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Factors that Influence Classroom Participation of Junior- and Senior-level Nursing Students

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FACTORS THAT INFLUENCE CLASSROOM PARTICIPATION OF JUNIOR- AND SENIOR-LEVEL NURSING STUDENTS

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FACTORS THAT INFLUENCE CLASSROOM PARTICIPATION OF JUNIOR-AND SENIOR-LEVEL NURSING STUDENTS

By Mary Tedesco-Schneck

Dissertation Advisor: Dr. Susan K. Gardner

An Abstract of the Dissertation Presented
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The healthcare system is dynamic and complex and requires innovative problem-solving to address inherent challenges and incorporate new knowledge and technology that may impact care. Nurses, as healthcare providers, need to be creative problem-solvers; hence nursing faculty must provide students with a foundation for problem-solving skills during their formative academic years. These skills may be enhanced through pedagogies that foster active learning supported by classroom participation. Feminist pedagogy reforms the faculty/student relationship and empowers students to be active participants in learning.

The purpose of this study situated in feminist pedagogy was to determine factors that influence classroom participation of junior-and senior-level nursing students enrolled in pre-licensure baccalaureate of science programs in the New England region. A quantitative, non-experimental, comparative, survey research design utilizing the College and University Classroom Environment Inventory (CUCEI) and Assessment of Classroom Participation Scale (ACPS) were distributed on-line to junior-and senior-level nursing students enrolled in pre-licensure nursing programs accredited by the Commission on Collegiate Nursing Education and the New England Association of Schools and Colleges in the New England region from September 29, 2014 to November 10, 2014. Two hundred and seventy-four nursing students participated.

Descriptive analysis was executed to analyze demographic data and responses to the CUCEI survey. Independent t-tests were utilized to determine a statistically significant difference between demographic groups and responses to the CUCEI survey. Pearson correlation was used to determine a relationship between scores on the ACPS and CUCEI. No statistically significant ($p < .001$) relationship between factors that influence classroom participation as measured by the CUCEI and reported classroom participation as measured by the ACPS for this sample of students was found. However, there were significant differences between subscales on the CUCEI. Classroom participation was reported to increase when faculty were personal and equitable with students. Classrooms that support cooperation and cohesion amongst students were reported to increase participation. Innovation teaching strategies and individualization allowing shared governance in the classroom were reported to decrease classroom participation. These results may provide insight for nursing faculty to incorporate behaviors in the classroom that engage students in learning and have implications for policy and future research.

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TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

LIST OF ABBREVIATIONS

AACN: American Association of Colleges of Nursing

ACPS: Assessment of Classroom Participation Scale

ANA: American Nurses Association

CCNE: Commission of Collegiate Nursing Education

CUCEI: College and University Classroom Environment Inventory

IOM: Institute of Medicine

NCLEX: National Council Licensure Examination

NEASC: New England Association of Schools and Colleges

NLN: National League of Nursing

QSEN: Quality and Safety of Education for Nursing

CHAPTER 1

INTRODUCTION

The healthcare system is dynamic and complex and requires innovative problem-solving to address inherent challenges and incorporate new knowledge and technology that may impact care (Benner, Stuphen, Leonard, & Day, 2010, Institute of Medicine, 2003). Nurses are an integral part of the healthcare team and must analyze and synthesize information to recognize these challenges and create environments that advance high quality care (Benner, Stuphen, Leonard, & Day, 2010). Given that nurses need to be creative problem-solvers, nursing faculty must provide students with a foundation for problem-solving skills during their formative academic years (Lau, 2014). This may be achieved through pedagogies that foster active learning (Bonwell & Eison, 1991, Meyers & Jones, 1993).

Active learning can be summarized as classroom activities that cultivate "participatory spaces for the sharing of knowledge" (hooks, 1994, p. 15) thus creating a community of learning. There are approaches informed by feminist pedagogy that view learning as a collaborative endeavor, supporting incorporation of various teaching strategies to engage students in learning (Maher & Tetreault, 1994, 2001; Crabtree, Sapp, & Lacona, 2009). Classroom participation is an essential ingredient for active learning (Ironside, 2005) yet it has been found that many nursing students do not participate in class (Pokess & McDaniel, 2011). The intention of this study was to determine factors in the classroom environment that foster participation of junior-and senior-level nursing students and analyze these results through the lens of the four critical themes of feminist pedagogy: voice, mastery, positionality, and authority, as proposed by Maher and Tetreault (1994, 2001). The framework was further adapted to reflect a cohesive theme of "community of learning" that includes students and faculty and is based on Maher and Tetreault's (1994, 2001) tenets of the feminist classroom. The community of learning is central

to the interrelationship of the four critical themes (Beck, 1995; Campbell, 2002; Crabtree, Sapp, & Licona, 2009; Crawley, Lewis, & Mayberry, 2008; Duncan & Stasio, 2001; Hahna & Schwantes, 2011; Hoffmann & Stake, 2001; Hughes, 1995; Ironside, 2001; Maher & Tetreault, 1994, 2001, Shrewsbury, 1987; Webb, Allen, & Walker, 2002; Webb, Walker, & Bollis, 2004; Webber, 2006).

Significance of the Study

One method faculty can use to facilitate development of problem-solving skills is active learning. Active learning has been found to engage students in the learning process. It also fosters problem-solving and innovation (Meyers & Jones, 1993; Wingfield & Black, 2005). Teachers using active learning acknowledge students as actual participants in the teaching/learning process and not simply as passive receptacles to be filled with information (Freire, 2010; Michel, Carter, & Varela, 2009). Students have been found to actively engage in learning through varied means - i.e., involvement in study groups, completion of homework and reading assignments, and participation in the classroom (Allen, 1995; Daggett, 1997). This study explored factors that influence classroom participation as one strategy to encourage active learning in junior-and senior-level nursing students.

Clinical practice is the heartbeat of the nursing profession. The classroom is the setting where students come to understand key concepts related to clinical practice (Hoke & Robbins, 2005). Hence, active learning through classroom participation can facilitate problem-solving and innovation required to apply nursing concepts in the clinical setting. Yet, a secondary analysis of data from the 2003 National Survey of Student Engagement (NSSE) revealed that students majoring in nursing, as compared to other majors, were less likely to participate in class (Popkess & McDaniel, 2011). A more thorough understanding of factors that influence classroom participation has the potential to assist faculty in developing and implementing strategies to actively engage nursing students in the classroom.

One way to create and support communities of active learning is to employ empowering pedagogies – those that shift power to students by encouraging classroom participation (Rappaport, 1984; Rubin, 2009). In an exploration of the concept of empowerment, Kieffler (1984) described empowerment as a cumulative developmental process that occurs in stages and culminates with personal transformation of the individual. Kieffler (1984) likened this transformation to a shift in an individual's self-perception and behavior – from the position of object to that of subject, as described by Paulo Freire (2010). As an object, a person is passive, powerless, and non-participatory, while as a subject, a person is active, empowered, and participatory (Freire, 2010; Kieffler, 1984). The dynamic process of empowerment requires individuals to be subjects; they must be critically aware of and engaged in their environment in order to gain mastery and achieve self-determination (Freire, 2010; Gibson, 1991; Skeleton, 1994). In the context of education, empowerment redefines the traditional faculty/student relationship. Faculty share the responsibility for learning with students who may then gain mastery over their own learning as subjects actively engaged in the teaching/learning process. This shared responsibility creates a community of learning (Falk-Rafael, Chinn, Anderson, Laschinger, & Rubotzky, 2004; Kreisberg, 1992).

Hawks (1992) conducted a concept analysis of empowerment in nursing education. The analysis explicated pedagogies nurse educators can use to foster student empowerment to support a community of learning. According to Hawks (1992), student engagement through active learning can be critical in the acquisition of empowerment, which is achieved by creating a climate that invites dialogue and reflection. Moreover, active learning techniques can be applied within a variety of pedagogical frameworks. For example, feminist, critical, and phenomenological pedagogies can each incorporate active learning techniques (Billings &

Halstead, 2009). These techniques may include case studies, focused homework assignments, simulation, storytelling, games, and role-playing (Billings & Halstead, 2009).

In contrast, some teaching practices may be perceived as disempowering and limiting classroom participation. These have been found to be influenced by actions of both the professors and students. For instance, professors who allowed small group discussion to go off-topic have been described as disempowering teachers because the students had no control over learning and consequently limited students' classroom participation (Hawkes, 1992; Tedesco-Schneck, 2012). Students have also described feelings of disempowerment whereby they withheld classroom participation in classes with perceived incivility on the part of students and faculty and/or a strong culture of competition. Uncivil behaviors on the part of students and faculty have been characterized as rude or demeaning comments or as exhibitions of negative non-verbal behaviors (e.g., eye rolling; Boice, 1996; Clark, 2008; Tedesco-Schneck, 2012). A culture of competition shifts the focus from learning to winning (Lam, Law, & Cheung, 2004; Vallerand, Gauvin, & Halliwell, 1986). In a community of learning, people learn together, not at the expense of others. In a competitive learning environment

> students may either work hard to do better than their classmates or … procrastinate under the assumption that they cannot win. Consequently, students in competitive environments may work against each other to attain goals that are perceived as attainable only by one or few learners. Under such conditions of unhealthy competition, learners may work to obstruct the success of others and celebrate the failure of their classmates as an opportunity for their own success (Ghaith, 2003, p. 84).

In contrast, teaching strategies that focus on collaboration and cooperation may promote positive classroom climates that invite active participation (Ghaith, 2003; Kohn, 1992; Self, 2009). Students in classes with a collaborative and cooperative focus have been found to have a

sense of interdependence (Bonwell & Eison, 1991; Ghaith, 2003). These students reported they share common learning goals with their classmates and sharing of learning goals has been linked to higher academic achievement (Ghaith, 2003).

The educational literature describes a range of pedagogies that encourage collaboration and cooperation through active student participation (Bonwell & Eison, 1991; Crookes, Crookes, & Walsh, 2013, hooks, 1994). However, many of these pedagogies are restricted to a single, specific technique – for example, narrative pedagogy, which emphasizes dialogue and debate as the means to foster a collaborative learning environment (Billings & Halstead, 2009; Ironside, 2005; Webber, 2006). Phenomenological pedagogy seeks to analyze content with the intent of understanding the human experience (Billings & Halsted, 2009). Alternatively, feminist pedagogical approaches with global focus on collaboration and cooperation have the potential to embrace many different techniques to facilitate active learning (Webb, Allen, & Walker, 2002; Webb, Walker, & Bollis, 2004).

Conceptual Framework

Maher and Tetreault's (1994, 2001) critical themes of voice, mastery, positionality and authority associated with feminist pedagogy serve as the conceptual frame work for this study. Feminist pedagogy is not a singular prescriptive teaching method but instead embraces an approach to teaching grounded in feminist theory and expressed in a variety of models (Maher & Tetreault, 1994, 2001; Shrewsberry, 1987). Although there are a range of feminist-based theories (Allan, 2011), an early focus of feminism was to challenge dominant patriarchal epistemologies that excluded the positionality of women and other marginalized groups (Belenky, Clinchy, Goldberger, & Tarule, 1986; Lather, 1991b; Maher & Tetreault, 1994, 2001). Pedagogy (teaching methods) can be informed by epistemology (ways of knowing; Crabtree, Sapp, & Licona, 2009; Maher & Tetreault, 1994, 2001). Feminist pedagogies are based on

feminist epistemologies which views learning as a collaborative endeavor, thus reforming the faculty/student relationship and empowering students to be active participants in the learning process (Maher & Tetreault, 1994, 2001; Shrewsberry, 1987; Wang, Chao, & Liao, 2011). Faculty behaviors that encourage students to be active participants may be situated in the four critical themes of voice, mastery, positionality, and authority proposed by Maher and Tetreault (1994, 2001) to create an atmosphere that supports a community of learning. Within this community, students and faculty can construct, deconstruct, and/or reconstruct knowledge related to course material (Crabtree, Sapp, & Licona, 2009; Maher & Tetreault, 1994, 2001; Weyenberg, 1998).

The critical theme of voice is complex and traverses beyond mere verbal participation in class discussion. Through the spoken word students begin an incremental process of fashioning their voice making connections between their words and their emerging beliefs and values. This allows exploration of "more complex connections to the material [facilitating the critical theme of] mastery as an interactive construction of meaning with other informants" (Maher & Tetreault, 1994, p.18). Faculty who respect positionality may liberate student voices in interpretation of course material. Positionality is not static as it is embedded in the fluidity of time, place, and identity (Hoffmann & Stake, 2001; Maher & Tetreault, 1994, 2001). Faculty who respect positionality allow multiple views to be heard which again may facilitate "more complex connections to the material" (Maher & Tetreault, 1994, p.18). Honoring multiple interpretations of course material de-centers authority so that there is shared responsibility for learning (Campbell, 2002; Maher & Tetreault, 1994, 2001, Webber, 2006). Decentering authority may allow student input on how class time is spent and choice of assignments that enhance understanding and learning. These critical themes of feminist pedagogy lend themselves to

active teaching strategies that invite classroom participation in the university setting (Crabtree, Sapp, & Licona, 2009; Maher & Tetreault, 1994).

Active teaching strategies engendered in a classroom milieu of feminist pedagogy that emphasize collaboration over competition demonstrate potential to encourage classroom participation (Beck, 1995; Duncan & Stasio, 2001; Johnson, 2003; Magdola, 2002; Maher & Tetreault, 1994, 2001; Persaud & Salter, 2004) however, there is a dearth of studies that focus on faculty behaviors framed in tenets of feminist pedagogy that may support classroom participation. Furthermore, specifically in nursing education, there are no known studies on level of classroom participation – certainly none rooted in a feminist pedagogy and factors that may influence classroom participation of nursing students. Framing this study with Maher and Tetreault's (1994, 2001) feminist approach that included the critical themes of voice, mastery, positionality, and authority provided an opportunity to demonstrate the theoretical fit and contribute to developing improved nursing education strategies. For purposes of fully capturing the interrelationships of those critical themes and the essence of active learning, the prevailing feminist motif of community was inserted in the framework as the centralizing theme.

Research Questions

The purpose of this study, situated in a modified interpretation of Maher and Tetreault's (1994, 2001) feminist pedagogy was to determine factors that influence classroom participation of junior-and senior-level nursing students enrolled in a pre-licensure baccalaureate of science (BSN) programs in the New England region. The intention was to address the following research questions:

1. What do junior- and senior-level nursing students in pre-licensure, accredited, baccalaureate nursing programs perceive as the factors in the classroom-learning environment that influence participation?

2. What is the relationship between these factors and reported classroom participation?
3. What is the relationship between these factors and the students' demographic variables?

Organization of the Study

To answer the research questions, I conducted a quantitative, non-experimental, comparative, survey research design. The College and University Classroom Environment Inventory (CUCEI) and Assessment of Classroom Participation Scale (ACPS) were distributed online to junior-and senior-level nursing students enrolled in pre-licensure nursing programs accredited by the Commission on Collegiate Nursing Education (CCNE) and the New England Association of Schools and Colleges (NEASC) in the New England region. The CUCEI measures factors in the classroom environment that influence classroom participation. The ACPS provides students' self report of their level of classroom participation. Demographic data including program level, age, gender, race and/or ethnicity, and primary language were also collected from research participants to determine if significant differences existed between these groups.

A total of 274 students from CCNE and NEASC accredited pre-licensure baccalaureate programs in the New England region responded to the online survey. Descriptive analysis was executed to analyze demographic data and responses to the College and University Classroom Environment Inventory survey. Independent t-tests were utilized to determine if there was a statistically significant difference between groups derived from the demographic data (e.g., male versus female) and responses to the CUCEI survey. Pearson correlation was used to determine a relationship between ACPS and score on the CUCEI. Further, subcategories of the CUCEI were matched to the four critical themes of feminist pedagogy (voice, mastery, positionality and authority) based on the work of Maher and Tetreault (1994, 2001) and a

central theme of community of learning was introduced for the purpose of interpreting the data.

This study helped to further explain factors that influence classroom participation of junior-and senior-level nursing students. Additionally, this study helped to clarify existence of a relationship between factors that influence classroom participation and reported classroom participation that includes preparation for class, contribution to discussion, group skills, communication skills, and attendance and punctuality. Nursing faculty can use this information to create classroom environments that foster classroom participation as a means to assist students to gain problem-solving skills for the complex health care environment they will enter.

Summary

This chapter demonstrated the significance of this study and the contribution of a feminist pedagogical approach in advancing classroom participation. In Chapter Two, I begin with a broad overview of the relationship between pedagogies and learning. I continue with a more specific analysis of the feminist pedagogy espoused by Maher & Tetreault, (1994, 2001) and active learning. For explanatory context I include a brief review of history of nursing education, associated pedagogies and factors that influence classroom participation.

CHAPTER 2

LITERATURE REVIEW

Nurses have a unique status in healthcare in three particular ways. They comprise the largest segment of the healthcare provider population, work in a myriad of settings, and spend the most face-to-face time with patients and their significant others (United States Department of Health & Human Services, 2010; Westbrook, Duffield, Li, & Creswick, 2011). Nurses must work collaboratively, both to advance professional development and to maintain high standards of care to contribute to positive population health outcomes (Benner, Sutphen, Leonard, & Day, 2010). Nurses must also exercise problem-solving skills to advance their knowledge, to engage in inquiry, and to formulate creative initiatives for navigating the dynamic changes inherent in clinical situations as well as the overall health care landscape (AACN, 2008; CCNE, 2009). In the clinical setting, problem-solving and innovation are paramount, in part because clinical situations evolve and change (Brown, Kirkpatrick, Greer, & Swanson, 2009). It follows that faculty who teach nursing students must foster problem-solving skills, and one way they can do this is to create active classroom environments that invite classroom participation.

In the following sections I present a broad overview of pedagogy and learning followed by a more specific analysis of the relationship between a framework of feminist pedagogy described by Maher and Tetreault (1994, 2001), active learning, and classroom participation. The historical review of pedagogies provides insight into the culture of active learning – particularly via classroom participation – in the education of nurses. Finally, I discuss factors that influence classroom participation, including classroom climate, faculty characteristics, and student characteristics.

Pedagogy and Learning

In the broadest sense, pedagogy refers to the science of teaching (Billings & Halstead, 2009; Crabtree, Sapp, & Licona, 2009; Murphy, 1996). Faculty engaged in the science of teaching implement carefully-planned methods in order to conduct a teaching/learning process that directs "interactions between teacher, students, and the learning environment" (Murphy, 1996, p. 49). These methods are inherently positioned within certain pedagogical frameworks that are based on particular beliefs and values (Billings & Halsted, 2009; Gore, 1993).

Pedagogies can be viewed along a continuum: passive to active. More specific typologies further elucidate specific teaching/learning methods along the spectrum. Passive pedagogies are teacher-centered, and their methods support the premise that knowledge resides with the professor while students are passive, unquestioning recipients (Meyers & Jones, 1993). In contrast, active pedagogies are more student-centered. While professors share their expertise in the teaching/learning process, students' knowledge and perspective are also encouraged through various methods that foster shared participation in the learning community (Bonwell & Eison, 1991; Meyers & Jones, 1993).

One type of passive pedagogy - patriarchal pedagogy - has been intrinsically based on education strategies developed from the perspective of the male experience. Those strategies emphasize individualism, competition, hierarchy, and domination (Chinn, 1989; Gerald, McEvoy, & Whitfield, 2004; Griffiths, 2006). The implementation of patriarchal pedagogies supports an unequal distribution of power. For example, the all-knowing professor dictates what constitutes knowledge and regularly limits classroom participation to students' responses to faculty-generated questions; such practices may render students powerless (Bevis & Watson, 1989; Hawkes, 1992). This pedagogy has been described by Freire (2010) as the "banking method" of education, whereby students are passive receptacles that the professor fills with knowledge.

Such a faculty/student relationship can affect the process of students' academic development, stifling their capacity to independently seek, create, and apply knowledge (Meyers & Jones, 1993).

Active learning, which is associated with more varied pedagogical schema, involves students in the teaching/learning process; thus, it enhances students' self-perception and confidence in their abilities to engage in scholarly inquiry and generation of knowledge (Bonwell & Eison, 1991). Students engaged in more active learning, when compared to those involved in more passive learning, have demonstrated improved retention of course-generated knowledge (Michel, Cater, & Varela, 2009; Weaver, & Qi, 2005). Furthermore, both students and faculty report that active learning keeps students interested and engaged, thus potentiating a foundation for an appreciation of and a commitment to lifelong learning (Haidet, Morgan, O'Malley, Moran, & Richards, 2004). To enact active teaching pedagogies, faculty can employ various modalities to transform students from spectators to engaged participants (Allen, 1995; Bonwell & Eison, 1991; Chickering & Gamon, 1987).

For nursing education in particular, active learning has been shown to enhance the transfer of concepts learned in the classroom to the clinical setting. Moreover, students favor the active teaching strategies that facilitate this application (Crookes, Crookes, & Walsh, 2013; Hoke & Robbins, 2005; Loftin, Davis, & Hartin,2010). For example, in a comparison of two groups of nursing students – one taught via didactic content delivered in a traditional passive pedagogy and one taught via active learning methods (small group discussion, case studies, and role playing) – the active learning group demonstrated higher clinical grades (Hoke & Robbins, 2005).

Active learning pedagogies encompass various typologies, or subcategories. These include narrative and phenomenological pedagogies – two approaches that are often associated with prescriptive teaching methods (Billings & Halstead, 2009; Ironside, 2001). For example, narrative pedagogy generates knowledge by incorporating dialogue and debate among students and faculty (Diekelmann, 2001). Phenomenological pedagogy emphasizes creating knowledge and finding meaning through the actual, or lived experiences of faculty and students (Ironside, 2001).

Feminist pedagogy - is unlike more prescriptive active learning methods, in that it can incorporate various strategies imbued in a set of values and beliefs that support faculty and student participation in the learning environment (Forrest & Rosenberg, 1997; Shackelford, 1992). In other words, feminist pedagogy is an overarching philosophy of education that utilizes multiple modalities to engage students in the teaching/learning process (Webber, 2006). Feminist pedagogy embraces egalitarian principles of cooperation and collaboration over competition and domination, and envisions students as vocal, active participants who share with faculty the responsibility for a community of learning (Chinn, 1989; Crabtree, Sapp, & Licona, 2009; Shrewsberry, 1987).

Feminist Pedagogy, Active Learning, and Classroom Participation

Feminist pedagogy emerged in part from the seminal research of Belenky, Clinchy, Goldberger, and Tarule (1986), who challenged an exclusive patriarchal epistemology based on individualistic competition and objectivity. Feminist pedagogy is based on feminist theory, which in its infancy focused on understanding, analyzing, and dismantling the sociopolitical forces that supported the oppression of women (Hughes, 2002). Over time, feminist theory has evolved into various typologies (Allan, 2011). It embraces the possibility of transforming thoughts as well as social and political systems “beyond patriarchal concepts” (Grosz, 2010, p.

105). Historically, these patriarchal concepts have been embedded within societal institutions, including academia, which has particular relevance for this study (Hughes, 1995; Valen, 1999).

Epistemology, or ways of knowing, is governed by beliefs regarding who is qualified to generate knowledge and legitimacy of knowledge (Harding, 1987; Hesse-Biber, 2012). Generation of knowledge can occur at many different levels and in various venues. For example, research is a process of formal, systematic inquiry that creates new knowledge or develops a more multifaceted understanding of existing knowledge (McMillan & Schumacher, 2010). The dynamics of teaching/learning can also generate knowledge in the classroom and may be facilitated through pedagogical practice. Patriarchal pedagogies utilize epistemologies based on authoritarian and competitive attitudes and behaviors, with emphasis on separate objectivity (Caughie & Pearce, 2009; hooks, 1994). In the context of the college classroom, power resides primarily with the expert professor who disseminates knowledge to protégés in a one-sided conversation (Crabtree, Sapp, & Licona, 2009). In contrast, feminist pedagogies employ epistemologies that encourage democracy, co-operation, and connected subjectivity. College professors with these educational underpinnings seek to empower students and elicit multivocality by generating knowledge through the facilitated exchange of ideas between students and faculty (Belenky, Clinchy, Goldberger, & Tarule, 1986; Hughes, 1995). Hence, consistent with the unifying theme of feminist pedagogy of learning as a collaborative endeavor, students perceive themselves as partners in a community of learning; such self-perception supports their empowerment (Maher & Tetreault, 1994, 2001).

In their landmark study of feminist pedagogy, Maher and Tetreault (1994) proposed that feminist epistemology is a segue to feminist pedagogy rooted in the tenets of collaboration and cooperation. In their qualitative research of pedagogical practices in six colleges and universities, Maher and Tetreault (1994) provided exemplars of tenets of feminist pedagogy,

which explicated four themes in the feminist classroom: mastery, positionality, authority, and voice of students/faculty. These themes emerged from a qualitative study of the classrooms of 17 feminist college professors at six universities. Data were gathered through classroom observation, audio-taped class sessions, and in-depth interviews with professors and students. Each of the four themes relates to an overall classroom milieu of collaboration within a community of learning (Maher & Tetreault, 1994).

The theme of voice facilitates “construction of new and multidimensional forms of knowledge” (Maher & Tetreault, 1994, p. 18) as students and faculty engage in discourse. In the critical theme of voice, Maher and Tetreault (1994) suggest voice is more than students finding their own voice in the singular sense. They elaborate by describing the process by which students come to “fashion” their voice. This “fashioned voice” emerges from multi-vocality as students and faculty share beliefs, values, and experiences in the construction, deconstruction, and/or reconstruction of knowledge. Voice in feminist classrooms can be viewed as analogous to epistemological awakening: "We have seen how the voices of women and men, of white students and students of color, of those of different ages and sexual preferences, may intersect in the construction of new and multidimensional forms of knowledge" (Maher& Tetreault, 1994, p. 18). The theme of mastery in the feminist classroom refers to the interactive social construction of knowledge among students and faculty. It is described as collaborative as opposed to hierarchal such that the professor imparts knowledge to students who then demonstrate mastery of knowledge by reiterating the learned information. Instead through engagement with material or content, learners master the material by considering new forms of interpretation and taking into account different positions and multiple ways of knowing (Maher & Tetreault, 1994). The theme of authority in the feminist classroom is expressed as shared by faculty and students. Faculty relinquish the traditional omnipotent role of authority and

recognize both their own and the students' unique contribution in the dance of learning. This reinforces the concept of faculty and students as partners in a community of learning (Maher & Tetreault, 1994). The theme of positionality accounts for the intersection of multiple personal attributes (e.g., gender, age), sociopolitical factors, and historical context in the construction of knowledge (Maher & Tetreault, 1994). In their initial, interpretive data analysis, Maher and Tetreault (1994) proposed recognition of positionality would facilitate both honoring multiple ways of knowing and considering implications for change. In their later work, a quotation from a white, male student led Maher and Tetreault (2001) to reexamine the critical theme of positionality. The student reflected that he was "ashamed of being an upper-class white male" (Maher & Tetreault, 2001, p. 1) who experienced privilege at the expense of those who are black. He acknowledged that these disparities were unfortunate but compartmentalized his experience by reflecting "personally I don't have to deal with that. I'm an upper-class white male; I'm the boss" (Maher & Tetreault, 2001, p. 1). Hence, a new emphasis of ongoing reflection of positionality and its effect on individuals and society could give rise to new sociopolitical possibilities. In summary, enactment of these four critical themes can help to create a classroom environment where students and faculty consider diverse approaches to create synergistic opportunities for complex challenges.

Across disciplines, faculty have understood feminist pedagogy to be a conduit to awaken students' voices. The implementation of feminist approaches, in both traditional and online courses, has been reported in the educational literature (Campbell, 2007; Capobianco, 2007; Hahna & Schwantes, 2011; Hoffmann & Stake, 2001; Michela, 2006; Morris, 2012). Increased levels of classroom participation were reported in two studies: a group of graduate students taking an online course and a group of female engineering students (Johnson, 2003; Salter & Persaud, 2003). Some faculty have perceived an increased sense of community after

implementing feminist pedagogy in their classrooms (Duncan & Stassio, 2001; Johnson, 2003). Likewise, students have reported a sense of community in feminist classrooms that encourage participation and empower both independent thinking and freedom to challenge traditional views (Beck, 1995; Magdola, 2002; Salter & Persaud, 2003; Wang, Chao, & Liao, 2011). In one empirical study nursing students' perceived level of empowerment in a nursing course utilizing feminist pedagogy increased over the duration of the course, as evidenced by empowerment scores (Falk-Rafael, Chinn, Anderson, Laschinger, & Rubotzky, 2004). Stake and Hoffmann (2000) found that both students and faculty reported increased levels of open-mindedness.

Despite these positive outcomes for feminist pedagogy, faculty have identified barriers to its implementation. These include classroom seating arrangements that support lecture style teaching, large classes, and faculty concern that student evaluations will be negative and will impede promotion and tenure (Duncan & Stassio, 2001; Webber, 2005 & 2006). Faculty also have expressed feelings of conflict between a commitment to foster class discussion and a need to deliver content in a traditional lecture format in order to ensure success on high-stakes quantitative testing (Capobianco, 2007). Moreover, classroom participation stimulated by feminist pedagogy has not always been described positively by faculty and students. Duncan and Stassio (2001) reported that faculty observed increased incidents of disruptive behaviors by students using the approach. They attributed this behavior to students' perception of a lack of faculty authority. Furthermore, there is evidence that students socialized in a culture of patriarchal instruction actually resist participating in the feminist classroom and reflect their discontent in course evaluations (Lather, 1991a). Based on the tenets of feminist pedagogy a formalized plan for implementation may serve to mitigate such barriers.

Webb, Walker, and Bollis (2004) explicated a model to facilitate implementation of feminist pedagogy in the classroom. In this model they addressed the principles of feminist

pedagogy such as reframing the professor-student relationship and creating a community of learning by privileging voice and respecting diversity.

Reframing the professor-student relationship – from authoritarian to collaborative – may help to deconstruct the one-way transfer of knowledge from professor to student, thereby engaging both parties in scholarly pursuit (Parry, 1996; Wang, Chao, & Liao, 2011; Webb, Walker, & Bollis, 2004). Some feminist scholars have referenced this type of pedagogy as participatory (Hoffmann & Stake, 2001). Empowerment shifts power, such that it is shared between teacher and student, and it is conceptualized as the freedom to make choices, act intentionally, effect change, and generate knowledge (Currie, 1992; Falk-Rafael, Chinn, Anderson, Laschinger, & Rubotzky, 2004; Shrewsberry, 1993; Webb, Walker, & Bollis, 2004). Consequently, both students and faculty are equally responsible for their role in the process of learning (Chinn, 1989). Decentering power in the student/faculty relationship and encouraging students to express their thoughts on content and teaching/learning methods to achieve learning objectives may also help build an inclusive learning community for students and faculty (Shrewsberry, 1987). Building relationships and encouraging dialogue within a community of learners may bolster students' confidence in their capacity to seek and generate knowledge inspiring commitment to lifelong learning (Shrewsberry, 1987; Waller, 2005b; Webb, Walker, & Bollis, 2004). Furthermore, an inclusive, collaborative community of learning has the possibility of supporting and respecting multivocality, thereby creating a climate to safely challenge traditional, dominant discourses and instilling appreciation rather than fear of difference (Shrewsberry, 1987). Students exposed to multiple perspectives may also have an increased capacity to engage with diverse groups beyond the structure of the university (Harper & Hurtado, 2012). Hence, "every societal problem needs a wide variety of people working together to find solutions "(Waller, 2005a, p. 4). To this end, students can also develop

confidence in their ability to be part of conversations across disciplines. These opportunities translate directly to required skills in clinical settings for nursing students where patient diversity and teamwork are certainly encountered. In the classroom, integrating the collective richness of these six principles of feminist pedagogy necessitates intentional, purposeful planning and execution of teaching modalities that encourage participation (Shrewsberry, 1987; Waller, 2005a).

Consequently, a foundational and defining principle of feminist pedagogy is classroom participation, in its "creation of a participatory classroom community that elicits full and open discussion amongst students and faculty" (Hoffmann & Stake, 2001, p. 81). Hills and Watson (2011) described participation as a shared partnership between faculty and students that requires presence. They explained, "Participation requires commitment. It is a conscious decision to devote time, energy, and resources to [the] teaching/learning [process]" (p. 80). In higher education, including nursing education, faculty frequently express reluctance to implement teaching methods that encourage participation. This reluctance may be due partly to faculty inexperience and partly to institutional barriers such as large class size, forward-facing classroom seating arrangements, or a lack of administrative support (Brown, Kirkpatrick, Greer, & Swanson, 2009; Greer, Pokorny, Clay, Brown, & Steele, 2010; Kenny & Banerjee, 2011). Despite the limited number of nursing faculty who report using active teaching/learning modalities vitalized by participation, the majority of those studied tended, nevertheless, to express interest in implementing these strategies (Brancato, 2007; Schnell, 2006).

History of Nursing Education and Associated Pedagogies

Nursing students themselves, when compared to university students as a whole, often appear resistant to teaching methods intended to stimulate classroom participation (Popkess & McDaniel, 2011). A hidden influence on faculty/student resistance to active pedagogies based

on classroom participation may originate in the history of nursing education. Specifically, nursing has a longstanding tradition of passive pedagogical frameworks that rely primarily on patriarchal and apprenticeship styles of education (Bevis & Watson, 1989). However, the culture of nursing education has evolved over time, and that evolved culture may influence the faculty member's choice – as well as students' expectation and preference – regarding specific pedagogies. These combined factors may ultimately impact the classroom participation of nursing students.

Lack of classroom participation among nursing students may be traced to the history of nursing education, a history that is steeped in passive learning (Bevis & Watson, 1989). Pedagogical practices in nursing education have been influenced by population health and disease as well as the social context of the given time period (Gaynon, 1985). During ancient times, care of the sick was relegated to individuals without any formal training in nursing care – either female family members or community members. The era of the Crusades ushered in the first formal training as an apprenticeship for male nursing orders whose primary responsibility was to care solely for military personnel (Anderson, 1981). It was not until 1836 that the first organized nursing education program was established at the Deaconess School of Nursing in Kaiserwerth, Germany, for the religious orders of nuns. In 1850, Florence Nightingale received four months of nursing training at the Kaiserwerth Deaconess School of Nursing during which she experienced, according to her diaries, a calling from God. As a result of her training, Florence Nightingale was recruited to provide nursing care on the battlefield during the Crimean War, and she trained 38 women who accompanied her as volunteers caring for the sick and wounded (Gill & Gill, 2005). Upon her return to London, Nightingale established the St. Thomas Hospital School of Nursing, which exclusively accepted women and was based on the apprenticeship model of education (Anderson, 1981; Holliday & Parker, 1997; Wolfenden,

2011). Apprenticeship is based on the tenets of passive pedagogies, whereby the expert clinician transmits knowledge to the novice student. Learning is evidenced by return demonstration of tasks and verbatim oration of content (Pope, 2008).

In the United States, the first diploma hospital school of nursing opened in 1873. The Bellevue Training School for Nurses in New York City was also founded on the pedagogical practices of Nightingale's apprentice style of education (Harmon, 1985). During the 1800s, infection was a leading cause of mortality in hospitalized patients. Ritualistic, procedural, nursing practices for wound care and preventing the transmission of infectious diseases were very effective at reducing mortality during that time period. Hence, these ritualistic, prescribed procedures dominated nursing during that era. As such, the apprentice style of education emphasizing rote memorization and behavioral performance may have been well-suited to teaching the prescribed procedural practices (McMillan & Dwyer, 1989). Additionally, for the most part, male physicians in hospitals provided medical care, served as administrators, and supervised the practice and education of nurses (Ashley, 1976; Pope, 2008).

The principles of apprenticeship, coupled with the fact that nurses were educated by male physicians, established a dichotomy of power characteristic of patriarchal pedagogy, whereby the professor (holding the power) imparts knowledge to the student who is passive and unquestioning (powerless; Lewis & Simon, 1986). Dock (1917), a prominent nursing educator, reified the patriarchal pedagogy of the apprenticeship philosophy: "No matter how gifted she may be, she will never become a reliable nurse until she can obey without question" (p. 394).

With advances in the physical and social sciences in the early 1900s, healthcare became more complex, moving beyond simply executing prescribed procedures. Thus, a more liberal education was required for advancing nursing knowledge and practice. In 1923, a five-year study

initiated by the National League of Nursing and sponsored by the Rockefeller Foundation supported the transition of nursing education from hospitals to universities for the "development of the individual, the acquisition of a general education, education for citizenship and social reform" (Hansen, 1991, p. 341). At this point, nursing education moved to the university setting. However, hospitals and physicians were reluctant to relinquish the nursing student workforce and lobbied aggressively for the perpetuation of patriarchal apprentice-style diploma schools, which continued to flourish alongside university-based programs (Gaynon, 1985; Hansen, 1991). Even with the transition to institutions of higher education, nursing education still was dominated by passive patriarchal pedagogies – perhaps unsurprising, given those pedagogies also prevailed in university settings of the time. The dominance of these pedagogies was partly due to their enculturation in nursing education but was also related to the long-standing patriarchal organizational structure of universities themselves (Hansen, 1991; Pope, 2008).

A hospital nursing shortage after World War II spurred the establishment of an associate degree program – a third entry or pathway to the profession of nursing. Theoretically, associate degree graduates were intended to serve as supervised, technical nurses responsible for execution of procedures and tasks taught via the apprentice model (Mathias, 2010; Pope, 2008). Nurses prepared in associate degree programs were differentiated from baccalaureate prepared nurses, whose education gave them the executive capacity to serve as leaders in nursing care, research, and policy (American Association of Colleges of Nursing, 2012a; Matthias, 2010); however, because the licensure exam was the same for all registered nurses, regardless of their pre-licensure education, the differentiation based on degree program was rendered meaningless and the apprentice style of education was further reified in the overall culture of nursing education across entry levels (Matthias, 2010).

Nursing faculty across all programs have been slow to fully embrace active teaching pedagogies; they rely on the passive patriarchal pedagogies that have shaped nursing educational throughout its history (Brancato, 2007; Brown, Kirkpatrick, Greer, & Swanson, 2009; Scarry, 1999). The patriarchal pedagogies, after all, are familiar; there can be security in familiarity (Burke, 2011). Today the average age of nursing faculty ranges from 51 to 61 years, depending on level of education and academic rank (American Association of Colleges of Nursing; 2012b). This aging group was trained in the era of passive apprentice style of education and are inclined to teach in the same fashion they were taught (Schnell, 2006). Additionally, nursing faculty are immersed in higher education institutions where patriarchal pedagogy may be hegemonic (Chinn. 1989). Within their own departments, nursing faculty may lack philosophical support to pursue active pedagogies (Brancato, 2007; Griffiths, 2006; Schaeffer & Zygmont, 2003). Other barriers to time and energy investment in development of innovative teaching methods, such as active learning, include heavy academic workloads, reward for research over excellence in teaching, and large class sizes (Schaeffer & Zygmont, 2003; Schnell, 2006).

Despite the conflicting history and presence of obstacles, active learning pedagogies must be given serious consideration in the new era of nursing education. Because they hold great promise to foster problem-solving and ensure patient safety – two crucial components in the nursing profession, they cannot be ignored. In a series of reports, the Institute of Medicine (2003) identified specific practices and errors that had been demonstrated to compromise patient safety. In response, nurse educators developed the Quality and Safety Education for Nurses (QSEN) competencies. The competencies are best suited to active teaching pedagogies enacted through classroom participation, which would in turn nurture the problem-solving and innovation that are needed to improve quality and safety in health care (Brady, 2011; Sherwood,

2011). Research that discerns factors influencing classroom participation as one component of active learning in nursing education could be transformative. Such research could give faculty the confidence to implement provocative pedagogies to facilitate active learning, thereby supporting an ultimate intent to create a generation of nurses capable of the problem-solving and innovation required in a complex health care environment.

Factors that Influence Classroom Participation

Active listening, thoughtful quiet contemplation, in-class writing, and engagement in class discussion are components frequently considered in a holistic description of classroom participation (Bean & Peterson, 1988; Craven & Hogan, 2001; Daggett, 1997; Zaremba & Dunn, 2004). Classroom participation has the potential to shift the dynamic of teaching/learning from teacher-centered to student-centered, thereby enhancing characteristics of feminist pedagogy such as collaboration, community building, and multi-vocality (Shrewsberry, 1987). Participation has been broadly defined as a process of active engagement with course content, as evidenced by classroom interaction with faculty and peers. Classroom participation is not simply a dialogue between the professor who poses a question and the student who answers (McCleary et al., 2011; Rocca, 2010). In the educational literature across disciplines, both behaviors and continua of participation provide more specific descriptions and may often serve as grading rubrics (Czekanski & Wolf, 2013). Continua of participation are linked to types of activity such as attending class, answering questions, and making presentations (Rocca, 2010).

Factors found to influence classroom participation of university students can be organized into three primary categories, including (a) classroom climate, (b) faculty characteristics, and (c) student characteristics (Kenny & Banerjee, 2011). The following analysis and synthesis of scholarly evidence related to classroom participation is based on these categories. While classroom climate may be influenced by both faculty characteristics and

student characteristics, for the purpose of this analysis, the classroom climate section will include only those factors related to classroom structure that influence participation. Those factors influencing classroom climate that can be attributed to either faculty or students will be included in the faculty characteristics and student characteristics sections, respectively.

Classroom Climate

Classroom climate can be defined as the physical setting and structure of the course (Rocca, 2010). Six main areas have been attributed to classroom climate: (a) location, (b) classroom aesthetics and comfort, (c) arrangement of furniture, (d) time of day, (e) class size, and (f) course requirements (Rocca, 2010). I discuss each of these in turn below.

Classroom location includes online and interactive telecourses as well as traditional university-based classes. Comfort with technology, on the part of both students and faculty, can affect participation, inasmuch as those who are less technologically-savvy may exhibit lower rates of participation (Hurt, 2008; Rocca, 2010).

In traditional university-based classes, classroom aesthetics – such as wall color, comfort and arrangement of furniture, lighting, and room decorations – can also influence rates of participation (Davis & Sommer, 1972; Sommer & Olsen, 1980, Yang, Becerik-Gerber, & Mino, 2013). For example, Sommer and Olsen (1980) renovated a traditional classroom characterized by sterile, white walls and hard student desks by colorfully painting and decorating walls, adding plants, and comfortable furniture. The changes resulted in a dramatic increase in participation rates (from 7% to a high of 85% in some classes).

Additionally, physical arrangement of student desks in traditional, forward-facing rows with the professor positioned in the front of the room has been demonstrated to decrease participation (Davis & Sommer, 1972; Rocca, 2010). Alternate seating arrangements, such as a circular or horseshoe configuration, may either enhance or hinder student interaction

(Inderbitzin & Storrs, 2008). For example, to illustrate the latter, nursing students have reported that when seated in a horseshoe configuration "a negative glance from a classmate [that went unnoticed with traditional seating arrangements] could discourage interaction" (Loftin, Davis, & Hartin, 2010, p. 120).

Other elements of class structure have been found to influence participation rates. For example, classes that met weekly and in the evening had lower rates of participation. Class size also impacted student participation and class attendance (Constantinople, Cornelius, & Gray, 1988; Rocca, 2010). In classes with more than 65 students, students exhibited lower rates of attendance and participation, while students in classes of smaller size showed higher rates of attendance and participation (Becker, Sommer, Bee, & Oxley, 1973; Feld, 1977). In large classes, various things may explain the reluctance of students to participate, including fear of slowing down delivery of class content, negative reactions from peers and faculty, and a desire to maintain anonymity (Kenney & Banerjee, 2011; Rocca, 2010). Large class sizes may also influence professors' choice of teaching methods. A proclivity to passive lecture has been observed in connection with larger class sizes, while active pedagogies tend to be associated with smaller class sizes (Feld, 1977). The literature predominantly describes increased class size as a hindrance to active learning and participation; however, some studies have demonstrated that carefully-planned engaging activities can facilitate participation in large classes (Exter et al., 2010; Salter & Persaud, 2003). One such activity could be small group work with subsequent presentation to the larger class (Salter & Persaud, 2003). Although class size has been demonstrated to influence participation, the greater influence may be faculty's choice of pedagogical practices, such that, regardless of class size, more engaging pedagogies foster more participation (Becker, Sommer, Bee, & Oxley, 1973).

When professors include participation as a percentage of the course grade, the frequency of student participation has been demonstrated to increase; however, the quality of participation is not necessarily clearly described (Bean & Peterson, 1988). For example, some students may strive to receive the maximum percentage award for participation by dominating the conversation but they may fail to contribute to group learning (McCleary et al., 2011). It is imperative to have consistent standards to assess both quantity and quality of participation (Bean & Peterson, 1988; Daggett, 1997).

Faculty Characteristics

In addition to the atmosphere and size of the class, characteristics of the faculty member may also influence participation of students. Faculty attributes that affect student participation may include demeanor, teaching methods, and ability to manage the classroom environment (Rocca, 2011; Salter & Persaud, 2003). Demeanor includes behaviors exhibited both inside and outside of the classroom. Faculty who remember students' names and exhibit an interest in students' lives beyond the classroom are frequently viewed more favorably by students (Fassinger, 1996; Loftin, Davis, & Hartin, 2010). In addition, faculty who share personal experiences and have positive non-verbal behavior (such as smiling and maintaining eye contact) contribute to a relationship of immediacy that encourages participation (Kenney & Banerjee, 2011; Salter & Persaud, 2003). Although some faculty report reservations about these types of behaviors, due to either a fear of relinquishing power and/or a need to maintain structure in the classroom, students may have a different perspective (Boice, 1996; Salter & Persaud, 2003). For example, in a study by Salter and Persaud (2003), students commented, "More learning occurs when the instructor is viewed as a human being with expertise in an area" (p. 842). Humor can also foster immediacy; however, if perceived as inappropriate, it may actually impede the student/faculty relationship, thus silencing students. Inappropriate humor

includes sexual, racial, and ethnic jokes as well as targeting students with disparaging remarks (Frymier, Wanzer, & Wojtaszczyk, 2008). Peer pressure among faculty related to expected academic behavior may also influence immediacy behaviors, impacting student/faculty relationship and ultimately impacting class participation. In some institutions, faculty are expected not to have an amicable relationship with their students, and instead are expected to be distant, objective, and impersonal (Boice, 1996; Bowen, Seltzer, & Wilson, 1987).

The use of teaching methods that aim to actively engage students in the classroom may increase classroom participation (Crookes, Crookes, & Walsh, 2013). These methods include questioning, case studies, small group discussion, role playing, gaming, clicker technology, and simulation (Meyers & Jones, 1993). For example, thoughtful questioning by faculty can foster participation and challenge students to analyze and consider application of information. Of course, a certain amount of faculty finesse and skill is essential to avoid posing the sort of questions that simply require students to regurgitate information characteristic of rote memorization (Carum & Davis, 2005; Sanders, 1966).

Clicker technology has been demonstrated to increase participation because it is safe and anonymous, thereby avoiding contributing to students' feelings of inadequacy if they publicly answer a question incorrectly (Filer, 2010). Use of clickers has also been demonstrated to facilitate learning when there is an ensuing discussion focused on all possible answers. This strategy requires participants engage in problem-solving (DeBourgh, 2008). On the other hand, passive classrooms in which students are spectators rather than participants can result in distracting activities such as sleeping, texting, and conversations with classmates that interfere with engaged learning (Auster, & Wylie, 2006; Wingfield, & Black, 2005). Therefore, faculty who primarily use lecture as a teaching modality are viewed by students as uninviting for questions. Students frequently comment when the professor appears to be rushing through course

material they are reluctant to ask questions they perceive may be unwelcome and interrupting delivery of necessary content (Loftin, Davis, & Harkin, 2010; Salter & Persaud, 2003).

Embedded in teaching methods are professors' attitudes and behaviors when interacting with students in the classroom that may influence the classroom environment. Students who fear condescending responses to their questions and comments are less likely to participate in class (Dollman, King, & Hemphill, 2009). In addition, faculty may have preconceived notions about cognitive ability that may be conscious or subconscious (Persaud & Salter, 2004). Women, people of color, and those who have disabilities have been found to be less likely to be called on than their counterparts that can shape the classroom environment such that certain students may not feel that their participation is valued or worthy (Kenney & Banerjee, 2011). Furthermore, students often expect faculty to maintain a safe classroom climate that promotes participation without disparaging comments and incivilities by peers (Clark, 2008; Musial, 2010). As such, an empirical study to determine effectiveness of feminist pedagogy in a nursing course reported an increase in classroom participation due to "an open format and instructor's non-judgmental approach" as well as faculty maintaining an atmosphere of classroom civility (Falk-Rafael, Chinn, Anderson, Laschinger, & Rubotzky, 2004, p. 109).

Student Characteristics

Certain student characteristics may also play a role in classroom participation. These include (a) self-perception, (b) intellectual development, (c) preparation for class, (d) personal characteristics (i.e., gender, age, race and/or ethnicity, primary language), (e) stress level, and (f) peer incivility (Kenney & Banerjee, 2011; Rocca, 2010). Fassinger (1997) found the strongest indicators of participation were students' self-perception as a part of a group that was influenced by peers' behavior both outside and within the classroom setting. For example, student gossip (occurring outside of class) and perceived hostile body language and derogatory

comments (occuring during class) were found to inhibit participation. On the other hand, factors that enhanced group cohesiveness and membership, such as getting to know other students in the class and developing relationships, were found to increase participation (Fassinger, 1997).

Level of student preparation for class is also a significant variable that influences participation (Fassinger, 1996; 1997). Students who reported not completing reading and homework assignments were less likely to participate in class. Completion of reading and homework assignments was found to be higher in classes where professors randomly called on students; subsequently, participation increased (Czekanski & Wolf, 2013; Karp & Yoels, 1976).

Personal characteristics (such as age, gender, race and/or ethnicity, and primary language) also have been associated with classroom participation. Both older students and male students have demonstrated higher rates of class participation than younger students and female students (Lewis & Simon, 1986; Rocca, 2010). This finding may relate more to professors' assumptions about the capacities of older students and cognitive abilities of males than to any inherent personality traits in either group. For example, Persaud and Salter (2004) found that female engineering students have increased levels of participation in more interactive classroom environments where their questions and opinions were welcome. Other researchers have found that class participation increases when faculty and students are the same gender (Crombie, Pyke, Silverthorn, Jones, & Piccinin, 2003; Howard & Henney, 1998). A mixed method study by Allan and Madden (2006) indicated that inhospitable student behaviors toward female students created a chilly classroom climate, thus inhibiting females' participation.

Primary language is another personal characteristic found to influence participation. Researchers have reported decreased participation levels among students whose primary language is not English or whose racial identification is non-White (Campbell, 2007; Hirschy & Wilson, 2002; Howard, Zoeller, & Pratt, 2006).

Students' stress may also impact participation. Students who experience significant levels of stress related to financial and psychosocial events may have difficulty engaging in class (Czekanski & Wolf, 2013). Students who must work to pay for their education may only have a certain amount of time to devote to academics, and thus are under more strain than students without those job-related constraints on their time. Other psychosocial stressors include abusive relationships and addiction (Musial, 2010).

Classroom incivilities, which themselves can be a potential source of stress, also have adversely influenced participation (Clark, 2008; Tedesco-Schneck, 2012). Researchers have noted that student incivilities (such as frequently missing class, failing to prepare for class, cheating, or distracting other students) may decrease participation (Boice, 1996). In uncivil situations, students were less likely to take notes or interact and professors, too, became aloof and disengaged. Ultimately, incivility can erode the spirit of a community of learning (Boice, 1996; Clark, 2008; Hirschy & Braxton, 2004).

Summary of Nursing Education and Active Learning Pedagogies

Nursing education has a tradition of passive learning pedagogies, or those that do not promote the level of analytical thought and problem-solving required in an increasingly complex health care industry (Pope, 2008). Active learning pedagogy has been shown to foster analytical thinking, which is a necessary skill for safe and effective nursing practice (Hoke & Robbins, 2005; Loftin, Davis, & Hartin, 2010). Values and beliefs associated with feminist pedagogy embrace active learning by creating participatory classroom communities in which students and

professors raise their voices to generate and apply knowledge (Crabtree, Sapp, & Licona, 2009; Maher & Tetreault, 1994; Shrewsberry, 1987).

Although nursing faculty are increasingly interested in implementing active learning strategies that foster participation (Brancato, 2007; Schnell, 2006), some nursing students appear to resist these methods. In a secondary analysis of data from the National Survey of Student Engagement (NSSE) comparing nursing majors to other health profession and education majors, nursing students reported they did not “perceive themselves to be engaged in student-centered and interactive pedagogy" (Popkess & McDaniel, 2011, p. 89). In light of those findings, in combination with the strength of evidence suggesting interactive pedagogies are beneficial for nursing students, examination of student perception and experience is warranted. The purpose of this study is to determine perceived factors that influence nursing classroom participation in baccalaureate junior- and senior-level nursing students.

CHAPTER 3

METHODOLOGY AND METHODS

In previous chapters, I have supported the benefits of class participation to facilitate active learning for pre-licensure nursing students. However,, little is known about the factors that serve to influence classroom participation for pre-licensure baccalaureate nursing students. In the following chapter, I outline the methodology and methods employed in the undertaking of this study.

Research Questions and Hypotheses

The guiding research questions and hypotheses for this study were as follows:

1. What do junior- and senior-level nursing students in a pre-licensure accredited, baccalaureate nursing program perceive as factors in the classroom-learning environment that influence participation?
2. What is the relationship between preferred factors in the classroom-learning environment that influence participation as measured by the CUCEI and reported classroom participation as measured by the ACPS?
3. What is the relationship between preferred factors in the classroom-learning environment that influence participation as measured by the CUCEI and nursing students' class level and demographic variables?

The hypotheses for the study were:

1. Junior- and senior-level nursing students who prefer an active classroom-learning environment as measured by the CUCEI will report higher levels of classroom participation as measured by the ACPS.

2. There is a difference between junior-and senior-level nursing students' preferred classroom-learning environment as measured by the CUCEI and reported levels of classroom participation as measured by the ACPS.
3. There is a difference based on demographic variables (age, gender, race and/or ethnicity, and primary language) of preferred classroom-learning environment as measured by the CUCEI and reported levels of classroom participation as measured by the ACPS.

The independent variables for this study included age, gender, race and/or ethnicity, primary language, class level, and student perception of nursing classroom-learning environment as measured by the College and University Classroom Environment Inventory (CUCEI). The dependent variable was student reported classroom participation as measured by the Assessment of Classroom Participation Scale (ACPS). Below, I describe each of these instruments and this methodology.

Methodology and Research Design

This research methodology was a positivist approach utilizing a quantitative, non-experimental, comparative, survey design. The conceptual framework of Maher and Tetreault's (1994. 2001) feminist pedagogy informed the study design hence; a description of my positionality is included. Positionality is one of the four critical themes of the feminist pedagogy described by Maher and Tetreault (1994, 2001). Positionality considers the influence of individuals' multiple identities (e.g., gender, race) and experiences on epistemology (i.e., generation of knowledge; Maher & Tetreault, 1994, 2001; Takacs, 2002). Research is one method of generating knowledge and may be influenced by positionality (Code, 1991; McMillan & Schumacher, 2010). A description of this researcher's positionality substantiates the choice of the research questions and methods.

Positionality of the Investigator

I have been faculty at an AACN accredited baccalaureate nursing program for 13 years. I received my baccalaureate nursing education at a time in the history of the United States when the dominant teaching modality was lecture (Bevis & Watson, 1989; Harmon, 1985). Understanding factors that facilitate classroom participation has been an ongoing personal interest.

Research Design

Aforementioned this study is a quantitative, non-experimental, comparative, survey design informed by a conceptual framework of feminist pedagogy. Feminist pedagogies are student-centered by shifting power "to give voice and influence, to those [students] that have been excluded from traditional power structures" (Shackleford, 1992, p. 571). Feminist pedagogy embraces various active teaching/learning strategies that encourage students to participate and, ultimately, claim their education (Crabtree, Sapp, & Licona, 2009; Shrewsberry, 1987). From this perspective, I sought to understand factors that influence classroom through the lens of a feminist pedagogical framework described by Maher and Tetreault's (1994, 2001) and adapted for this study to include the four critical themes of voice, mastery, positionality, and authority that fosters a community of learning central to these themes (figure 3.1).

Figure 3.1. Relationship Between Critical Themes of Maher and Tetreault's (1994, 2001) Feminist Pedagogy and the Community of Learning

Historically, survey research has had a long tradition in feminist methods (Miner, Jayaratne, Pesonen, & Zurbrugg, 2012). Survey research is designed to help understand attitudes and beliefs (Creswell, 2014). Findings from feminist survey research intended to understand attitudes and experiences of women have been instrumental in forwarding social change (Weiner, 2000). For example, in the 1920s, feminist scholars from the University of Chicago utilized survey research to identify living conditions of individuals in underprivileged neighborhoods. As a result of this research, changes to improve the lives of those individuals were implemented (Miner, Jayaratne, Pesonen, & Zurbrugg, 2012; Seigfried, 1999). More recently, survey research designed to understand and evaluate job-training programs for poor women promoted a more in-depth policy analysis of these programs (Kim, 1997). In the field of education, feminist scholars from the University of Colorado utilize feminist pedagogy in an

educational program, Smart-Girls®, to empower middle-school girls to be actively engaged in learning (Williams & Ferber, 2008). In the university setting, Park, Park, Lee, and Moon (2006) utilized survey research to understand sexual harassment of female Korean college students. They reported reasons these students were reluctant to report sexual harassment subsequently suggesting workshops and policies to address this issue. Hence, findings from this survey design are intended to give nursing students a voice regarding factors that influence classroom participation. Subsequently, this may provide nursing faculty with an understanding of opportunities to increase classroom participation.

Methods

The design of this study was a quantitative, non-experimental, comparative design. The method of data collection was an anonymous online survey administered via Survey Monkey® software. Quantitative designs are intended to objectively measure variables that may impact on a particular phenomenon of interest and illuminate patterns of perceptions and attitudes (Creswell, 2014; McMillan & Schumacher, 2010; Yilamz, 2013). Survey research as a quantitative design provides a numeric representation of attitudes or beliefs of the target population (Creswell, 2014; Dillman, Smyth, & Christian, 2009). Non-experimental designs allow the researcher to determine if a relationship exists between variables without intentionally controlling conditions that may affect the variables (Fain, 2013; McMillan & Schumacher, 2010). A comparative design is utilized to determine if there is a difference amongst the variables between two groups (Creswell, 2014).

There is evidence that online surveys, as opposed to face-to-face survey interviews, result in increased likelihood of honest answers (Dillman, Smyth, & Christian, 2009). Respondents of face-to-face interviews tend to conform to social norms and may give the perceived desired answer rather than an honest answer (Sue & Ritter, 2012); thus, anonymity

associated with online surveys may also increase validity of responses (Dillman, Smyth, & Christian, 2009; Sue & Ritter, 2012). Face-to-face interviews can also limit geographic reach due to time and money required for travel (Sue & Ritter, 2012).

Two instruments were used to collect data through the online surveys, the College and University Classroom Environment Subscale (Appendix B; Fraser, Treagust, & Dennis, 1986) and the Assessment of Classroom Participation Scale (Appendix A; Dancer & Kamvounias, 2005). Use of the CUCEI scale was intended to determine junior-and senior-level baccalaureate nursing students' attitudes and beliefs of factors that influenced their classroom participation. Use of the ACPS was intended to determine reported actual classroom participation. A comparison was executed to ascertain if there was a linear relationship between perceptions of factors that influence participation in the classroom environment as measured by the CUCEI and reported classroom participation as measured by the ACPS existed between groups. Groups were based on age, gender, race and/or at the city, primary language, and program level as specified in the hypotheses. The following section includes a description the instruments used to measure the dependent and independent variables under study, sampling procedure, data collection, management, and analysis, and ethical conduct.

Instruments

The Assessment of Classroom Participation Scale (ACPS; Appendix A; Dancer & Kamvounias, 2005) was selected to measure reported level of classroom participation by study participants. Only two instruments to quantify classroom participation were found in the literature; the Evaluation of Classroom Participation Instrument (Daggett, 1997) and the Assessment of Classroom Participation Scale (Dancer & Kamvounias, 2005). The Evaluation of Classroom Participation Instrument (Daggett, 1997) focused only on the level of completion of assigned reading to prepare for class and was not tested for reliability. The ACPS (Dancer &

Kamvounias, 2005) considered five aspects of classroom participation (preparation, contribution to discussion, group skills, communication skills, and attendance) and had a reliability of 0.77 to 0.92.

The actual CUCEI (Fraser, Treagust, & Dennis, 1986) was used to measure factors that would increase, decrease, or have no effect on classroom participation. Only one other instrument that assessed the classroom environment was found in the literature; however, the focus was on peer, student, and faculty personality traits that influence the learning environment (Fassinger, 1995). I was interested in behaviors of peers, students, and faculty that influence classroom participation as well as the effects of the physical classroom environment. The following is a description of each of these instruments; the ACPS to measure the dependent variable and the CUCEI to measure the independent variable (Dancer & Kamvounias, 2005; Fraser, Treagust, & Dennis, 1986).

Demographic data including program level, age, gender, race and/or ethnicity, and primary language were also collected from research participants to determine if significant differences existed between these groups.

Assessment of Classroom Participation Scale. The dependent variable of classroom participation was measured with the Assessment of Classroom Participation Scale (Appendix A; Dancer & Kamvounias, 2005). The ACPSdefines participation as more than merely reported number of times a student answers questions or makes comments in class. There are five components that define participation in the ACPS, which include preparation for class, contribution to discussion, group skills, communication skills, and attendance and punctuality. Reliability and validity have been established for this scale (Dancer & Kamvounias, 2005).

For this study, the ACPS was prefaced by a modifying statement to reduce socially desirability bias (Appendix A; Sue & Ritter, 2012). In the data collection process of anonymous

surveys, measurement error can affect accuracy of response. "Measurement error occurs when a respondent's answer is inaccurate or imprecise" (Dillman, Smyth, & Christian, 2009, p. 18) and can occur when participants attempt to give a socially acceptable answer. This phenomenon is known as social desirability bias (Sue & Ritter, 2012). Classroom participation is frequently a behavior favorably associated with student engagement and knowledge by some college professors (Bean & Peterson, 1988). In an effort to provide a socially acceptable response, participants in this study may have self-reported a higher quality of classroom participation. The modifying statement prefacing the ACPS was intended to reduce social desirability bias.

College and University Classroom Environment Inventory. The CUCEI measures specific factors that may influence classroom participation (Fraser, Treagust, & Dennis, 1986). Prior to the development of the original College and University Classroom Environment Inventory (CUCEI; Fraser, Treagust, & Dennis, 1986) measures of classroom environment were designed for elementary- and secondary-level students (Moos, 1979). Measures of college and university environments that were in existence focused on institutional environment as opposed to the classroom environment (Dorman, 2014). Two versions of the original CUCEI were created, one to measure the perceived actual classroom environment and one to measure the perceived preferred classroom environment. Wording of each of the items in the two versions of the CUCEI (actual and preferred) differ only in verbiage to indicate either present tense for the actual CUCEI and future tense for preferred CUCEI (Fraser, Treagust, & Dennis, 1986). The original CUCEI contained seven subscales (personalization, involvement, student cohesiveness, satisfaction, task orientation, innovation, and individualization). A four-point Likert ordinal rating scale (strongly agree to strongly disagree) determined students' perception of the actual or preferred classroom environment. The seven subscales of the original CUCEI are:

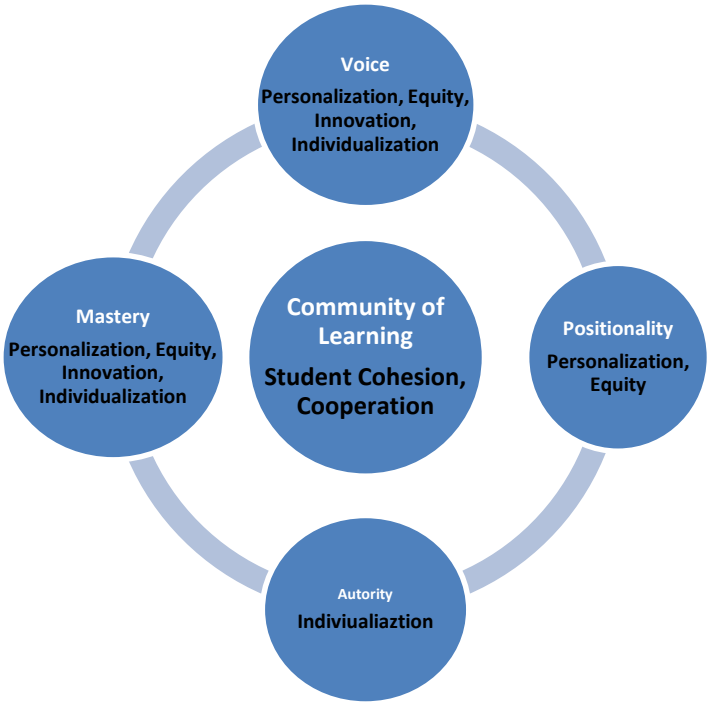
1. Personalization—the opportunities individual students have to interact with the instructor and the concern for students' personal welfare
2. Involvement—how much students participate actively and attentively in class discussions and activities
3. Student cohesiveness—extent to which students know, help, and are friendly toward each other
4. Satisfaction —how much students enjoy their classes
5. Task orientation—extent to which class activities are clear and well organized
6. Innovation—how often new and different teaching and learning activities are used
7. Individualization—extent to which students are allowed to make decisions and are treated differently (Fraser, Treagust, & Dennis, 1986, p. 48)

Two subscales of the CUCEI scale were modified by Nair and Fisher (2001): the involvement subscale was modified to measure cooperation and the satisfaction subscale was modified to measure equity. Nair and Fisher (2001) believed the involvement subscale in the original CUCEI focused more on competition in the learning environment; thus, replacement with the cooperation subscale was intended to measure student cooperation in the learning environment.

In the original CUCEI, the satisfaction subscale measured the degree of students' perceived enjoyment of the class (Fraser, Treagust, & Dennis, 1986). In the modified version, satisfaction was replaced with equity to measure the degree to which students believed they were treated equally within the classroom environment (Nair & Fisher, 2001). With these changes, the modified version of the CUCEI more closely adheres to the principles of feminist pedagogy, which is based on collaboration and cooperation with equity of student voice (Maher

& Tetreault, 1994). The modified CUCEI now contained seven subscales: personalization, innovation, student cohesion, task orientation, cooperation, individualization, and equity (Nair & Fisher, 2001). Items in the task orientation subscale are reflections of rigid class structure which is counterintuitive to feminist pedagogy (Maher & Tetreault, 1994). Hence, for purposes of this study only six of the seven subscales (personalization, innovation, student cohesion, cooperation, individualization, and equity) were used. I decided to use the modified CUCEI and the six aforementioned subscales because they most closely reflect faculty and student classroom behaviors outlined in Maher and Tetreault's (1994, 2001) pedagogical model of four critical themes of voice, mastery, positionality, and authority and the adapted central theme of a community of learning (Figure 3.2). The modified actual CUCEI developed by Frasier, Treagust, & Dennis (1986) utilized a four-point Likert ordinal rating scale (strongly agree to strongly disagree) to determines students' perception of the actual classroom environment. For purposes of this study, the Likert ordinal rating scale was modified to ascertain if classroom participation is increased, decreased, or unchanged by each factor (Appendix B).

Figure 3.2. Critical Themes of Maher and Tetreault's Feminist Pedagogy (1994, 2001), Community of Learning and CUCEI Subscales



Validity. An instrument's validity allows the researcher to make meaningful inferences from the study participants' scores (Creswell, 2014; McMillan & Schumacher, 2010). Construct validity establishes the reliability with which the instrument captures the important aspects of the concept (McMillan & Schumacher, 2010). In the initial development of the CUCEI items from the most widely used existing subscales on classroom environment from secondary schools were redefined and modified by the authors' "colleagues with expertise in questionnaire construction and teaching at the tertiary level" (Fraser, Treagust, & Dennis, 1986, p. 46). These subscales included the *Learning Environment Inventory* (Anderson & Walberg, 1974), the *Individualized Classroom Environment Questionnaire* (Rentoul & Fraser, 1979) and the *Classroom Environment Subscale* (Trickett & Moos, 1973).

The preliminary versions of the actual and preferred CUCEI forms were tested on 499 university students from Australia (N = 434) and the United States (N = 65). An item analysis facilitated inclusion or removal of items that would enhance each of the subscales' internal consistency (Fraser, Treagust, & Dennis, 1986). Discriminant validity determines the degree each subscale measures a unique dimension of the concept by statistical comparison amongst each of the subscales. Scores of less than 0.45 indicate that the subscale measures a unique dimension (McMillan & Schumacher, 2010). In the initial creation of the CUCEI, discriminant validity for the seven subscales of the actual CUCEI ranged from 0.34-0.47 and the discriminant validity range for the preferred CUCEI was 0.32-0.42 (Fraser, Treagust, & Dennis, 1986). Documentation of use of both the original and modified versions of the CUCEI provides additional discriminant validity summarized in Appendix D and E.

Reliability. Test reliability determines the extent to which an instrument consistently measures a construct (McMillan & Schumacher, 2010). Cronbach's alpha coefficient is a numerical determinant of reliability and a value of greater than or equal to 0.70 generally reflects an acceptable level (McMillan & Schumacher, 2010). Reliability has been established for the CUCEI overall and also for each of the seven subscales of both the original and modified versions. In the initial development of the CUCEI, the Cronbach alpha coefficients of the actual CUCEI ranged from 0.72 to 0.92 and 0.60 to 0.82 for the preferred CUCEI (Fraser, Treagust, & Dennis, 1986). In the subsequent study by Fraser, Williamson, and Tobin (1987), the Cronbach alpha coefficients for the actual CUCEI ranged from 0.70 to 0.84 and 0.63 to 0.82 for the preferred CUCEI. Documentation of use of both the original and modified versions of the CUCEI provides additional evidence of reliability summarized in Appendix E and F.

Reliability for each of the seven subscales of the original and modified CUCEI is reported in Appendix F and G. The Cronbach alpha for the task orientation subscale has consistently been

less than 0.70. This provided additional support for the decision to eliminate the use of the task orientation subscale in this study.

Sampling Procedures

Non-probability, purposive convenience sampling was employed for this study. This type of sampling enables selection of a study population that represents the topic of interest (McMillan & Schumacher, 2010). The population of interest for this study was junior- and senior-level nursing students enrolled in a CCNE and NEASC accredited pre-licensure baccalaureate program in the New England region. Currently, there are three pre-licensure entry levels for registered nurses: associate's degree, diploma certificate, and baccalaureate degree (Benner, Sutphen, Leonard, & Day, 2010). In the Carnegie Foundation study of professional education for nursing, the baccalaureate-level of education has been cited as the desired level of entry and is endorsed by professional nursing organizations and accrediting bodies (American Association of Colleges of Nursing, 2008; Benner, Stuphen, Leonard, & Day, 2010; CCNE, 2013). In the *Essentials of Baccalaureate Education for Professional Nursing Practice,* the guiding document for curriculum development and accreditation for baccalaureate nursing programs, placement of general education and core science courses are recommended at the freshman- and sophomore-level while nursing courses are most heavily concentrated at the junior- and senior-level (American Association of Colleges of Nursing, 2008; CCNE, 2013). Hence, baccalaureate junior- and senior-level nursing students were the desired target population as they are more likely to have experienced nursing classrooms environments.

There are two professional nursing education organizations each with separate accrediting bodies that grant accreditation to programs of nursing: the National League of Nursing (NLN) and the American Association of Colleges of Nursing (AACN) (Benner, Sutphen, Leonard, & Day, 2010; Ingwerson, 2013). Baccalaureate nursing programs receive accreditation

through AACN whose accrediting body is the Commission on Collegiate Nursing Education. This accrediting body is divided into six regions, one of which is the New England region (CCNE, 2009). States in the New England region for CCNE accreditation include Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont. Additionally, in order for a baccalaureate nursing program to receive CCNE accreditation, the parent institution must also be accredited (Benner, Sutphen, Leonard, & Day, 2010; CCNE, 2009). The New England Association of Schools and Colleges (NEASC) is the accrediting body for the New England region, which includes the same states in the CCNE New England region (Commission on Collegiate Nursing Education, 2014; New England Association of Schools and Colleges, 2014).

Including states in the New England region provided access to a population that was racially and ethnically diverse. Current census statistics report racial composition of the United States population is 72% White and 28% people of color (United States Census Bureau, 2011). Racial diversity in Connecticut, Massachusetts, and Rhode Island mirrors the reported racial composition of United States (United States Census Bureau, 2011). Targeting a diverse population was particularly salient for this study as race and/or ethnicity are characteristics that have been associated with classroom participation (Campbell, 2007; Hirschy & Wilson, 2002; Howard, Zoeller, & Pratt, 2006; Lewis & Simon, 1986; Rocca, 2010). Geographic similarity between these two accrediting bodies provided demographic and cultural consistency for the desired sample.

Thirty-six baccalaureate nursing program directors in the New England Region whose programs are accredited by the Commission on Collegiate Nursing Education (CCNE) and New England Association of Schools and Colleges (NEASC) were invited to participate in this study. An email invitation with an explanation of the study and an attachment of the IRB approval from the University of Maine was initially sent to each of the program directors (Appendix I). In

response to the initial email, three program directors agreed to invite their junior- and senior-level nursing students to participate. Within a week of the initial email invitation, the email was re-sent to program directors who had not responded. An additional five program directors agreed to participate and four declined to participate, citing university policy. The 24 remaining program directors who had not responded were contacted by telephone. I spoke with two of the program directors and left voice mail messages for 22 of the program directors providing information regarding the study and a request for participation. Additionally, the administrative assistants for each of the 22 program directors for whom a voicemail message was left were successfully contacted by telephone. A copy of the email sent to the program directors was sent to the administrative assistants with a request to approach the program directors about this study. This resulted in an additional five program directors who agreed to provide their students with the opportunity to participate in the study. Hence, 13 program directors (36% of the total number of eligible programs) agreed to provide their students with the opportunity to participate in the study.

Study Sample. The 13 participating programs represented Connecticut, Maine, Massachusetts, and Vermont. There was no representation from programs in New Hampshire or Rhode Island as they declined to participate in the study. Of the participating programs, a total of 1,761 baccalaureate nursing students of whom 969 (55%) were junior-level and 792 (45%) were senior-level students were invited to participate in the study by the program directors for each university/college. Enrollment data were obtained from administrative assistants of each of the participating programs. Of the 1,761 students invited to participate, 274 (16%) completed the survey. The 274 students were comprised of 118 (43%) junior-level and 156 (57%) senior-level nursing students. The margin of error for the sample proportion is 0.03. A summary of enrollment data of nursing students from the participating programs is included in Table 3.1.

Demographics of the study participants are comparable to the national percentages of baccalaureate nursing students and as specified in Table 3. 1.

Table 3.1. Sample and National Demographics of Baccalaureate Nursing Students

Demographic	Sample	National Percentage [a]
Race	N = 269	
Caucasian	240 (89%)	71%
Other	29 (11%)	19%
Gender	N = 271	
Female	248 (92%)	86%
Male	23 (8%)	14%
Age	N = 268	
less than 30 years	248 (93%)	84%
greater than or equal to 30 years	20 (7%)	16%
Primary Language	N = 268	
English	261 (90%)	No data available
Other	7 (2%)	No data available

[a] National League for Nursing. 2013. Annual Survey of Schools of Nursing, Fall 2012. www.nln.org/research/slides/index.htm

Data Collection, Management, and Analysis

In the following section, I describe how data were collected, managed and analyzed. This will include the process of coding data and statistical methods for analysis.

Data collection. Data were collected from September 29, 2014 through November 3, 2014. As previously noted, emails were sent to program directors of all 36 eligible baccalaureate nursing programs in the New England region accredited by the Commission on Collegiate Nursing Education (CCNE) and the New England Association of Schools and Colleges (NEASC). Thirteen program directors agreed to offer their nursing students the opportunity to participate and sent the survey links to junior-and senior-level baccalaureate nursing students enrolled in their

programs. Embedded within the email sent to each program director were the survey link and a separate link for the drawing of a $75 Visa gift card for students who chose to participate. The surveys were available using Survey Monkey® software in the following order: (1) Assessment of Classroom Participation Scale (ACPS), (2) College and University Classroom Environment Inventory (CUCEI), and (3) demographic information. Each question allowed the study participant the option of selecting;"Do not wish to respond." The College and University Classroom Environment Inventory allowed an area for comments after each subscale. Anonymity was ensured because data were not linked to email addresses.

I implemented data collection strategies to reduce non-response error. Non-response error can occur with web-based surveys when a significant percentage of participants do not respond to the survey (Dillman, Smyth, & Christian, 2009; Sue & Ritter, 2012). Factors that can interfere with response rates include lack of trust and perceived high social costs (Tschepikow, 2012). It has been reported that trust may be established by conveying to participants potential benefits that may result from a particular study (Dillman, Smyth, & Christian, 2009). Trust may also be earned when request for participation is from an authoritative source and survey construction has a professional appearance (Sue & Ritter, 2012). Non-response has also been found to increase when completing the survey is unduly laborious due to format or participant experiences technical difficulties (Sue & Ritter, 2012). In contrast, response rates have been found to increase with both social and tangible rewards for participation (Dillman, Smyth, & Christian, 2009; Patrick, Singer, Boyd, Cranford, & McCabe, 2013; Sue & Ritter, 2012). Social rewards are generated from an individual's sense of being appreciated and assisting another in solving a problem (Dillman, Smyth, & Christian, 2009). Thanking participants for completing the

survey also provides a social reward (Dillman, Smyth, & Christian, 2009; Sue & Ritter, 2012; Tschepikow, 2012).

To reduce non-response error, strategies were implemented to enhance trust and offer sociable and tangible reward for this study. The introductory page of the survey included the credentials of the researcher, benefits of the study, tangible rewards, and thanking students for considering participation (Appendix J). My credentials may have been perceived as credible and authoritative by some participants. Assisting faculty to provide more meaningful classroom instruction is a potential benefit of the study that may have been perceived by participants as a social reward. Tangible rewards for the study included entering participants who complete the survey in a random drawing for a $75 Visa gift card. The introductory page was immediately followed by the study consent form that included potential benefits to faculty and nursing students (Appendix J). The study consent form also assured anonymity, which may have reduced non-response rates if participants perceived a high social cost. Information related to one's class participation could potentially be perceived as sensitive information, thus assurance of anonymity may have decreased the non-response rate. Finally, Survey Monkey® software utilized for administration of the survey is familiar to the college population and has been demonstrated to produce higher response rates than paper-based surveys (Greenlaw & Brown-Welty, 2009; Marra & Bogue, 2006).

Serial requests for completion of surveys can also increase the percentage of responders (Dillman, Smyth, & Christian, 2009). It was requested that after the initial invitation, a second invitation be sent to the nursing students. Program directors from 2 out of 13 agreed to send the second invitation.

Data Management. Data collected from responses to the survey using Survey Monkey® were exported on an Excel spreadsheet. Three hundred and thirty-three students responded. Two hundred and seventy-four out of the 333 students completed the CUCEI and the ACPS survey; completion of demographic information was optional. However, for all demographic variables greater than 98% of the participants completed the section. The 59 incomplete responses were removed from the data set.

The choice of responses for the ACPS for each of the five components (preparation, contribution to discussion, group skills, communication skills, and attendance) were never, sometimes, most of the time, and always. Never was assigned a numeric code of 0, sometimes was assigned a numerical code of 1, most of the time was assigned a numerical code of 2, and always was assigned a numerical code of 3 (Appendix A). Hence, 3 would be the highest achievable score for each component of the ACPS. On the ACPS there was also an option for "do not wish to respond" however, 0% of students chose this option. On the original ACPS, a five-point Likert scale was also used however; the options were very good, good, average, fair, or poor. The terms were change for this study because they were felt to be more definitive.

The choices of responses for each statement in the CUCEI are as follows with their respective codes: would increase my classroom participation 1, would decrease my classroom participation -1, would have no effect on my classroom participation 0. Both descriptive and inferential statistics were generated using IBM SPSS Statistics 23®. Reverse coding was used for statements that were written in the negative (e.g., the instructor is unfriendly and inconsiderate towards me).

Data Analysis. Data were analyzed using both descriptive and inferential statistics. The following is a description of the descriptive statistical methods for each scale (ACPS and CUCEI) and demographic data. Inferential statistics were executed to test the stated hypotheses and are also described in this section.

Descriptive Analysis. To analyze factors in the classroom-learning environment that influence classroom participation, as measured by the CUCEI, a descriptive analysis was executed. Absolute (numbers) and relative frequencies (percentages) provided a concise description of the distribution of responses to the survey questions (Appendix K; Coladarci, Cobb, Minium, & Clarke, 2004). Tabulation of responses for the CUCEI depicted factors in the classroom environment that this sample of students ascribed to increasing, decreasing, or having no effect on their classroom participation. Further, participants completing the CUCEI were afforded the opportunity to provide narrative comments for each of the six subscales: personalization, innovation, cohesion, cooperation, individualization, and equity. Although analysis of these narrative comments is not consistent with qualitative analysis (Creswell, 2014), it did provide the benefit of additional insight of participants' perception of factors that influence classroom participation. Comments were carefully read to identify consistent keywords and concepts that were incorporated in the analysis of each subscale (Fink, 2013).

The Assessment of Classroom Participation Scale was intended to identify students' reported actual classroom participation (Appendix A; Dancer & Kamvounias, 2005). There are five components that define participation in the Assessment of Classroom Participation Scale, which include preparation for class, contribution to discussion, group skills, communication skills, and attendance and punctuality. Absolute (numbers) and relative frequencies (percentages) for the Assessment of Classroom Participation Scale provided a concise description of the distribution of responses for each component of this scale.

Descriptive statistics were also executed in analysis of demographic variables reported in detail in the description of the study sample in Chapter 3. Overall, demographics of study participants are comparable to the national demographics of baccalaureate nursing students such that the majority of participants were English-speaking, Caucasian females less than 30 years of age (National League for Nursing, 2013).

Inferential Analysis. Inferential statistics were employed to analyze data generated from the stated hypotheses. Pearson-product moment correlation was utilized to determine if there was a linear association between preferred factors in the classroom-learning environment as measured by the total scores on the CUCEI and reported levels of classroom participation as measured by the total scores on the ACPS for the entire sample (i.e., expected increased scores on CUCEI and ACPS). Independent t-tests were used to determine if a statistically significant difference (alpha level of 0.01) existed between junior-and senior-level-nursing students in regards to scores on the CUCEI and ACPS. Likewise, the independent t-tests were used to determine if a statistically significant difference (alpha level of 0.01) existed between age, gender, race and/or ethnicity, and primary language in regards to scores on the CUCEI and ACPS. Age was collected as a continuous variable therefore, age was dichotomized as those students who were less than 25 years of age versus those students who were greater than or equal to 25 years of age. The National Center for Education Statistics within the United States Department of Education categorizes university and college students as traditional (less than 25 years) and non-traditional (greater than or equal to 25 years; United States Department of Education, 2015).

A further analysis of scores for each individual subscale of the CUCEI and each individual component of the ACPS revealed unanticipated differences. Hence, repeated measures ANOVA was used to test for a difference among the CUCEI and ACPS subscales within subjects. Post-hoc tests were then used to compare each subscale to every other subscale.

Ethical Conduct of Research. In addition to fulfilling the requirements of the Institutional Review Board (IRB) at the University of Maine to protect the rights of human subjects, ethical standards specified by the American Association for Public Opinion Research (AAPOR) were also adhered to. These standards include informing potential study participants of the "nature of the survey, the identity of the [researcher], how the data will be used, average length of time to complete the survey, and any risks involved in participating in the survey" (Appendix J; Sue & Ritter, 2012, p. 28). The opening page included the study consent form and participants were allowed access to the survey only by checking the option of agreeing to participate (Appendix J).

Anonymity ensures study participants cannot be identified through data that have been collected (McMillan & Schumacher, 2010). The link to this study was emailed to junior- and senior-level baccalaureate students by the program directors of participating universities/colleges. In other words, I did not have access to the participants' email addresses; thus, data generated were anonymous.

Summary of Methodology and Methods

This quantitative, non-experimental, comparative, survey research design influenced by a feminist pedagogical framework was intended to facilitate understanding of perceived factors that influence classroom participation of junior- and senior-level nursing students enrolled in a baccalaureate program (Creswell, 2014; McMillan & Schumacher, 2010). Additionally, I endeavored to understand the relationship between students' reported classroom participation and factors perceived to influence this participation. Baccalaureate junior-and senior-level

nursing students enrolled in CCNE accredited nursing program in the New England region were invited to complete an online survey utilizing the College and University Classroom Environmental Inventory and the Assessment of Classroom Participation Scale (Dancer & Kamvounias, 2005; Fraser, Treagust, & Dennis, 1986). The following chapter is a report of methods of data analysis and interpretation of data generated from this study.

The independent variables that have been associated with classroom participation used for this study include age, gender, race and/or ethnicity, primary language, program level, and factors that influence classroom participation measured by the College and University Classroom Environment Inventory (CUCEI; Campbell, 2007; Fraser, Treagust, & Dennis, 1986; Hirschy & Wilson, 2002; Howard, Zoeller, & Pratt, 2006; Lewis & Simon, 1986; Rocca, 2010). Questions related to age, gender, race and/or ethnicity, and primary language may potentially be considered sensitive information for some individuals. It has been reported requesting sensitive information at the end of a questionnaire increases response rates as individuals having already completed the bulk of the survey and are more likely to be engaged and interested (Dillman, Smyth, & Christian, 2009). Additionally, it has been reported that questions perceived as unrelated to the study may result in distrust and abandonment of the survey (Sue & Ritter, 2012). A short explanation for study participants prior to completing questions related to sensitive information can facilitate trust (Dillman, Smyth, & Christian, 2009; Sue & Ritter, 2012). Hence, demographic questions were placed at the end of the survey and preceded by an explanation of their significance (Appendix C). The independent variable of perceived factors that influence classroom participation was measured with the CUCEI (Appendix B).

CHAPTER 4

RESULTS

The purpose of this study situated in feminist pedagogy as described by Maher and Tetreault (1994, 2001) was to determine factors that influence classroom participation of junior- and senior-level nursing students enrolled in a pre-licensure baccalaureate of science (BSN) programs in the New England region. The intention was to address the following research questions:

1. What do junior- and senior-level nursing students in pre-licensure, accredited, baccalaureate nursing programs perceive as the factors in the classroom-learning environment that influence participation?
2. What is the relationship between these factors and reported classroom participation?
3. What is the relationship between these factors and the students' demographic variables?

Descriptive Results

Descriptive analysis was utilized with tabulation of absolute (numbers) and relative frequencies (percentages) for questions on each of the six subscales of the CUCEI. The CUCEI subscales include personalization, innovation, student cohesion, cooperation, individualization, and equity (Fraser & Treagust, 1986).

Personalization

Personalization, or the extent to which students interact with faculty and faculty's concern for students' welfare (Fraser, Treagust, & Dennis, 1986), was most often cited by students for increasing classroom participation (Table 4.1).

Table 4.1. Responses: Personalization Subscale of CUCEI
N = 274

Response	Increase	No effect	Decrease	No
The instructor considers my feelings.	238 (87%)	33 (12%)	0 (0%)	3 (1%)
The instructor is friendly and talks to me.	263 (96%)	10 (4%)	1 (0.4%)	0 (0%)
The instructor goes out of his way to help me.	258 (94%)	15 (6%)	0 (0%)	1 (0.4%)
The instructor helps me when I am having trouble with my work.	256 (93%)	17 (6%)	1 (0.4%)	0 (0%)
The instructor moves around the classroom to talk with me.	176 (64%)	85 (31%)	12 (4%)	1 (0.4%)
The instructor is interested in my problems.	212 (77%)	62 (23%)	0 (0%)	0 (0%)
The instructor is unfriendly and inconsiderate towards me.	5 (2%)	6 (2%)	263 (96%)	0 (0%)

Forty-one of the 274 study participants (15%) provided comments in this section. Students commented that faculty who were friendly and enthusiastic created a tone that encouraged classroom participation. During class discussions, students reported faculty's validation that students' contributions were valued also increased classroom participation. In contrast, demeaning faculty responses to questions posed by students were cited as diminishing participation. Several students commented when faculty simply knew students' names they are more likely to participate in class. Positive faculty/student interactions outside of the classroom environment were also cited as factors that would increase classroom participation.

Innovation

The innovation subscale ascertains the extent of new teaching methods and activities and its relationship to classroom participation (Fraser & Treagust, 1986; Fraser, Treagust, & Dennis, 1986; Nair & Fisher, 2001). Student responses for 3 out of 7 questions on this subscale indicated innovative classroom activities increase their participation (74% to 77%); however, for each of the 7 questions, 21% to 61% of students reported that innovation had no effect on their classroom participation.

Table 4.2. Responses: Innovation Subscale of CUCEI

N = 274

Response	Increase	No effect	Decrease	No
New ideas are seldom tried out in class.	35 (13%)	125 (46%)	105 (38%)	9 (3%)
My instructor uses new and different ways of teaching in the class.	202 (74%)	58 (21%)	12 (4%)	2 (1%)
The instructor thinks up innovative activities for me to do.	206 (75%)	58 (21 %)	9 (3 %)	1 (0.4%)
The teaching approaches used in the class are characterized by innovation and variety.	212 (77 %)	58 (21 %)	3 (1%)	1 (0.4%)
Seating in the class is arranged in the same way every week.	85 (31 %)	166 (61 %)	22 (8 %)	1 (0.4%)
The instructor often thinks of unusual activities.	124 (45 %)	106 (39 %)	40 (15 %)	4 (1 %)
I seem to do the same type of activities in every class.	37 (14%)	131 (48%)	102 (37%)	4 (1%)

Twenty-five out of 274 (9%) participants provided comments on innovation. Although some students reported innovation was welcome and stimulating, the desire for structure was a recurrent theme. Seating as a function of structure was also cited by some students as a source of comfort. Students also reported innovative activities needed to be well-planned and maintain the intended focus to ensure faculty imparted the “correct information and facts”

preferably in lecture format. Faculty's expert knowledge and ability to provide personal examples of clinical situations were professed to increase classroom participation. The preference for lecture, structure in delivery of content, and consistent seating arrangements is reflected in the following statement, "The classroom arranged in the same way every week and sitting in the same seat, makes me feel more comfortable. If the teacher tries to do new activities or learning strategies, it makes me uncomfortable and less likely to contribute. I like lectures with slideshows so I can take notes."

Student Cohesion

The student cohesion subscale focuses on the relationship between knowing and supporting one's classmates and classroom participation (Fraser & Treagust, 1986; Fraser, Treagust, & Dennis, 1986; Nair & Fisher, 2001). Student cohesion was reported to increase classroom participation in varying degrees as responses ranged from 42% to 78% on each of the seven items of this subscale. Additionally, a considerable percentage of students (21% to 49%) reported that items included in student cohesion subscale would have no effect on their classroom participation.

Table 4.3. Responses: Student Cohesion Subscale of CUCEI
N = 274

Response	Increase	No effect	Decrease	No
My class is made up of individuals who do not know each other well.	16 (6%)	73 (27%)	184 (67%)	1 (0.4%)
I know most students in the class by their first names.	214 (78%)	58 (21%)	2 (1%)	0 (0%)
I make friends easily in the class.	207 (76%)	66 (24%)	1 (0.4%)	0 (0%)
I don't get much of a chance to know my classmates.	9 (3%)	89 (32%)	176 (64%)	0 (0%)
It takes me a long time to get to know everybody by is/her first name in the class.	7 (3%)	137 (50%)	127 (46%)	3 (1%)
I have the chance to know my classmates well.	211 (77%)	58 (21%)	4 (1%)	1 (0.4%)
I am not very interested in getting to know other students in the class.	14 (5%)	134 (49%)	115 (42%)	11 (4%)

Nineteen out of 274 study participants (7%) provided comments in this section. Students reported relationships with classmates evolved over time and increased their level of comfort subsequently, increasing classroom participation. The following statement by a student captures this sentiment, "I have a small nursing class and I am more comfortable participating now that I know everyone." In contrast, there were some students who did not feel that student cohesion affected their classroom participation as reflected in some comments: "I'm there to learn, not join the social club."

Cooperation

The cooperation subscale ascertains students' inclination to work collaboratively with their classmates in the learning environment as opposed to competing with classmates (Fraser & Treagust, 1986; Fraser, Treagust, & Dennis, 1986; Nair & Fisher, 2001). The majority of students reported that cooperation with assignments, resources, and class activities increased classroom participation.

Table 4.4 Responses: Cooperation Subscale of CUCEI
N = 274

Response	Increase	No effect	Decrease	No
I cooperate with other students when doing assignment work.	232 (85%)	35 (13%)	7 (3%)	0 (0%)
I share my books and resources with other students when doing assignments.	172 (63%)	72 (26%)	28 (10%)	2 (1%)
I work with other students on projects in this class.	200 (73%)	43 (16%)	30 (11%)	1 (0.4%)
I learn from other students in this class.	215 (78%)	48 (18%)	11 (4%)	0 (0%)
I work with other students in the class.	213 (78%)	44 (16%)	17 (6%)	0 (0%)
I cooperate with other students on class activities.	222 (81%)	41 (15%)	11 (4%)	0 (0%)
Students work with me to achieve class goals.	217 (79%)	46 (17%)	8 (3%)	3 (1%)

Fifteen out of 274 study participants (5%) provided comments in this section. Most students reported increased learning when working in groups because of the potential to build relationships with other students in the class and further discuss nursing concepts; however, group work was noted to be challenging when all members do not participate equally and a grade was attached to the assignment. Some students also commented that group work helps students to learn to be team players, which was perceived as important in the nursing profession.

Individualization

The individualization subscale considers the relationship between providing students an opportunity to make decisions related to pace of course work and type of activities and classroom participation (Fraser & Treagust, 1986; Fraser, Treagust, & Dennis, 1986; Nair & Fisher, 2001). Responses for this subscale did not indicate a strong preference for activities intended to support individualization as percentages ranged from 19% to 63% on each of the seven items in this category.

Table 4.5 Responses: Individualization Subscale of CUCEI
N = 274

Response	Increase	No effect	Decrease	No
I am expected to do the same work as all the students in the class, in the same way and in the same time.	121 (44%)	100 (37%)	51 (19%)	2 (1%)
I am generally allowed to work at my own pace in the class.	153 (56%)	93 (34%)	25 (9%)	3 (1%)
I have a say in how class time is spent.	172 (63%)	81 (30%)	15 (5%)	6 (2%)
I am allowed to choose activities and how I will work.	195 (71%)	58 (21%)	17 (6%)	4 (2%)
Teaching approaches in the class allow me to proceed at my own pace.	173 (63%)	70 (26%)	27 (10%)	4 (2%)
I have little opportunity to pursue my particular interest in the class.	38 (14%)	67 (24%)	161 (59%)	8 (3%)
My instructor decides what I would do in the class.	43 (16%)	161 (59%)	61 (22%)	9 (3%)

Eleven out of 274 study participants (4%) provided comments in this section. Although students reported that some autonomy would be welcome in this area, the overall sentiment was that large volumes of information required in nursing would not permit this degree of latitude. Most students who commented expected faculty to “lay out a concrete plan and objectives so that we can be successful in the real world. This allows students to learn to prioritize as structure and organization is key especially in nursing.”

Equity

The equity subscale focuses on the relationship between fair and equal treatment of students and the effect on classroom participation (Fraser & Treagust, 1986: Fraser, Treagust, & Dennis, 1986; Nair & Fisher, 2001). The majority of students reported that equity was an important factor that increased classroom participation.

Table 4.6 Responses: Equity Subscale of CUCEI
N = 274

Response	Increase	No effect	Decrease	No
The instructor gives as much attention to my questions as to other students' questions.	233 (85%)	9 (14%)	1 (0.4%)	1 (0.4%)
I get the same amount of help from the instructor as to other students.	226 (82%)	44 (16%)	3 (1%)	1 (0.4%)
I am treated the same as other students in the class.	232 (85%)	40 (15%)	1 (0.4%)	1 (0.4%)
I receive the same encouragement from the instructor as other students do.	231 (84%)	41 (15%)	1 (0.4%)	1 (0.4%)
I get the same opportunity to answer questions as other students do.	228 (83%)	43 (16%)	2 (1%)	1 (0.4%)
My work receives as much praise as other students' work.	225 (82%)	43 (16%)	5 (2%)	1 (0.4%)
I have the same amount of say in the	228 (83%)	44 (16%)	0 (0%)	2 (1%)

Nine out of 274 study participants (3%) provided comments in this section. Students reported fair treatment in terms of grading, feedback, and an opportunity to share ideas would increase their classroom participation. The following comment illustrates this perception, "I appreciate equal feedback and chances to share my opinion and ideas."

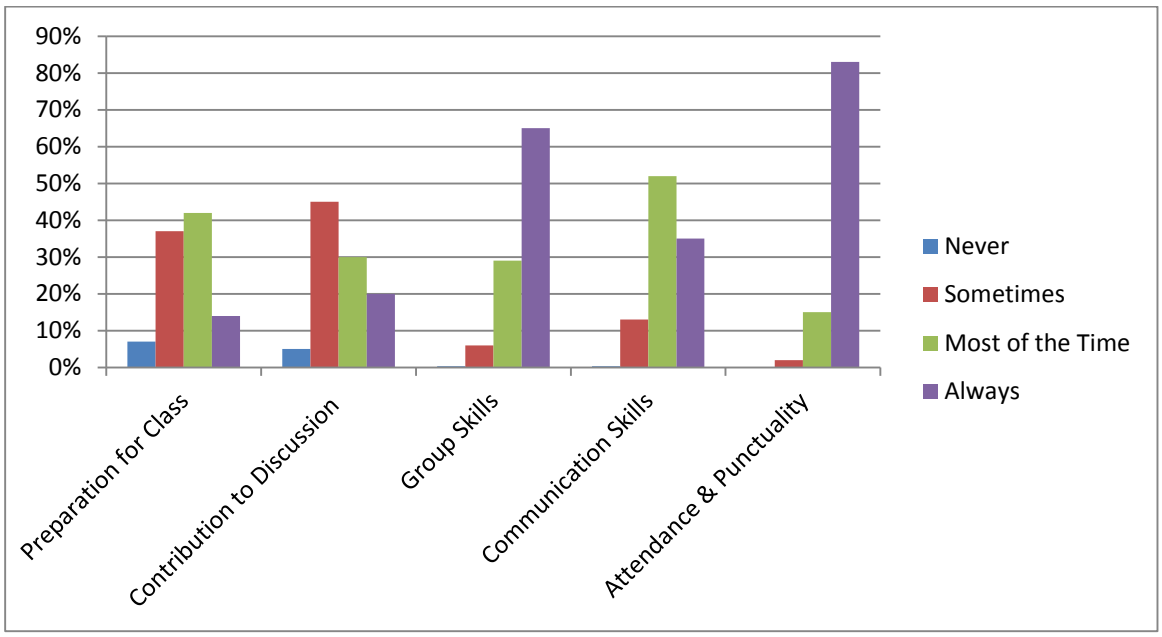
Assessment of Classroom Participation

Forty-four percent of students report they never or sometimes believe "the extent of [their] reading, analyzing, and understanding of material" was demonstrated by their contribution to class discussion as specified in this scale (Appendix L, Table 4.7; Dancer & Kamvounias, 2005, p. 448). In fact, 50% of students reported they never or sometimes "volunteer answers, ask relevant questions, express opinions or analyze contributions of others" as specified in this scale (Appendix L; Table 4.7, Dancer & Kamvounias, 2005, p. 448). Despite the high percentage of students who responded that they do not believe their preparation for class is demonstrated by their contribution to class discussion nor do they contribute to discussion, 98% of the participants reported they either always (83%) or most of the time (15%) attend class and arrive on time (Appendix L, Table 4.7, & Figure 4.1).

Table 4.7 Response: Assessment of Classroom Participation Scale
N = 274

	Never	Sometimes	Most of the Time	Always
Preparation for Class	19 (7%)	101 (37%)	114 (42%)	40 (14%)
Contribution to Discussion	13 (5%)	122 (45%)	84 (30%)	55 (20%)
Group Skills	1 (0.3%)	17 (6%)	78 (29%)	178 (65%)
Communication Skills	1 (0.3%)	35 (13%)	143 (52%)	95 (35%)
Attendance and Punctuality	0 (0%)	5 (2%)	41 (15%)	228 (83%)

Figure 4.1. Frequency of Responses: Assessment of Classroom Participation



Inferential Results

Inferential statistics were utilized to test the hypotheses of this study. The study was designed to determine if a relationship existed between preferred factors in the classroom-learning environment as measured by the CUCEI and reported classroom participation as measured by the ACPS for junior-and senior-level-level nursing students enrolled in baccalaureate programs. It was hypothesized that junior-and senior-level-level nursing students who preferred an active classroom-learning environment (i.e., higher CUCEI scores) would report higher levels of classroom participation (i.e., higher ACPS scores). A Pearson-product moment correlation revealed no relationship ($r = -.027$) between preferred factors in the classroom-learning environment and reported classroom participation for the entire sample of participants. The mean score for the entire sample on the CUCEI was 29.27 out of a possible 42. The mean score for the entire sample on the ACPS was 10.90 out of a possible 20.

It was further hypothesized that there would be a statistically significant difference between total scores on the CUCEI and ACPS based on class level, age, gender, race and/or

ethnicity, and primary language.. There was no statistically significant difference between total CUCEI and ACPS scores based on class level, gender, race and/or ethnicity, and primary language. However, there was a statistically significant difference regarding total CUCEI and ACPS scores between age groups (Table 4.8). It should be also noted that overall scores on the total CUCEI for the entire sample could be considered low as the highest attainable score would be 42. Likewise, the highest possible overall score on the ACPS is 20 suggesting low scores regarding reported participation for the entire sample.

Table 4.8. Comparison between Mean Scores of CUCEI and ACPS

	CUCEI Mean Scores (Significance)			ACPS Mean Scores (Significance)		
	Score	SD	Significance	Score	SD	Significance
Level (n=274)						
Junior (n=118)	28.52	8.71	(.123)	10.81	1.73	(.431)
Senior (n=156)	30.01	7.13		10.98	1.81	
Gender (n=271)						
Male (n=23)	26.91	9.68	(.121)	11.61	2.23	(.059)
Female (n=248)	29.58	7.69		10.86	1.77	
Age (n = 268)						
< 25 years (n=216)	27.22	6.01	(.000*)	10.75	1.74	(.003*)
$\geq$ 25 years (n=52)	21.70	7.23		12.58	1.98	
Race (n=269)						
Caucasian (n=240)	29.38	7.88	(.892)	10.97	1.61	(.492)
Other (n=29)	29.17	8.41		10.98	1.84	
Primary Language (n=268)						
English (n=261)	29.44	7.78	(.703)	10.93	1.80	(.757)
Other (n=7)	28.29	12.13		10.71	2.70	

*p < .01 (2-tailed) for Independent t-tests

Further analysis of the difference between each of the CUCEI subscale scores for the entire sample was prompted by significant variability between subscale scores. Although ranking of each of the six CUCEI subscales in terms of influence on classroom participation between younger and older students was the same, classroom participation was less significantly influenced by personalization, equity, and student cohesion for students greater

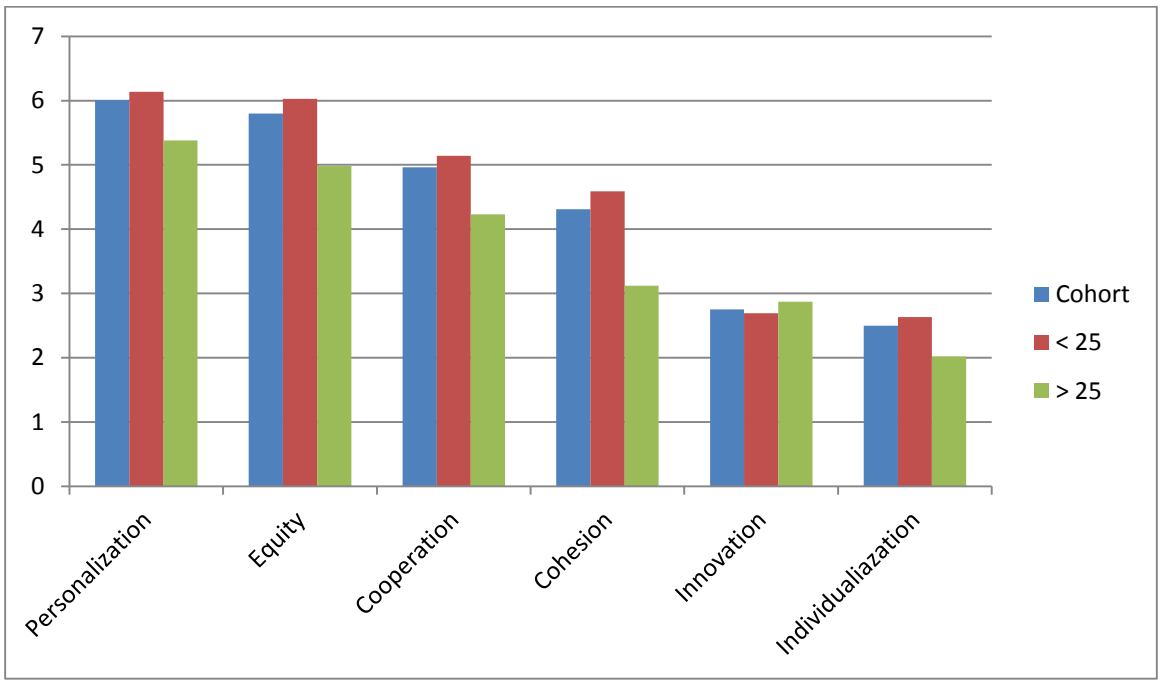
than or equal to 25 years of age. Additionally, there was a statistically significant difference between the CUCEI subscales of innovation and individualization and all other subscales for the entire sample (Table 4.9).

Table 4.9. Comparison of Mean CUCEI Subscale Scores Between Age Groups

		n= 216 (< 25 years)	n=52 (≥ 25 years)
CUCEI Subscales	Entire Sample Scores	< 25 years	≥ 25 years
Personalization	6.01	6.14	5.38*
Equity	5.80	6.03	4.98*
Cooperation	4.96	5.14	4.23
Student cohesion	4.31	4.59	3.12*
Innovation	2.75*	2.69	2.87
Individualization	2.50*	2.63	2.02

*p < .01 (2-tailed)

Figure 4.2 Comparison of Mean CUCEI Subscale Scores Between Age Groups



The Assessment of Classroom Participation Scale measures students' self-reported level of classroom participation (Dancer & Kamvounias, 2005). Variability on each of the five components of this scale was observed; hence, our analyses validated a statistically significant difference ($p < .01$) between student responses on each of the component. Students 25 years of age or older reported significantly higher ($p < .01$) levels of preparation and contribution to class discussion than students younger than 25 years of age. Amongst the entire sample attendance and punctuality were significantly higher ($p < .01$) than preparation and contribution to class discussion.

Summary of Results

Although no statistically significant ($p < .01$) relationship between factors that influence classroom participation as measured by the CUCEI and reported classroom participation as measured by the ACPS for this sample of students was found, there were significant differences between subscales on the CUCEI (Table 4.9) and components of the ACPS (Table 4.7) . This sample of students reported that innovation and individualization were least likely to increase classroom participation. Personalization, equity, cooperation, and student cohesion were reported as most likely to increase classroom participation. Although there were significant differences related to the extent that each of these subscales affected classroom participation based on age, the ranking of each subscale in terms of effect on classroom participation for both traditional (less than 25 years of age) and non-traditional (greater than or equal to 25 years of age) students was the same.

Overall, CUCEI and ACPS scores for the entire sample were low: 29.27 out of 42 and 10.90 out of 20, respectively. Low scores on the CUCEI may be attributed to selection of the "no effect on classroom participation" option for several factors on the innovation and individualization subscales (up to 61% of students responded that some items would have no

effect on their classroom participation). Low total scores on the ACPS may reflect that while this sample of nursing students reported high rates of class attendance and punctuality, reported preparation and participation was low. Non-traditional students, however, did report higher rates of preparation and contribution to discussion. Considering these results within the framework of feminist pedagogy explicated in the work of Maher and Tetreault (1994, 2001) may help nursing faculty to develop strategies to engage nursing students in classroom participation.

CHAPTER 5

DISCUSSION

The purpose of this study was to understand perceived factors in the classroom-learning environment that influence classroom participation of New England junior- and senior-level baccalaureate nursing students. Further, I endeavored to investigate a possible relationship between students' reported classroom participation and factors perceived to influence their participation. An anonymous, online survey that included the Assessment of Classroom Participation Scale (ACPS) and the College and University Classroom Environment Scale (CUCEI) were distributed to junior-and senior-level baccalaureate nursing students in the New England region. As reported in Chapter 4, there was no statistically significant linear association between the total scores of the ACPS and CUCEI; however, there were statistically significant differences ($p < .001$) between components on the ACPS and subscales of the CUCEI for the entire sample and between age groups dichotomized as those students greater than 25 years versus those less than or equal to 25 years. Although there were differences based on age for the CUCEI subscales scores, ranking of the six subscales was the same (Table 4.9). Of the six CUCEI subscales, scores were lowest on innovation and individualization for the entire sample regardless of age.

In this chapter, I review my significant results through the lens of feminist pedagogy based on the work of Maher and Tetreault (1994, 2001). According to Maher and Tetreault (1994, 2001) feminist pedagogy embodies four critical themes that include voice, mastery, positionality, and authority. A community of learning is a central, cohering theme of feminist pedagogy and may be created by integrating each of these four themes in the learning environment (Beck, 1995; Campbell, 2002; Crabtree, Sapp, & Licona, 2009; Crawley, Lewis, & Mayberry, 2008; Duncan & Stasio, 2001; Hahna & Schwantes, 2011; Hoffmann & Stake, 2001;

Hughes, 1995; Ironside, 2001; Maher & Tetreault, 1994, 2001, Shrewsbury, 1987; Webb, Allen, & Walker, 2002; Webb, Walker, & Bollis, 2004; Webber, 2006). These results are analyzed through the lens of the four critical themes of feminist pedagogy as proposed by Maher and Tetreault (1994, 2001) and the central, cohering theme of a community of learning created by this researcher (Figure 3.1). Subscales on the College and University Environment Inventory were integrated with each of Maher and Tetreault's (1994, 2001) four critical themes (voice, mastery, positionality, and authority) and the central theme of a community of learning (figure 3.2 & 5.1). Further, results were related to the existing literature on classroom participation presented in Chapter 2. Reports of actual classroom participation as measured by the Assessment of Classroom Participation Scale provide insight of the characteristics of classroom participation for this sample of nursing students. Faculty behaviors that support classroom participation is one factor that may enhance enactment of the critical themes of feminist pedagogy (voice, mastery, positionality, and authority) creating a community of learning in the classroom environment (Beck, 1995; Chinn, 1989; Crabtree, Sapp, & Licona, 2009; Maher & Tetreault, 1994, 2001).

Feminist Pedagogy

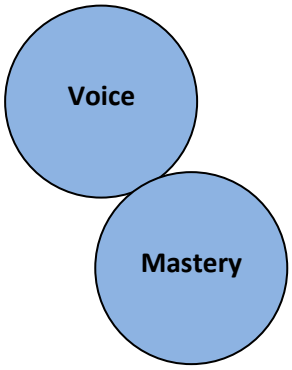
In their seminal, qualitative research study, Maher and Tetreault (1994, 2001) proposed four critical themes related to feminist pedagogy: voice, mastery, positionality, and authority. Teaching strategies that support voice, mastery, positionality, and authority symbiotically create feminist classrooms for which classroom participation is a key component (Ropers-Huilman, 1999). There are six subscales of the College and University Classroom Environment Inventory. Four of the subscales, personalization, innovation, individualization, and equity, may be related to specific critical themes proposed by Maher and Tetreault (1994, 2001). The remaining two CUCEI subscales, student cohesion and cooperation, may be viewed as central to the creation of

a community of learning inherent in feminist classrooms (Crabtree, Sapp, & Licona, 2009; Maher & Tetreault, 1994, 2001).

Feminist Pedagogy Critical Themes: Voice and Mastery

The CUCEI subscales most germane to the critical themes of voice and mastery would include personalization, equity, innovation, and individualization (Fraser & Treagust, 1986; Maher & Tetreault, 1994, 2001). The potential influence of faculty behaviors inherent in these CUCEI subscales (personalization, equity, innovation, and individualization) may support voice and mastery and allow faculty to consider ways to engage students in classroom participation.

Figure 5.1. Relationship: CUCEI Subscale Scores of Personalization, Equity, Innovation and Individualization with Maher and Tetreault's (1994, 2001) Critical Themes of Voice and Mastery

	n = 274	
CUCEI Subscales	**Scores***	**Critical Themes**
Personalization Faculty concern for students' learning & personal welfare.	6.01	
Equity Honoring all voices.	5.80	
Innovation Variety of teaching/learning methods.	2.75	
Individualization Allowing students to participate in decisions regarding class structure & assignments.	2.50	

*7.00 is the highest possible score for each subscale

<u>CUCEI Subscale: Personalization.</u> Personalization would be connected to the concept of voice as it is intended to determine the influence of faculty concern for students' learning and personal welfare on classroom participation (Fraser & Treagust, 1986). Subsequently, faculty who demonstrate concern for students' learning and personal welfare may create a classroom environment that welcomes student voice.

In the feminist classroom, awakening of student voice is more than merely answering questions or expressing a point of view (Belenky, Clinchy, Goldberger, & Tarule, 1986). Awakening of voice allows students to link their words and thoughts to personal experiences and explore more deeply their beliefs and values as related to course content (Maher & Tetreault, 1994, 2001; Webber, 2006). The critical theme of voice described by Maher and Tetreault (1994, 2001) has both singular and plural implications for students. When an individual student exercises their voice in classroom discussions, their own personal understanding of concepts, beliefs, and values related to the topic at hand may be enhanced (Maher & Tetreault, 1994, 2001). Further, by hearing others' understanding of concepts, beliefs, and values, the community of students within the classroom may consider other perspectives as it relates to course content (Morgenstern, 1992). This facilitates multiple interpretations of content fostering the construction, deconstruction and reconstruction of knowledge. Creating a welcoming classroom environment and demonstrating concern for students' welfare beyond the classroom setting as depicted in the CUCEI subscales of personalization may help students feel more comfortable participating in class thus, awakening their voice (Fraser & Treagust, 1986).

Personalization may also foster the feminist pedagogical theme of mastery. In a finite sense, mastery is often interpreted as a student's ability to "master" course content evidenced through competencies or testing based on faculty terms and expert knowledge (Maher & Tetreault, 1994, 2001). Feminist pedagogy can challenge this traditional interpretation, wherein mastery is perceived as ongoing construction of knowledge whereby students interpret content based on positionality (Crabtree, Sapp, & Licona, 2009; Maher & Tetreault, 1994; 2001). Mastery can be viewed as an ongoing, collaborative process between faculty and students in the construction of knowledge actualized by shared authority and enhanced by faculty who exhibit

behaviors consistent with high levels of personalization (Maher & Tetreault, 1994, 2001; Webb, Walker, & Bollis, 2004). Hence, high levels of personalization (faculty concern for students learning and welfare) may support mastery by permitting voices of students and faculty to be heard in the construction and reconstruction of knowledge.

The highest statistically significant CUCEI subscale score for this sample was personalization (Table 4.9). Hence, nursing students in this sample reported when faculty demonstrated concern for individual students' learning needs and personal welfare, their classroom participation would be increased. This point is congruent with strong evidence in the literature that faculty characteristics such as demeanor inside and outside of the classroom and interest in students' lives beyond the classroom environment positively influences classroom participation (Dollman, King, & Hemphill, 2009; Johnson, 2003; Rocca, 2011; Salter & Persaud, 2004). Consequently, from a feminist perspective, increased classroom participation may hold promise to engage the voice of students in collaborative mastery of knowledge.

CUCEI Subscale: Equity. Equity in the context of the CUCEI reflects the extent faculty equally encourages students' participation in the classroom environment (Fraser & Treagust, 1986) thus, supporting the critical themes of both voice and mastery in Maher and Tetreault's (1994, 2001) framework of feminist pedagogy. By honoring all voices equally, mastery is enhanced such that multiple perspectives may create new avenues for understanding and applying knowledge (Maher & Tetreault, 1994, 2001).

In the literature, equity has been reported to increase classroom participation. Nair and Fisher (2001) reported when faculty encourage and respect students' voices equally such that the classroom environment is one of collaboration as opposed to competition, students are more likely to participate in class. Additionally, it has been reported when faculty welcome all students' questions and equally recognize their accomplishments, classroom participation is

increased (Dallimore, Hertenstein, & Platt, 2004; Falk-Rafeal, Chinn, Anderson, Laschinger, & Rubotzky, 2004).

For this sample, scores on the CUCEI subscale of equity were significantly higher than the other subscales (Table 4.9). This may suggest when faculty treat students fairly by providing equal opportunity for participation (e.g., opportunity to answer questions) amongst all students, classroom participation would be increased. Increased classroom participation supported by equity may be fertile ground for supporting students' voice and facilitating mastery.

CUCEI Subscale: Innovation. The CUCEI innovation subscale reflects the extent that a variety of teaching techniques affects classroom participation (Fraser & Treagust, 1986). This subscale may be linked to voice because a variety of innovative teaching techniques may accommodate different learning styles with the potential of appealing to an overall higher percentage of students within a classroom (Crookes, Crookes, & Walsh, 2013; Montgomery & Grant, 1998). Subsequently, this increased appeal may engage more students in dialogue. In the current sample, scores on this subscale were significantly lower than scores on the other four subscales of personalization, equity, student cohesion, and cooperation (Table 4.9). However, a closer analysis of responses for each innovation subscale factor suggests that some components within the subscale would have no perceived effect on classroom participation for the majority of students (e.g., arrangement of seats) thus lowering the total subscale score. Additionally, within this subscale response on the effect of unusual activities on classroom participation were widely dispersed between the choices also contributing to a lower total subscale score (Table 4.6 & Appendix K). Despite responses of no effect and widely dispersed selection of choices for some factors on the innovation subscale, between 74% and 77% of students did report on three items of this subscale that innovation and variety of teaching strategies in the classroom would increase their classroom participation. However, although innovation may be favored by this

sample of students, comments on this subscale reflected a preference for structure to ensure faculty imparted the “correct information and facts.”

In the literature, innovative teaching strategies have been described primarily in the context of active learning as a method to implement feminist pedagogy and awaken student voice (Duncan & Stassio, 2001; Hawkes, 2005; Magdola, 2002; Salter & Persuad, 2003). Reported effects of innovative strategies include both an increase and decrease in classroom participation (Allen, 1995; Auster & Wylie, 2006; Bonwell & Eison, 1991; Hoke & Robbins, 2005). Innovative strategies that encouraged students to challenge traditional ways of knowing have been reported to increase classroom participation (Magdola, 2002). In contrast, innovative strategies that are loosely structured allowing students to go off-topic have been cited as disengaging hence, decreasing classroom participation (Hawkes, 1992; Tedesco-Schneck 2012). In some studies, students and faculty reported innovative strategies perceived to decenter faculty authority result in disruptive classroom behaviors (Duncan & Stassio, 2001). Hence, low scores for this sample on the CUCEI innovation subscale may be associated with reports in the literature that students favor innovation but are reluctant to embrace “unusual” teaching strategies they may perceive as loosely structured.

Innovation, or the utilization of new and varied teaching techniques (Fraser & Treagust, 1986), can also facilitate mastery in two important ways (Maher & Tetreault, 1994, 2001). Innovative teaching techniques may be more inclusive in addressing the learning styles of a higher percentage of students thus engaging a larger group of students in a dynamic learning process needed to achieve mastery (Crookes, Crookes, & Walsh, 2013; Montgomery & Grant, 1998). This may then challenge students to think in distinct and creative ways as many voices enter the conversation such that knowledge can be constructed, deconstructed, and/or reconstructed (Hahna & Schwantes, 2011; Meyers & Jones, 1993). Innovation has been closely

associated with a myriad of active pedagogies as opposed to more traditional passive pedagogies that consist of primarily lecture (Allen, 1995; Bonwell & Eison, 1991; Chickering & Gamon, 1987). Feminist pedagogy incorporates varied active teaching strategies (Crabtree, Sapp, & Lacona, 2009; Maher & Tetreault, 1994, 2001). Researchers have reported that active pedagogies, including feminist pedagogy, can encourage ongoing mastery of knowledge (Burbach, Matkin, & Fritz, 2004; Smith, 1977; Stake & Hoffman, 2000).

In summary, total scores on the innovation subscale were significantly lower than other subscales; however, analysis of responses of individual factors within the subscale suggest that unusual activities and seating arrangement decrease or have no effect on classroom participation thus lowering the total score. The majority of students did report on three individual factors that innovative and varied teaching strategies were likely to increase their classroom participation which could support voice and mastery within the critical themes of feminist pedagogy.

CUCEI Subscale: Individualization. The CUCEI subscale of individualization is the extent to which students are allowed to make decisions regarding class structure and assignments (Fraser & Treagust, 1986). In this sense, students' voices are supported such that they have input in course design and execution. Individualization may also contribute to mastery by faculty sharing ownership for learning with students (Fraser & Treagust, 1986; Maher & Tetreault, 1994, 2001). For this sample, scores on this subscale were the lowest of all CUCEI subscales scores. A closer analysis of responses for each factor on the subscale reveals 21% to 59% of students in this sample reported that provision of opportunities to make decisions on class structure and activity would have no effect on classroom participation. The opportunity for students to have choice over their individual work was the only area reported to increase classroom participation (71%) for this sample (Table 4.5 & Appendix K). There is little in the literature regarding students' and

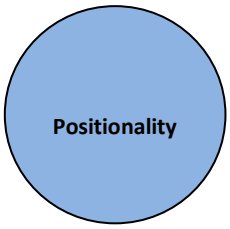
faculty's experiences with shifting or sharing of power between faculty and students in regard to class structure and assignments and the influence of classroom participation. Webber (2006) reported in a qualitative study that shifting or sharing of power between faculty and students was problematic simply by virtue of faculty's position of power within an institution. Although individualization has the potential to foster voice and mastery (Fraser & Treagust, 1986; Maher & Tetreault, 1994, 2001) it may have little effect on classroom participation as reported by 21% to 59% of this sample of students.

Summary of the Relationship between Personalization, Equity, Innovation, and Individualization on Voice and Mastery. In summary, high scores on personalization and equity for this sample would indicate when faculty are friendly and demonstrate concern for students' welfare, classroom participation personified in the critical theme of voice and mastery is increased. This result is supported by existing research that a welcoming faculty demeanor (Dollman, King, & Hemphill, 2009; Johnson, 2003; Rocca, 2011; Salter & Persaud, 2004) and equitable encouragement and support of students' favorably influences classroom participation (Dallimore, Hertenstein, & Platt, 2004; Falk-Rafeal, Chinn, Anderson, Laschinger, & Rubotzky, 2004). Increased classroom participation may be perceived as an awakening of students' voice, foundational to the process of mastery which requires a give-and-take dialogue amongst students and faculty to construct, deconstruct, and reconstruct knowledge (Crabtree, Sapp, & Licona, 2009). Additionally, innovative teaching strategies may support voice and mastery for this sample of students as long as they are not perceived as unusual or loosely structured. Conclusions related to the effect of individualization in relation to voice and mastery associated with classroom participation for this sample cannot be established since a high percentage of students reported that individualization had no effect on their classroom participation.

Feminist Pedagogy Critical Theme: Positionality

The critical theme of positionality is most closely associated to the CUCEI subscales of personalization and equity.

Figure 5.2. Relationship: CUCEI Subscale Scores of Personalization and Equity with Maher and Tetreault's (1994, 2001) Critical Theme of Positionality

	n = 274	
CUCEI Subscales	**Scores***	**Critical Themes**
Personalization Faculty concern for students' learning & personal welfare.	6.01	
Equity Honoring all voices.	5.80	

*7.00 is the highest possible score for each subscale

Positionality considers the relationship between the positions of self to others (Takacs, 2002). Factors that influence one's position may be intrinsic including such attributes as gender, race, and sexuality and extrinsic including factors such as sociocultural conditions or life experiences (hooks, 2010; Takacs, 2002). In the classroom setting, faculty who encourage students to consider these intrinsic and extrinsic factors have been found to recognize the influence of positionality on epistemology (Maher & Tetreault, 1994, 2001; Takacs, 2002). Although the subscale of personalization does not fully incorporate all the complexities of positionality, there are faculty behaviors within this subscale that are congruous to faculty support of positionality in the classroom environment (Fraser & Treagust, 1986).

For example, the majority of students in this sample reported when faculty consider students' feelings (87%) and problems (77%), their classroom participation would be increased. Hence, faculty understanding of students' feelings and problems can be an acknowledgment of a student's unique experiences (positionality; Takacs, 2002). Likewise, the equity subscale

reflects the importance students' place on faculty's inclusion of all students' participation in the community of learning and may be affiliated with positionality (Fraser & Treagust, 1986; Maher & Tetreault, 1994; 2001). This sample of students indicated that equity (Table 4. 9) would increase their classroom participation. Faculty who foster equity, allow multiple voices to be heard thus, honoring positionality by encouraging multiple interpretations of course content based on students' unique positions (Takacs, 2002). Maher and Tetreault's (1994, 2001) research on feminist classrooms does not specifically focus on the effect of positionality on classroom participation. Nevertheless, they did report when faculty honor positionality, collective discourse is enriched (Maher & Tetreault, 1994, 2001). Further, it has been reported that a sense of community in feminist classrooms encourages participation and empowers both independent thinking and freedom to challenge traditional views (Beck, 1995; Magdola, 2002; Salter & Persaud, 2003; Wang, Chao, & Liao, 2011). Therefore, high scores on the CUCEI subscales of personalization and equity for this sample of students suggests faculty behaviors within these subscales may serve to support students' consideration of positionality in the construction of knowledge.

Feminist Pedagogy Critical Theme: Authority

Individualization can be associated with the critical theme of authority (Maher & Tetreault, 1994, 2001). In this sense, individualization indicates the degree to which students are permitted to make decisions regarding course execution and assignments (Fraser & Treagust, 1986). Faculty who assume a position of sovereign authority may create a power hierarchy such that expert knowledge, teaching strategies, and evaluation are solely the purview of the professor without input from students (Chinn, 1989; Crabtree, Sapp, & Licona, 2009). In contrast, authority in the context of feminist pedagogy has the potential to shift the power in the classroom from a hierarchical to a more democratic structure validating students' point of

view (Shrewsberry, 1987). Students and faculty can position themselves as both "knowers and learners" (Maher & Tetreault, 2001, p. 128).

Figure 5.3. Relationship: CUCEI Subscale Score of Individualization with Maher and Tetreault's (1994, 2001) Critical Theme of Authority

	n = 274	
CUCEI Subscales	**Scores***	**Critical Themes**
Individualization Allowing students to participate in decisions regarding class structure & assignments.	2.50	

*7.00 is the highest possible score for each subscale

For this sample, scores on the individualization were the lowest of all CUCEI subscales, which could indicate that when faculty share authority with students in this sample, classroom participation decreases. However, a closer analysis of responses for each factor on the subscale suggests that individualization may have little effect on classroom participation as reported by 21% to 59% students (Table 4.5; Appendix K). This is supported in the literature as it has been reported that some students in feminist classrooms welcome shared authority while others do not (Beck, 1995; Magdola, 2002).

Community of Learning Within Feminist Pedagogy

Feminist pedagogy embraces egalitarian principles of cooperation and collaboration over competition and domination, and envisions students as vocal, active participants working together with peers and faculty sharing responsibility for learning (Chinn, 1989; Crabtree, Sapp, & Licona, 2009; Shrewsberry, 1987). The CUCEI subscales of student cohesion and cooperation supports this central tenet of feminist pedagogy (Fraser & Treagust, 1986; Maher & Tetreault, 1994; 2001). High scores on the student cohesion subscale would indicate that strong personal

relationships among students in a class increases classroom participation (Fraser & Treagust, 1986). High scores on the cooperation subscale would indicate that when students work collaboratively with their peers during class and outside of class; their classroom participation increases (Fraser & Treagust, 1986). In contrast, low scores on these subscales (student cohesion and cooperation) would indicate that classroom participation is not effected or decreased by these factors (Fraser & Treagust, 1986).

Figure 5.4. Relationship: CUCEI Subscale Scores of Student Cohesion and Cooperation with Community of Learning

	n = 274
CUCEI Subscales	**Scores***
Student Cohesion Relationship between knowing and supporting one's classmates.	4.96
Cooperation Inclination to work collaboratively with other students.	4.31

*7.00 is the highest possible score for each subscale

In this sample, there were statistically significant differences between scores on the CUCEI subscales of student cohesion and cooperation and the other four CUCEI subscales. Scores on the student cohesion and cooperation subscales were significantly lower than scores on personalization and equity. This result may indicate that student cohesion and cooperation is not as strongly associated with increased classroom participation as personalization and equity however; the majority of students did report that specific factors within these subscales were likely to increase their classroom participation (Table 4.3 and 4.4; Appendix K). Within the subscale of student cohesion, 76% to 78% of students reported that knowing classmates by their first names and having the opportunity to know their classmates well would increase their

classroom participation. Within the subscale of cooperation, 79% to 85% of students reported working with their classmates on assignments, projects and in-class activities was likely to increase their classroom participation. Lower scores on the student cohesion subscale in comparison to personalization and equity may be attributed to 21% to 50% of student responses of "no effect on classroom participation" for each of the seven items within the subscale. Likewise, lower scores on cooperation may be attributed to 13% to 26% of student responses of "no effect on classroom participation" for each of the seven items within the subscale.

In the literature, it has been reported that when students have the opportunity to develop relationships with their classmates; classroom participation increases (Fassinger, 1997). In-class activities and group assignments have been reported by some researchers to increase classroom participation (Crookes, Crookes, & Walsh, 2013; Salter & Persaud, 2003). Some researchers have reported that feminist classrooms for university students have been demonstrated to enhance both cohesion and cooperation, and subsequently, increase classroom participation (Morris, 2012; Persaud & Salter, 2004; Stake & Hoffman, 2000). Conversely, a secondary analysis of data from the National Survey of Student Engagement (NSSE) found that when compared to education and other health majors, nursing students reported spending significant less time working collaborative with other nursing students in class (Popkess & McDaniel, 2011). In summary, results for this sample suggest that student cohesion and cooperation may be less influential as a factor that increases classroom participation (Crookes, Crookes, & Walsh, 2013; Fassinger, 1997; Morris, 2012; Persaud & Salter, 2004; Stake & Hoffman, 2000).

Assessment of Classroom Participation Scale (ACPS)

Considering the reported actual classroom participation for this sample as measured by the ACPS may help faculty develop strategies to encourage nursing students to participate in class more fully. Increased classroom participation holds promise to create communities of learning supported by the critical themes of feminist pedagogy (voice, mastery, positionality, and authority; Beck, 1995; Chinn, 1989; Crabtree, Sapp, & Licona, 2009; Maher & Tetreault, 1994, 2001). Features of classroom participation were explicated by students' report of preparation, contribution to discussion, group skills, communication skills, and attendance and punctuality (Dancer & Kamvounias, 2005).

While 44% of students reported that they never or sometimes prepare for class and 50% of students reported they never or sometimes contribute to class discussion, 98% of students reported they always or most of the time attend class. This may be reflective of a preference of a more passive approach to learning whereby students attend class but do not fully participate. However, preparation for class was defined in the ACPS as reading, analyzing, and understanding material was evident by the student's contribution to class discussion (Appendix A; Dancer & Kamvounia, 2005). These responses may suggest that students' perceive their preparation for class may not be reflected when they contribute to a class discussion. In the literature it has been reported that students who complete reading and homework assignments were more likely to participate in class (Fassinger, 1997). However, there are no reports of students' perception that their contribution to class discussion reflects their level of preparation. Students' report of group and communication skills as they relate to participation suggest that students' perceive when they do contribute to class discussion, they express their ideas clearly and concisely (87%) and do not dominate the conversation (94%).

In summary, students in this sample report consistently attending class and arriving on time (98%) and further report when they do contribute to discussion they have strong communication (87%) and group skills (94%; Table 4.7). Despite these positive attributes that may facilitate classroom participation only half of the students report actually contributing to discussion (50%) and preparing for class (56%). Relating these results of reported actual classroom participation by this group of students to results of reported factors that are likely to increase classroom participation may provide insight to faculty behaviors that engage students in the classroom. For example, perhaps nursing students in this sample do not contribute to class discussion because they fear being admonished if they answer incorrectly in class. The following comments on the personalization scale were reflective of this sentiment; "The way the professor responds to incorrect responses will affect my participation" and "[I am] afraid to answer wrong and be embarrassed. I don't want to stand out and look stupid." These results give pause for faculty to consider behaviors within each CIUCEI subscale that may enhance classroom participation thus supporting voice, mastery, positionality, and authority to create communities of learning.

Differences Between Groups

Thus far, discussion of the data analysis has included the entire study sample. The only differences between groups found on the ACPS were based on age (Table 4.8). However, differences based on gender were approaching statistical significance and are worthy of discussion as these differences have been reported in the literature (Allan & Madden, 2006; Lewis & Simon, 1986; Persaud & Salter, 2004; Rocca, 2010). The following is a discussion related to the differences or a lack of between groups in responses on the ACPS.

Analysis of responses for this sample of students on the ACPS did not support statistically significant differences based on race and/or ethnicity, and class level. For this

sample, this observation may be attributed to underrepresentation of minorities (14%) that is consistent with representation of these groups in nursing on the national level (AACN, 2014). Lack of variation based on class level might be attributed to an established uniform pattern and perception of classroom participation by the time nursing students reach junior-and senior-level (American Association of Colleges of Nursing, 2008; CCNE, 2013).

Analysis based on age was dichotomized as those less than 25 years versus those greater than or equal to 25 years, consistent with the definition of non-traditional students by the National Center for Educational Statistics (Kena at all., 2015). Statistically significant differences were found based on age (dichotomized as less than 25 years versus those greater than or equal to 25 years) between some scores on the ACPS (Table 4.8). Older students reported higher levels of classroom participation. There is a strong body of evidence that non-traditional students have increased levels of classroom participation over traditional students (Lewis & Simon, 1986; Rocca, 2010). Older students characteristics of adult learners, as they have been described as independent, self-directed, and more confident in their abilities (Brookfield, 1986; Cyr, 1999; Knowles, 1970, 1975; Knox, 1977).

Analysis of scores on the ACPS based on gender (male versus female) revealed a difference approaching statistical significance with males reporting higher levels of classroom participation than females. It has been reported in general that male students have higher rates of classroom participation than female students (Lewis & Simon, 1986; Rocca, 2010). Persaud and Salter (2004) have reported classroom environments that welcome opinions of female engineering students resulted in their increased classroom participation. Likewise, Allan and Madden (2006) indicated that inhospitable student behaviors towards female students created a chilly classroom climate, thus inhibiting females' participation. It may be that faculty behaviors associated with the critical themes of feminist pedagogy (Maher & Tetreault, 1994,

2001) as related to the CUCEI subscales, particularly the subscale of equity, may hold promise to encourage classroom participation amongst all students regardless of gender.

There were statistically significant differences on three of the CUCEI subscale scores based on age. Significantly lower scores on the CUCEI subscales of personalization, equity, and student cohesion were observed for non-traditionally-aged students. However, although differences were observed between traditional and non-traditional students in regard to age, ranking of the degree of influence each of these CUCEI subscales had on classroom participation was the same. Personalization determines the perceived effect faculty's concern for students' welfare and opportunities for student interaction with faculty have on classroom participation. Equity determines the perceived influence equal treatment and opportunity for classroom participation amongst students has on classroom environment (Fraser & Treagust, 1986). Similar to traditional students (less than 25 years), non-traditional students (greater than or equal to 25 years) reported behaviors associated with the subscales of personalization and equity have the highest degree of influence for increasing classroom participation. However, personalization and equity may be less likely to influence classroom participation of older students who are more likely to have increased confidence in their own abilities as learners (Knowles, 1970, 1975). Subsequently, external factors such as faculty friendliness associated with personalization may not have as much influence on classroom participation for non-traditional students who have been described as more intrinsically, self-motivated and independent (Knowles, 1970, 1975; Long, 1983).

Student cohesion is the extent to which students are friendly toward each other (Fraser & Treagust, 1986). Student cohesion was less likely to influence classroom participation for non-traditional students. Existing evidence suggests that non-traditional students as compared to traditional students frequently have additional responsibilities such as parenting and increased

financial obligations which, may result in less opportunity and importance of fraternizing on classroom participation for these students (Knowles, 1970, 1975; Knox, 1977; Long, 1983).

Summary of Discussion

Junior- and senior-level baccalaureate nursing students in this sample reported that personalization and equity are important factors that positively influence classroom participation. Although cohesion and cooperation for nursing students may perhaps be less influential as a factor that increases classroom participation, the majority of students in this sample report cohesion and cooperation do have a substantial impact on classroom participation. The effect of innovation and individualization on classroom participation for this sample is not as clear. While unusual activities and seating arrangements within the innovation subscale are reported to have no effect on classroom participation, both innovation and variety are reported to likely increase classroom participation. Individualization appears to either decrease or have no effect on classroom participation for this sample.

Nursing students in this sample reported high rates of attendance and punctuality (98%) and positive group (94%) and communications skills (87%) when they do contribute to class discussion. However, only 50% of students reported actually participating in class discussion and 56% reported preparing for class. Consideration of these results in the context of nursing education may assist nursing faculty to implement active teaching strategies that engage students in classroom participation. Feminist pedagogies support active teaching strategies by encouraging faculty behaviors that seek to include student voice, redefine mastery, consider positionality on epistemology, and decenter authority to create a community of learning (Maher & Tetreault, 1994, 2001). In the next chapter, I will explore the implications of these results for practice, policy, and future research.

CHAPTER 6

IMPLICATIONS

The purpose of this study, based on the four critical themes of feminist pedagogy proposed by Maher and Tetreault (1994, 2001) and the community of learning as a central cohering theme, was to determine factors that influence classroom participation of junior-and senior-level nursing students enrolled in a pre-licensure baccalaureate of science (BSN) programs in the New England region. I hypothesized that junior-and senior-level nursing students who prefer an active classroom-learning environment as measured by the CUCEI would report higher levels of classroom participation as measured by the ACPS.

The results of this study found no statistically significant linear association between total scores of the ACPS and CUCEI. However, there were statistically significant differences between CUCEI subscales scores and components on the ACPS for the entire sample. The differences between the CUCEI six subscale scores, which include personalization, innovation, student cohesion, cooperation, individualization, and equity, may provide insight for nursing faculty to incorporate behaviors in the classroom that engage students in learning.

Practice and policy may be intricately interrelated; thus, joint consideration may facilitate a seamless train of thought to consider implementation strategies to facilitate classroom participation. These results also provoke thought regarding future research that may add to on-going knowledge of engaging pedagogies that increase classroom participation for baccalaureate nursing students. Considering study limitations provides a balanced approach to analysis of the results and may also contribute to thought regarding future research to advance knowledge on this topic. In the following section, I will explore the implications of these results in terms of practice and policy as well as discuss study limitations and opportunities for future research.

Practice and Policy

The Assessment of Classroom Participation Scale provided insight regarding students' reported classroom participation and responses on the College and University Classroom Environment Inventory revealed potential factors that may increase classroom participation for this sample of nursing students. Nursing students in this sample reported high rates of attendance and punctuality (98%) and positive group (94%) and communications skills (87%) when they do contribute to class discussion. However, only 50% of students reported actually participating in class discussion and 56% reported preparing for class. Considering junior- and senior-level baccalaureate nursing students' responses on the CUCEI provides a starting point to explore practices and policies that may increase classroom participation.

CUCEI Subscale of Personalization Related to Classroom Participation

Personalization could be seen as an important factor that positively influences classroom participation for students in this study. Faculty behaviors that support personalization and are also reported in the literature include knowing students' names and demonstrating positive, non-verbal communication such as nodding and smiling when engaging with students' (Kenney & Banerjee, 2011; Salter & Persaud, 2003). Further, faculty characteristics such as demeanor inside and outside of the classroom and interest in students' lives beyond the classroom environment positively influence classroom participation (Dollman, King, & Hemphill, 2009; Johnson, 2003; Pascarella & Terenizini, 1991; Rocca, 2011; Salter & Persaud, 2004). These behaviors may be perceived as easily incorporated within and outside of the classroom by nursing faculty. However, it has been reported that some institutions expect faculty to be distant, objective, and impersonal in their relationship with students (Boice, 1996; Bowen, Seltzer, & Wilson, 1987).

This sentiment, however, may actually reflect intent to maintain professional ethics in the student-faculty relationship. Personal relationships with students may be perceived as favoritism or may adversely affect faculty's objectivity when evaluating students' performance (Owen & Zwahr-Castro, 2007; Plaut & Baker, 2011). The American Association of University Professors in the *Statement of Professional Ethics* (2009) indicates faculty must avoid discriminatory behaviors in their relationships with students, which include favoring some students based on age, gender, race, and/or other characteristics. In the American Nurses Association *Code of Ethics for Nurses* (2015), faculty are expected to facilitate critical thinking and clinical reasoning to ensure safe nursing practice. Hence, it has been suggested that faculty should establish boundaries in their roles as educators and mentors (Lachman, 2009). In health care, boundaries may be even more essential as faculty serve as role models for students in maintaining a professional relationship between provider and patient (Plaut & Baker, 2011).

Further, accreditation standards for baccalaureate nursing programs require evidence that professionalism is fostered within the university and clinical setting (AACN, 2008). In light of these issues, a dilemma between balancing personalization (being friendly with students and demonstrating a concern for their welfare) while maintaining professional boundaries may exist. Exploring practices to delineate the professional student-faculty relationship may be one way to facilitate classroom participation through increased personalization while maintaining limits (Espinoza, 2012; Owen & Zwahr-Castro, 2007). In a study of 447 undergraduate students' perception of behaviors that violated the professional student-faculty relationship, Owen and Zwahr-Castro (2007) reported socializing and relating to students during academic sponsored activities was perceived as acceptable. However, when faculty extended these relationships beyond the walls of the university, students' perceived a crossing of boundaries (Owen & Zwahr-Castro, 2007).

Although relating and socializing within the academic setting may be perceived as acceptable, there are also methods of relating to students reported in the literature perceived as unacceptable. Inappropriate humor including sexual, racial, and ethnic jokes, incivility, conversation about faculty's personal problems, and sexual advances are reported as unacceptable behaviors both on-campus and off-campus (Clark 2008, 2013; Frymier, Wanzer, & Wojtaszczyk, 2008; Owen & Zwahr-Castro, 2007). Carefully crafted institutional policies that specify expectations for professional behavior of students and faculty may also serve to cultivate professionalism while continuing to support faculty in demonstrating friendly behaviors and concern for students' welfare to engage students in classroom participation (Altmiller, 2012).

However, simply reading a policy may not always translate to understanding or adhering to the policy. There are some reports in the literature of seminars for nursing and medical students utilizing scenarios of professionalism as a foundation for discussion to facilitate understanding and adhering to professional standards in the university setting (Jones & Nestel, 2004; Rhodes, Schutt, Langham, & Bilotta, 2012). One method to facilitate classroom participation utilizing behaviors associated with personalization may be to support faculty in engaging with students during campus sponsored events while maintaining a professional student-faculty relationship supported by institutional policy.

Other factors to consider related to personalization behaviors would include class size and faculty workload. In the literature, large class size has been reported to be associated with decreased classroom participation as students are reluctant to participate due to fear of slowing down delivery of class content (Kenney & Banerjee, 2011; Rocca, 2010). Large class sizes have also been reported to influence professors' choice of teaching methods. A proclivity to passive lecture has been observed in connection with larger class sizes, while active pedagogies tend to be associated with smaller class sizes (Feld, 1977). However, faculty's ability to execute

personalization behaviors in larger versus smaller classes has not been reported. It would seem that some of the behaviors on the CUCEI personalization subscale that facilitate classroom participation such as knowing students' names and walking around the classroom to talk with students would be more challenging in larger classes. However, other factors within the personalization scale such as being friendly and considering students' feelings might be more easily incorporated by faculty regardless of class size.

Heavy academic workloads have been reported in the literature as a barrier to development of innovative teaching methods due to time and energy investment required to develop these strategies (Schaeffer & Zygmont, 2003; Schnell, 2006). Heavy academic workloads as a barrier to implementation of faculty behaviors associated with personalization have not been reported in the literature. However, it is reasonable to consider that heavy academic workloads could potentially affect energy level and sense of well-being resulting in a decrease in faculty behaviors demonstrative of personalization.

Public policy has been reported to influence class size and faculty workload particularly at public universities (Capaldi, 2011; Oprisko, 2014; Zumeta, 2001). In order to cut costs some universities may choose to increase class size and faculty workload subsequently requiring fewer faculty. The intent of this action may be to reduce budgetary expenditures associated with salaries and benefits (Capaldi, 2011; Oprisko, 2014). This may threaten the quality of education with inability to execute personalization behaviors as just one factor. Hence, it is important for legislators and policymakers to understand the potential consequences of state budgetary cuts to higher education (Capaldi, 2011). To this end, administrators and faculty in higher education should collaborate with legislators and policymakers to fully consider the impact of state budgetary cuts on the quality of higher education.

CUCEI Subscale of Equity Related to Classroom Participation

For this sample, high scores on the CUCEI subscale of equity are also closely associated with increased classroom participation. This subscale reflects the extent students perceive faculty equally respect and encourage participation of all students in the classroom environment (Fraser & Treagust, 1986). There are reports in the educational literature that substantiate participation increases when faculty equally encourage and respect voices of all students in the classroom environment (Dallimore, Hertenstein, & Platt, 2004; Falk-Rafeal, Chinn, Anderson, Laschinger, & Rubotzky, 2004). In practice, teaching strategies to ensure that all students in the classroom have an equal opportunity to participate may enhance equity and mitigate actual or perceived favoritism (Fraser & Treagust, 1986; Shrewsberry, 1987). Teaching strategies reported to support equitable opportunities for student participation are often described as innovative, active pedagogies (Bonwell & Eison, 1991; Meyers & Jones, 1993). Such pedagogies may be more inclusive in addressing various learning styles, consequently, awakening the voices of many students (Crookes, Crookes, & Walsh, 2013; Montgomery & Grant, 1998).

From the perspective of implications for practice, faculty can incorporate active pedagogies to engage students (Meyers & Jones, 1993). However, in academia faculty are frequently hired based on their expert knowledge and not necessarily their teaching ability (Benner, 1984; MacManus, 2005; Rutz, Condon, Iverson, Manduca, & Willett, 2012), which may have implications for the adoption of institutional policies that support faculty development (Teeter et al., 2011). These policies might include release time and financial support for faculty to attend conferences and seminars focused on teaching strategies (Rutz, Condon, Iverson, Manduca, & Willett, 2012). Mentoring offers another opportunity for faculty to increase their skill and comfort as educators (Savage, Karp, & Logue, 2004). Further, institutional support to bring consultants who possess expertise in pedagogy on campus may provide an additional

avenue to support faculty in creating active pedagogies (Billings & Halstead, 2009). Beyond faculty development to assist faculty in creating teaching strategies that foster classroom participation, enhancing student cohesion and cooperation in the classroom environment may be an additional strategy to support such innovative pedagogies (Fraser & Treagust, 1986).

CUCEI Subscales of Student Cohesion and Cooperation Related to Classroom Participation

The CUCEI subscales of student cohesion and cooperation reflect the degree that amicable relationships with other students in the class and cooperative behaviors influence classroom participation (Fraser & Treagust, 1986). When faculty are able to facilitate student cohesion and cooperationin the classroom environment, some researchers have reported that classroom participation increases (Morris, 2012; Salter & Persaud, 2004; Stake & Hoffman, 2000); however, a secondary analysis of the 2003 National Survey of Student Engagement questionnaire revealed that nursing students are less likely to work collaboratively compared to education and other health majors (Popkess & McDaniel, 2011). For this sample, student cohesion and cooperative was found to increase classroom participation; although, not as significantly as personalization and equity (Table 4.9). Additionally, five out of fifteen students on the CUCEI student cohesion subscale commented that group work often adversely affected individuals' grades when not all group members "equally pulled their weight." Competing for grades may be counterintuitive to collaboration (Ghaith, 2003; Lam, Law, & Cheung, 2004) such that competition over collaboration continues to be a dominant force for students enrolled in nursing programs (Bevis & Watson, 1989). Nursing has a strong culture of competition steeped in patriarchal pedagogy (Gaynon, 1985; Hansen, 1991). A closer analysis of the impact of the culture of nursing education can be examined in the context of the role of innovation and individualization on classroom participation.

CUCEI Subscales of Innovation and Individualization Related to Classroom Participation

Aforementioned, scores on CUCEI subscales of innovation and individualization were the lowest (Table 4.9). Although between 74% and 77% of students reported three of the seven innovation subscale factors would increase their classroom participation, 39% to 61% of students in this sample reported that new ideas, seating, unusual activities, and consistency of class activities would have no effect on their classroom participation. Similarly, students in this sample reported that faculty behaviors aimed to promote individualization such that students had some control over pace of course work and types of assignment would have no effect on their classroom participation. The meaning of these responses is difficult to interpret. Student comments on these subscales (innovation and individualization) may provide some insight. Nine out of thirty-six (25%) students commented on these two subscales that innovation and individualization did not allow the transfer of "facts and knowledge" from the professor to the student. Fifteen out of thirty-six (42%) of students indicated a preference for faculty imposed structure in the classroom. Pedagogy focused on transfer of "facts and knowledge" has been described in the nursing literature as content-laden (Diekelmann & Smythe, 2004) and in the nursing and educational literature as passive learning (Bonwell & Eison, 1991; Freire, 2010, hooks, 1994). Student comments for this sample viewed in the context of literature on structured, content-laden curriculums allows consideration of factors that may contribute to students' and faculty's preference for such pedagogies. These factors may include zero tolerance for error in healthcare, a culture of nursing education grounded in passive pedagogy, and risk associated with high stakes National Council Licensure Examination for Registered Nurses (NCLEX-RN®) testing (Gaynon, 1985; Hansen, 1991; Institute of Medicine, 1999; Sullivan, 2014).

A sobering report by the Institute of Medicine (1999) estimated that 98,000 patients per year die as a result of medical errors. Although the term "medical errors" is used by the Institute of Medicine (IOM) to describe this disturbing trend, in actuality errors occurring across health care disciplines potentially jeopardize safety and may result in death (Brady, 2011). For nursing, these errors may include medication administrationerrors or wrongful execution of treatments and procedures (Brady, 2011; Sherwood, 2011). A response in the health care community has included training and technology to improve safety but has also created a climate of zero tolerance for error in healthcare settings (Institute of Medicine, 2003). Consequently, fear of harming a patient due to students' lack of clinical experience, reasoning, and judgement may result in faculty and student perception that expert faculty knowledge must be imparted to students to ensure safe practice. The rationale for this approach may be flawed. Care environments are becoming more complex and information aimed at improving quality care has grown at an exponential rate (Ironside, 2004). However, nurses must be adept at accessing and applying information as opposed to memorizing (Allen, 2010; Brunt, 2005; Ironside, 2004, 2005). Innovative problem-solving is more likely to result from engaging pedagogies than those that support rote memorization (Ironside, 2005; Schell, 2006). Further, problem-solving may facilitate a sense of salience required in clinical nursing practice. Salience has been described as the ability to recognize important areas of focus and change in a clinical situation (Benner, Sutphen, Leonard, & Day, 2010). On the contrary, nursing faculty may struggle with enactment of feminist approaches for some content related to nursing care. For example, certain laboratory values are memorized in order to recognize physiologic changes that require prompt action to ensure safety. Memorization of laboratory values does not lend itself to multiple interpretations of meaning. One way that nursing faculty might incorporate memorization of essential content with more interactive pedagogies is through case studies and

simulation. Critical laboratory values could be included in a case study as one component of patient assessment. However, invitation for a more interpretive approach can be encouraged by situating the laboratory values within a broader more holistic perspective of the patient and family. Simulation is another innovativeactive learning approach reported to foster problem-solving and allows incorporation of concrete data such as laboratory values within a broader context. Simulation provides an opportunity for students to deliver nursing care in a rigorous but safe environment prior to actual patient contact (Fero et al., 2010; National Council of State Boards of Nursing, 2014). High-quality simulation opportunities have been demonstrated to improve psychomotor skills inherent in the execution of nursing treatments and procedures while fostering a holistic approach to patient care (Cant & Cooper, 2010; Jeffries, 2007). However, creation of simulation scenarios requires carefully planned learning objectives and technical execution of the scenario by faculty (Guimond, Sole, & Salas, 2011; Jeffries, 2007). Institutional support for such training is required in order for simulation to replace a percentage of traditional clinical training involving actual patients (National Council of State Boards of Nursing, 2014). Additionally, financial investment in simulation equipment would be required by programs of nursing who choose to implement simulation (Jeffries, 2007). On a national level, creation of grants that may provide capital funds for the initial investment of simulators for programs of nursing may also support implementation of simulation consistently across programs and geographic areas. However, studies on faculty's use of such innovative pedagogies identified "fear of trying something new" (Schell, 2006, p. 444) and insufficient faculty knowledge and experience as a barrier to implementation (Schaeffer & Zygmont, 2003; Schell, 2006). Faculty development and mentoring may serve to support faculty in discovery and implementation of innovative pedagogies (Rutz, Condon, Iverson, Manduca, & Willett, 2012).

Finally, after graduation, nursing students must pass the NCLEX-RN® to practice (National Council of State Boards of Nursing, 2015, Sullivan 2014). Consequences of students failing this licensing exam include loss of income because the student cannot practice as a registered nurse and earn the salary customary for this position without a license. Further, some students may have significant student loans making loss of income even more significant. Test failure may also be associated with decreased self-confidence and feelings of despair (Sullivan, 2014). For institutions, NCLEX-RN® low first time pass rates can negatively influence programs of nursing accreditation (Carrick, 2011). These consequences have been conceptualized as high stakes testing (Sullivan, 2014). The NCLEX-RN® blueprint provides faculty and students with content areas included on the exam (National Council of State Boards of Nursing, 2015). One factor that often influences nursing curriculums is the NCLEX-RN® blueprint (Carrick, 2011). In the nursing education literature it is suggested that faculty may feel pressured to cover content to adequately prepare students (Ironside, 2004; Schaefer & Zygmont, 2003). A focus on covering content may support more traditional teaching methods such as lecture as opposed to innovation. In a study of 946 educators, Brown, Kirkpatrick, Greer, Matthias, and Swanson (2009) reported that 78% of nursing faculty continue to use lecture and teacher-centered pedagogies in the classroom.

In summary, students in this sample seem to favor faculty structured classroom environments that may not support innovation and individualization. Reports in the nursing educational literature indicate innovative pedagogies can foster problem-solving critical to safe nursing practice (Benner, Stuphen, Leonard, & Day, 2010; Lau, 2014). Finding ways to cover content while incorporating innovative pedagogies that support individualization may be enhanced through faculty development and mentoring. National conversations about the relationship between NCLEX-RN® first time pass rates and program accreditation may provide

other possibilities to consider. For example, perhaps pass rates could be calculated based on first and second time test takers. Hence, these strategies may be influential and supporting innovation and individualization in nursing education.

Limitations

Limitations of this study arose primarily from instrumentation, sampling, sample composition and response rates. The actual College and University Classroom Environmental Inventory was intended to measure students' reports of their actual classroom learning environment (Fraser, Treagust, & Dennis, 1986). For this study, the CUCEI was adapted to determine factors within the CUCEI subscales that would influence classroom participation for this sample of students. Further, the conceptual framework for this study was based on the four critical themes of feminist pedagogy (voice, mastery, positionality, and authority) developed by Maher and Tetrault (1994, 2001) with the central cohering theme of a community of learning created by this researcher. A community of learning includes both students and faculty. The CUCEI did not include students' perception of faculty within the circle of a community of learning and the perceived effect on the students' classroom participation. The Assessment of Classroom Participation scale was also used in this study. It is intended to assess reported classroom participation however; wording of one of the key components related to contribution to class discussion lends itself to a different interpretation. Students' reported preparation for class in this scale is described as "reading, analyzing, and understanding material [is] demonstrated by [your] contribution to discussion" (Dancer & Kamvounias, 2005, p. 448). It may be that students are reading, analyzing, and understanding material but they believe it is not evident when they contribute to class discussion. This is much different than not preparing for class.

Sampling for this study was executed by sending an email to program directors of baccalaureate schools of nursing in the New England region and inviting them to offer junior- and senior-level nursing students an opportunity to participate in this study. Students could participate in the study by clicking on the link embedded in an email sent by the program directors. It is not known if some of these emails may have been delivered to potential participants' spam folder in which case the student would have missed the opportunity to participate in the study. Further, it is not known if some program directors actually verbally invited students to participate and sent the email. If some program directors included a verbal invitation it could have altered the response rate. Although, information provided by this sample of students was insightful, the response rate of 16% was low. Finally, the demographic composition of this sample of students was comparable to the national composition of baccalaureate nursing students. However, the number of students in each of the demographic categories was small and inferences from the difference between groups were statistically difficult to determine. The limitations and implementations provided in this section allow for consideration of future research.

Future Research

For this sample of students, there was no linear association between reported classroom participation as measured by the ACPS and factors that influence classroom participation as measured by the CUCEI. It was anticipated that students who reported high levels of classroom participation would be more likely to prefer an active learning environment as evidenced by these scores. An interesting finding was that students did not report high levels of participation in class, yet 98% reported attending class always or most of the time. Scores on the CUCEI subscale of innovation were one of the lowest yet for three factors on the innovation subscale, 74% to 77% of students reported a desire for innovation and variety in terms of

teaching strategies. Student comments, however, suggested an inclination for structured, faculty-centered teaching that did not include innovation. It may be that because factors on the CUCEI innovation subscale did not provide information regarding specific innovative teaching strategies, participants were not able to accurately express their perceptions. Based on the results for this sample, students are attending class but report mixed perceptions regarding the influence of innovative teaching strategies.

The CUCEI instrument was not intended to measure student preference for factors in the classroom environment that would influence their participation hence, the CUCEI innovation subscale may have lacked clarity. This would provide an opportunity to refine this scale and re-establish validity and reliability. The revised CUCEI could then be used in a qualitative or mixed method study and/or action research. A qualitative study or mixed method study may assist faculty in understanding effective innovative strategies that engage students and faculty in the community of learning. Action research may provide an opportunity to implement an innovative teaching strategy with input from students and faculty linked with an evaluation of the effect on classroom participation.

The lowest scores were reported on the CUCEI subscale of individualization. This subscale is intended to determine the extent students' control over course execution and assignments has on classroom participation (Fraser & Treagust, 1986). Shared control and governance could create a community of learning with input from both students and faculty. Interpretation of these scores was difficult as many students reported that factors within the subscale would have no effect on their classroom participation. The cohering theme of a community of learning was established as central to the four critical themes of the conceptual framework of feminist pedagogy (Maher & Tetrault, 1994, 2001) utilized in this study. Further research regarding individualization may assist nursing faculty in establishing strategies to

facilitate a cultural shift regarding the student/faculty relationship. Re-envisioning the student/faculty relationship as a partnership may contribute to a sense of a community of learning that continues into students' professional transition. This might invite questions of inquiry such as; how do nursing students perceive their role in the learning environment and what meaning do they ascribe to the student role? How have past educational experiences influenced nursing students' beliefs regarding shared responsibility for learning?

Lastly, although not the primary focus of this study, student comments do raise questions about topics that are currently in the forefront of the nursing education community. What influence do high stakes testing and zero-tolerance for error have on students' preference for pedagogy? What do students understand about pedagogy? Further research in these areas may assist faculty to develop meaningful pedagogy in the current educational and health care climate encountered by this generation of nursing students. As nursing moves forward as a profession, these proposed future research endeavors provide an opportunity to examine our past and consider our future in preparing students to embrace the challenges inherent in healthcare.

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APPENDICES

APPENDIX A: ASSESSMENT OF CLASSROOM PARTICIPATION SCALE

Some studies show that college students do not participate in class. Please rate your participation in nursing classes for each item.

Preparation: The extent of your reading, analyzing and understanding of the material is demonstrated by your contribution to classroom discussion.

0 = Never	4 = Sometimes	3 = Most of the time	4 = Always

Contribution to discussion: You volunteer answers, ask relevant questions, express your own opinion and analyze contributions of others.

0 = Never	1 = Sometimes	2 = Most of the time	3 = Always

Group skills: You allow others to contribute by avoiding class domination. You share ideas with others and provided positive feedback to others. You exhibit tolerance and respect for others.

0 = Never	1 = Sometimes	2 = Most of the time	3 = Always

Communication skills: Your ideas are expressed clearly and concisely. You use appropriate vocabulary.

0 = Never	1 = Sometimes	2 = Most of the time	3 = Always

Attendance and punctuality: You attend all class sessions and arrive on time.

0 = Never	1 = Sometimes	2 = Most of the time	3 = Always

APPENDIX B: COLLEGE AND UNIVERSITY ENVIRONMENT INVENTORY

For each of the following statements, please rate how each would influence your classroom participation in a nursing class. Assume that classroom participation is not a part of the course grade.

Would **increase** my classroom participation	Would **decrease** my classroom participation	Would have **no effect** on my classroom participation

Personalization

1. The instructor considers my feelings.
2. The instructor is friendly and talks to me.
3. The instructor goes out of his way to help me.
4. The instructor helps me when I am having trouble with my work.
5. The instructor moves around the classroom to talk with me.
6. The instructor is interested in my problems.
7. The instructor is unfriendly and inconsiderate towards me.

Comments:

Innovation

8. New ideas are seldom tried out of class.
9. My instructor uses new and different ways of teaching in the class.
10. The instructor thinks up innovative activities for me to do.
11. The teaching approaches used in the class are characterized by innovation and variety.
12. Seating in the class is arranged in the same way week.
13. The instructor often thinks of unusual activities.
14. I seem to do the same type of activities in every class.

Comments:

Student Cohesion

15. My class is made up of individuals who do not know each other well.
16. I know most students in the class by their first names.
17. I make friends easily in the class.
18. I don't get much of a chance to know my classmates.
19. It takes me a long time to get to know everybody by is/her first name in the class.
20. I have the chance to know my classmates well.
21. I am not very interested in getting to know other students in the class.

Comments:

Cooperation

22. I cooperate with other students when doing assignment work.
23. I share my books and resources with other students when doing assignments.
24. I work with other students on projects in this class.
25. I learn from other students in this class.
26. I work with other students in the class.
27. I cooperate with other students on class activities.
28. Students work with me to achieve class goals.

Comments:

Individualization

29. I am expected to do the same work as all the students in the class, in the same way and in the same time.
30. I am generally allowed to work at my own pace in the class.
31. I have a say in how class time is spent.
32. I am allowed to choose activities and how I will work.
33. Teaching approaches in the class allow me to proceed at my own pace.
34. I have little opportunity to pursue my particular interest in the class.
35. My instructor decides what I would do in the class.

Comments:

Equity

36. The instructor gives as much attention to my questions as to other students' questions.
37. I get the same amount of help from the instructor as to other students.
38. I am treated the same as other students in the class.
39. I receive the same encouragement from the instructor as other students do.
40. I get the same opportunity to answer questions as other students do.
41. My work receives as much praise as other students' work.
42. I have the same amount say in the class as other students.

Comments:

APPENDIX C: DEMOGRAPHICS

Some studies have shown that age, gender, race and/or ethnicity, and primary language can influence college students' class participation. Please provide the following information.

1. Are you a junior or senior level nursing student? _____
2. Age _____
3. Gender
    a. Transgender
    b. Female
    c. Male
    d. Other
4. What is your race and/or ethnicity? _____
5. What is your primary language? _____

APPENDIX D: Table D.1. Reliability and Validity of the Original CUCEI

Author/Year	Nature of the Study/Sample	Cronbach's Alpha Reliability Co-Efficient	Discriminant Validity
Booth/1997	The purpose of the study was to determine if students enrolled in a dental learning module perceived a more favorable classroom environment (measured with the CUCEI) with an interactive teaching approach versus traditional lecture approach. Sample: 30 dental students	Based on previous studies. Did not re-establish reliability.	
Clarke/1990	The purpose of the study was to determine the reliability of the CUCEI. Sample: 130 teacher-education students in Australia.	Actual: 0.50 to 0.90 Preferred: 0.50 to 0.80	
Clarke, Chant, & Dart/1989	The purpose of the study was to determine the relationship between perceive classroom environment as measure with the CUCEI and student satisfaction in a pre-service education course. Sample: 130 teacher education students	Actual: 0.45 to 0.86 Preferred: 0.51 to 0.79	
Coll, Taylor, & Fisher/2002	The purpose of the study was to determine the reliability of the CUCEI on university students for whom English was their second language. Sample: 257 freshman and sophomore science majors who had English as a second language	Acceptable reliability was determined only for two subscales: Student cohesiveness (actual: 0.77 & preferred 0.67) Satisfaction (actual: 0.73 & preferred 0.73)	Actual: 0.11 to 0.36 Preferred: 0.36 to 0.57
Dorman/2014	The purpose of the study was to determine how classroom environment as measure with the CUCEI influences course experience. Sample: 495 pre-service teacher education students in Australia.	Actual: 0.75 to 0.90	

Fisher & Parkinson/1998	The purpose of the study was to determine if the CUCEI was an effective tool to assess learning environments. Sample: 28 RN nursing students in a gerontology course	Based on previous studies. Did not re-establish reliability.	
Marcelo/1988	The purpose of the study was to establish reliability and validity of this instrument in Spanish. Sample: 200 students at the University of Seville	Actual: 0.54 to 0.80 (except Involvement: 0.29)	
Phan/2008	The purpose of this study was to determine if there was a relationship between classroom environments and student engagement and reflective thinking. Sample: 298 students in grade 12 in Fiji	Actual: 0.70 to 0.82 Only used 4 subscales involvement, student cohesiveness, satisfaction, and task orientation.	
Powers, Davis, & Torrence/1998	The purpose of the study was to determine if the CUCEI could be used as an evaluative measure of classroom environment for a virtual (online) graduate course. This was a mixed method study in which responses to the CUCEI were validated by qualitative rezone, Sample: 20 graduate students		

APPENDIX E: Table E.1. Reliability and Validity of the Modified CUCEI

Author/Year	Nature of the Study/Sample	Cronbach's Alpha Reliability Co-Efficient	Discriminant Validity
Logan, Crump, & Rennie/2006	The purpose of the study was to establish validity and reliability of the modified CUCEI in two separate studies in computing classes (one in a university setting and one in the high school setting). **Sample:** 239 tertiary(university) students; 265 (high school) secondary students	**Tertiary** Actual & Preferred: 0.70 to 0.93 **Secondary:** Actual: 0.64 to 0.91 Preferred: 0.72 to 0.93	**Tertiary** Actual: 0.18 to 0.34 Preferred: 0.25 to 0.42 **Secondary:** Actual: 0.21 to 0.39 Preferred: 0.35 to 0.47 Overlap with several subscales
Logan/2007	The purpose of this study was to determine if there was a difference in the preferred classroom environment as measured by the modified CUCEI between boys and girls in a computer class. **Sample:** 265 12th and 13th grade computer students in New Zealand	Based on previous studies. Did not re-establish reliability.	
Strayer/2012 Strayer/2007 (dissertation)	The purpose of this study was to determine if there was a difference between the perceived classroom environments of a flipped classroom versus a traditional classroom as measured with the CUCEI **Sample:** 49 university students in an introductory statistics class.	Actual: 0.67 to 0.93	Inter-correlational are less than 0.85 therefore discriminant is assumed.
Thangia/2005	The purpose of this study was to determine if non-English speaking students who were not proficient in English could accurate utilize the CUCEI. They could not. **Sample:** 320 students in Malaysia	Item reliability (Rasch) 0.99	
Yarrow & Millwater/1995	The purpose of the study was to determine if the perceived actual classroom environment could be improved to reflect the perceived preferred classroom environment of pre-service education majors in a psychology course. **Sample:** 140 students	Based on previous studies. Did not re-establish reliability.	

APPENDIX F: Table F.1. Reliability Table for the Subscales of the Original CUCEI

Subscales	Fraser & Treagust, 1986	Clarke 1989	Clarke, Chant, & Dart 1989	Coll, Taylor, & Fisher, 2002	Dorman, 2014	Marcelo, 1988	Phan, 2008
Personalization	A: 0.75 P: 0.68	A: 0.80 P: 0.50	A: 0.78 P: 0.50	A: 0.54 P: 0.66	A: 0.81 P:	A: 0.695 P:	A: P:
Involvement	A: 0.70 P: 0.65	A: 0.70 P: 0.60	A: 0.70 P: 0.62	A: 0.36 P: 0.63	A: 0.75 P	A: 0.289 P	A: 0.82 P
Student Cohesiveness	A: 0.90 P: 0.78	A: 0.90 P: 0.80	A: 0.88 P: 0.79	A: 0.77 P: 0.67	A: 0.90 P	A: 0.803 P	A: 0.73 P
Satisfaction	A: 0.88 P: 0.82	A: 0.90 P: 0.70	A: 0.86 P: 0.69	A: 0.73 P: 0.73	A: 0.86 P	A: 0.736 P	A: 0.76 P
Task Orientation	A: 0.75 P: 0.63	A: 0.50 P: 0.50	A: 0.45 P: 0.51	A: 0.48 P: 0.51	A: 0.78 P	A: 0617 P	A: 0.70 P
Innovation	A: 0.81 P: 0.70	A: 0.80 P: 0.70	A: 0.75 P: 0.70	A: 0.30 P: 0.32	A: 0.77 P:	A: 0.539 P:	A: P:
Individuation	A: 0.78 P: 0.67	A: 0.80 P: 0.60	A: 0.75 P: 0.62	A: 0.51 P: 0.54	A: 0.78 P:	A: 0.621 P:	A: P:

APPENDIX G: Table G.1. Reliability Table for Subscales of the Modified CUCEI

Subscales	Nair & Fisher, 2001	Strayer, 2012
Personalization	A: 0.87 P: 0.84	A: 0.90 P:
Cooperation	A: 0.92 P: 0.93	A: 0.94 P:
Student Cohesiveness	A: 0.82 P: 0.83	A: 0.78 P:
Equity	A: 0.93 P: 0.94	A: 0.93 P:
Task Orientation	A: 0.77 P: 0.79	A: 0.74 P:
Innovation	A: 0.73 P: 0.84	A: 0.71 P:
Individuation	A: 0.82 P: 0.80	A: 0.67 P:

APPENDIX H: BACCALAUREATE CCNE ACCREDITED PROGRAMS BY STATE

Connecticut

1. Central Connecticut State University
2. Fairfield University
3. Quinnipiac University
4. Sacred Heart University
5. Southern Connecticut State University
6. University of Connecticut
7. University of St. Joseph
8. Western Connecticut State University

Maine

1. Husson University
2. Saint Joseph's College of Maine
3. University of Maine
4. University of Maine Fort Kent
5. University of Southern Maine

Massachusetts

1. American international College
2. Boston College
3. Curry College
4. Elms College
5. Fitchburg State University
6. Laboure College
7. MGH Institute of Health Professions
8. Northeastern University
9. Salem State University
10. University of Massachusetts Amherst
11. University of Massachusetts Boston
12. University of Massachusetts Dartmouth
13. University of Massachusetts Lowell
14. Worcester State University

New Hampshire

1. Colby Sawyer College
2. Keene State College
3. Plymouth State University
4. Saint Anselm College
5. University of New Hampshire

Rhode Island

1. Rhode Island College
2. Salve Regina University
3. University of Rhode Island

Vermont

1. Norwich University
2. University of Vermont

APPENDIX I: E-MAIL AND TELEPHONE SCRIPT TO THE DIRECTORS OF NURSING PROGRAMS

Dear _____:

My name is Mary Tedesco-Schneck. I am an assistant professor of nursing at Husson University in Bangor, Maine and a doctoral candidate at the University of Maine in Orono. I am conducting a study on factors that influence classroom participation of junior-and senior-level pre-licensure nursing students. I am requesting that an e-mail with an embedded URL link to the survey be sent to your students. The survey is anonymous and I will not have access to the students' e-mail addresses. I am using SurveyMonkey© to execute the survey and respondents e-mail addresses are not stored to ensure anonymity. SurveyMonkey © software provides Secure Sockets Layer (SSL) encryption with Verisign certificate Version 3, 128 bit encryption ©. The URL link and survey are secured by Verisign during transmission from the account to the respondents and vice versa (SurveyMonkey, 2014).

When participants click on the URL link to the survey, the first page is the consent form. Students that choose to participate in a study will be asked to complete a survey asking questions about factors that influence their classroom participation in nursing classes. The survey is 51 items and will take approximately 20 minutes to complete. After completing the survey participants will be directed to a separate link to enter into a drawing random drawing for a $75 Visa gift card.

I have attached the consent form and the email to be sent to the students. If you agree, I will e-mail to you the invitation to the students to participate in the study so you can simply forward it.

APPENDIX J: ELECTRONIC CONSENT

Please select your choice below.

If you do not wish to participate in the research study, please decline participation by clicking on the "disagree" button.

Clicking on the "agree" button below indicates that:

- you have ready the above information
- you voluntarily agree to participate
- you are at least 18 years of age

Select one:

○ agree ○ disagree

Confidentiality

To ensure anonymity, directors of the programs of nursing (Appendix H) will be contacted by e-mail and/or telephone asking them to forward a prepared e-mail to junior-and senior-level nursing students in their program (Appendix I) inviting them to participate in the study. Embedded in the e-mail sent to the students will be a separate URL link to the survey (Appendix J).

SurveyMonkey © software provides Secure Sockets Layer (SSL) encryption with Verisign certificate Version 3, 128 bit encryption ©. The URL link and survey are secured by Verisign during transmission from the account to the students and vice versa (SurveyMonkey, 2014).

SurveyMonkey © software provides researchers with the option to not link the respondents e-mail addresses to the survey results to make the survey anonymous (SurveyMonkey, 2014). Additionally, survey data generated and collected by a researcher is

owned by the researcher and not SurveyMonkey©. Upon completion of the study, the researcher can delete the data. I intend to purchase the SurveyMonkey© Gold Plan which features SPSS integration and the option to download data without identifiers. This will allow me to store and analyze my data on my own laptop. The only individuals that will have access to the stored data are my advisor Susan K. Gardner, PhD and Gail Tudor, PhD who is a statistician and a member of my committee.

If the study is published, there will be no identifiers linked to the study participants as the data is numerical representation of responses to survey questions without e-mail addresses as noted above or any other identifiers. All data will be stored on my password-protected computer for three years and then destroyed.

Risks

This is an anonymous survey therefore there is no risk of identification of the participants. The risk to the participants is impingement on their time and any inconvenience incurred by completing the survey.

Benefits

While this study may have no direct benefit to the participants, this research will help me learn more about how to create an engaging classroom environment that invites nursing students to participate in class. As a result of completing this survey, participants may discover factors that influence their classroom participation thus enhancing their future learning and understanding.

Compensation

After reaching the end of the survey, participants are directed to a separate link (not linked to the survey) to enter into a drawing for a $75 Visa gift card.

APPENDIX K: RESPONSES: COLLEGE AND UNIVERSITY CLASSROOM ENVIRONMENT INVENTORY

	Increase	Decrease	No Effect	No Response
Personalization				
The instructor considers my feelings.	238 (87%)	0 (0%)	33 (12%)	3 (1%)
The instructor is friendly and talks to me.	263 (96%)	1 (0.4%)	10 (4%)	0 (0%)
The instructor goes out of his way to help me.	258 (94%)	0 (0%)	15 (6%)	1 (0.4%)
The instructor helps me when I am having trouble with my work.	256 (93%)	1 (0.4%)	17 (6%)	0 (0%)
The instructor moves around the classroom to talk with me.	176 (64%)	12 (4%)	85 (31%)	1 (0.4%)
The instructor is interested in my problems.	212 (77%)	0 (0%)	62 (23%)	0 (0%)
The instructor is unfriendly and inconsiderate towards me.	5 (2%)	263 (96%)	6 (2%)	0 (0%)
Innovation				
New ideas are seldom tried out of class.	35 (13%)	105 (38%)	125 (46%)	9 (3%)
My instructor uses new and different ways of teaching in the class.	202 (74%)	12 (4%)	58 (21%)	2 (1%)
The instructor thinks up innovative activities for me to do.	206 (75%)	9 (3%)	58 (21%)	1 (0.4%)

The teaching approaches used in the class are characterized by innovation and variety.	212 (77%)	3 (1%)	58 (21%)	1 (0.4%)
Seating in the class is arranged in the same way week.	85 (31%)	22 (8%)	166 (61%)	1(0.4%)
The instructor often thinks of unusual activities.	124 (45%)	40 (15%)	106 (39%)	4 (1%)
I seem to do the same type of activities in every class.	37 (14%)	102 (37%)	131 (48%)	4 (1%)
Student Cohesion				
My class is made up of individuals who do not know each other well.	16 (6%)	184 (67%)	73 (27%)	1 (0.4%)
I know most students in the class by their first names.	214 (78%)	2 (1%)	58 (21%)	0 (0%)
I make friends easily in the class.	207 (76%)	1 (0.4%)	66 (24%)	0 (0%)
I don't get much of a chance to know my classmates.	9 (3%)	176 (64%)	89 (32%)	0 (0%)
It takes me a long time to get to know everybody by his/her first name in the class.	7 (3%)	127 (46%)	137 (50%)	3 (1%)
I have the chance to know my classmates well.	211 (77%)	4 (1%)	58 (21%)	1 (0.4%)
I am not very interested in getting to know other students in the class.	14 (5%)	115 (42%)	134 (49%)	11 (4%)

Cooperation				
I cooperate with other students when doing assignment work.	232 (85%)	7 (3%)	35 (13%)	0 (0%)
I share my books and resources with other students when doing assignments.	172 (63%)	28 (10%)	72 (26%)	2 (1%)
I work with other students on projects in this class.	200 (73%)	30 (11%)	43 (16%)	1 (0.4%)
I learn from other students in this class.	215 (78%)	11 (4%)	48 (18%)	0 (0%)
I work with other students in the class.	213 (78%)	17 (6%)	44 (16%)	0 (0%)
I cooperate with other students on class activities.	222 (81%)	11 (4%)	41 (15%)	0 (0%)
Students work with me to achieve class goals.	217 (79%)	8 (3%)	46 (17%)	3 (1%)
Individualization				
I am expected to do the same work as all the students in the class, in the same way and in the same time.	121 (44%)	51 (19%)	100 (37%)	2 (1%)
I am generally allowed to work at my own pace in the class.	153 (56%)	25 (9%)	93 (34%)	3 (1%)
I have a say in how class time is spent.	172 (63%)	15 (5%)	81 (30%)	6 (2%)
I am allowed to choose activities and how I will work.	195 (71%)	17 (6%)	58 (21%)	4 (2%)

Teaching approaches in the class allow me to proceed at my own pace.	173 (63%)	27 (10%)	70 (26%)	4 (2%)
I have little opportunity to pursue my particular interest in the class.	38 (14%)	161 (59%)	67 (24%)	8 (3%)
My instructor decides what I would do in the class.	43 (16%)	61 (22%)	161 (59%)	9 (3%)
Equity				
The instructor gives as much attention to my questions as to other students' questions.	233 (85%)	1 (0.4%)	39 (14%)	1 (0.4%)
I get the same amount of help from the instructor as to other students.	226 (82%)	3 (1%)	44 (16%)	1 (0.4%)
I am treated the same as other students in the class.	232 (85%)	1 (0.4%)	40 (15%)	1 (0.4%)
I receive the same encouragement from the instructor as other students do.	231 (84%)	1 (0.4%)	41 (15%)	1 (0.4%)
I get the same opportunity to answer questions as other students do.	228 (83%)	2 (1%)	43 (16%)	1 (0.4%)
My work receives as much praise as other students' work.	225 (82%)	5 (2%)	43 (16%)	1 (0.4%)
I have the same amount say in the class as other students.	228 (83%)	0 (0%)	44 (16%)	2 (1%)

APPENDIX L: RESPONSES: ASSESSMENT OF CLASSROOM PARTICIPATION SCALE

N = 274

	Never	Sometimes	Mostof the Time	Always	No Response
Preparation for Class	19 (6.9%)	101 (36.9%)	114 (41.6%)	40 (14.6%)	0 (0%)
Contribution to Discussion	13 (4.7%)	122 (44.5%)	84 (30.7%)	55 (20.1%)	0 (0%)
Group Skills	1 (0.3%)	17 (6.2%)	78 (28.5%)	178 (65.0%)	0 (0%)
Communication Skills	1 (0.3%)	35 (12.8%)	143 (52.2%)	95 (34.7%)	0 (0%)
Attendance and Punctuality	0 (0%)	5 (1.8%)	41 (15.0%)	228 (82.2%)	0 (0%)

BIOGRAPHY OF THE AUTHOR

Mary Tedesco-Schneck was born in Plainfield, New Jersey on January 12, 1959. She was raised in Plainfield and Warren, New Jersey and graduated from Watchung Hills Regional High School in 1977. She attended Rutgers University and earned a Bachelor of Science in Nursing in 1982 and attended Seton Hall University and earned a Master's of Science in Nursing in 1984. Additionally, she is certified by the National Association of Pediatric Nurse Practitioners and Associates (NAPNAP) as a Pediatric Nurse Practitioner. She has practiced clinically in a variety of settings which include primary, acute, and community care. She has participated in clinical research most notably the Natural History of HIV Infection in Children funded by the Centers for Disease Control in Atlanta, Georgia.

In 2003, Mary Tedesco-Schneck joined Husson University as an Assistant Professor of Nursing teaching primarily pediatric nursing in both the graduate and undergraduate programs while still maintaining a clinical practice in a variety of settings. Currently, her clinical practice is at Eastern Maine Medical Center in Pediatric Dermatology with Janice L. Pelletier, MD. She has also been the principal investigator of two pilot studies executed at Husson University in Bangor, Maine related to pedagogy. She has presented at numerous nursing education conferences on pedagogy specifically related to nursing education and has a recent publication *Active learning as a path to critical thinking: Are competencies a roadblock?* Mary Tedesco-Schneck is a candidate for the Doctor of Philosophy in Education with a concentration in Higher Education Leadership from the University of Maine in May 2016.