectual Curiosity, and Instructional Strategies/Practices. The three major contributors identified and discussed are fundamentally comprehensive.

Additional comments, several participates discuss their lack of “seeing body language” or non-verbal communication. Could their responses reflect more of an issue with their personal communication or writing style, in that it may not reflect a clear concise viewpoint? Or does it reflect a communication perspective issue from the receiver/student? Could it reflect a language or cultural issue, meaning that the effective use of the written word has been slowly replaced by the emoji and non-standard abbreviations used in text messaging, such as LOL (laugh out loud)? If the target audience learning skills requires the use of such items, should the Instructor become versed in such a new language or skill set? The instructional strategies/practice may incorporate this new communication model, but will it alienate the intellectually advanced student by lowering the communication threshold?

One question that I was interesting to see if it was address by the participants was that the online line learning requires self-motivation by the student, but is it hindered by the generational age gap between student and instructor? I did not see any response by the participants that addressed any communication dynamics that may have hampered the fostering of the culture of curiosity by either the gender or age difference between Instructor and student.
Reviewer 2 Comments:

I have completed my review of your findings. It was actually a fun exercise to really take time to think about what I thought about IC in the on learning context. I was also encouraged that many of the words and short phrases I listed were also present in your interviews.

Based on my understanding of what you asked me to do here are my comments:

The content related to connectedness is certainly pertinent and rang very true to me. When I consider IC in the on-line environment being able to connect and engage students is challenging and I think requires a deliberateness on the part of the faculty, but also the students. Engagement with students occurring out of a faculty knowledge, passion, and creativity is also a familiar thought with me. It makes sense to me that to encourage and promote IC we must demonstrate and model the same. To do that it certainly helps to be expert or very comfortable with the content.

The relational reciprocity: Connection to meaningful use of Content stuck a chord with me as well. We always talk about the importance of teaching “in context”. In the classroom this is critical to help students learn and be able to apply the content. They must have something to connect the vast of info we provide to a practical situation. In the on-line environment this would be critical and challenging; helping students relate to the material in a practical manner would promote IC.

I will say the idea of “knowing self” and “self-awareness” was not something I considered when answering the research questions. This was such an interesting aspect of this study to me. It seems the participants are going many directions here. I see faculty reflection in evaluating their teaching ability when students struggle, I see faculty evaluation of student knowledge and adjusting content to “close their gaps in knowledge”, and the idea of “false knowledge”. These ideas are so important and I would have struggled with how to capture and categorize. I think reflexivity is a good way to pull these together. I guess what I am trying to say is that this one keeps nagging at me and makes me want to pull something else from the content.

One of the words or phrases I considered when answering the question was “effort” and “energy”. This was clearly identified in your theme of Commitment. While I was thinking more along the lines of the student effort and energy it makes sense that many times that is ignited by the effort and energy of the faculty.

Inquiry, I believe, was right on target and resonated with me as faculty in an on-line environment as is the challenging boundaries. This is a great way to capture the narratives in this area. The importance of creativity in IC also rang true for me. It was interesting to read the excerpts on how to initiate this in the on-line environment.
Quality Improvement is right on target as well. When I was considering IC and on-line learning environment I wanted to connect the “effort” with the “contextual content” and “demonstrated learning”. I believe that is what was captured in this content.

I must say the compassionate intentionality was interesting to me and not something I was expecting. The comments seem to be about building relationship, setting a tone, and setting the stage as a safe environment which can certainly be defined as “compassionate intentionality”.

VITA

BEDELIA HICKS RUSSELL

Education:
PHD, East Tennessee State University, Johnson City, TN, 2016
MSN, Vanderbilt University, Nashville, TN 2001
BSN, Tennessee Technological University, Cookeville, TN, 38505

Professional Experience:
Tennessee Technological University
Whitson-Hester School of Nursing
Assistant Professor – 2001 to present
Interim Dean – 2013 to 2015
College of Graduate Studies
Interim Associate Dean – 2016 to present

Licensure/Certifications:
RN Licensure, State of Tennessee
CNE, Certified Nurse Educator
CPNP-PC, Certified Pediatric Nurse Practitioner
APRN, Advanced Practice Registered Nurse

Publications:


Honors and Awards: Anne Floyd Koci Faculty Award for Excellence in Teaching, 2011
Whitson-Hester School of Nursing at Tennessee Tech University