THE DEVELOPMENT OF A SCALE FOR MEASURING FACULTY
PERCEPTIONS OF BARRIERS TO SCHOLARSHIP OF TEACHING AND
LEARNING: A MIXED METHODS INQUIRY

by

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Abstract

A classical Delphi method and an extensive literature review were used in this mixed-methods inquiry exploring bachelors of science in nursing (BSN) program faculty members’ perceptions of the barriers to the scholarship of teaching and learning (SoTL). Qualitative data collected from multidisciplinary literature sources were analyzed through interpretive description (ID) methods. Urgent calls for radical transformation of the current educational methods in nursing education literature were specific, and cited the SoTL as key to advancing nursing education science. Iterative rounds of premise reflection were used to create endorsement-type survey items that elicited expert nurse educator Delphi panelists’ opinions on components of the SoTL phenomenon. Findings from the qualitative and quantitative survey analyses were then used to construct a valid faculty-centered survey instrument. Theoretical triangulation of the self-determination theory (SDT) (Deci and Ryan, 2012), Iwasiw, Goldenberg, and Andrusyszyn’s (2009) context-relevant curriculum development (CrCD) model, and the theory of action (Argyris, 2006) produced a heuristic for premise reflection that added to the study’s trustworthiness. Suggestions for further research included a faculty-student action research-based collaborative through the SoTL in undergraduate nursing education.
Dedication

I dedicate this dissertation to Ted, my life partner and part-time career coach. Your continued nudges to keep going in the doctoral program and refraining from any negativity over the past year kept me on task. Now our home can be returned back to the beautiful living space it was before the piles of dissertation research papers appeared.

I also want to dedicate this scholarship to future nurse scholar educators who venture to invest their time and energies in educational research. The path through nursing education research has many milestones, and those who follow it need to regard it as a pilgrimage to a place of higher understanding and purpose in education. When each pilgrim’s journey is complete, each one will be transformed and informed.
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CHAPTER 1. INTRODUCTION

Introduction to the Problem

The purpose of this study was to determine what perceptions were shared among bachelors of nursing science (BSN) faculty regarding barriers to their engagement with the scholarship of teaching and learning (SoTL). The research problem chosen for study was the lack of an available measurement instrument that contained relevant measures of BSN faculty perceptions of barriers to the SoTL. A barriers scale was conceived as a useful tool for exploring the SoTL phenomenon as an option for BSN faculty development. Creative approaches to increasing faculty engagement with the SoTL was viewed as something needed in BSN education. Nursing education researchers Benner, Sutphen, Leonard, and Day (2010) called the redesign of undergraduate nursing education a pressing social agenda to meet society’s demand for better prepared nursing program graduates with greater levels of competency has increased significantly. Kreber (2013) characterized the scholar of teaching as someone who was becoming more authentic through critical reflection on the interests of their students’ success. The SoTL was hypothesized to be the most direct path to redesigning nursing education with evidence-based teaching practices. Hence, using knowledge about faculty perceptions of the barriers to the SoTL seemed a logical way to achieving best practices in teaching and thereby advancing nursing education science with a better understanding of how to increase BSN faculty educational scholarship.
Better Prepared Program Graduates

Urgent calls for nursing education reform from multiple stakeholders within the literature shared a concern that current teaching practices in undergraduate nursing programs lagged behind current evidence-based clinical nursing practices. The lack of evidence-based teaching practices produced through scholarship in nursing education was cited as a reason for suboptimal teaching in undergraduate nursing programs, and for nursing education’s failure to accomplish the critical goal of adequately preparing new nurses for practice (Benner, Sutphen, Leonard, & Day, 2010). In a Carnegie Foundation sponsored study for the advancement of teaching in the professions, Benner et al. (2010) identified a widespread problem with newly hired registered nurses (RNs) underprepared by their nursing education to begin practicing nursing of very sick hospital patients. According to Benner et al. (2010), the students lacked sufficient cognitive skills to grasp the salient aspects of high-level acute care, and characterized the source of this problem as a practice-education gap issue. The scholarship of teaching was viewed as a potential solution to closing the practice-education gap in professional nursing.

New approaches to teaching undergraduate nursing students were considered as possible solutions to closing the practice-education gap. Nursing education would need to provide students with learning opportunities designed to broaden their knowledge in several fields, and sharpen their skills in critical reflection and lifelong learning (Benner et al., 2010). According to Benner et al. (2010), nursing programs failed to maintain relevance in a constantly changing clinical practice, and thereby left students inadequately prepared for practice as new nurses entering the field (Benner et al., 2010).
The SoTL was perceived to be the most direct approach for undergraduate faculty to engage in nursing education reform efforts.

**Better Teaching and Learning Strategies**

Undergraduate nursing programs need up-to-date pedagogical research disseminated and available for review through an increased publication of teaching scholarship conducted by BSN faculty. Literature on the state of higher education were was consulted. Philosopher Hannah Arendt (as cited by Kreber, 2013) viewed education as the main process for rejuvenating society. Benner et al.’s (2010) recent ethnographic study findings were mixed on how well schools of nursing met the nursing profession’s social contract to prepare students as professionals. The Institute of Medicine (2010) report and the Robert Wood Johnson Foundation (2013) report charted a proposed a future vision for nursing, and included a goal of 80 percent of all registered nurses achieving at a minimum the BSN degree by 2020. One outcome of the push for increased numbers of BSN prepared nurses could include basic nursing education becoming more focused on a clearer trajectory for nurse educator preparation leading to increased numbers of nursing faculty.

**A looming impasse for nursing education.** A shortage of qualified nursing faculty across the United States continues to be a problem for the nursing profession (Bittner & O’Connor, 2012; Benner et al., 2010; Schumacher, Risco, & Conway, 2008). Recently, the American Association of Colleges of Nursing (AACN) (2014a) developed a centralized application service (CAS) that identified 16,000-plus student nurse vacancies in 2013, and assisted prospective undergraduate students to gain quicker access to those vacancies. A conceivable outcome of the CAS would include more nursing students...
entering a nursing program as more faculty leave the classroom to retire, or to seek better paying work (Bittner & O’Connor, 2012). One possible undesirable outcome of the faculty shortage problem compounded by overcrowded classrooms could be that nurse educators would fail to effectively create what Speakman (2009) called a learning environment where epiphanies in learning could occur. Benner et al. (2010) found a lack of quality teaching in nursing program classrooms, and the uneven character of knowledge integration strategies used. Should the capacity for making important connections to practice diminish in nursing classrooms, the practice-education gap could grow, leaving new graduates entering the field with insufficient knowledge integration to apply in practice. In the long-term, practice partner organizations seeking well-prepared BSN graduates would not be served, and lead to a condition of scrutiny focused on nursing faculty (Benner et al., 2010). Recently, the AACN (American Association of Colleges of Nursing, 2014b) found that 43.7 percent of healthcare organizations required a BSN degree for all new hire RNs. Programs that graduate BSNs who are well-prepared for practice will most likely become the standard against which all other undergraduate programs will be measured. External pressure focused on nursing faculty to achieve higher expectations of learning outcomes in their classrooms may increase the level of constraints on faculty already considering their teaching role exit options.

The increased demand for better prepared BSN program graduates may have a short-term, unintended impact on faculty engagement with the SoTL. According to O’Meara, Terosky, and Neumann (2008), two competing narratives were at work in undergraduate faculty members’ work lives: (a) a narrative of constraint, where faculty members were expected to become more accountable, more productive, and forfeit some
autonomy for some greater, externally imposed purpose, and (b) a narrative of growth that some faculty engendered from an internal drive to press on in spite of external constraining forces toward greater self-fulfillment and toward greater social justice. A narrative of constraint may occur as BSN faculty members’ teaching performance comes under increased scrutiny, and as an unintended result of the increased demand for practice-ready BSN program graduates. According to Gresley (2009), it was not enough to expect sufficient learning in nursing students from current pedagogical practices. Nursing faculty will ultimately be responsible for creating and implementing strategic changes in nursing education that achieve the goal of better prepared graduates.

Throughout the literature, innovative teaching practices were acknowledged as important to maintaining the relevancy of nursing education to nursing practice (Herinckx, Munkvold, & Tanner, 2014; Phillips et al., 2013; Giddens, Brady, Brown, Wright, Smith, & Harris, 2008; Schell, 2006) but according to Iwasiw, Goldenberg, and Andrusyszyn (2005), many teaching innovations were not made public, and remained local knowledge, causing what Shulman (as cited by McKinney, 2013) called the collective amnesia in higher education. Repeated database searches for nursing education literature on the SoTL yielded little evidence of the SoTL movement pertaining to nursing education reform. The dearth of literature in nursing on the SoTL movement was identified a particularly problematic condition.

**Faculty Engaged in Scholarship**

Nurse educators will have to participate in spearheading educational reform processes in nursing, but the lack of evidence in the literature describing how nurse educators can internalize the scholarship of teaching will put them at a disadvantage. The
scholarship of teaching and learning (SoTL) was identified as the most appropriate avenue for making innovative teaching practices public in nursing (Benner et al., 2010; Gresley, 2009). Increased faculty engagement in the scholarship of teaching was viewed as a vital step forward in preserving the professional and social status that the field of nursing currently enjoys (Gresley, 2009). Nurse educators must begin to adopt evidence-based teaching practices to inform their teaching, and reform current teaching practices (Gresley, 2009). Emerson and Records (2008) suggested strategies for nurse educators who seek to create an academic culture that values evidence-based teaching and the scholarship of teaching, and provided an overview of how scholarship in nursing education has the potential to catalyze evidence-based teaching practices.

**An Academic Culture of Scholarship**

The SoTL could be viewed as a new form of faculty enculturation for nursing academics, where the goal is to make meaningful improvements in current educational practices leading to improved learning outcomes including graduates who are better prepared for professional practice. Heinrich, Hurst, Leigh, Oberleitner, and Poirrier (2010) described at length a scholarship realignment process for nurse educators at one college of nursing, and the risks they identified as inherent to the process. Foremost on the Heinrich et al. (2010) risk list was an administrative culture that lacked appreciation for innovative forms of scholarship, or that devalued such scholarship as being pseudo-scholarship. The negative aspect of engagement in an innovative form of scholarship like the SoTL would cause passionate scholars with innovative scholarship in mind to abandon hope of pursuing their dreams (Heinrich, Hurst, Leigh, Oberleitner, & Poirrier, 2010). Heinrich et al. (2010) noted a common dilemma that passionate nurse scholars
faced was a low functioning organization with structural issues that discouraged them from engaging in innovative scholarship.

Organization-level and faculty-level issues will be targeted as central issues for determining the barriers to the SoTL that BSN faculty members encounter, and that can be objectively addressed by beginning a dialectic surrounding the SoTL in nursing. A valid scale for measuring faculty perceptions is proposed for its potential to objectively quantify the reasons for the lack of faculty engagement in the SoTL phenomenon. Ultimately, instrumentation of faculty perceptions of barriers to the SoTL would permit an objective dialectic of the SoTL in BSN programs aimed at reducing and/or removing barriers to pedagogical knowledge development.

**Leading Change in Nursing Education**

Institutional structures and ritualistic thinking patterns are ingrained in nursing education. Thompson and Clark (2013) called for nursing education leadership to effectively lead change in nursing education and embrace scholarship as an overarching and high-reaching means toward the goal for nursing education reform. A potential barrier to the SoTL in nursing may be an unintended perpetuation of traditional nursing practices and values that began in the classroom. New faculty initiated to the academic doctrine of teaching, service, and scholarship were often left to their own devices, and simply had to do their best (Bartels, 2007). Nurse educators practice a form of indoctrination when they teach nursing as they were taught nursing, and continue a perpetuation of their preferred teaching style (Ard, 2009) to the next generation of nurses. Bailey (2010) examined indoctrination in educational settings and found that teaching a belief system to the uninitiated while failing to critically examine the content of that
teaching implied that two hallmarks of indoctrination were at work. Schriner (2007) provided an example of how new nursing faculty endured a certain amount of dissonance when their espoused guiding values of professional nursing practice were not as valued by the reward structures in academe as they were in practice. Indoctrination remained an unexamined condition of employment in nursing and nursing education, and was considered for its potential to create a barrier for faculty engagement in the SoTL.

Bailey (2010) examined the practice of indoctrination, and the concept of doctrine. According to Bailey (2010), the meaning of the term doctrine was broad and vague, and that doctrines were part belief systems that defied proof, and were resistant to verification, or to being disproved with decisive evidence. Bailey (2010) suggested that broad consensus among teaching faculty in education was the basis for curricula. In nursing, the traditional nurses’ training school model formed the basis for contemporary nursing curricula. According to Bailey (2010), the curriculum content was infused with the doctrine of past nursing practices.

A practice history versus a science history. There have been debates about whether the nursing profession was truly a science-based practice, or in fact an artful practice. Nursing became a profession that achieved professional status at the margins of the medical profession (Lynaugh, 2008). Lynaugh (2008) recounted the 1964 political environment surrounding the professionalization of nursing, when the Nurse Training Act (NTA) was endorsed by Lyndon Johnson. Johnson legitimized funding nursing education as something that would solve the problem of over-burdened physicians whose time would be better spent doing higher-level medical science, and how more and better educated nurses would make that possible for the medical profession (Lynaugh, 2008).
Nursing became a practice profession increasingly taught in institutions of higher learning because federal funding made it possible.

Nursing as a practice profession continued to evolve, and eventually gained the status of an art and a science. In 1997, Bishop and Scudder examined the designation of nursing as a science, and cited Benner’s position of nursing as a practice studied and learned as a human science. Bishop and Scudder (1997) regarded the moral aspects of nursing as a sign that it was neither an art nor a science, as those domain were without moral obligation to humanity. According to Gadamer (as cited by Bishop & Scudder, 1997), a professional practice developed from a communal way of being, to promote some good for humanity’s sake. Bishop and Scudder (1997) interviewed 40 hospital nurses about their most fulfilling experiences in nursing, and all but one participant described some aspect of nursing as morally fulfilling, and not just from having achieved a high level of technical competence. The moral aspect of nursing education surfaced elsewhere in the literature as a theme shared by academic scholars in nursing. The debate in the literature about whether nursing practice is science-based or an artful discipline, or whether a science or an art has any moral obligations was considered germane to a study of scholarship efforts in nursing education.

**Nursing education science.** Nursing faculty engaged in the SoTL have the potential to morally enrich the learning environment with nursing practice’s ethos of caring. Kreber (2013) explained that the scholarship of teaching was a practice with internal goods, and when practiced virtuously for the sake of improving educational outcomes, the scholarship of teaching could achieve an ethical dimension. Advancements in nursing education science will rely heavily on nursing faculty ethically
engaging in the SoTL on behalf of their students’ and society’s best interests. Benner et al. (2010) described how nursing pedagogies failed to achieve integrated learning because classroom teaching practices involved too much abstraction of nursing knowledge. Also, clinical teaching practices often failed to provide links to the abstract theory taught in the classrooms (Benner et al., 2010). According to Benner et al. (2010), integrating the nursing student’s educational experience would bridge the practice-education gap that caused new graduates to be underprepared for work in a profession where underdetermined patient-related problems required a nurse’s courage and determination to solve. Nursing faculty were in need of help in achieving realignment with nursing pedagogies that increased basic preparation of the professional nurse (Long et al., 2012). Published scholarship of teaching in nursing could provide the help that teaching faculty needed to learn to use pedagogical knowledge generated by other nurse educators, and foster within them the courage to transform their teaching practices.

The call for reform in nursing education will mostly be heeded by those who can find within themselves a moral purpose in their work, and perhaps link that purpose to an engagement with the SoTL. Alteen, Didham, and Stratton (2009) characterized faculty engagement in scholarship as being motivated by an internal compass of values pointing toward a future where the next generation of nurse scholars could thrive and uphold the professional status of nursing. Kreber (2013) also noted certain values surrounding the scholarship of teaching in higher education: (a) a satisfaction in the process of inquiry in matters of teaching and learning, (b) practice reflexivity to critically examine the internal motivators sustaining the work of scholarly teaching, and (c) the continued pursuit of important questions about how teaching and learning best serves the learners’ learning
needs. Kreber (2013) described the bigger picture in education of a *praxis* that resisted instrumentalist teaching methods out of an obligation to do the right thing and do it well. These three value-based conditions were regarded as more practice-based than art or science. The SoTL cycle (see figure 1) was derived from Kreber’s description of the scholarship of teaching as a praxis, and inspired by Alteen et al.’s (2009) internal compass analogy. In Kreber’s (2001) Delphi survey findings (appendix B, table B4), item 32 introduced the concepts of discovery and application, and item 13 introduced the concepts of planning and evaluation through a cycle of action, reflection, and improvement. The concepts *discover, plan, apply, evaluate* and *share* were identified as integral to faculty engaging authentically in the SoTL.

**Figure 1 The Scholarship of Teaching and Learning Cycle**

![SoTL Cycle Diagram]

The SoTL presents opportunities for nurse educators to engage in scholarship and make important contributions to the advancement of a codified knowledge for nursing education. According to Kreber (2013), phronesis-guided actions of practice were those actions conducted in an authentic manner in order to do the right thing and do it well, and termed this as the educator’s *horizon of significance*. The horizon of significance that
motivates authentic educators consists of educational priorities that guide teachers’
actions toward serving the students’ best interests (Kreber, 2013). Authenticity was a
theme in the education philosophy literature that was associated with autonomy and
open-mindedness (Bailey, 2010). Autonomy, competency, and relatedness were themes
explored in the literature on self-determination theory (SDT) and in the literature on the
scholarship of teaching.

Social psychology in educational research. Motivation theory included the
perceived locus of causality (PLOC) theory, as a valid description of how self-concordant
individuals used internal motivators to new levels of organization, and were therefore
better prepared to engage in new growth opportunities (Sheldon, 2004). Sheldon and
Filak (2008) demonstrated that autonomy, competency, and relatedness were
psychological needs that teachers needed to consider, as subversion of any of these could
negatively impact their students’ internal motivation to learn. Classroom research
matters were explored in the SoTL literature that demonstrated how all classrooms were
socially constructed environments where the investigator’s involvement in their students’
learning outcomes could not be operationalized apart from multiple variables.

The SoTL movement was explored through a social constructivist’s lens.
Grauerholz and Main (2013) reported that when empirical methods were employed in the
conduct of a quasi-experimental classroom research project, no control group actually
existed. Study findings revealed that the 2 classroom set-up (control and experimental)
failed because two groups of students were fundamentally non-comparable (Grauerholz
& Main, 2013). Recommendations made by Grauerholz and Main (2013) to SoTL
investigators included a reminder that all classrooms are socially constructed

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environments with far too many variable to control. Grauerholz and Main (2013) recommended using a case study design to examine the overall impact of an educational approach. The case study approach was characterized as useful for developing descriptions of a variety of learning outcomes, including some exemplary ones that might provide insight as to which innovative educational approach was most effective in engaging learners in learning (Grauerholz & Main, 2013). SoTL investigations in the socially constructed, messy environment of the classroom would likely involve prioritizing the satisfaction of the learners’ psychological needs over carefully designed control measures to yield implementable findings. The complexities of conducting a SoTL study in the classroom may be perceived by faculty as a significant barrier to their engaging in the SoTL.

**Reforming nursing education.** Nursing education reform was characterized in the literature as slow in coming to fruition. Valiga (2009) noted that nursing science took 30-plus years to develop, and to become an impactful form of scholarship. According to Valiga (2009), greater numbers of nursing faculty were required to achieve the broad goal of advancing nursing education science through the scholarship of teaching. Brown, Kirkpatrick, Greer, Matthias, and Swanson (2009) found that although academic nurse educators were often implementing innovative teaching and learning strategies, they generally lacked the skills necessary to evaluate the impact of their teaching innovations on learning. The scholarship of teaching would need to become a driving force in the advancement of nursing education science.

**An undervalued SoTL.** The scholarship of teaching has been less valued by academic cultures than traditional research-driven scholarship. Meleis (2012) noted that
the progress toward evidence-based practices in the nursing profession was impacted by differences between criteria used by clinical disciplines to evaluate scholarship, and the criteria adopted by nursing to evaluate practice-based research. According to Meleis (2012), the lack of scholarship in nursing was correlated to definitional characteristics associated with the nursing profession, where a female-dominated labor force influenced how nurses’ philosophical perspectives on knowledge development evolved over the course of sustained struggle for equality.

Thoun (2008) suggested that the pragmatic approach used in faculty selection was based on whether a prospective faculty member’s scholarship potential included ongoing funding for research. Thoun (2008) found that this had a fragmenting effect on promoting a passion for scholarship. Boyer (1990) explained that basic research became the preeminent scholarly activity, with the other scholarship domains flowing from it. According to Kreber (2013), engagement in an informal inquiry was as important to advancing professional growth as conducting a formal study, and informal forms of the scholarship of teaching led to more formal studies that added valuable knowledge, and that inspired and motivated others who learned from them to begin studies of their own.

Scholarship in schools of nursing was characterized in the literature as lacking in continuity and lacking significance on practice. Nursing’s scholarly contributions to society should be appreciated as authentic products of epistemic diversity and integrative processes (Meleis, 2012). Authenticity is the concept Kreber (2013) explored in an in depth manner, and scholarship that is authentic should involve critical reflections on various dynamics at work in teaching and exposing attitudes surrounding teaching that are counter to students’ best interests. Meleis (2012) offered nursing a way to
authenticity, through a voice that confronts the sacred cows of nursing scholarship in order to learn new ways to evaluate progress within the nursing discipline. Evaluation criteria from disciplines outside of the nursing discipline have prevailed over nursing scholarship, and caused incongruities between what types of scholarship were promoted in nursing, leading to what Gresley (2009) identified as the non-progressive nature in nursing research, limiting advances in practice and education based on the research. Nursing’s collective voice on scholarship should, through critical reflection, achieve authenticity once nursing scholarship is validated, and shared with a larger audience of current and future nurse scholars. Until then, insufficient numbers of nursing academics will have taken up the scholarship of teaching, thereby perpetuating an historical track record of noncumulative scholarship in teaching the discipline.

Kreber’s (2013) examination of the scholarship of teaching in higher education found that critical reflection by educators was a prerequisite for authentic scholarship, in that critical reflection on teaching perspectives increased the level of authenticity, whereby scholarship became a transformative learning process for educators. Eventually, the scholarship of teaching increased self-direction that led to the advancement of transformative agendas (Kreber, 2013). Benner et al. (2010) concluded that only a radical change in how nurse educators were educating nurses before licensure would accomplish meeting the demand for better prepared new nurses entering practice. Undergraduate nursing program faculty were a central focus for the Benner et al. (2010) study, and also selected as the population of interest for this study.
Background, Context, and Theoretical Framework

A discussion of the background, context, and theoretical framework for the Delphi study follows. A brief background on the SoTL in nursing education from the current literature on the SoTL is provided. Dissertation aims and the central focus of the study are discussed, and include the identification of a knowledge gap in the SoTL literature from higher education and nursing education sources. Important trends in nursing education reform are also identified, as well as examples of how the SoTL relates to nursing education reform efforts. Theoretical and conceptual frameworks selected for the study are briefly discussed in terms of how each apply to the research.

Background for the SoTL in Nursing Education

Teaching quality initiatives during the 1990s spawned an interest in the SoTL among academics in higher education, mainly for providing a means of professionalizing teaching (Kreber, 2002). Kreber conducted a Delphi study of higher education experts’ perspectives on the scholarship of teaching, and from her findings concluded that among the various disciplines many issues surrounding the scholarship of teaching remained unresolved (Kreber, 2001). McKinney (2012) pronounced the SoTL to be a social movement, and one with members who shared a set of beliefs. The intent of this nurse educator-centered study is to understand what beliefs are shared among undergraduate nursing faculty about the SoTL.

Although the SoTL domain is a relatively new concept for the professions education disciplines, the scholarship of teaching was discussed with increased frequency in the nursing profession’s literature. Boyer (1990) introduced a quadripartite scholarship
model to higher learning that nursing education readily adopted. However, 24 years later, nursing education has yet to articulate an appreciable standard of the SoTL, or a clear process for nursing program faculty to follow (Gresley, 2009). In the preface of a widely adopted teaching guide for academic nurse educators, Billings (2009) proposed that faculty take up the SoTL through reflection on action, and through innovations that create conditions leading to an active learning community (p. xiv). Multiple sources provided evidence of the extant knowledge surrounding the SoTL (Malinsky, DuBois, & Jacquest, 2010; Thompson, Galbraith, & Pedro, 2010; Toth & McKey, 2010; Alteen, Didham, & Stratton, 2009; Heinrich, Hurst, Leigh, Oberleitner, & Poirrer, 2009; Patterson, 2009; Cash & Tate, 2008; Emerson & Records, 2008; Hawranik & Thorpe, 2008; Schumaker, Risco, & Conway, 2008; Pratt, Boll, & Collins, 2007). Hutchings (2010, p. 63) likened the scholarship of teaching to, “a habit of mind and set of practices that contribute to a culture in which other changes and developments can thrive.” According to Angelo (2002), a lack of understanding of what is meant by the term learning in higher education, and what factors drive faculty to self-directed learning and professional development were partly responsible for failures of prior educational reform efforts. Also, academic cultural change processes are poorly understood, as are best-practice strategies for promoting lasting change (Angelo, 2002).

Context

Dissertation aims and objectives. The central focus of this study is to gain an understanding of what BSN faculty members generally believe about the scholarship of teaching, and what they perceive the role of the scholarship of teaching to be in their teaching practices. The idea for a study of nursing faculty perceptions surrounding the
scholarship of teaching emerged in response to a burning desire to discover why so few SoTL studies in nursing education were published in the literature. A study of the SoTL phenomenon in nursing will provide answers to important questions surrounding the SoTL phenomenon in nursing. Knowledge synthesis surrounding the SoTL in nursing education has been sparse. Increasingly frequent and urgent calls for curriculum reform makes this a timely study of an important central phenomenon to educators teaching in undergraduate nursing programs. Key participants in the SoTL study are: (a) expert nurse educators whose published writings inform the development of a valid measurement scale of BSN faculty perceptions of the barriers to the SoTL in nursing education, and (b) expert nurse educators teaching in undergraduate nursing programs who agreed to participate in this study.

**Important trends.** Evidence of precise knowledge surrounding faculty perceptions surrounding the scholarship of teaching was conspicuously sparse within the higher education literature. Benner et al. (2010) identified that nursing faculty lacked sufficient time to reflect on the scholarship of teaching as one problem, compounded by yet another problem of insufficient opportunities for faculty development and that nursing education reform should ideally be accomplished by nursing faculty. Fairman (2008) cited the nursing profession’s historical legacy with a discipline-specific struggle to establish a unified concept for nursing scholarship, and signified a significant barrier to advancing the scholarship of teaching in nursing. Gresley (2009) described the non-progressive nature of nursing scholarship, and the lack of progression may have resulted from a legacy of struggle for nursing to assert a collective voice, in general and in the literature. The scholarship of teaching has been met with some significant challenges to
becoming an established scholarship domain, both in higher education, and in nursing education.

A significant gap was noted in the nursing literature regarding what was articulated about transforming nursing curricula. Phillips et al. (2013) recommended a conceptualizing first step to challenge the current thinking about nursing education. The traditional view of nursing held by nursing faculty might be the best place to begin a challenging conversation about ideas surrounding curriculum reform and the SoTL. According to Benner et al. (2010), faculty engagement with the scholarship of teaching was something needed immediately, and that the scholarship of teaching should become standard practice in undergraduate nursing education programs.

Nursing faculty are encouraged to assume responsibility for the curriculum, and they are encouraged to believe that they own the curriculum they teach. Vandeveer (2009) regarded nursing faculty as the profession’s cognitive development specialists. If true, this would seem to place the task of closing the practice-education gap squarely on nursing program faculty. Brown, Kirkpatrick, Greer, Matthias, and Swanson (2009) found that a majority of nursing faculty believed their predominant teaching roles were those of a facilitator and an information provider. Valiga (2009) characterized the building of a science of nursing education as a movement involving multiple stakeholders rather than an initiative spearheaded by a few gifted scholars. Hutchings, Huber, and Ciccone (2011) described the community aspect of scholarly teaching as one where intellectually engaged individuals share their local knowledge about teaching, thereby enriching the larger community’s view of teaching. Heinrich et al. (2009) found that new nurse educators were ill-prepared to engage in the SoTL, as they lacked adequate
preparation in teaching and adequate time management skills. Also, the lack of faculty development opportunities that Heinrich et al. (2009) described was evidence enough to motivate an in depth study of nursing faculty engagement with the SoTL phenomenon. More SoTL studies conducted by academic nurse educators are needed to expand the shared perception that teaching roles involve more than the two cited by Brown et al. (2009).

At the present time, only two formal surveys of university faculty perceptions surrounding SoTL were located in the literature (Secret, Leisey, Lanning, Polich, & Schaub, 2011; Kreber, 2002). Secret, Leisey, Lanning, Polich, and Schaub (2011) investigated the perceptions of faculty surrounding the SoTL, and noted that the reward structure favored research over SoTL studies. Survey participant responses in the Secret et al. (2011) study reflected faculty attitudes indicating that institutional reform of the reward system was an important consideration. Also, faculty perceptions of recognition criteria for SoTL studies indicated there was confusion about how reward for the SoTL efforts worked at their institution (Secret et al., 2011). Reward for the work associated with a SoTL study was an important consideration, but the Secret et al. (2011) study participants were predominantly untenured faculty, and nearly half of the participants reported no prior experience with a SoTL activity. So, no conclusion about whether lack of faculty experience with the SoTL, or the lack of a clear reward system was responsible for the low level of faculty engagement with the SoTL. Hebenstreit (2012) surveyed nursing faculty about their perceptions surrounding empowerment and innovative behavior, and identified a need for nursing faculty to become more familiar with institutional norms, and/or increase their participation in professional organizations. The
decision to develop a pilot survey instrument for capturing nursing faculty perceptions surrounding SoTL in their teaching practices was based on the aforementioned faculty-centered survey work (Kreber, 2002; Secret et al., 2011; Hebenstreit, 2012), and recent survey-based research on research and teaching trends among university faculty (Ithaka, 2013).

Nurse educators participating in educational reform efforts will likely experience academic cultural change that they do not understand, but nevertheless will endure, because as nurses they are accustomed to what Shulman (2010) referred to as practicing the triage of priorities. Nurse educators were characterized as a group not valued for having “specialized knowledge, skills, and abilities” (IOM, 2010, p. 16), shedding some light on a shadowy gap in the knowledge surrounding teaching and learning in nursing. This research is driven by the desire to understand those conditions favorable to the conversion of nurse educators from experienced change survivalists to their becoming self-directed change agents in educational reform.

This educational study advances the current knowledge of undergraduate nursing program faculty perceptions of the SoTL domain. Substantiated knowledge of the SoTL in the higher education literature was examined for salient topics useful for informing the development of a pilot survey instrument designed to measure nursing faculty perceptions of the SoTL. College faculty are charged with improving the curriculum, and held responsible for evaluating the learning outcomes related to those improvements. In a final analysis, Secret et al.’s (2011) survey findings regarding university faculty perceptions of SoTL indicated a need for more SoTL studies. Secret et al. (2011) found that what university faculty believed to be SoTL varied, and that their motivation to
conduct SoTL studies was influenced by departmental promotion and tenure criteria. In the nursing education literature, the SoTL concept remains an understudied, underappreciated, and underreported phenomenon.

Information generated during this study will provide future inquiries surrounding the SoTL in nursing education with a theoretically sound basis on which to develop a more comprehensive knowledge of the phenomenon. The findings of this study will be of particular interest to nursing program faculty leadership when considering which internal and external contextual factors in their undergraduate nursing programs are likely to promote and/or impede nursing faculty engagement in self-directed SoTL studies.

**Theoretical and Conceptual Frameworks**

Increased knowledge is needed in nursing education to advance a theory of the scholarship of teaching for nurse educators. Over the course of several months, a theoretical model was conceived through theory derivation (Walker & Avant, 2005) and theory triangulation to develop a useful, logical model that explained both the theoretical and conceptual guiding frameworks selected for this study. The model also served as a tool for guiding critical reflection during the development and refinement of a barriers scale instrument. Implications of developing a scale for measuring faculty perceptions of barriers to the SoTL in nursing education included: (a) extending the knowledge of faculty perceptions surrounding scholarship in general by using a context relevant framework derived from nursing curricular knowledge (Iwasiw et al., 2009), and (b) knowledge synthesis surrounding the context of nurse educators’ involvement with the SoTL from a theory of motivation perspective (Deci & Ryan, 2007). A third theory, the theory of action (Argyris, 2006), was then used to derive a theoretical perspective on the
SoTL that considered two types of learning: (a) single-loop learning, where self-sealing prophesies and ritualized patterns stifled innovation, and (b) double-loop learning, where individuals and organizations were engaged in knowledge synthesis and innovation. An initial theory derivation involved regarding faculty perceptions of barriers to doing scholarship as resulting from multiple internal and external motivational factors, similar to concepts integral to the Iwasiw et al. (2009) CrCD model, specifically the context-relevant internal and external factors in nursing curriculum development. A second theory derivation using deCharms’ original perceived locus of causality (PLOC) (as cited by Ryan & Deci, 2002) was selected from a phronesis viewpoint, in that motivated individuals were viewed as self-directed and were guided by a self-concordant sensibility. The theory of action (Argyris, 2006) provided insight for navigating the challenges of initiating significant and lasting change in nursing education’s well-worn, single-loop learning pathway.

The phronesis viewpoint was compared to the pragmatist viewpoint described by King and Kitchener (as cited by Woerkom, 2010) as an intellectual approach to critical reflection. According to Woerkom (2010), critical reflection and instrumental rationality were related concepts used in intellectual pursuits, such as when pragmatists construct meaningful descriptions of their experience(s). Brookfield (as cited by Woerkom, 2010) characterized pragmatists as resistant to accepting generalities and universalities to achieve a specific ideal, such as seeking valuable knowledge about something not implicitly understood. The pursuit of pedagogical knowledge through scholarship examined from a pragmatist constructivism viewpoint was viewed as a self-directed
intellectual pursuit that resisted generalities in order to synthesize authentic knowledge surrounding the SoTL phenomenon in nursing educational settings.

The professional nurse’s perspective was taken to critically reflect on the prospects of BSN faculty engaging in the SoTL. Critical reflection led to a review of the core professional nursing values (CPNVs) (Shaw & Degazon, 2008). Shaw and Degazon (2008) investigated the application of the CPNVs in a relational pedagogy for transitioning new BSN graduates into professional practice. The American Association of Colleges of Nursing (AACN) (2008) essentials of baccalaureate education provided definitions for the CPNVs altruism, autonomy, human dignity, integrity, and social justice. These five core values represented an encapsulation of exemplary moral conduct for professional nurses (American Association of Colleges of Nursing, 2008). Viewed through the professional nurse educator’s lens and the pragmatist constructivism viewpoint, the CPNVs were viewed as important teaching points, but also viewed as elements of a productive social teaching context. The CPNVs could be considered as elements of a guiding framework for the phronesis of nursing education.

**Conceptual Frameworks**

Three theoretical frameworks were selected for inclusion in the study of faculty perceptions of barriers to the SoTL in nursing education. The context-relevant curriculum development (CrCD) model was selected for its constructs supporting the social context of teaching in nursing education. The self-determination theory (STD) was chosen for its long track record in quantitative studies that confirmed its constructs over and over as a highly accurate description of the interplay between types of motivation, loci of causality, and social aspects of belonging and competence. The theory of action (TA) was
perceived as an integral third component for an innovative framework that facilitated describing the phenomenon of the scholarship of teaching, as well as for having a long track record of providing solid examples of behavior patterns and learning patterns on an organizational level.

**A context-relevant curriculum development model.** Iwasiw et al. (2009) identified multiple internal and external contextual factors, and these were found to be useful for informing the development of three iterative Delphi study surveys. The construct *curriculum nucleus* in nursing was developed by Iwasiw et al. (2009) from philosophically informed knowledge about contextual sources, core nursing concepts, professional nursing expertise, and pedagogical expertise. The CrCD model (Iwasiw et al., 2009) juxtaposed multiple internal and external factors of curriculum development around a central core of nursing faculty, or the curriculum nucleus, and around which relevant concepts were derived in order to begin the development of a scale for measuring nursing faculty perceptions of barriers to the SoTL.

**The self-determination theory.** Authentic scholarship through inquiry required the ability and sustained motivation to think and act freely in the interest of higher pursuits. Deci and Ryan (2007) developed the SDT, a social psychology motivation theory that supplied additional theoretical elements for constructing a scale that included intrinsic and extrinsic motivation concepts in order to measure faculty perceptions of the scholarship of teaching. The SoTL was viewed as a socially responsive action that nursing faculty would eventually learn about, and find that it satisfied an inquisitive part of the nurse’s nature. According to Deci and Ryan (2007), the SDT was developed with the assumption that people are naturally inclined to be active, self-motivated, curious and
interested in succeeding for the sake of personal satisfaction. The SDT recognizes that social contexts can thwart those natural inclinations, and lead to mechanistic, passive, or detached and amotivated states of internal conflict (Deci & Ryan, 2007). Sheldon (2002) used the SDT mini-theory of perceived locus of causality (PLOC) to explain how individuals who learned to resist change and protect the status quo were “stalled” (p. 78) in a state of non-concordance with their natural state of being active, curious, and self-motivated. The social context these individuals found themselves in was not providing the necessary psychological nutriments for optimal flourishing (Sheldon, 2002).

The theory of action. The theory of action (Argyris, 2006) was selected for use as a third theoretical element in a guiding framework for examining the SoTL in nursing. Argyris (2006) proposed that authentic scholarship required a departure from the status quo mind-set, and enter a double-loop learning dynamic for any meaningful finding that yielded knowledge with high implementable validity. The SoTL was viewed as something that when conducted in an authentic manner would yield highly implementable knowledge, useful for reforming nursing education.

Statement of the Problem

The scholarship of teaching is an underdeveloped form of scholarship in nursing education (Benner et al., 2010). Advancements in nursing education science will require nursing faculty who are skilled in the scholarship of teaching (Gresley, 2009). Database searches using the search terms barrier and faculty and nursing yielded only a few relevant articles. Hutchings, Huber, and Ciccone (2011) described the underdeveloped knowledge surrounding the SoTL in higher education as a significant barrier. Meyers (2008) described a gender bias in higher education as a barrier to engaging in the SoTL.
Secret et al. (2011) identified lack of experience with the SoTL phenomenon as a significant barrier. The tripartite academic roles of teaching, service, and the scholarship of discovery were characterized by Glassick, Huber, and Maeroff (1997) as a barrier to the SoTL movement in higher education. Barriers to the SoTL will need to be explored on many levels in higher education, and this study explores the barriers to the SoTL from a faculty perspective.

**Purpose of the Study**

The purpose of the study was twofold. The general purpose of this research was to advance the knowledge in nursing education science about undergraduate nursing faculty perceptions of barriers to advancing SoTL in the classroom or clinical setting. The specific purpose of this research was to develop a barriers scale useful for quantification of undergraduate nursing faculty perceptions about significant barriers to their engagement in SoTL. Broome, Ironsides, and McNelis (2012) found no known organized approach to discovering current contributions to nursing education science among schools of nursing (SONs), what barriers to knowledge development in nursing education currently existed, or what kinds of support would be needed to assist efforts to advance nursing education science.

An objective, valid and reliable barriers scale could potentially provide quantifiable information useful for examining locally perceived barriers to the SoTL, and thereby enable work aimed at reducing the barriers to scholarship for those faculty who possessed an inclination to engage in the SoTL. Additionally, findings from data collected using a valid SoTL barriers scale could promote conversations among faculty about the underappreciated form of scholarship in nursing education. Those
conversations might yield something better than data from a barriers scale alone, including a heightened awareness shared among faculty about the SoTL’s potential to renew and re-energize their teaching practices.

Research Questions

Rich descriptions of faculty perceptions of barriers to SoTL from the literature review will enable the development of open-ended survey questions. Round 1 (R1) of the Delphi study will involve qualitative questions. The quantitative phase of the proposed mixed-methods study begins in Round 2 (R2) of the Delphi study. Answers to the following research questions will be sought during and following the Delphi study.

Central Qualitative Research Question

What are the barriers teaching faculty perceive as impacting the advancement of scholarship of teaching and learning (SoTL) in schools of nursing (SONs)?

Additional Qualitative Research Questions

What types of internal and external factors in the teaching environment do nursing faculty perceive as significant barriers to the pursuit of scholarly work in teaching and learning?

What personal beliefs and skills do faculty perceive in themselves as barriers to engaging in SoTL?

What perceptions of students’ beliefs and skills do faculty perceive as barriers to faculty engagement with SoTL?
Primary Quantitative Research Question

To what degree do teaching faculty in schools of nursing (SONs) share perceptions regarding barriers to the advancement of scholarship of teaching and learning (SoTL)?

Additional Quantitative Research Questions

Which internal and external factors of the teaching context do faculty perceive as controlling and as barriers to SoTL?

Which internal factors and external factors of the teaching context are perceived to potentiate autonomy and increase engagement in scholarship?

Rationale, Relevance, and Significance

The rationale, relevance, and significance of a Delphi study conducted with BSN faculty were determined from an extensive review of the literature, and from critical reflection on the nature of the SoTL within the context of teaching in nursing. The current knowledge gap in nursing education about the SoTL was considered as a sufficient rationale for the study. The call for nursing education reform efforts and the potential findings from a study conducted with BSN faculty was viewed as relevant. Four aspects of the study’s significance to add implementable knowledge were identified.

Rationale

Reduction of the knowledge gap surrounding faculty perceptions of barriers to producing scholarship of teaching was viewed as key to developing a potential solution to closing the practice-education gap in nursing. Boyer (1990) explained how building bridges that span a gap between theory and practice amounted to a scholar taking a step
back, looking for and understanding the connections, bridging the gap with the new knowledge, and communicating the knowledge to others. Broome, Ironsides, and McNelis (2012) questioned whether or not nursing faculty had the collective capacity, or the will to engage in important educational research efforts. The development of an objective, valid barriers scale was conceived as a possible mechanism useful for facilitating the exploration of faculty role ambivalence, complacency among faculty surrounding engaging in scholarship, and potentially useful for developing a collective awareness of the potential the SoTL holds for nursing education.

The knowledge surrounding the SoTL in nursing was found to be underdeveloped. The need to ground teaching innovations in evidence was noted in the literature (Gresley, 2009; Patterson, 2009). Traditional nursing curricula and an instructor-centered paradigm were well-established, ensconced educational practices that Gresley (2009) identified as potential barriers to advancing nursing education science beyond its current nascent stage. Gresley (2009) stated that teaching an evidence-based practice required faculty to adopt and use teaching and evaluation strategies that demonstrate the most successful approaches to achieving desired learning outcomes. A valid barriers scale could be useful for basing actions that decrease perceived barriers that nursing faculty experience and that cause feelings of ambivalence about scholarship in many faculty members.

Relevance

A barriers scale was viewed as having relevance in nursing education reform for its potential to inform decisions about the types of faculty-centered development activities needed, especially the development of increased research capacity among
nursing faculties. Increased research capacity among nursing faculties was identified as critical to the advancement of a nursing education science through scholarship in evidence-based teaching strategies. A measurement scale that accurately captures data about nursing faculty perceptions of barriers to SoTL would facilitate the development of customized activities designed to increase interest in the scholarship of teaching. The reliance on first-time pass rates on the licensure examination has not resulted in needed changes to the practice-based profession’s teaching methods (AACN, 2013), or to significant improvements in graduates’ preparedness for practice (Benner et al., 2010). Benner et al. (2010) pointed out that significant changes must come from within nursing programs, and driven by a clear vision of what constitutes a quality nursing education.

**Significance**

The significance of developing a valid barriers scale was four-fold. First, having a valid scale would support the conduct of a funded multi-site survey-based that would permit researchers to improve the instrument’s reliability. Also, a valid and reliable barriers scale would address Broome et al.’s (2012) concerns that no systematic method existed to quantify current SoTL activities among SONs. Third, the findings from a larger study could potentially elevate the status of mixed research and survey development in nursing education to the level currently held by traditional basic research methods. Lastly, the development of a valid barriers scale for the SoTL in nursing education would add to the momentum created by the NLN certified nurse educator (CNE) movement.

The NLN’s position on innovation and excellence in nursing was published in a statement declaring that nursing education be based on research findings, and taught by
faculty who can demonstrate competencies in multiple areas of nursing education (National League for Nursing, 2005). In 2005, the NLN introduced the CNE program (Ortelli, 2006), a voluntary process made available to nursing faculty who desired to be recognized as advance practitioners of nursing education. In 2009, the NLN CNE program was granted accreditation by the National Commission for Certifying Agencies (NCCA), the accrediting body of the National Organization for Competency Assurance (NOCA) (National League for Nursing, 2013). The establishment of the CNE program was viewed as having raised the bar on evidence-based teaching, and something that would inevitably lead to increased numbers of nursing faculty engaging in evidence-based teaching practices (EBTPs).

The findings from a mixed methods investigation of nursing school faculty perceptions of barriers to SoTL would lead to greater knowledge about certain aspects of nursing education culture that need to change in order to increase the numbers of NLN recognized centers of excellence in nursing education. Strategic application of that knowledge in schools of nursing would serve as a catalyst for nurse educator scholars to begin collaborative work on the creation of new educational frameworks in nursing classrooms and clinical settings. Eventually, the knowledge gained would provide the means for identifying and removing sufficient numbers of barriers for nurse educators to begin making significant advancements in nursing education science. Also, a lexicon specific to the SoTL domain for nurse educators would likely emerge, and thereby validate the contextual nature of nursing’s scholarly teaching practices conducted in classrooms and clinical settings. Over time, an emerging theory of the SoTL in nursing education could provide a model of the SoTL domain in nursing education. A
prospective model for the SoTL in nursing education was developed during this study using theory derivation, and was useful as a device for reflections over the course of the barriers scale instrument development process.

**Nature of the Study**

A pragmatist’s worldview (Creswell & Plano Clarke, 2011) and an interpretive approach guided the mixed methods Delphi study of BSN faculty perceptions of the SoTL. The mixed methods, exploratory sequential design was selected for its applicability to the pragmatic goal of developing a quantitative measurement scale.

Fetters, Curry, and Creswell (2013) described the exploratory sequential design as a basic mixed research design where qualitative data were collected and analyzed with the goal of applying the findings to a subsequent quantitative data collection strategy. Also, a social constructivist worldview often guided an interpretive approach in explorations of complex social contexts (Creswell, 2009). Merriam (2009) explained that constructivism and interpretivism were terms that often meant the same thing in qualitative studies. Thorne (2008) developed a qualitative method that she termed *interpretive description*, and noted that interpretive description was an effective qualitative approach for developing authenticity in the final interpretation of literary discourse and participant dialogue. Interpretive description was selected for the qualitative approach most suitable for the study of a complex social phenomenon like the scholarship of teaching.

Precise information about how BSN program faculty members balanced the multiple aspects of a full teaching workload was not available in the literature. However, successful academic nurse educators seemed to possess sufficient self-determination to persist in addressing the constant demands of teaching nursing
(Benner et al., 2010). Teaching in a BSN program was the social context from which this study emerged.

The mixed-methods QUAL-quan sequential approach addressed two broad research questions: “What barriers to the SoTL do nursing faculty believe impede their engagement with classroom or clinical education research,” and “Which internal and/or external factors surrounding faculty engagement with the SoTL are shared among nursing faculty?” The survey-based research began by asking faculty members who teach undergraduate nursing classes at a single purpose Midwest urban college of nursing multiple open-ended and closed-ended questions about the SoTL. The first Delphi round survey achieved the instrument development goal of the mixed-methods study by collecting both qualitative and quantitative data from BSN faculty study participants. The second (R₂) and third (R₃) Delphi rounds were conducted as a process of refining the desired barriers scale instrument. Quantitative data were collected and used to determine levels of consensus and dissensus nursing faculty expressed regarding their perceptions of the statements about barrier to the SoTL included in the R₂ and R₃ surveys.

**Definition of Terms**

**Academic Nursing Culture**

Academic work culture in schools of nursing has been characterized as: an academic discipline in search of a unifying theoretical framework (Long et al., 2012), and where teaching a practice-oriented discipline’s knowledge, skills, and attitudes involves inculcating students with the professional nursing perspective and the central concerns of nursing (Meleis, 2012). Nursing faculty teach, perform service-related activities, and
may also engage in scholarship (Finke, 2009), but the central role for undergraduate nursing is teaching (Billings & Halstead, 2009). Nursing was characterized as a hybrid profession (Shulman, 2010), taught by nurses who came to the academy with little or no formal education in teaching, having only taught health protection and health maintenance to their patients in a one-on-one context. Nurse educators were found to hold an instrumental view of education (Goodman, 2013), and to hold an intellectual view of education (Meleis, 2012). Those two viewpoints were determined to be important bits of information to reflect on during the development of a reliable barriers scale.

**Boyer Scholarship Model**

Boyer’s (1990) scholarship model included 4 separate, but interrelated domains: (a) discovery, (b) integration, (c) application, and (d) teaching. The following definitions were derived from Boyer (1990), Hutchings, Huber, and Ciccone (2011), and Kreber (2013).

**Discovery.** The scholarship of discovery involved the synthesis of new knowledge through qualitative and/or quantitative research methods. It also involved going public in peer-reviewed journals, presenting at conferences, poster presentations, creating new forms of knowledge work, building a new framework for future work.

**Integration.** The scholarship of integration was used to explain and/or demonstrate how existing knowledge was useful, and accomplished through an extended literature review, authoring a text for use by a broad range of disciplines, or designing a core course through team collaboration.

**Application.** The scholarship of application involved problem solving efforts within the profession and/or society, providing consultation services beyond the
college/university setting, involvement in professional organization leadership, and mentoring students in leadership roles in their professional formation.

**Teaching.** The scholarship of teaching is a domain in education where teachers engage in critical reflection of learning outcomes from current teaching approaches (Hutchings, Huber, & Ciccone, 2011), and advances formal teacher knowledge that becomes public through various channels (Kreber, 2013). The scholarship of teaching included efforts to improve learning outcomes through lifelong learning in teaching theory and practice, classroom-based teaching/learning theory development, creating and using new instructional materials, mentoring master’s level and doctoral-level learners, and piloting a program-level assessment framework.

**Expert Nurse Educator**

The expert nurse educator is someone who consistently uses and shares highly reliable information gained from considerable experience to influence, engage, and support others in their academic work. (Streubert, 2009). According to Streubert (2009), the criteria for recognition as an expert included having abilities considered by their peers to have reached a level of excellence, or through professional relationships beyond their peer group. According to Faulk and Morris (2012), expert nurse educators practiced teaching authentically, from a well-developed sense of the self. Shulman (as quoted by Faulk & Morris, 2012) described the expert educator as someone with teaching experience in both the knowledge content and signature pedagogies, and who was capable of effectively integrating content knowledge with pedagogy. The nurse educators who participated in the Delphi study were, in the aggregate, determined to possess those characteristics identified by Shulman.
Assumptions, Limitations, and Delimitations

Discussions on the assumptions, limitations, and delimitations of the study follow. Five assumptions about BSN faculty were identified. Limitations of the study included the developmental nature of creating a novel scale for measuring faculty perceptions. Delimitations set by the investigator were also identified.

Assumptions

A pragmatist’s perspective was adopted for the exploration of the perceptions of barriers to engaging in the SoTL that BSN faculty share. The view taken in this study motivated a lengthy search for answers to the research questions about which faculty perceptions of the scholarship of teaching were significant barriers to the advancement of nursing education science through scholarship. It was assumed that faculty perceptions measured by a barriers scale reflected a reality within the teaching context of a school of nursing and their teaching lives. Also, a barriers scale constructed using information from reliable literature sources would be, by varying degrees, contextually-relevant to full-time BSN faculty.

BSN faculty. The following five assumptions about faculty applied to this study: (a) Nursing faculty teaching in different schools of nursing experience different contextually relevant circumstances that influence their perceptions of the SoTL, (b) nursing faculty with varying amounts of teaching experience may not share the same level of appreciation for potential that the SoTL offers in reforming outdated teaching routines, (c) newer faculty members may possess the capacity to engage in the SoTL, but as early careerists, they may not yet be motivated to do so and therefore may not have formulated an opinion about engaging in the SoTL, (d) the sample of nursing faculty that
consent to participate in the Delphi survey rounds will provide honest responses to each of the survey items to the best of their abilities, and (e) the Delphi panelists will have a sufficiently elevated level of academic sophistication to understand the content and context of the Delphi survey-based study.

**Limitations**

The findings from this mixed methods study may not be transferable to other settings, and were intended only for the development of a discipline-specific instrument. Due to the developmental nature of the Delphi study, validity evidence for each of the Delphi surveys was not generated. The subjective nature of knowledge surrounding the SoTL phenomenon was found to be messy, in that as a socially situated action, the descriptions of the SoTL within the literature diverged in multiple directions. Therefore, no uniform definition of the SoTL was found among the various disciplines’ literature-based discussions on the topic, and operationalization of the SoTL variables was accomplished through abductive reasoning. No objective claims to truth regarding the SoTL variable measures could be made, and complicated operationalization of the variables via a useful barriers scale.

Trustworthiness of the study methods was maintained through the use of generally accepted qualitative approaches. A constructivist’s worldview was taken to build a conceptual model of the SoTL. Theory derivation (Walker and Avant, 2005) and theoretical triangulation (Speziale and Carpenter, 2007) methods were used to enhance the trustworthiness of the emerging model of the SoTL for undergraduate nursing academics. The resulting framework was useful for hanging the multiple constructs, and to discern relevant patterns from the literature and the Delphi study data sets. The 80
percent weight given the qualitative methods used in the Delphi study afforded ample opportunities to inductively analyze data through interpretive description. However, from the study’s beginning, no expectation was held for making a claim to a universal truth from the study findings. Therefore, the study outcome was limited to the possibility of creating a workable survey instrument with good internal validity.

An interpretive description approach to knowledge synthesis (Thorne, 2008) was chosen for the potential it offered for solving complex contextualized problems, such as pattern detection through a flexible, *abductive* approach to inquiry. The method’s adaptability to in-depth text analyses of qualitative data (Thorne, 2008) was useful for analyzing the data collected from the Delphi study participants as well as from the literature. No claim of complementarity between the data sources could be made in such an early stage of instrument development. However, representativeness of the three Delphi panelist samples to the population provided a measure of confidence that the data collected most likely reflected perceptions of the SoTL shared by many other nursing faculty.

**Transferability**

The first Delphi round was strictly interpretive in nature, and useful in the second Delphi round survey items’ development. The second Delphi round survey involved a translation of the qualitative data from the first round into a quantifiable form using Likert scale endorsement statements for the survey. BSN faculty ranked each statement by level of essentialness. The situated, or local nature of the Delphi study data would be transferable to some future research application where the derived knowledge was found to have particular relevance to another, similar faculty sample. Also, survey research that
involved descriptive designs was intended to describe the particularistic nature of a phenomenon in a systematic manner (Merriam, 2009). Transferability of the study findings to a larger, more diverse population of nurse educators might therefore be limited.

**Delimitations**

The mixed-methods design provided both a qualitative and quantitative description of BSN faculty members’ shared perceptions of barriers to the SoTL. A delimitation for the Delphi study was the 80 percent weight placed on the qualitative methods. Merriam (2009) described the nature of qualitative research as stemming from an interest in how people interpret, construct, and make meaning in their worlds. The Delphi study aim to develop an initial version of a barriers scale required the collection of qualitative data mined directly from the literature as well as from the study participants.

Time was a second delimiting factor throughout the Delphi study. Once the instrumentation development process was deemed sufficiently informed by the literature, the Delphi survey rounds were limited by a time schedule of six weeks established for completion of the first two electronic Delphi survey rounds. The third Delphi survey was set to be administered to a distinctly separate group of expert nurse educators one month later, who were only accessible for two days at a different Midwest location. Therefore, the time allotted to refine each of the iterative Delphi survey instruments was a second delimitation.

Without the luxury of liberal time to complete member checks before its implementation, the third Delphi survey was administered on time to the available volunteer participants in the convenience sample of expert nurse educators. Although
these nurse educators represented a different sample, they were found to share many demographic similarities with the first 2 samples of nurse educators who served as Delphi round 1 and 2 panelists.

A third delimitation of the three round Delphi study was the planned omission of member checking the findings of each Delphi survey. The Delphi study design was selected with the intent to maintain participant anonymity to potentiate an increase in the candid nature of the survey responses. The three Delphi rounds accomplished the research goal of comparing the findings from three different groups of expert nurse educators, with the results of the third Delphi round confirming that a third sample of BSN faculty shared similar perceptions of barriers to the SoTL with the first and second Delphi expert nurse educator panels.

The mixed research design was a delimitation in that proponents of different research traditions may not consider the approaches rigorous enough to consider the findings valid. Inductive reasoning or deductive reasoning applied separately were considered insufficient for an examination of a social phenomenon with as many complexities as the SoTL presented. The SoTL phenomenon was studied from multiple angles through abductive reasoning with the intent to create a new description of the SoTL phenomenon specifically for nursing education. The mixing of the rich qualitative findings with limited quantitative findings from the three Delphi surveys was by design a delimitation of the study.

Nurse educators generate knowledge using an array of interdisciplinary sources to enrich their students’ learning. The nurse educator’s work in preparing to adopt a new teaching strategy, and depart from an old tried-and-true teaching strategy is akin to a
bricolage (Denzin & Lincoln, 2013), or the artistic assembly of whatever might be at hand to create some new hybrid construction. Shulman (2010) characterized nursing as a sort of hybrid profession, having taken up knowledge from multiple disciplines to use in the delivery of care. Thorne (2008) described the problematic nature of the nursing discipline in terms of how nursing knowledge developed within a dialectic of objective and subjective observations. The aforementioned delimitations were considered in terms of the nature of knowledge development in nursing, and were concordant with the nature of an exploratory sequential mixed-methods study.

**Organization of the Remainder of the Study**

Chapter 2 provides an expanded literature review that specifically addressed the SoTL movement in nursing, as well as a general review of the SoTL movement in higher education. A discussion of the findings from the literature review on the SoTL movement is provided in the chapter 2 summary. Chapter 3 provides a detailed description of the research methods used to conduct the Delphi study, and the approaches used to complete the development of a survey instrument designed to measure faculty perceptions of barriers to the SoTL. Chapter 4 includes a complete description of the Delphi study findings. Chapter 5 provides an in depth discussion of the study’s limitations and delimitations, and proposed opportunities for future inquiry into the phenomenon of faculty perceptions of barriers and facilitators of the SoTL.
CHAPTER 2. LITERATURE REVIEW

Introduction to the Literature Review

The role the scholarship of teaching and learning (SoTL) plays in nursing education reform was explored in the literature review. The primary reason for conducting an extensive and iterative literature review of the SoTL phenomenon in nursing education was the paucity of knowledge surrounding nursing faculty perceptions of the SoTL published by nursing academic scholars. Also, several calls for nursing education reform were noted in the literature, calls for nursing faculty to address an expanding and problematic practice-education gap and to develop a planned, actionable initiative.

Reasons for a lack of published literature on the SoTL in nursing education were sought using a theoretical prism of three distinctly different theories: (a) the context-relevant curriculum (CrCD) model (Iwasiw et al., 2009), (b) the self-determination theory (SDT) (Deci & Ryan, 2002), and (c) the theory of action (Argyris, 2006). The impetus for conducting a study of BSN faculty perceptions of barriers to the SoTL came from a desire to develop an explanatory model of scholarship of teaching for nursing as well as a valid measurement scale useful for exploring faculty perceptions of scholarship in the teaching context of BSN programs.

Themes identified throughout the literature review helped to determine emerging patterns. According to Merriam (2009), sufficient attendance to the literature included: (a) careful selection of key journal articles based on the journal titles, (b) the use of certain key words when database searches were conducted, and (c) detection of recurring patterns of concepts and models discussed within the literature reviewed.
Findings from a literature review grounded in the most current writing on the SoTL in higher education and nursing education provide sufficiently rich qualitative data to begin a mixed method study of nursing faculty perceptions surrounding the SoTL phenomenon. Evidence from the literature on nursing scholarship and scholarship in higher education created a mixed message as to how scholarship could flourish within the context of teaching (Thompson & Clark, 2013; Vander Sluis, 2012; Goodman, 2013; Goodman, 2011: Hutchings, Huber, & Ciccone, 2011; Heinrich, Hurst, Leigh, Oberleitner, & Poirrier, 2010; Shriner, 2007). The literature review provided sufficient evidence for increasing the understanding of the complex nature of catalysts and barriers to scholarship that nursing faculty teaching in undergraduate nursing programs are likely to share.

Concepts germane to a study of the SoTL were dispersed throughout the literature and reviewed for possible application in the development of a barriers scale. Nursing faculty lacked examples of how begin the transformation of their curricula. Given the multiple calls for transformation of nursing education in the literature (NLN, 2011; Benner et al., 2010; Glasgow, Dunphy & Mainous, 2010; IOM, 2010; Forbes & Hickey, 2009), faculty would need to cultivate a mindset for curriculum change (Hutchings, 2010), and develop habits of inquiry like the scholarship of teaching (Hutchings et al., 2011). According to Alteen, Didham, and Stratton (2009), faculty could develop their teaching capacities through the SoTL as an ongoing, capacity-building initiative, and described faculty development through the scholarship of teaching as, “the internal compass that guides, enriches, sustains, and empowers nurse educators”
(p. 271). The literature also provided ample examples of why nursing faculty have not engaged in the SoTL movement.

**Brief History**

A brief history of the SoTL domain and of nursing education’s experience with scholarship was considered relevant and grounded in the literature discussions. Scholarship in higher education and in nursing education was reviewed, as were socio-political and cultural aspects of nursing education and nursing knowledge development. Also explored were the philosophical and theoretical considerations surrounding the SoTL phenomenon and nursing education.

**Boyer’s contributions.** The SoTL concept was not defined until the early 1990s. Boyer (1990) began a study of a problem of the professoriate becoming increasingly infatuated with research, and less focused on scholarly teaching. Scholarship through research was promoted by what Boyer (1990) described as a collaborative agreement between the higher learning field and the federal government to insure the U.S. national continued success post World War II. Boyer’s realization that the scholarship of teaching was the one area where faculty appraisals lacked any rigor came following his service as the U.S. Commissioner of Education (Boyer, 1995). Eventually, the SoTL concept was proposed as a form of scholarship equal to the scholarships of discovery, integration, and application.

Historically, bedside teaching and patient contact were the mainstay signature pedagogy in nursing education (Shulman, 2005). According to Shulman (2005), a plethora of medical advances permitted many patients to receive treatment in the outpatient setting. In order to adapt to the changing clinical learning environment in the
acute care arena, nurse educators were required to adopt new pedagogies such as human patient simulation. Long et al. (2012) introduced the signature pedagogies for nursing as alternative teaching strategies that would increase the quality of nursing education as their integration into the curriculum replaced over-used PowerPoint-based lectures and multiple-choice exams. Recently, a few published articles on the effectiveness of these new pedagogies have appeared, but few articles identified the SoTL as a means for dissemination of their effectiveness. None of the articles discussed how the SoTL would be a necessary means for addressing the practice-education gap.

**A nursing perspective on scholarship.** Historically, nursing has consistently served humanity alongside physician-led care, where the professional perspective was formed by the pragmatism of nursing work (Meleis, 2012), with nurses always thinking about specific patient issues while not necessarily contemplating nursing theory. Meleis (2012) described the nursing profession’s long-held perspective of caring as an underappreciated knowledge-based endeavor, in part because caring labor was traditionally done by women, most of whom had to work outside the home to obtain a living wage. Nursing as a caring profession came into existence along the periphery of early medical science, as a service to the hospital where each nursing program began (Finke, 2009), and some characterized nursing as the handmaiden’s duty to medicine. In the early years of nursing, around-the-clock caring for the sick was not widely recognized as intellectual work.

**Nursing practice or academic practice.** The context of teaching in nursing and conducting scholarship in nursing education was described in the literature as having evolved over a somewhat problematic past. Moody, Horton-Deutsch, and Pesut (2007)
suggested that the complexity inherent in academic nursing was compounded by rigid, cumbersome bureaucratic conditions. Lynaugh (2008) provided the groundwork explanation for nursing’s complexity, and characterized the 1970s era of nursing education as a reconstruction/professionalization project without a charge foreman. In terms of advancing nursing as a profession with a distinct knowledge base, Lynaugh (2008) highlighted two important factors worthy of further consideration. First, nursing education relied heavily on private funding sources to develop new nursing education programs. Second, nursing scholarship remained largely dependent on funding from federal resources, funds that were controlled by the dominant political, social, and cultural forces (Lynaugh, 2008). D’Antonio (2006) characterized the rise of the nursing profession by quoting Isabel Hampton Robb’s definition of a nurse: “The term nurse means everything, anything, and next to nothing” (p. 246). What D’Antonio (2006) and Lynaugh (2008) described in their characterizations of the transformation of twentieth-century American nursing was a socio-political and economic revolution within the professional nursing ranks. Elevated academic status for some nurse scholars was due in part to liberating social movements, political influence, and economic advancements that transformed nursing. However the momentum for transformation was largely supported by external stakeholders, and not spawned independently by the profession.

**A stalled professional progression.** The profession’s lengthy image transition from doer of many tasks into the scholarly academic role was charted over the past 50 years. According to Fairman (2008), in 1965 the American Nurses Association (ANA) issued a position paper on educational preparation for nursing that recommended the BSN degree be the minimum for entry to professional practice. Fifty years later, another
ANA position paper recommended making the BSN degree the minimum level for professional practice. Over the course of a half century, the progress made toward attaining the BSN minimum standard for entry to practice included moving nursing programs into the university setting.

Scholarship in nursing continued to be stifled. The BSN enrollment figures reported by the AACN (2014) survey of 720 schools with BSN programs indicated that all were at capacity and as a result, 53,000-plus applicants were turned away. The situation reported by the AACN (2014b) was attributed to faculty shortages, funding shortages, and decreasing clinical site availability. The AACN (2014c) also reported that a significant surge in masters-level program enrollment and doctor of nursing practice program enrollment was seen in 2013, but the PhD program applicant numbers only increased by 1.7 percent, or 84 students. These findings indicated that professional nurses were more inclined to be practice-focused, intent on doing nursing practice, but not particularly taken with the prospects of conducting scholarship in nursing, or in nursing education.

The SoTL: A low priority for nursing. Scholarship in nursing education did not enjoy the attention received by other advance practice nursing specialties. The National Survey of Nurse Faculty 2011 (RWJF, 2009) results were reviewed for relevant demographic information about current faculty demographic trends. Seventy-six percent of nursing faculty taught in a low intensity research setting, 93 percent held a graduate-level degree, 70 percent were not on a tenure track, and 87 percent were responsible for course creation or course revision (RWJF, 2009). The average work week entailed 20-hours of non-teaching academic-related activities, and 27-hours of actual teaching time.
Eighty percent had never published a peer-reviewed journal article (RWJF, 2009). These findings were instructive, in that most nursing faculty were either too busy to engage in scholarship, or not familiar enough with the role.

Once nursing programs moved from the hospital-based vocational model to the current academic model, nurse educators teaching in undergraduate nursing programs were burdened by perpetual workloads that limited opportunities to plan and implement needed changes to the current curriculum. Long et al. (2012) characterized the nursing profession’s knowledge creation activity as an adaptation of other disciplines’ sciences as nursing continued to define its own practice theories. According to Long et al. (2012), nursing faculty faced a continual and daunting challenge to educate new nurses, and did so under several challenging conditions: (a) faculty were consistently challenged to address the ever-changing complexities of the health care environment, (b) faculty were challenged to infuse a content-laden teaching and learning environment with the caring ethic, including empathy and justice, (c) faculty were challenged to adapt liberal arts pedagogies to the teaching of a clinical science and a practice profession, (d) faculty were challenged to assure clinical and simulation learning experiences appropriate for every level of the curriculum, and (e) faculty were challenged to remain ever mindful of an unqualified expectation of a satisfactory first-time passing rate on the national licensure examination. The challenges that Long et al. (2012) identified as ongoing actions undergraduate nursing faculty took to achieve teaching success were sufficient reasons why BSN faculty have been slow to engage in the SoTL movement.

Nursing faculty empowerment was also investigated in the literature. Chung and Kowalski (2012) conducted a quantitative survey-based study of nursing faculty
mentoring and job satisfaction. Only 40 percent of respondents in the Chung and Kowalski (2012) study reported mentorship experiences. Insufficient time was surmised to have caused of the low numbers of mentoring experiences reported (Chung & Kowalski, 2012). According to Records and Emerson (as cited by Chung & Kowalski, 2012), the lack of mentoring was considered to have long term negative results on the faculty shortage. The prevalence of mentoring among nurse educators was not sufficient to offset negative impact on job satisfaction from the current faculty shortage (Chung & Kowalski, 2012). However, the data did show higher correlation with increased psychological empowerment and job satisfaction (Chung & Kowalski, 2012).

Bellack (2008) characterized modern nursing educational models as, “teaching heavy and learning light” (p. 439). Traditionally, nurse educators were charged with teaching nursing students how to do nursing tasks correctly, resulting in a large part of the nursing student’s intellectual development being caught instead of being taught to think critically about patients beyond basic nursing care needs (Bellack, 2008). As clinical nursing science advanced faster than nursing education, nursing program graduates were behind from the start (Benner et al., 2010). Recent calls for nursing education reform within the literature were based on that knowledge.

Educational reform in nursing was described as a possible outcome of educators share their scholarship. Hutchings et al. (2011) referred to the teaching commons as the manifestation of increased reports of SoTL studies published and the information made accessible. Stockhausen, Teach, and Turale (2011) characterized scholarship as the hallmark of disciplinary maturity. The scholarship of teaching in nursing as defined by the American Association of Colleges of Nursing (AACN) was broad in its scope, but it
did not specify the generation of scholarly artifacts as an expectation. Based on the Boyer model (1990), the AACN (1999) distinguished the scholarship of teaching as inquiry that produced educational knowledge, and that expert nurse educators used to enhance learning the nursing profession in novice nurses, and that established a sound connection between the teacher’s knowledge and student learning.

The nursing education environment. As a hybrid profession (Shulman, 2010), the nursing educational environment should provide a robust set of conditions for learning the profession, but it also might be subject to a silo effect. Benner et al. (2010) recommended that nursing knowledge should be taught in the context in which the work of nursing is done, and not in a silo, or decontextualized manner that is common in large lecture hall sessions that cover vast amounts of abstract theory. Faculty members who only taught in the classroom were therefore at a disadvantage in their ability to contextualize theory, and to achieve what Benner et al. (2010) called teaching for a sense of salience in the in-between spaces among the other health care disciplines, where the learning of the profession occurs. Benner et al. (2010) also added that faculty must remain current in their nursing specialty practice area, to assure the most relevant curriculum possible, and capable of sharing the nursing knowledge advancement on a continual basis.

The educational environment in schools of nursing is where the teaching-learning transaction occurs (Vandeveer, 2009). Learning is induced through a system of purposive actions designed to develop thinking skills rather than increasing memorization skills (Vandeveer, 2009). Long et al. (2012) described the pedagogical approaches nurse educators use to create a learner-centered environment. These signature pedagogies
included: (a) didactic instruction, (b) adaptations of liberal arts instructional strategies, (c) clinical and community-based education experiences, (d) human patient simulation laboratory scenarios, (e) study abroad experiences, and (f) NCLEX-RN preparation strategies (Long et al., 2012). Throughout each of signature pedagogies, nursing faculty apply an integrated ideology using tenets of humanistic, existential, phenomenological, feminist, and caring ways that promote self-development in their students and an obligation to care (Vandeveer, 2012).

**The faculty dimension.** Sauter, Johnson, and Gillespie (2009) defined nursing education as a postsecondary education that led to initial professional licensure, and/or led to advanced practice readiness. BSN programs are structured toward a bachelor’s degree and/or initial licensure. The faculty dimension of the BSN program requires qualified faculty who hold at a minimum a master’s degree in nursing (Sauter, Johnson, & Gillespie, 2009). Iwasiw et al. (2009) identified nursing faculty as an important component to the curriculum infrastructure. Other characterizations of nursing education were noted in the literature, and were taken into consideration as having merit for informing the development of an instrument intended for measuring nursing faculty perceptions. Evidence of self-determination as a characteristic of the nursing profession was missing in the literature, but evidence of a lack of self-determination was found.

**Academic culture, teaching faculty, and the SoTL.** Internal and external contextual factors and the associated themes that nurse educators encounter in the teaching environment included: (a) academic culture, (b) educational environment, (c) program infrastructure, (d) program history, (e) program mission and philosophy, (f)
policies and sociopolitical/economic issues, (g) professional standards, and (h) nurse educator demographics (Iwasiw et al., 2009).

Specific descriptions of an academic nursing culture are not prolific in the literature. Goodman (2013) suggested that the academic nursing culture has always taken an instrumental view of education, and this led to an academic culture that failed to adequately promote intellectual craftsmanship in teaching. Thompson and Clark (2013) suggested that the culture of academic nursing has never fully developed a mutual respect for teaching and for research. Smith and Crookes (2011) identified a decline in the trend to extoll clinical nursing research as the preeminent form of scholarship, but found little evidence of the integration of scholarship throughout teaching and learning, or for widespread institutional policies about the SoTL in the faculty performance appraisal process. According to Meleis (2012), nurses have traditionally built upon evidence from practice through an integrative process more aligned with human science than with pure science. A silo effect developed (Meleis, 2012) in nursing education because integrative learning processes were not fostered, and led to a fragmented learning experience. The lack of a well-defined path for nursing academics to develop the SoTL in their teaching practices appeared to be an internal, cultural matter within the nursing academy.

Evidence-based teaching in nursing developed in an erratic manner. Oermann (2009) explored the teaching and evaluation practices in the nursing education literature, but did not find an established framework for making evidence-based teaching practices public in nursing education. Finke (2009) provided an expanded description of faculty responsibilities for nursing academics, and included defending the right to self-govern and assuming accountability for the quality of the teaching and learning environment.
Halstead (2009) explained how teaching the nursing profession was an advance practice role, and that faculty required time to develop within that role. An updated list of competencies for the nurse educator standards of practice document was developed by the NLN (2012). The erratic nature of nursing education’s history with publication, the lack of a unified sense of professionalism in teaching, and an underdeveloped reward structure for teaching excellence were seen as impediments to the development of the SoTL in nursing education.

**Nursing education at a crossroads.** Nursing education reached a crossroads some time ago, where the traditional teaching paradigm that prepared nurses for practice has needed to go in a new direction. Nursing education has been in need of a new road map that crosses the practice-education gap, and leads to better prepared nursing program graduates. Bleich (2011) explored the prospect of nursing academics joining in a collective action in response to the 2010 IOM report recommendations, and proposed some challenging questions concerning: (a) the level of engagement that nurse educators might invest in nursing education reform efforts with the goal of better preparing nursing program graduates for practice, (b) whether or not nurse educators had an appetite for exercising their collective will in an education reform effort, and (c) where and how numerous ideas about nursing education reform might blend and thereby generate actionable dialogue. Bleich (2011) followed up his questions with an insightful suggestion that existing institutional structures and ritualized thinking patterns were two potential impediments to generating meaningful dialogue on nursing education reform. Institutional structures and rituals were discussed within the theoretical framework
section that follows, and were included in a staged model of the SoTL phenomenon in nursing described later.

An examination of the institutional structures within the literature on the SoTL was conducted. The pragmatist’s lens was used to focus on institutional and/or organizational learning, and to consider education reform as a form of learning that occurred when an organization moved beyond a ritualized single-loop learning cycle, and on to a double-loop learning dynamic that promoted organizational transformation. On the institutional level, Phillips et al. (2013) cited Bellack’s reasoning for the problem, where two decades lapsed with little change in how nursing was taught because nursing curricula emphasized that more content to be memorized, and covered via the traditional lecture. Tanner (as cited by Phillips et al., 2013) also found an additive curriculum where innovations were mostly just rearrangements of content within the curriculum and where little substantial change occurred. The additive curriculum problem was simply handed from one generation of nursing instructors to the next, who continued to amass more knowledge without much planning across the curriculum as to how all of the content would be learned.

On the individual level, teaching-as-one-was-taught was identified in the literature as a barrier to advancing nursing education (Phillips et al., 2013; Benner et al., 2010; Vandeveer, 2009). It was based on a narrowly conceived basic teaching skills set, and according to Ard (2009), teachers not only teach as they were taught, but they teach in a style similar to how they prefer to learn. Vandeveer (2009) explained that the teaching role for nurse educators has been redefined, and so old instructional strategies were no longer appropriate for preparing nurses for a practice that was rapidly moving
into the future. The redefined teaching role Vandeveer (2009) referred to was outlined in the 2012 revision of the National League for Nursing (NLN) Certification Test Development Committee’s document, *The Scope of Practice for Academic Nurse Educators*. Eight competencies were described in the scope of practice, with *engage in scholarship*, and *use assessment and evaluation strategies*, two competencies with the fewest number of criteria identified.

Iwasaw, Goldenberg, and Andrusyszyn (2009) developed the CrCD model, and identified the internal and external factors that nursing faculty potentially experienced on a daily basis within the teaching context. Also, academic nursing culture and its doctrine of teaching, service, and scholarship were examined through a social psychology lens using the self-determination theory (SDT) (Deci & Ryan, 2007; Ryan & Deci, 2002; Sheldon, 2002), and through a theory of action to develop a description of the organizational structures such as a single-loop learning cycle that impeded learning in an organization (Argyris, 2006).

**Challenges and impediments.** Nursing faculty will be more likely to find a place for the SoTL in nursing education when they learn about the practicality of its effects on nursing education knowledge development, or learning to teach from the true nursing perspective in an authentic manner. Shulman (as cited by Hutchings et al., 2011) recommended that teaching be evaluated as a form of scholarship, and considered for its “vision, design, interactions, outcomes, and analysis” (p. 100). Brookfield (2013) likened the SoTL to transformative learning, in that it challenged old paradigmatic thinking patterns in education. In the literature, nursing education was characterized as needing to accomplish some preliminary work to begin educational reform efforts.
The literature provided a metaphor for the impediments to generating action toward reforming organizational structures and ritualized thinking. Bellack (2008) reminded nurse educators of the mythological Greek god Sisyphus’s plight with his eternal mountain ascent, all the while shouldering his great burden, a stone that held significance only to him. The meaning Bellack (2008) conveyed by the image of Sisyphus’s labor was metaphorical for how the institution of nursing education held fast to teaching strategies that were no longer relevant to nursing’s rapid progressions in the practice arena.

Recent discussions on nursing education reform appeared in the literature (Benner et al., 2010; IOM, 2010; Forbes & Hickey, 2009; AACN, 2007; NLN, 2005), as well as discussions about developing a nursing education science (Billings & Halstead, 2009; Schultz, 2009). Curriculum reform efforts across several state-supported university and community college campuses was also investigated, and the development of a measurement tool for gauging the degree of curriculum reform at participating colleges and universities was developed (Herinckx, Munkvold, Winter, & Tanner, 2014). In nursing education, reasons why faculty engagement with the SoTL movement has been slow were also discussed (Haynie, Chick, and Gurung, 2012; Benner et al., 2010; Gresley, 2009; Iwasiw et al., 2005).

Moody, Horton-Deutch, and Pesut (2007) discussed the complexity inherent in an academic culture, where dual hierarchies form a bureaucracy for faculty and a separate bureaucracy for administrators, resulting in disconnections between the two hierarchies. Haynie, Chick, and Gurung (2012) provided an example of a hierarchical duality in education, where the myopic view of the scholarship of discovery devalued alternative
forms of scholarship, biased in favor of traditional scholarship activities in research. Thompson and Clark (2013) found that the senior professoriate in nursing needed to provide more demonstrable leadership, and to inspire courage and tolerance among teaching faculty who try new ways of engaging in scholarship. Patterson (2009) identified nursing school administrators as potentially being both a facilitator and a barrier to pedagogical innovation. According to Patterson (2009), administration was either supportive, or had different views that deterred faculty from attempting teaching innovations.

The preference for traditional research over teaching scholarship likely originated from a defensive mindset used to validate university-based, discipline-specific scholarship that led to gainful promotion and assurances of tenure. Glassick, Huber, and Maeroff (1997) cited a senior faculty for articulating how important a climate of trust was in the faculty evaluation process, and that although well-defined standards were important, trust was a more important condition in fostering scholarship. Hutchings, Huber, and Ciccone (2011) examined the impact of recognition and reward on the SoTL work in universities. An institutional culture that valued teaching and evaluated teaching in a discerning way had not thus far been well described (Hutchings et al., 2011). According to Hutchings et al. (2011), a critical mass of faculty peer group members with substantive pedagogical research experience was lacking, and identified this as a significant barrier to advancing the SoTL in many disciplines.

Chick (2013) explained that the approaches various disciplines take to accomplish SoTL projects should be situated in a discipline’s rich context, authentic, and what worked best for fostering students learning the discipline. Chick (2013) argued against a
gatekeeper model, where the SoTL work of one discipline would get published only if it met certain narrowly defined criteria, such as empirical rigor, easily replicable, or designs with baseline or pre- and post-test measures, and considered acceptable scholarship for publication in another discipline’s journals.

An example of a discipline’s SoTL work not being published in its own discipline’s journals was a nursing education scholarship of teaching pilot study that reported findings of an investigation in using a small group simulation as a midterm assessment alternative (Hensel & Stanley, 2014), but published in the Journal of The Scholarship of Teaching and Learning, a non-nursing education journal. Hensel and Stanley’s (2014) scholarship findings will not be widely read by nurse educators because it was published in a university-sponsored, interdisciplinary education journal. Perhaps the study was considered too marginal for publication in a nursing professional journal because it lacked the capacity to generalize due to a small sample size. The prospect of advancing nursing education science through the SoTL through 1-shot, underpowered pedagogical studies would seem to be a significant challenge for the profession.

Iwasiw et al. (2005) offered a possible reason for the lack of educational research literature published by nurse educators, in that at single institutions where significant data are gathered and evaluated on a local level, this information remained local, and never became public knowledge. Gresley (2009) touched on a reason why nurse educators may not have been encouraged to engage in the SoTL, stating that innovation and flexibility were necessary conditions for creating an educational program that was responsive to change. Benner et al. (2010) cited a negative trend in graduate nursing programs, where graduate students were no longer prepared for teaching careers, and instead emphasized
nursing research careers. Benner et al. (2010) supported this finding with demographic data showing that a third of all nursing faculty exceeded 55 years of age, and those holding doctoral degrees being the oldest members, with fewer of the younger members holding doctoral degrees. The literature in the above discussion appeared to describe a discipline that has stalled, and would need to be revived if needed reform was a goal.

The connection between what Argyris (2006) described about organizational defensive mind-sets and nursing education’s lack of published scholarship required more investigation as a first order barrier to advancing the scholarship of teaching in nursing. A conceptual model of a single-loop learning dynamic from Argyris’s was considered for use as an explanatory visual of the cognitive aspects nurse educators may encounter in their teaching practice regarding reform-driven decisions to improve teaching methods.

**Theoretical Framework**

Three theoretical models were considered when determining an appropriate framework on which to hang the numerous concepts associated with the SoTL domain. The SDT and its mini-theories (Deci & Ryan, 2002) was selected for its applicability to the complexities of studying individuals within a social context. The context-relevant curriculum development (CrCD) model (Iwasiw et al., 2009) was selected for its ground work in identifying the internal and external contextual factors present in the teaching environment. The theory of practice (Argyris, 2006) was selected for its pragmatic foci on single learning and double learning loops within an organizational setting. Theories that address the shared perceptions of members belonging to a professional group like nurse educators were not discussed at length in the literature. Gresley (2009) described the SoTL in nursing education in terms of elemental qualities of a theory of scholarship.
However, those theoretical concepts of scholarship remained vague, or were unacknowledged by most nursing academics. Bartels (2007) cited academic nursing’s underdeveloped lineage with the SoTL as an opportunity for improvement, requiring a collaborative culture supporting internal motivation to sustain a data-driven cycle of improvement in nursing education.

**The self-determination theory.** Deci and Ryan (2012) developed the self-determination theory (SDT) as a social psychology, a study of humankind’s inherent tendencies toward activity, toward intrinsic motivation, and preferences for integrative processes toward development. In their chapter on SDT, Deci and Ryan recounted how the theory developed, using empirical methods to describe three important psychological needs: (a) competence, (b) autonomy, and (c) relatedness (p. 417). They linked environmental factors to these needs, in order to explain how the social environment’s effects impacted intrinsic motivation in individuals. A new theorem called the cognitive evaluation theory (CET) (Deci & Ryan, 2012) was developed, “to explain the effects of extrinsic factors on intrinsic motivation” (p. 418). An additional mini-theory, the causality orientations theory (COT) followed the CET, when an answer to a question surrounding individual factors impacting three states of motivation: (a) autonomous motivation, (b) controlled motivation, and (c) amotivation (Deci & Ryan). Causality orientations became a new concept for describing an individual’s predilection toward autonomous behavior stemming from internal and external cues, or a tendency toward internal and external cues as controls, or interpreting cues as signs of fallibility or “indicators of incompetency” (p. 420) that fail to motivate at all. In order to address the human need for relatedness, Deci and Ryan (2012) developed the organismic integration
theory (OIT), and described how internalized external motivation included introjection, identification, and integration being three distinct types of motivation (p. 421). Finally, Deci and Ryan (2012) described how individuals self-regulate: (a) external reasons, (b) introjected reasons, (c) identified reasons, (d) integrated reasons, and (e) intrinsic reasons (p. 422). The result of the SDT research led by Deci, Ryan, and others led to an understanding that an autonomy continuum existed, with external regulation at the controlling end of the spectrum, and integrated regulation and intrinsic motivation on the autonomous end (Deci & Ryan, 2012).

Deci and Ryan (2012) explained how autonomous individuals actually benefit from a high degree of relatedness experienced between social group members, provided no conditional regard by one person negatively impacts the autonomy of the other person. An important distinction the SDT made between the constructs of autonomy and independence, where autonomy was treated as volition, and independence was treated as nonreliance (Deci & Ryan, 2012). According to Deci and Ryan (2012), interdependence among members of a social group was preferable to independence, as interdependence indicated a sense of belonging that fostered an autonomy supportive group norm.

Conformity was a theme associated with nursing curriculum development and academic freedom in the nursing education literature. According to Heinrich’s (2010) study findings, deans and department heads in nursing academe were noted to abandon their own scholarly pursuits in order to conform to the role expectations of the administrative and director positions. This tendency to subordinate a passion for innovative scholarship to administrative, teaching, and traditional forms of scholarship, and forego pursuing risky scholarship was modeled by dissertation mentors in the
doctoral of nursing program (Heinrich et al., 2010). Heinrich et al. (2010) found that passionate scholars shared a common desire to find their voices through scholarly pursuits in an area for which they deeply cared, and through scholarship that is both personally and socially relevant. The Heinrich et al. (2010) findings suggested that scholarship required conditions where autonomous motivation was not thwarted, and where autonomous motivation flourished when individuals felt a strong connection to their social group.

The self-determination theory (SDT) (Deci & Ryan, 2012) provided insight for developing a deeper awareness of potential motivating and/or constraining factors (e.g. figure 1) that may influence faculty perceptions of the SoTL in nursing education. Perceived barriers to a social issue like scholarship in education suggested applying a social psychology theory specifically addressing autonomy and control issues. The SDT and related mini-theories (2012) were selected for the overarching theoretical claim that linked a social environment like teaching and learning to intrinsic motivation, such as looking for an answer to a burning question about a teaching practice-related issue. Social psychologists Deci and Ryan (2008) used their self-determination theory (SDT) to explain how, through the validation of target individuals’ perspectives and perceptions about an activity, a community of individuals would become more engaged in the internalization, integration, exploration, and endorsement of certain behaviors associated with an activity. Certain contextual factors, or what Deci and Ryan (2012) termed \textit{psychological nutriments}, were necessary to promote and validate engagement in an activity, such as the trial-and-error efforts of faculty engaging in the SoTL.
The scholarship of teaching involves trial-and-error problem-solving methods, and constitutes a heuristic technique. According to Deci and Ryan (2008), autonomous motivation was an important factor in accomplishing heuristic tasks. Koestner and Losier (2002) explained that curiosity and the pursuit of challenges were manifestations of intrinsic motivation, and that in order for intrinsic motivation to flourish, the externally regulated social environment must provide sufficient autonomy support, promote competence-building opportunities, and encourage a sense relatedness to the social environment.

**The Context- Relevant Curriculum Development Model**

The context-relevant curriculum development model (CrCD) (Iwasiw et al., 2009) identified several structural components common to curriculum development, a form of scholarship in education, and that were determined to be useful as a conceptual model for developing a SoTL barriers scale. Internal and external contextual factors that impacted curriculum development activities described by Iwasiw et al. (2009) were selected and adapted to provide direction for the development of the three Delphi surveys. Applied to teaching practice, internal cues external cues from the various contextual factors were viewed from a nurse educator’s perspective as either potentially promoting involvement in scholarship, or more likely to impede involvement in scholarship and create a perceived barrier. Concepts in figure 2 were derived from the literature (Iwasiw et al., 2009). The curriculum development concept developed by Iwasiw et al. (2009) was applied to the teaching context of academic nursing, and used to form the basis of a new model for the SoTL in nursing education.
The faculty-centered model was derived from the context-relevant curriculum development (CrCD) model (Iwasiw et al., 2009). The institutional mission guides the academic culture, the academic culture provides support to faculty, the support enhances faculty skills acquisition, skilled faculty fulfill academic roles, and funding is made available for faculty development/lifelong learning.

**Academic nursing culture.** Group norms were discussed in nursing curriculum development discussions in the literature and reviewed for relevant concepts to consider. Iwasiw et al. (2009) identified how nursing faculty engaged in curriculum development were obligated to collaborate with faculty peers, and that academic freedom was often confused with working independently, and where conforming to established curriculum standards was not always a consideration. According to Larson (as cited by Iwasiw et al., 2009), academic freedom was conditional upon conforming to certain academic standards set forth by the institution and agreed upon by the faculty. Iwasiw et al. (2009) promoted the concept of scholarship in curriculum development as a duty, where faculty members were expected to present a logical argument for a particular position on curricular matters, and provide evidence for their positions.

**School of nursing (SON) infrastructure.** Iwasiw et al. (2009) outlined the elements that serve as the building blocks for the institution. Those included: (a) faculty, (b) students, (c) support staff, (d) technology, (e) library resources, (f) faculty
development, (g) teaching support, and (h) student services. According to Iwasiw et al. (2009), a lack in any of these infrastructural elements would create limitations, or barriers. Schumacher et al. (2008) explained how a group of nursing faculty were capable of transforming nursing education through collaborative efforts aimed at fostering faculty development through scholarship. Faculty and their teaching practices were viewed as central elements in the proposed SoTL in nursing model.

**Funding.** Current trends in funding a SoTL are predominantly from internal sources. Adequate funding might include salary allowances for protected time off. More importantly, funds earmarked for faculty development were characterized as a priority for reforming nursing education (Benner et al., 2010). Seasoned faculty were identified as key stakeholders in obtaining the funding needed to support their school (Schumacher et al., 2008), and their capacity to obtain grant moneys was often underutilized.

**Rank and promotion policies.** Scholarship efforts should be acknowledged in the rank and promotion policies. In schools where this is not the case, scholarship activities would need to be negotiated between faculty and the school administrator(s).

**Nursing and nursing education history.** The school’s place in the history of nursing and nursing education would be a consideration, especially among faculty teaching in newer schools that have not developed the portfolio of programs beyond a single purpose institution. Meleis (2011) provided reasons why history mattered to nursing, as the discipline’s intellectual basis was a collection of borrowed theories, and most nurse theorists were considered elitist, and their theories were generally not relevant to the practicing nurse. Expert nurses who chose to leave nursing practice to teach may
come to the teaching environment with no prior experience with epistemology, or knowledge development in any form beyond what was learned through experience.

**SON philosophy, mission, and goals.** Scholarship may be recognized in the school’s philosophy as either a priority among priorities, or not recognized at all. According to Csokasy (2009), the mission statement generally included an institution’s primary goal, or what it was committed to achieve. Mission statements varied according to institutional type (Csokasy, 2009). A nursing school mission statement in a private, single-purpose institution was most likely based on one of the traditional education theories (Csokasy, 2009). Behaviorism was cited as the most common traditional education theory used in nursing schools, as early nursing academic leaders believed it promoted professionalism through an organized, structured framework (Csokasy, 2008). Faculty were charged with the responsibility of creating the educational experience (Csokasy, 2008). In a behaviorist learning environment, faculty were expected to transmit their expert practice-based knowledge to their students, but according to Gresley (2009), most new nursing faculty lacked sufficient teaching expertise. Teaching expertise would have to be developed over time, and according to Finke (2009), most new educators needed 6 years of teaching experience before they were considered for a tenure track position.

**A phronetic teaching practice.** The kind of knowledge relevant for informing the praxis of teaching was identified by Bowman (as cited by Kreber, 2013) as phronesis. Goodman (2013) referred to the scholarship of teaching as intellectual craftsmanship. Flaming (2001) also advanced phronesis as an accurate knowledge form that nursing practice relied on, and occurred when individual nurses identified the salient aspects of
ill-defined patient situations, and that enabled nurses to take the most appropriate action on behalf of their patients. According to Thomson (as cited by Kreber, 2013), Aristotle’s position was that true praxis was based upon knowledge of something very different than the straightforward knowledge needed for producing things. Kreber (2013) characterized the scholarship of teaching as something ill-defined, something that presented insecure and unpredictable conditions because it involved teaching and learning, neither of which were completely predictable, or conditions easily controlled by the practitioner. What Kreber and Flaming argued for was that professional actions were not totally reliant on information from tradition, authority, or even research, but that professionals practiced deliberation on whether evidence-based practices were sufficient for informing professional judgment. The theory of action (Argyris, 2006) dealt directly with deliberate professional practice, professional action, and procedural knowledge.

**Theory of Action**

A close reading of the theory of action was necessary to make a connection to the two other theories, and formulate an explanation of the SoTL phenomenon from a nurse educator scholar perspective. According to the theory of action, learning is about taking effective action that is consistent, persistent, and avoids disrupting existing performance levels (Argyris, 2006). The theory of action defined effective action as the basic goal of all human performance (Argyris, 2006), and in this way mirrored the central premise advanced by the SDT that humans possessed tendencies toward taking action, feeling motivated, and being driven by self-development goals (Deci & Ryan, 2008).

In an earlier classic text on organizational learning, Argyris and Schön (1974) developed the theory of action, and introduced the term *theory-in-use* to describe the
assumptions that individuals used when they took action on something. A theory-in-use was defined as the set of action strategies, or sub-routines, implemented with intention in a particular sequence to produce some action to occur. People imposed causality through some previously learned procedural knowledge in order to make sense of their world. According to Argyris (2006), people used procedural knowledge in everything they do because they expected a specific result will occur. Theories-in-use were then created when people assembled multiple bits of procedural knowledge, or what Argyris (2006) called the master program. The master program was essentially a learning feedback loop, where the expected results of actions taken confirmed the procedural knowledge was valid.

A single-loop learning cycle. The dynamics of a single-loop learning concept was considered relevant to the discussion of the SoTL phenomenon in the literature. Argyris (2006) found that scholar practitioners in organizations sometimes espoused better ways of accomplishing their work, but they also sometimes behaved in counterproductive ways to their goals. Scholars were sometimes quick to identify problems caused by other practitioners within an organization, but often avoided sharing scholarly advice to rectify the practice-related problems (Argyris, 2006). When attempts were made to share new ideas through productive reasoning and that contradicted a current mindset, a negative feedback mechanism defended and maintained the status quo (Argyris, 2006). Unwelcomed suggestions for change were thereby deflected, and the single-loop learning dynamic was kept intact.

True learning on any level was evidenced by a learner’s ability to produce what the learner claimed to have learned, by a demonstration of new knowledge, new insight,
or an increased understanding (Argyris, 2006). According to Argyris (2006), it may be optimistic to expect higher level performance from individuals in an autonomy-supportive organization that grants groups of individuals control over their destiny. Pace (2004) characterized teachers, teaching, and the scholarship of teaching as analogous to *the amateur in the operating room*. This was referenced to the ways teachers based teaching strategies on oral tradition and not on any formalized systematic appraisal of teaching effectiveness (Pace, 2004). Pace (2004) called for a cultural shift in teaching that promoted theory-based intellectual craftsmanship that could be understood within a discipline-specific knowledge framework. A type of knowledge framework for the SoTL described below (see Palmer & Collins, 2006 and the elements of engagement in the SoTL). Clear objectives for teachers engaging in the SoTL would need to become cultural norms before scholarly expertise in teaching could be expected.

Unclear, or mixed objectives might appear within a school of nursing administrator’s proclamations that faculty own the curriculum and enjoy sufficient academic freedom in order to teach effectively, so long as the NCLEX-RN first time pass rate percentages do not drop due to some unilateral decision by faculty members using unconventional methods. Argyris (2006) warned against organizations that sent mixed messages professing autonomy as a disguise for stabilizing a status quo control structure. Unrealistic optimism and thinly veiled attempts at bolstering bureaucratic controls are what Argyris and Schön (1974) and later Argyris (2006) characterized as being diplomatic, a cardinal sign of an organization entrenched in a single loop learning dynamic.
Routines were viewed as a significant aspect of an examination of scholarship within the teaching context in nursing. Argyris (2006) explained how human beings learned to test the validity of solutions to problems they tried to solve using a mindset. Mindsets that developed as defense mechanisms within an organization were seldom critiqued by the organization’s members (Argyris, 2006). In a similar vein, Bailey (2010) described how educational scholars have discussed at length the concept of indoctrination, but that the actual doctrine concept was not examined in a critical manner by these scholars. In other words, the reasons for standard work routines were never really examined, only compliance with those standard routines were monitored.

The routines and rituals of teaching. The maxim *we teach as we were taught* is widely understood in education to mean that very little of what teachers do when they teach is authentically their own teaching style, but according to Ard (2009), it is often related to their preferred learning style. Benner et al. (2010) cited nurse educators’ reports of insufficient time to reflect on the quality of their teaching practices. Benner et al. (2010) found that the climate in which nursing education operated promoted short-term, efficient, and affordable programs over more comprehensive designs. Lecture-based instruction became the master plan in nursing education. Lecture halls were not designed to facilitate delivery of alternative instructional strategies that promoted active learning (Ard, 2009). Lecture halls were the stages from which wisdom was imparted to the many by the resident sage.

The reliance on routine, instructor-centered approaches to teaching nursing was an example of a theory-in-use. Lecture was believed to create the conditions sufficient
for learning everything students should know about nursing theory in as few semesters as possible, it so it became the preferred routine for teaching (Rowles & Russo, 2009).

Routines can spawn defensive reasoning mindsets. Defensive routines develop into self-fulfilling prophesies because they involved the use of self-referential logic, and frequently result in doubt among professionals that any real change for the better could occur (Argyris, 2006). Argyris (2006) explained how organizations implemented defensive routines to avoid conflict through policies, practices, or actions that actually inhibited learning new ways to improve performance. Thompson and Clark (2013) provided an example of a defensive routine, where the academic culture in nursing encouraged knowledge production for immediate application, but discouraged deep and broad inquiry. An orientation toward deep and broad inquiry was described by Valiga (2009) as a precondition for building a nursing education science. Gresley (2009) noted that nurse educators were reliant on status quo pedagogical practices, and avoided attempts to use evidence-based teaching methods in creative ways that could have advanced nursing education science.

Institutional structures that encouraged ritualistic thinking instead of innovative thinking and thwarted the creative application of evidence-based teaching would classify as a Model I theory-in-use under the theory of action. Argyris (2006) explained that Model I values included unilateral control over individuals, suppression of negative thinking, minimize the risk of loss, and model rational actions. Defensive reasoning was described by Argyris (2006) as the most common form of ritualistic thinking. A hypothetical Model I theory-in-use scenario in nursing education was considered: (a) a faculty member returned to routine teaching straight from the textbook after failing at a
risky attempt to teach nursing conceptually, (b) whereby the students were encouraged to abandon rote memorization approaches, and (c) subsequently performed poorly on a standardized content exam. The faculty member used defensive reasoning by acting rationally, returning to traditional teaching practices that minimized being embarrassed by the poor exam grades, and decreased students’ negative feelings toward the faculty member’s teaching style. The faculty member failed to learn how to teach conceptually due to the defensive reasoning of a Model I single loop learning situation.

A comparison of single loop learning with double loop learning clarified the usefulness of applying the theory of action in the current study of the SoTL in nursing education. Argyris (2006) described double loop learning as the development of a new insight for correcting action strategies and for new governing values. The theory-in-use that produced double loop learning was termed Model II (Argyris, 2006). Argyris (2006) explained how Model II values differed from Model I values, in that Model II values included the development of valid information, taking a position and making informed choices to act, and regularly assessing the action’s effectiveness. Double loop learning uses Model II values to question current practices through an honest self-assessment that leads to improved performance. Kreber (2013) described the SoTL as a practice dependent on values, or goods, that included action strategies/designs-in-use implemented on behalf of students to improve teaching practices through critical self-reflection, and asking important questions about the source of the motivation to improve teaching practices. Model II values closely resemble those of phronesis, where the most appropriate actions were informed by new insight of a previously underdeveloped understanding. In figure 3, faculty are imbedded in the teaching context, and learning
about teaching is depicted as a self-sealing action cycle. Faculty may find themselves repeating the cycle when there are no catalysts for change that motivate faculty to take action and develop an interest in scholarship. A consequence of the single-loop learning may include faculty developing perceptions that there are presently too many barriers to begin participation in the scholarship of teaching, including a sense of sufficing to meet academic role expectations.

Nurse educators bring valuable knowledge from nursing practice to the learning environment. However, according to Benner et al. (2010), many came without sufficient preparation in educational theory. The majority of PhD prepared nurses were educated to practice research in nursing science, not as nurse educator scholars (Benner et al., 2010). Benner et al. (2010) found that the current nursing shortage crisis and related nursing faculty shortage caused an ongoing distraction for nurse educators, where incumbent faculty members, when asked to teach an overloaded assignment each term, obliged the request. The faculty shortage may have led faculty to feel that they could not negotiate their teaching assignments. The lack of autonomy that faculty experienced may have led them to develop a defensive mindset similar to those Argyris (2006) outlined in his Model I single-loop learning cycle. Figure 3 below depicts a hypothetical single-loop cycle.

Nonnegotiable working conditions common in Model I organizations were described as cryptic, insidious cycles of denial and interdependency. According to Argyris (2006), leaders in Model I organizations encouraged a type of siege mentality, where individual group members were deflected from internal reflection on practical solutions. In order to feel competent, individuals developed a habitual practice of denial.
that included avoiding making any requests for help (Argyris, 2006). Argyris (2006) cited adequate productivity as a managerial reasoning behind the decisions made when leading workgroups in a single learning loop. Organizations that strived for higher learning within the organization needed feedback maps that made interdependencies and inconsistencies explicit on a systemic level (Argyris, 2006). The nursing faculty shortage and the continued strain that it placed on incumbent faculty shared great similarity with Argyris’s characterizations of Model I organizations.

**Figure 3 The Context of Teaching and Model I Single-loop Learning**

![Diagram](image)

Figure 3 is a model derived from Argyris’s (2006) theory of action. It depicts a closed-loop learning dynamic. In this single-loop learning dynamic, faculty learn about teaching within the context of the institution’s mission, the academic nursing culture where faculty are supported by the culture, and where faculty skills are enhanced by the available support. Expected academic roles are met by faculty through skill enhancement, and when available, funds can be accessed by faculty for development/lifelong learning.

Autonomy in nursing was viewed as something promoted by nursing leadership, and autonomy occurred as nurses learned precisely how critical a role they played in healthcare. Nurses learned that they functioned as the most important patient safety feature within the health care setting (Benner et al., 2010). The reality for nurses working
in acute care facilities has become one of overstretched staffing patterns and increasingly complex patients that required higher levels of nursing care (Benner et al., 2010). The majority of nursing faculty entered the academy as expert nurses who prevailed as professionals working in overstretched and understaffed nursing units. New faculty may quickly find that expectations for teaching in a short-staffed nursing program are similar to the expectations placed on nurses at times to work short-staffed. Nurse educators may learn that cultural routines in academic nursing involve limited autonomy.

**Elements of engagement in the SoTL.** An expectancy model for scholarship and teaching motivation was reported in the literature. Palmer and Collins (2006) developed an expectancy model similar to the Porter and Lawler expectancy model (as cited by Palmer & Collins, 2006), and used some of Kreber’s scholarship of teaching model elements. Palmer and Collins (2006) conducted focus group discussions with university faculty in order to collect qualitative data on what constituted excellent teaching, what was considered evidence of excellent teaching, and what kinds of rewards were most valued by faculty members.

Palmer and Collins (2006) identified 10 elements of an expectancy model for teaching excellence and teaching scholarship: (a) recognition of faculty efforts through increased visibility, credibility, and greater influence among students and colleagues, (b) reward structures on a continuum that are transparent, and based on evidence provided by faculty of their efforts, (c) faculty self-assessments of teaching performance with core criteria that included evidence of reflection, self-awareness, and professional development, (d) an array of skills and traits that included continued professional competency development and funded scholarship, (e) a level of esteem for teaching on a
parity with the esteem bestowed on disciplinary research, (f) established criteria for measuring excellence in teaching on a continuous basis, (g) conditions conducive to intrinsic motivation associated with recognition, reward, and responsibility, (h) conditions conducive to extrinsic motivation, such as monetary rewards, time off for research, and extramural professional work, (i) sufficient fairness and transparency in any reward structure, and (j) a reward structure that was considered to have good to high value, and that was distributive. Figure 4 is a hypothetical example depicting faculty engaged in an action cycle catalyzed by one of several possible factors surrounding the teaching practice context. Funds support faculty learning skills that encourage greater reflection on actions in teaching, leading faculty to set goals and to an autonomous decision to participate in the SoTL.

**Figure 4 Model II Double-loop Learning in Nursing Education**

Figure 4 depicts concepts derived from three separate theories: (a) the CrCD model by Iwasiw et al. (2009), (b) the SDT by Deci and Ryan (2007), and the theory of action by Argyris (2006).
The literature provided some evidence for reasons behind the current lack of nursing faculty engagement in the SoTL, and for the paucity of published scholarship of teaching in nursing education. Heinrich et al. (2010) explained how academic leaders modeled their own conformity-related issues with not pursuing scholarship, and that actually discouraged scholarship among faculty, and caused faculty to sense a loss in their autonomy to pursue scholarship. Long et al. (2012) described how nursing programs measured success by a NCLEX-RN first time pass rates benchmark, and when that was satisfactory, it was a proxy for teaching performance self-appraisal that provided faculty with a false sense of competency about their teaching.

Hutchings et al. (2011) advanced recommendations made by Shulman for academic leaders to foster an autonomy supportive environment in which teaching scholarship could thrive. Brookfield (as cited by Kreber, 2013) characterized the scholarship of teaching as something that challenged the status quo power dynamic in education, and that a hegemonic assumption shared by many educators in higher education was that, “good teachers meet everyone’s needs” (p. 166). Moody et al. (2007) explained that nursing education culture tolerated disconnect between leadership and teaching faculty, and where a bias that favored research over other forms of scholarship actually depreciated teaching’s status.

**Review of the Research Literature and Methodological Literature**

Teaching in the professions has a history that included the scholarship of teaching, but no clear definition for scholarship of teaching appeared in the literature. Kreber’s research findings (2013) described the scholarship of teaching as a transformative process where codified teacher knowledge was advanced through practical
reasoning using content reflection, process reflection, and premise reflection to move the formal knowledge into the public domain.

Patterson’s research (2009) involved an examination of the nature of evidence that nurse educators in undergraduate programs use in their teaching practices. Nurse educators in the Patterson (2009) study were interviewed using open-ended questions, and the qualitative data collected during the interviews were analyzed using qualitative description. Findings revealed that nurse educators conducting scholarly teaching activities did not adhere to any particular hierarchy of evidence (Patterson, 2009). Instead of following any hierarchy of evidence for best practices in teaching, the Patterson’s (2009) study participants showed a preference for consulting their peers when formulating changes to their teaching practices, using their own professional knowledge and experience, and data collected from standardized testing, course grades, and classroom-specific assessment techniques. The Patterson (2009) study participants used pragmatism to guide their use of evidence in their teaching practices.

Thorne (2008) identified the pragmatic obligation as something interpretive description researchers should consider. What ID researchers presented as research findings intended for use in practice should have added value, as something relevant and useful to the general knowledge. In SoTL work, nursing faculty were found to base their teaching practices on context-relevant evidence. Patterson (2009) advanced the FAME hierarchy, where considerations for feasibility, appropriateness, meaningfulness, and effectiveness generated pedagogical questions about what would work, how it might affect the NCLEX-RN scores, or if students would be successful in the course. Nurse educators were characterized as straddling evidence-based teaching practice, with one
foot firmly planted on teaching evidence generated through pragmatism, and the other foot searching for a foothold in the empirical evidence generated through quantitative means. Learning was a red thread running throughout the FAME-related questions.

Learning was central to the advancement of the SoTL movement. McKinney (2006) noted an absence of empirical evidence in the literature in the sociology education literature, and attributed this to a lack of focus on learning outcomes. According to McKinney (2006), the challenge for educators was to critically reexamine prior assumptions about what has always been presumed as sufficient evidence of learning. Pedagogical content knowledge and signature pedagogies were attributed to a bigger picture of learning (McKinney, 2006). McKinney (2006) surmised that disciplines that had not tapped into the SoTL movement in any significant manner had most likely not yet to begun to work through the challenges to beginning a SoTL program, or had not yet identified opportunities to engage in the SoTL. Resistance by administrators to acknowledge SoTL work as valuable and worthy of reward was similar to the resistance that faculty had for assessment work, except that faculty were generally resigned to accomplishing the assessment work (McKinney, 2006). McKinney (2006) found that faculty were favorable toward the prospect of engaging in a SoTL project, but they were challenged to do so by the resistance to SoTL work by administrators. Autonomy support for faculty engagement in the SoTL was lacking, due in part to the lack of a clear definition for the SoTL, and in part due to the negative view that the standards for the SoTL were low (McKinney, 2006), and therefore not as acceptable a form of scholarship as the scholarship of discovery.
In this study, a mixed methods design was viewed as the best approach for developing a perceptions measurement scale. Levin and Greenwood (2013) recommended social research into significant issues include both qualitative and quantitative traditions, as neither research tradition alone would be sufficient, and promoted methodological diversity whenever a researcher aimed to apply theory to practice. Creswell and Plano Clark (2011) defined mixed methods research as having philosophical underpinnings that guide a research design based on research questions, and where both qualitative and quantitative methods are necessary to collect and analyze data needed to answer those questions. Mixed methods research increases the research rigor by countering weaknesses inherent in both qualitative and quantitative research designs, and ideal when qualitative research findings are needed to inform the development of a relevant quantitative instrument (Creswell & Plano Clark, 2011).

Mixed methods research (MMR) was recommended for survey instrument development. According to Onwuegbuzie, Bustamante, and Nelson (2010), instrument development and construct validation required a multiple-step process. Skulmoski, Hartman, & Krahn (2007) described the Delphi method as a well-established, flexible approach to using questionnaires in an iterative manner to uncover new data. An interpretive description developed from the literature review provided a basis for the development of open-ended and closed-ended survey questions used in the first round survey. Neergaard, Olesen, Andersen, and Sondergaard (2009) described how qualitative description provided an approach that was well suited to mixed-methods research where a questionnaire or scale is under development. Onwuegbuzie et al. (2010) recommended that a theoretical framework used to develop a quantitative survey instrument be based on
findings within a discipline’s theoretical literature. Creswell and Plano Clark (2011) recommended a mixed methods approach for initial survey instrument development when both qualitative and quantitative data were necessary.

Mixed methods studies were generally based on four rationales for extracting the most meaning possible: (a) mixing qualitative and quantitative techniques to augment sample size, (b) enhancing the fidelity of an instrument, (c) assessing a treatment’s integrity, and (d) providing ways to more fully explain the study findings’ significance (Onwuegbuzie, Bustamante, & Nelson, 2010, p. 57). According to Creswell and Plano Clark (2011), a mixed-methods study was particularly well suited for research that requires more than one data source, and where the primary objective was addressed through multiple phases.

A review of the literature on scholarship in higher education and in nursing education was accomplished using interpretive description (ID), a qualitative approach to knowledge synthesis. ID methodology was used as a guide through the complex descriptions of the phenomenon in the literature. Neergaard et al. (2009) identified qualitative description as a constructivist approach suitable for a mixed-methods study, and an appropriate qualitative approach to the development phase of questionnaires and scales. Basic qualitative description was used to develop annotations of the most salient qualitative data located in the literature. Thorne (2008) expanded on the qualitative description method, and used grounded theory strategies to develop the ID method, an approach she found to be most effective in developing authenticity in the final interpretation of literature reviews and participant dialogue.
ID was also considered for use in developing a descriptive model for the SoTL. Thorne (2008) described ID as an effective approach when applied through a nurse’s perspectival lens to increase understanding a phenomenon based on all available sources. Three perspectives were considered throughout the literature review: (a) a scholarly perspective, (b) a professional nurse perspective, and (c) a nurse educator perspective. The ID method applied to an extensive literature review was accomplished through iterative constructivist processes directed toward discovering the socially constructed elements of the SoTL phenomenon. According to Thorne (2007), literature reviewed in this way was likely to yield rich descriptions that amplified the hidden elements within a phenomenon of interest. The pragmatic aspect of ID was also considered and factored into the decision to pursue knowledge synthesis through the ID methodology.

Pragmatists use reflection through abduction to consider the context in which a situation unfolds. According to Feilzer (2010), pragmatism would provide the means for managing messy social conditions and the means for recharging the sociological imagination. Feilzer (2010) explained that pragmatists remained open and flexible by practicing reflexive and abductive thinking when studying a phenomenon. The SoTL phenomenon in nursing education was considered a fairly messy research topic to explore. Therefore, multiple research approaches were considered for their applicability in a study of a complex social context where individuals might be engaged in complex intellectual pursuits like scholarship.

Pragmatist researchers used whatever acceptable research method worked to develop a better understanding of a phenomenon under investigation, and thereby produce knowledge relevant to practice (Creswell & Plano Clark, 2011). Hookway
(2013) credited Dewey for advancing pragmatism in the United States, who asserted that it provided the grounds for prioritizing new democratic views over formerly received views of what constitutes a truth. Adcock and Collier (2001) posited that pragmatism worked to acknowledge the validity of a measure by exploring between the particular and the universal perspective. Pragmatism works in the middle space between the positivist’s and the constructivist’s worldviews.

Quantitative and qualitative instrument development literature was reviewed for background information before and during the iterative Delphi survey instrument development. Onwuegbuzie et al. (2010) provided sufficient information about instrument development and construct validation using mixed-methods research approaches. According to Onwuegbuzie et al. (2010), most instrument development occurred within one of two frameworks, qualitative approaches were used to develop qualitative interview guides and surveys, and quantitative approaches were used to develop quantitative measurement instruments. A mixed-methods framework was advanced as an optimal approach to developing a quantitative instrument (Onwuegbuzie et al., 2010). Information on quantitative survey research was also reviewed for increased understanding on how to decrease survey error. Weisberg (2005) provided multiple suggestions for survey development based on the most current survey research literature available.

The Delphi process was selected for this survey-based study of nursing faculty perceptions, based in part on the following nursing education specialists’ recommendations. Warner and Misener (2009) recommended survey research, and specifically the Delphi technique, to facilitate resource tapping of expert opinions on
complex issues such as curriculum reform or scholarship. Csokasy (2009) promoted the Delphi process for providing participants enough time to reflect and clarify their thoughts surrounding a particular philosophy for curricular work. Skulmoski, Hartman, and Krahn (2007) recommended nine basic steps for completing a Delphi study: (a) establishing whether a broad or a narrow focus for the initial question is needed, (b) assuring that essential panelist expertise criteria are met, (c) determining the heterogeneity or homogeneity of the sample, (d) deciding on whether a two to three, or more iteration Delphi would suffice, (e) designing the Delphi survey mode of interaction, (f) establishing a method to assure methodological rigor, such as an audit trail, (g) selecting appropriate analysis techniques for data analysis and results reporting, (h) devising a way for further verification with a different sample from a different geographical location, and (i) committing to publishing the Delphi instrument for peer review. Figure 5 depicts the Delphi survey instrument development process devised for this study.

**Figure 5 The Delphi Survey Instrument Development Process**
Synthesis of Research Findings

Conditions conducive to faculty engaging in the SoTL were identified in the literature, and examples of barriers to the SoTL encountered by faculty were also found. Very little progress in faculty engagement with the scholarship of teaching occurred since the 1990s, when Boyer’s (1990) 4 scholarship forms were adopted into nursing education. Rationales for the low adoption rate of the SoTL into the nursing academy were explored.

Autonomy. Autonomy was a significant concept related to how likely faculty were to engage in this form of scholarship. The Porter and Lawler expectancy model (as cited by Palmer and Collins, 2006) and the SDT (Deci & Ryan, 2002) considered autonomy as a necessary element for individuals engaged in developing solutions to difficult problems, and who enjoyed the rigorous nature of intellectual work.

Benner et al. (2010) discussed how nurses gained autonomy through practice once they had a clear appreciation of the important role they played in society. Also, as nurses learned to pragmatically cope with overstretched staffing patterns and increased patient acuity, their sense of autonomy helped to preserve nursing’s professional status. Halstead (2009) recommended that as advance practitioners, nurse educators needed protected time to develop within their academic practices. According to Broome et al. (2013), the scholarship of teaching enterprise in nursing education was an underdeveloped, underappreciated facet of nursing education science’s development. Pragmatism was seen as something that required a certain amount of autonomy in pursuit of effective results. Autonomy in nursing education was viewed as restricted by multiple facets within the academic culture.
Academic nursing culture was portrayed in the literature as lacking a unified concept for the scholarship of teaching. D’Antonio’s poignant (2006) characterization of the rise of the nursing profession using Isabel Hampton Robb’s definition of a nurse: “The term nurse means everything, anything, and next to nothing” (p. 246) gave some indication that nursing culture needed to mature more. Brookfield’s characterization of educators in higher education as “good teachers [who] meet everyone’s needs” (Kreber, 2013, p. 166) was remarkably like a paraphrasing of Robb’s definition of a nurse (D’Antonio, 2006). These findings were revealing, in that nurses who become educators were at risk for losing their identity as autonomous individual.

Kreber’s (2013) characterization of the scholarship of teaching as something ill-defined, with insecure and unpredictable conditions related to teaching and learning, and not easily controlled by the practitioner added another dimension to the discussion about faculty engaging in the SoTL. McKinney’s (2006) viewpoint of the SoTL’s reputation among academic leadership that the standards for the SoTL were low, and therefore not as acceptable a form of scholarship as basic disciplinary research. Heinrich et al. (2010) explained how doctoral nursing program mentors modeled a strong positive bias toward traditional disciplinary research, and a strong negative bias toward innovative forms of scholarship to their mentees. Therefore, it was likely that many nursing academics who experienced the negative bias toward alternative forms of scholarship as unacceptable and risky in their doctoral programs endorsed that bias.

**Intellectual craftsmanship.** Bartels (2007) explained how academic nursing’s underdeveloped lineage with the SoTL would need a more collaborative culture, one that supported educators’ internal motivation to engage in a data-driven cycle of improvement
in nursing education. Teaching in nursing was characterized by Goodman (2013) as traditionally an instrumental enterprise, where the traditional ideas about teaching had utility and therefore regarded as truth. Intellectual craftsmanship under the instrumental view would amount to repeating the past as accurately as possible, and avoid getting too involved in solving perplexing problems such as increasing student engagement in their learning. Teaching in nursing became a narrowly conceived, instrumental practice that produced new nurses.

Instrumental rationality was considered as a possible impediment to nurse educators developing a more reflective practice and scholarship of teaching. Kinsella (2007) reviewed discussions of Schön’s theory of reflective practice in the literature. According to Kinsella (2007), the idea that nursing knowledge must be evidence-based and backed by rigorous scientific inquiry became the dominant stream of consciousness within the profession. What Schön (as cited by Kinsella, 2007) found was that when a practitioner applied abstracted theoretical concepts to practice, the practitioner was likely to experience a type of discordance, or a sense that their own knowledge was somehow lacking validity. The practice-education gap in nursing may be a result of nurse educators trying to apply technical rationality to teaching a very situation-specific, contextually constructed epistemology in nursing practice.

The practice-education gap. The calls for radical reform in nursing education were based on findings from health care industry leaders that indicated new graduates from nursing programs were not practice ready. Lecture became the mainstay pedagogy for nursing, as a decontextualized strategy where a practice-based profession was taught by covering vast amounts of abstract theory in a lecture hall or classroom. According to
Benner et al. (2010), faculty members who only taught in the classroom were
disadvantaged by the lecture hall setting, and that their ability to contextualize theory and
teach for a sense of salience was constrained. Flaming (2001) introduced the term
phronesis as a knowledge form that nursing practice relied on, and happened when nurses
identified the salient aspects of ill-defined patient situations. Kinsella (2007) explained
how Schön viewed professional education as grounded in positivism, and that
professionals were educated to solve problems encountered in practice through
instrumental thinking, and not through reflection. New graduates entering nursing
practice would therefore be at a distinct disadvantage if their education was
predominantly built upon rational, instrumental problem solving instead of learning how
to effectively solve problems using critical reflection. Nursing curriculum overload was
cited as a distracting element in nursing students’ abilities to integrate their knowledge
and apply it to practice.

**Acontextual, nonintegrative approaches to teaching and learning.** The over-
emphasis on teaching content instead of teaching contextually was emphasized in the
literature. Tanner (as cited by Phillips et al., 2013) noted that the additive curriculum in
nursing amounted to rearrangements of content, and with the exception of adding new
content, little change occurred. *Teaching heavy and learning light* were the words
Bellack (2008) used to characterize undergraduate nursing curricula. Each successive
generation of nursing instructors then added more knowledge without critically
examining how all of that could be learned and retained by their students. Systematic
teaching approaches such as PowerPoint presentations became the mainstay solution to
teaching large amounts of content (Benner et al., 2010), leaving little opportunity for periods of critical reflection activities in the classroom leading to integrative learning.

Integrative teaching methods would require an educator to provide learning activities specifically constructed for the content being covered, not from overloaded lecture hall presentations. Shaw and Degazon (2008) provided an example of content that could not be learned through lecture. According to Shaw and Degazon (2008), teaching the core professional nursing values (CPNVs) would require a relational pedagogy, something not be easily reproduced in a lecture hall. The AACN’s (2008) CPNVs included altruism, autonomy, human dignity, integrity, and social justice (AACN, 2008; Shaw & Degazon, 2008). Integrative approaches to teaching the CPNVs in a relational way that students could then internalize and apply to practice would necessitate abandoning slide presentations for more relational approaches, such as reflective thinking exercises and group discussions. Teaching strategies aimed at improved learning outcomes take considerable time to develop.

**Sufficient time to reflect.** Time was a common theme used in discussions surrounding scholarship in teaching. Angelo (2002) described how a 3 to 5 year effort was required for innovations in scholarship to become standard practice. Roger’s (as cited by Angelo, 2002) found that adoption of innovations in an organization started with a small group of innovators, who then inspired early adopters to get on board, and in most organizations amounted to only one-fifth of an organization’s workforce. Rodgers (as cited by Angelo, 2002) noted that in order for an innovation to become more widely adopted within an organization, the middle majority would need to be introduced to the concept early on and frequently thereafter.
Innovations in nursing education were explored for their potential impact on the quality of nursing practice. The NLN Task Group on Innovation in Nursing Education (NLN, 2013) made recommendations to senior academic leaders to promote faculty who were engaged in developing pedagogical innovations by assuring that sufficient time was afforded for the work within the current faculty workload. Previous research in the scholarship of teaching in nursing included discussions surrounding innovation as a central theme to nursing education reform.

Critique of Previous Research

Previous research in the SoTL phenomenon in nursing education was not well represented in the literature. Three recent studies were reviewed for salient aspects of the findings reported in the literature. Phillips et al. (2013) investigated 15 schools of nursing involved in innovations in curriculum transformation, an outcome of the scholarship of teaching. Broome, Ironside, and Mc Nelis (2012) provided a brief report of a pilot study investigating the conduct of educational research in schools of nursing across the United States. Benner et al. (2010) investigated the state of nursing education across the United States with the primary aim of deepening the understanding of teaching and student learning in registered nurse programs. Sufficient funding was cited in all 3 studies as essential to curriculum innovation, educational research, and the scholarship of teaching. A second issue cited by all 3 studies was protected time for scholarship.

Curriculum innovation. Phillips et al. (2013) looked at schools of nursing that most closely matched the definition of innovation described by Pardue, Tagliaren i, Valiga, Davidson-Price, and Ore howski (as cited by Phillips et al., 2013). The Pardue et al. definition of innovation involved a concept analysis, and included transforming
systems using knowledge in new ways, a critical examination of the status quo, and a
cultural shift toward excellence in teaching and learning in nursing and supporting faculty
taking risks and using creativity (Phillips, Resnick, Boni, Bradley, Grady, Ruland, &
Stuever, 2013). Phillips et al. (2013) concluded that the descriptive study may not have
answered as many questions as it generated about curriculum innovation.

Education research. A cross-sectional survey design was used to survey deans of
nursing from a list procured from the American Association of Colleges of Nurses
(AACN) (Broome, Ironside, & McNelis, 2012). The survey was used to collect data on
the current level of faculty engagement with pedagogical research (Broome et al., 2012).
Six hundred-plus surveys were sent, with a response rate of 3.1 percent, or 21 completed
and returned surveys. Broome et al. (2012) considered the implications of such a poor
response rate, and concluded that the most plausible reason for deans of nursing schools
choosing not to participate in a brief, one-shot survey about their faculty was that only 21
deans could confirm that faculty at their institutions were engaged in some form of
educational research. The Broome et al. (2012) study and the disappointing outcome
may have implications surrounding the scholarship of teaching in nursing education as a
significant barrier to preparing a larger and more capable nursing workforce.

Scholarship of teaching. Benner et al. (2010) characterized the current state of
description of how nursing pedagogies failed to achieve integrated learning due to an
over-abstraction of nursing knowledge in the classroom was an important study outcome.
Clinical teaching practices also were found to fail at linking abstract nursing theory to the
practice setting (Benner et al., 2010). According to Benner et al. (2010), integrating the
nursing student’s educational experience would bridge the practice-education gap. Integrative educational experiences in nursing will require scholars of teaching to break away from traditional teaching methods and begin the risky work of the SoTL.

The Phillips et al. (2013) study yielded a model for examining curriculum innovation, and provided a suggestion of a starting point for nurse educators to get focused on concepts over content. The Broome et al. (2012) pilot study findings reaffirmed Benner et al.’s (2010) call for nursing education reform through nursing faculty involvement in some form of scholarship of teaching. According to Broome et al.’s (2012) findings and Benner et al.’s (2010) findings, the academic culture in nursing would have to embrace the SoTL if any significant education reform in nursing was to become a reality.

The most informative resource for promoting scholarship among faculty came from the assessment literature. Angelo (2002) recommended following guidelines developed over a decade of classroom research experience and from academic innovations reported in the literature. First, plan for the long term commitment to increasing the desired form of scholarship and level of engagement, and involve key faculty players in the plan (Angelo, 2002). Then, use improved student learning as the main focus of all scholarship efforts (Angelo, 2002). Also, whenever possible, create multiplier effects by getting seasoned faculty, novice faculty, and students working together on scholarship projects (Angelo, 2002). Consider faculty scholar support group meetings, and provide sufficient funding for faculty to access development opportunities (Angelo, 2002). Set and maintain clear expectations of what constitutes quality scholarship, and then celebrate the results through making them public (Angelo, 2002).
The research literature in nursing journals lacked the substance necessary to formulate a comprehensive plan for addressing the various barriers to the SoTL encountered by nursing faculty. Nursing education reform through the SoTL will require additional research that reaches beyond the discipline’s borders.

**Chapter 2 Summary**

Evidence of nursing faculty perceptions of barriers to the SoTL in the literature was examined over a 12-month period. Databases accessed included: Academic Search Premier, CINAHL Complete, Education Research Complete, Ovid Nursing Full Text PLUS, SAGE Journals Online, and SocINDEX with Full Text. A wide and deep-reaching net was cast, and through an iterative literature review, essential qualitative descriptions of the SoTL phenomenon in nursing education were captured. The literature proved to be a rich qualitative data source from which to draw some preliminary conclusions about the state of the SoTL in BSN education. The SoTL phenomenon was found to lack wide acceptance among nursing faculty for a variety of reasons. First, by definition the SoTL concept was not well understood (Silva, 2012, Thoun, 2009). Silva (2012) critiqued Boyer’s (1990) definition of the SoTL as too focused on research, and offered a definition more broadly aligned to a definition of phronesis in teaching and learning. Thoun (2009) also critiqued Boyer’s descriptions of the 4 scholarships, and offered some unique defining characteristics for scholarship in nursing. Meleis (2012) theorized that nursing scholarship was defined by the nursing profession’s unique perspective on knowledge development, and that no singular coherent framework had been developed. One conclusion drawn from Silva (2012), Thoun (2009), and Meleis (2012) was that the SoTL movement had not received much attention from within the
nursing discipline. It seemed that nursing was in a perennial search for a unified framework, and that the framework builders constituted a small, elite group of senior academic scholars that failed to garner much attention from the majority of faculty. Thus, scholarship in nursing education remained something out of reach to most undergraduate faculty.

A second finding within the literature-derived data involved an academic culture within the nursing profession that practiced segregation among faculty ranks. According to Thompson and Clark (2013), teachers were assigned a teaching burden that prohibited their engagement in scholarly pursuits. Conversely, Benner et al. (2010) described the PhD teaching in nursing as someone prepared to conduct research, and undereducated as an educator. Allen and Field (2005) cited the evaluation of scholarship using narrow definitions for promotion considerations as a significant barrier to sufficient recognition for many nurse educators’ contributions to nursing education. The nursing education culture was perceived to lack a sufficiently open appreciation for alternative forms of scholarship.

A third finding within the literature regarded an academic culture that practiced a form of defensive reasoning (Argyris, 2006), an institutionalized hierarchical structure that perpetuated the marginalization of teaching while awarding greater status to nurse researchers with funded programs. Meleis (2012) suggested that the nursing profession relied on borrowed theory, and this practice led to an underdeveloped knowledge-building capacity that left many important scholarly pursuits in nursing largely ignored. Teaching was found to be one of those scholarly pursuits that nursing ignored, and for which there were many espoused theories (Argyris, 2006) that were not the theories-in-
use nurse educators relied on to teach. Teaching theories-in-use amounted to repeating teaching practice patterns learned from the past that were mostly left unexamined through critical reflection.

Schools of nursing continued a practice of employing underprepared nurse educators in teaching positions, where role strain was common (Clark et al., 2010), and that left faculty feeling less than competent in their teaching role. Inadequate informational orientation to the teaching role was common, as lengthy probationary periods were considered sufficient for successful transitioning into the faculty role (Clark et al., 2010). Bartels (2007) upheld the notion that the academic culture in nursing perpetuated certain rigid expectations and reward structures that were not concordant with the espoused values of nursing practice. Survivors of the enculturation process were rewarded with more work, and those that departed academia frequently returned to clinical practice in search of some renewal in their professional career (Bartels, 2007). Goodman (2013) noted that the instrumental nature of nursing education was incompatible with the notion of an intellectual craftsmanship in higher education. These conditions reflected a single-loop learning environment, where a siege mentality and survival in the academy perpetuated low-impact actions in teaching, service, and scholarship year in and year out.

The pragmatist’s view would regard the SoTL as rational means to achieving high-impact learning improving faculty knowledge about what content to teach as well as it can be taught, so that it could be learned as useful information applied to teaching practice. This was viewed to be in stark contrast to the teaching-as-one-was-taught paradigm (Ard, 2009) prevalent in professions education. Although guidance on possible
solutions for engaging faculty in high-impact double-loop learning opportunities was sparse in the nursing education literature.

The academic nursing culture described within the literature appeared to be a culture that promoted an industrial approach to education, where a NCLEX-RN first time pass rate benchmark was used as a standard measure for evaluating throughput quotas.

Descriptions of nursing faculty shortages (Bittner & O’Connor, 2012), and of complacency with current educational practices (Thompson & Clark, 2013) seemed to describe conditions that promoted the siege mentality described by Argyris’s (2006) Model I theory-in-use. Goodman (2013) cited a common managerial practice in nursing academe for gathering the wrong data, as well as other practices that detracted from the quality of nursing students’ educational experiences. No single recipe for reforming current nursing educational practices was found in the literature, only recommendations for reforming policies in nursing academe were located.

One example of how nursing academe might achieve successful reform was noted. Alteen et al. (2009) characterized the ideal environment for the SoTL to flourish, where faculty used their internal compass to guide their teaching practices in an autonomy supportive environment where guidance, enrichment, sustainability, and empowerment were considered elemental. Those elements were not common themes in the literature-based discussions surrounding current nursing education practice.

Imbedded themes surrounding the SoTL and related barriers located within the literature were not always central to an article’s topic, but often tangential to the discussion. Barrier types were identified within narratives describing other aspects of education that sometimes made indirect references to barriers to scholarship. The Delphi
study survey items constructed from the themes identified in the literature became concept derivations in the form of endorsement-type statements. Weisberg (2005) provided information useful for guiding the survey item construction process. The themes and patterns identified within the literature informed the pragmatic approach to the construction of the iterative Delphi survey versions described in Chapters 3 and 4.
CHAPTER 3. METHODOLOGY

Introduction to Chapter 3

Chapter 3 includes a complete description of the research methodology undertaken during the course of the study. In Chapter 3, multiple discussion topics on methodology include: (a) the general and specific purpose of the study, (b) the qualitative and quantitative central research questions, (c) the research design, (d) the target population, (e) the sample size, (f) the sampling method, (g) the recruitment methods, (h) instrumentation, (i) data collection methods and procedures, (j) field test method, (k) pilot test method, (l) operationalization of the variables, (m) data analysis procedures, (n) limitations of the research design, (o) transferability, (p) expected findings, and (q) ethical issues.

Purpose of the Study

The general purpose of the study was to increase the knowledge surrounding multiple perceived barriers that BSN faculty members experienced when considering engaging in the SoTL. The specific purpose of the study was to develop a valid barriers scale for measuring faculty perceptions of engaging in the SoTL work while teaching in a BSN program.

Research Questions

The central qualitative research question was:

What were the barriers BSN faculty members perceived as impacting the advancement of the SoTL in schools of nursing (SONs)?

Subordinate questions included:
(a) What types of internal and external factors in the teaching environment did nursing faculty perceive as significant barriers to the pursuit of scholarship in teaching?, (b) What personal beliefs and skills did faculty perceive in themselves as barriers to engaging in the SoTL?, and (c) What perceptions did faculty have regarding BSN students’ beliefs and skills that were considered significant barriers to faculty engagement in the SoTL?

The central quantitative research question was:

To what degree do teaching faculty in SONs share perceptions regarding barriers to the advancement of the SoTL?

**Research Design**

A sequential exploratory mixed-methods design was determined as the most appropriate approach to developing a pilot barriers scale. The Delphi study R1 survey development was grounded in an extensive review of the current literature on the SoTL. The literature review was conducted using maximum variation sampling of the most current data on the SoTL within several online databases, and enhanced the diversity of positions represented on the SoTL. Databases accessed included: Academic Search Premier, CINAHL Complete, Education Research Complete, Ovid Nursing Full Text PLUS, SAGE Journals Online, and SocINDEX with Full Text. Creswell and Plano Clark (2011) recommended a mixed-methods approach as suitable to the complexity involved in developing a quantitative measurement scale from qualitative data interpretations. A pluralistic stance was taken, where a constructivist approach and a pragmatist stance were used in a bottom-up approach to construct knowledge through interpretations of the qualitative and quantitative data provided by the R1 survey results.
The three round Delphi study was conducted in order to collect data from expert nurse educator panelists who were not Delphi R_1 and R_2 survey participants. A mixed-methods design was selected for the development of a barriers scale. Creswell (2009) described the merits of using mixed-methods in instrument development research. The qualitative approach accounted for approximately 80 percent of the total weight of the mixed-methods activities. The quantitative approach accounted for approximately 20 percent of the total weight of the mixed-methods activities, but used throughout the study to guide decisions throughout the barrier scale instrument development.

**Table 1 Delphi Study Instrumentation**

<table>
<thead>
<tr>
<th>Order of Instrument Implementation</th>
<th>Name of Data Collection Instrument</th>
<th>Instrument Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Study Delphi Round 1 (R_1)</td>
<td>Scholarship of Teaching and Learning</td>
<td>Nine section thematic survey with closed and open-ended items, plus demographics (electronic version)</td>
</tr>
<tr>
<td>Delphi Study Round 2 (R_2)</td>
<td>Scholarship of Teaching and Learning</td>
<td>Fifty closed-ended Likert scale endorsement items (electronic version)</td>
</tr>
<tr>
<td>Delphi Study Round 3 (R_3)</td>
<td>Faculty Perceptions of the Scholarship of Teaching</td>
<td>Twenty-five closed-ended Likert scale endorsement items, plus demographics (electronic version)</td>
</tr>
</tbody>
</table>

**Qualitative Phase**

A comprehensive literature review of SoTL was completed as a preliminary step in developing an interpretive description of the phenomenon. Predetermined inclusion criteria were used to enhance the diversity of positions on scholarship and barriers to SoTL. The context-relevant curriculum development (CrCD) model (Iwasiw et al., 2009) provided the necessary framework for choosing inclusion criteria. A qualitative description of findings from the literature followed. Propositions (Walker & Avant,
2005) about barriers to the SoTL were then created from the qualitative description findings from the literature review.

In a second qualitative step, a Delphi round (R1) was conducted with 18 panelists, expert nurses, many with five or more years of teaching experience in bachelor of nursing programs. The R1 Delphi panelists were asked for structured input in the form of narrative responses via an e-survey with closed and open-ended questions surrounding barriers to SoTL in nursing education. The survey items were generated from the list of propositions created during and following the comprehensive literature review. Panelist demographic data were collected with the Delphi R1 survey, and included 6 items related to panelists’ age, years of experience in nursing, years of experience teaching nursing, and highest degrees earned in nursing and other education programs. Response rate-enhancing strategies recommended by Hsu and Sanford (2007) were implemented, and reminder emails sent within one week of each survey’s release. A two-week turnaround time limit was maintained for both of the Delphi e-surveys.

Qualitative Data Analysis

The narrative data was read for understanding, with the readings guided by SDT (Deci & Ryan, 2012) and the CrCD model (Iwasiw et al., 2009) for purposes of identifying defining attributes in the panelists’ narratives that correlated with the constructs of these two frameworks. Likert scale endorsement items were created for each of the defining attributes located in the panelists’ narratives (see Appendix B). An audit trail of reflections was maintained in the form of field notes that were reviewed as needed to complete the survey item creation process.
Quantitative Phase

In the quantitative phase, Likert scale endorsement items created for the barriers scale were submitted to the Delphi panelists via an e-survey that asked for ranking of each item by degree of importance on a five point scale of importance to a proposed barriers scale. Participants’ rankings were analyzed in IBM SPSS 20.0 using descriptive statistics (e.g. mean, standard deviation, range, interquartile range [IQR], variance). Items were retained according to rank as well as according to the central concept’s importance in the literature. The SDT (Deci & Ryan, 2012) and the CrCD (Iwasiw et al., 2009) guiding frameworks were used in determining whether a lower ranking item was retained or discarded, as well as from the qualitative description from the literature review. Mixing of the two research methods also occurred in phase 2.

A paper and pencil version of the third Delphi survey, the SoTL barriers scale, allowed for data collection from survey volunteers, expert nurse educator conference attendees who were accessed within the confines of the conference exhibition space. The data collected was then entered into IBM SPSS 20.0, and analyzed using principle component analysis (PCA), Cronbach’s alpha, and a factor analysis with varimax rotation.

Target Population, Sampling Method, and Related Procedures

The target population was all BSN program faculty teaching across the United States. Academic nurse educators were viewed as members of a specialty practice within the nursing field. BSN program faculty were viewed as advance practice specialists in pre-licensure professional nursing education.
Nonprobability sampling was used in the Delphi study panelist selection. An email invitation was sent to 20 potential participants selected from a SON faculty roster, with 19 consenting to participate. Nurse educators who taught at least 1 didactic nursing course in a BSN program were enrolled in the Delphi study. Targeted faculty members received an invitation to participate and a consent form via the SON email system. Brief descriptions of the overall mixed-method study of faculty perceptions of barriers to SoTL were provided, as well as approximate times to complete each SurveyMonkey© electronic survey and the time frame for each survey.

The Delphi panelist sample size was set at 20 individuals. According to Hertzog (2008), a sample size of 10-15 individuals might be sufficient in a pilot study, however for purposes of instrument revision, a sample size of 35-40 individuals would be preferable. The sample size for the first two Delphi rounds (R₁, R₂) was 19 for R₁ survey, and 18 for the R₂ survey. Okoli and Pawloski (2004) compared the traditional survey method with the Delphi method, and found that because the Delphi method depended on group dynamics rather than statistical power, a 10 to 18 Delphi panel of experts was recommended. The third Delphi round (R₃) was conducted using a convenience sample of 49 expert nurse educator conferees.

The setting for Delphi R₁ and R₂ surveys was the school of nursing faculty member’s office computer, or the faculty member’s home computer. The setting for the Delphi R₃ survey was a metropolitan hotel’s exhibition hall table adjacent to the main conference center meeting rooms. The R₃ paper and pencil formatted survey was provided on clipboards with pencils. A complementary chilled soft drink and snack bar were made available to the volunteer survey participants.
The R₁ and R₂ Delphi panelists were recruited through the SurveyMonkey© website email service, using the panelists’ school of nursing email addresses. The R₃ Delphi survey volunteers were recruited via face-to-face encounters within the conference hotel exhibition hall where the professional nurse educator group annual conference for 2013.

**Instrumentation**

The Delphi study of faculty perceptions of barriers to the SoTL in the context of teaching BSN students began with a few field-tested questions reviewed by doctoral students enrolled in a PhD in education program, and by two expert nurse educator colleagues. Instrumentation for the Delphi study followed Kreber’s (2002) instrument design. Kreber (2002, p. 154) framed the exploratory study by asking three specific questions:

- To what extent do ‘experts’ agree on the nature of the scholarship of teaching?
- Do they conceptualize the scholarship of teaching in ways that are compatible with any of the aforementioned perspectives?
- To what extent do ‘experts’ agree on what constitute unresolved issues that present obstacles to the institutionalization of the [SoTL] concept in universities?

**The R₁ Survey Instrument**

The first Delphi survey was designed using a structured approach similar to Kreber’s (2002) study, with the intent of gaining a broad sense about expert nursing faculty perceptions surrounding the SoTL in the context of teaching in a BSN program.
Each of the R₁ quantitative survey items were written in a Likert-type endorsement format with varying responses.

**The R₂ Survey Instrument**

The second Delphi survey was designed using the qualitative and quantitative data collected and analyzed from the R₁ survey responses. Each item was written in the form of a Likert scale endorsement statement, with the ranked responses *not at all essential*, *minimally essential*, *unsure*, *essential*, and *completely essential*.

**The R₃ Survey Instrument**

The third Delphi survey was based on recommendations made by the Delphi R₂ panel’s rankings. The R₃ survey items were composed using both direct statements regarding the SoTL and statements that were reverse coded and that required additional effort by survey participants to interpret and give their endorsement.

**Data Collection**

The goal for the data collection phase was to achieve parsimony with the final Delphi round survey instrument using an innovative data collection model. Falzarano and Zipp (2012) depicted a three round Delphi data collection process in a top-down funnel diagram format. On entering the funnel top, face and content validity of the proposed survey items developed from the extant literature, and a panel of experts were identified for the first Delphi round. The initial SurveyMonkey© R₁ survey was large, and devised using nine thematic sections, each with three closed-ended Likert scale items, and a single qualitative question for panelists to reply by typing in a text box. Rich qualitative data was collected from the nine qualitative section narratives. A faculty demographics section with single answer questions followed. The exported data files
were then imported into SPSS 20.0. Due to the limited time available for each of the Delphi survey rounds, additional data via member checks were not collected. Data sets were stored on a USB data storage device maintained and accessible only by the study investigator. Further down the funnel, the R2 Delphi survey was less capacious than the R1 survey, and contained fewer SurveyMonkey© survey screens for the Delphi panelists to navigate. The R2 survey data was imported into SPSS 20.0 and analyzed using descriptive statistics. Finally, at the bottom of the funnel, the R3 survey was devised from the R2 survey results and based on Delphi panelist consensus levels. The R3 survey emerged from the funnel’s end as a more refined, succinct, and comprehensive product.

**Field Test**

A field test of several potential survey items for the initial Delphi round was conducted with a senior nursing academic leader, and with an expert nurse educator colleague at the same SON where the researcher was employed. Items were then amended and reviewed for survey error as described by Weisberg (2005). Several of the first Delphi survey items were then reviewed by three doctoral-level students in a nursing education specialty track program. Feedback from these students was valued for being candid and relatively unbiased because no one had any prior knowledge of the researcher or the research topic under investigation.

**Operationalization of Variables**

The variable *faculty perceptions of barriers to the SoTL* were initially operationalized as Likert scale items derived from multiple barrier-related factors in the literature. Development of a valid barriers scale was dependent on the accuracy of each Delphi surveys’ representativeness to faculty members’ realities. Each item was
designed to measure faculty perceptions of barriers to the SoTL from a nursing academic’s perspective and through a pragmatic constructionist’s lens.

Table 2 lists potentially salient barriers to faculty participation in the SoTL identified within the literature and useful for informing the development of a faculty perception scale. Barrier types were identified and used to inform the development of each Delphi survey iteration. Each barrier type was then named, and the names used to construct themes for survey items.

### Table 2 Barriers to the Scholarship of Teaching and Learning

<table>
<thead>
<tr>
<th>Barrier Type</th>
<th>Barrier Name</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cultural: technology and teaching misalignment</td>
<td>Low technological self-efficacy among faculty</td>
<td>Davis, Kimble, and Gunby (2014)</td>
</tr>
<tr>
<td>Cultural: Risk to Career</td>
<td>Marginalization of the SoTL</td>
<td>Marquis et al. (2014)</td>
</tr>
<tr>
<td>Internal: Demotivation</td>
<td>Ambivalence for the SoTL</td>
<td>Marquis et al. (2014)</td>
</tr>
<tr>
<td>Cultural: Instrumental view of education</td>
<td>Scholarship of teaching irrelevant to clinical practice</td>
<td>Goodman (2013)</td>
</tr>
<tr>
<td>Cultural: Institutionalized ideologies</td>
<td>The good teacher fallacy</td>
<td>Kreber (2013)</td>
</tr>
<tr>
<td>Cultural: Segregated teaching and research domains</td>
<td>Low research capacity</td>
<td>Thompson and Clark (2013)</td>
</tr>
<tr>
<td>Cultural: insufficient numbers of doctoral-level faculty</td>
<td>Low faculty perception of sufficient self-determination</td>
<td>Bittner and O’Connor (2012)</td>
</tr>
<tr>
<td>Cultural: Limited Protected Time for Research</td>
<td>Pedagogical research a non-priority</td>
<td>Broome, Ironside, &amp; McNelis (2012)</td>
</tr>
<tr>
<td>Cultural: Lack of attention to integrative learning</td>
<td>Theoretical and atheoretical knowledge-based curricula</td>
<td>Meleis (2012)</td>
</tr>
<tr>
<td>Barrier Type</td>
<td>Barrier Name</td>
<td>Source</td>
</tr>
<tr>
<td>-------------------------------------------------</td>
<td>------------------------------------------------------</td>
<td>---------------------------------------------</td>
</tr>
<tr>
<td>Internal: Institutionalization of SoTL</td>
<td>Unclear SoTL definition</td>
<td>Silva (2012)</td>
</tr>
<tr>
<td>Cultural: Industrial Model of Education</td>
<td>High faculty workloads</td>
<td>Stockhausen et al. (2011)</td>
</tr>
<tr>
<td>External: Demotivation</td>
<td>Poor recognition by external funding sources</td>
<td>Stockhausen et al. (2011)</td>
</tr>
<tr>
<td>Internal: Bureaucratic oversight</td>
<td>Internal funding issues</td>
<td>Stockhausen et al. (2011)</td>
</tr>
<tr>
<td>External: Short-term educational focus, cost efficiency focus</td>
<td>Misdirected reward system</td>
<td>Benner et al. (2010)</td>
</tr>
<tr>
<td>Internal: conflict of purpose within the academy</td>
<td>Faculty underexposed to scholarship</td>
<td>Clark et al. (2010)</td>
</tr>
<tr>
<td>Internal: Unskilled at classroom assessment</td>
<td>Deskilled teaching</td>
<td>Brown et al. (2009)</td>
</tr>
<tr>
<td>Cultural: Teaching role devalued by predominant clinical focus in nursing education</td>
<td>Underdeveloped professional identity</td>
<td>Gresley (2009)</td>
</tr>
<tr>
<td>Internal: No established pattern of teaching scholarship publication</td>
<td>Underdeveloped publication framework</td>
<td>Oermann (2009)</td>
</tr>
<tr>
<td>Cultural: Low appreciation of educational research utility</td>
<td>Lack of EBTP literature</td>
<td>Patterson (2009)</td>
</tr>
<tr>
<td>Internal: Technical rationality</td>
<td>Unreflective nature of scholarly teaching</td>
<td>Kinsella (2008)</td>
</tr>
<tr>
<td>Internal: Conflicted values system</td>
<td>BSN Faculty Narratives of Constraint versus Growth</td>
<td>O’Meara, Terosky, and Neumann (2008)</td>
</tr>
<tr>
<td>Internal: Underdeveloped teaching standards</td>
<td>Underprepared faculty</td>
<td>Bartels (2007)</td>
</tr>
<tr>
<td>Internal: Content-focused teaching</td>
<td>Lack of innovation in teaching</td>
<td>Allen and Field (2005)</td>
</tr>
<tr>
<td>Internal: Narrow definition for scholarship</td>
<td>Lack of sufficient recognition for the SoTL</td>
<td>Allen and Field (2005)</td>
</tr>
</tbody>
</table>
Data Analysis Procedures

The data analysis procedures used to develop a barriers scale included an interpretive approach and a pragmatic approach. Gadamer (as cited by Halliday, 2010) characterized interpretation as dependent on an interpreter’s expectations, and subject to change over the course of the interpretation. The mixed-methods research approach followed a QUAL-quan sequence.

1. An initial qualitative description was developed from the selected literature.
2. Frequency, mean and standard deviation values for each R1 Delphi survey closed-ended endorsement item were computed using SPSS 20.0.
3. Open coding and axial coding of the narrative data collected in Delphi round 1 open-ended survey items was completed.
4. Quantitative and qualitative data stream mixing following the first Delphi round informed the development of 50 Likert-type ranked items for the R2 Delphi survey.
5. Frequency, mean and standard deviation values for each R2 Delphi survey ranked item were computed using SPSS 20.0.
6. The R2 Delphi survey results were used to craft 25 Likert-type items for the final Delphi round survey.
7. The R3 Delphi survey data were analyzed using SPSS 20.0. Principle component analysis with and without rotation was computed, and 8 factors were analyzed. Cronbach’s alpha statistic was used to determine the degree of the Delphi R3 survey’s internal validity.
8. Delphi panelist consensus was analyzed using standard deviation scores.
9. Qualitative and quantitative data stream mixing was used to inform the final analysis, and to construct a proposed model for the SoTL in nursing education.

**Limitations of the Research Design**

No clear standards for a Delphi study designed for instrument development were found in the methodology literature. Rea and Parker (2005) recommended that when a phenomenon associated with small populations of less than 100,000 were studied, the sample size for a survey-based study should approach 100 individuals if a 95 percent confidence interval is used, plus or minus 10 percent. According to Hasson, Keeney, and McKenna (2000), sample sizes for Delphi studies reported in the literature ranged from as few as 15 panelist to as many as 60 panelists. Hertzog (2008) recommended that pilot study sample size should approach 25-40 per group when Cronbach’s alpha was used to compute confidence intervals, and when it was used as an index of reliability (Tavakol & Dennick, 2011). The AACN (2014) provided data that indicated the current nursing faculty population was approaching 15,000 individuals across the United States. For an initial survey instrument use, the 40 recommended by Hertzog (2008) was considered a minimum acceptable sample size.

**Credibility**

The mixed-methods research approach used to develop a barriers scale instrument for BSN faculty use was critically examined throughout the study. According to Thorne (2008), interpretive description research should be evaluated using the following 5 principles: (a) contextual awareness, (b) disciplinary relevance, (c) moral defensibility, (d) pragmatic obligation, and (e) probable truth.
**Contextual awareness.** Development of a valid barriers scale for nursing was undertaken with the awareness that the instrument might be limited in its applicability because it was grounded in research findings informed by a select few members of the larger nurse educator population. Nevertheless, the study was conducted using the literature and expert opinion to inform the research findings. The particularistic nature of knowledge surrounding the scholarship of teaching in BSN faculty circles was acknowledged as something important to learn from and build upon that knowledge.

**Disciplinary relevance.** Nursing education science will not advance without a critical mass of nurse educators developing best practices in the classroom and clinical setting. Gresley (2009) explained why the scholarship of teaching was the most relevant form of scholarship to nursing education science. Rice (as cited by Gresley, 2009) proposed three elements to the scholarship of teaching: (a) it produced coherent and meaningful knowledge about the nursing field, (b) it enhanced the relevance of subject matter taught, and (c) it empowered faculty to transform and extend discipline-specific knowledge about teaching nursing.

**Moral defensibility.** Knowledge gathered from expert nurse educators and applied to the development of a barriers scale was done in the spirit of advancing nursing education science through the scholarship of teaching. The Delphi panelists’ narrative disclosures about their own teaching experiences and practices were regarded as important and valuable, and used with great respect for the panelists whose contributions were integral to the instrument’s development.

**Pragmatic obligation.** Educators need usable, practical knowledge about teaching to empower them to teach in innovative ways. According to Valiga (2009),
nurse educator scholars needed valid instruments in order to extend others’ work and answer significant questions concerned with the quality of nursing education.

**Probable truth.** The scholarship of teaching was described in the literature as a valid, transferable form of scholarship. Kreber (as cited by Poole, 2013) noted that complexities and rapid change were problems shared across disciplines. Poole (2013) found that the scholarship of teaching required multiple research methods to increase the confidence level in educational study findings about complex transdisciplinary issues.

**Qualitative and Mixed-Methods Validity**

The themes derived from the narrative responses collected with the initial Delphi survey open-ended questions were used to inform the R2 Delphi survey content. According to Creswell (2009), the sequential study design used in instrument development grounded a survey’s items in the study participants’ points of view. The third Delphi survey was then developed from findings of the R2 Delphi survey, and administered to a larger sample ($N = 49$) of the U. S. nursing faculty population.

**Trustworthiness**

Triangulation of research methods was used to enhance the trustworthiness of the findings. According to Flick (as cited by Denzin & Lincoln, 2013), triangulation was an alternative to validation, as multiple methods in a single study added depth and breadth to the findings. Trustworthiness was aspired to through phronesis, practicing it as a guiding principle to develop accurate descriptions of the SoTL in nursing education in as authentic a manner as possible. Phronesis was defined as a metaphysical concept of humans possessing the virtue of practical wisdom to do the right thing, at the right time, and for the
right reason (Phronesis, 2011). According to Birmingham (2004), Aristotle advanced phronesis as a virtue of practical intelligence, wisdom, or prudent deliberation on the particularistic. Phronesis was enacted as the guiding principle for upholding a moral obligation to accept no less than the very best in every action undertaken during the study.

Valiga (2009a) described excellence in teaching as happening because nurse educators were internally motivated to accept the challenges in nursing education through a sense of duty to innovate. The motivation for a study of the SoTL in nursing education came from a burning desire to complete the best possible interpretation of a challenging topic through innovative methods, and contribute to the advancement of nursing education science with a valid barriers measurement scale.

**Transferability**

Application of the study findings to other nursing faculty groups teaching in a variety of institution types was an important consideration. Merriam (2009) provided examples of how transferability might be considered in light of a particular context under investigation. Generalities were common to particular settings where universal phenomena were examined (Merriam, 2009). Merriam (2009) used Erickson’s example of teaching, where some aspects were universally concrete across many settings.

The primary aim for developing a valid instrument for measuring BSN faculty perceptions of barriers to the SoTL included the transferability of the instrument to other faculty groups. Faculty demographics across the U. S. were
found to be consistent, but the institutional settings in which U. S. nursing faculty teach would vary somewhat due to the level of research intensity. Therefore, a nurse educator who chose to use the barriers scale in a future study of nursing faculty teaching in a high level research intensive setting may not obtain useful findings with the barriers scale. The iterative scholarship model constructed from audit trail annotations and from the literature was conceived as reflective of the situation-specific contextual elements, and potentially applicable wherever faculty perceptions of barriers to the SoTL are under consideration.

**Expected Findings**

Purposive sampling was used as the data collection strategy for the first two Delphi rounds. The findings from each of the first two Delphi round surveys were expected as both surveys were developed with three theories, or models, and the literature to frame the creative process. The iterative nature of developing a valid survey through the Delphi technique allowed confirmation of the findings at each stage of the instrument’s development. Consensus and dissensus manifested with each survey, and the third round survey findings of 72 percent consensus and 28 percent dissensus was not an unexpected finding.

**Ethical Issues**

Ethical considerations were examined from multiple angles in the study of BSN faculty members’ perceptions surrounding the scholarship of teaching. The researcher’s pluralistic position was examined for the potential to interject a personal agenda. The researcher as instrument was another element of the study examined for potential ethical
concerns. The potential for a conflict of interest was also examined. Also, the potential for ethical issues arising during the study’s conduct was considered.

**Researcher’s Position Statement**

Phronesis was the axiological position taken in this study, where ethical deliberation, rational thought, and individual perceptions were combined in a pragmatic approach to better understand how BSN faculty perceived the SoTL. Constructivism and pragmatism were used throughout the mixed-methods study. According to Creswell and Plano Clark (2011), taking a pluralistic stance on reality was a valid reason for using a mixed-methods design. The researcher denied that any personal agenda was at work, and as a pragmatic constructivist, the aim was to create an instrument that would at least partially solve the problem of not knowing BSN faculty perceptions of barriers to engaging in the SoTL. The nature of reality for the pragmatist was both a singular condition with an explanatory theory for a phenomenon in hand, and a plurality of conditions as perceived by multiple individual study participants (Creswell & Plano Clark, 2011). No personal gain was sought through the conduct of the mixed methods study. Creswell and Plano Clark (2011) explained how pragmatists placed the importance of the research question above the methods used.

The *researcher as instrument* concept was examined for the potential to interject ethical conflict. Knowledge construction from the literature and from the Delphi survey findings required the researcher to, as Thorne (2008) recommended, become solidly located within the discipline, and to be guided by theory (Thorne, 2008). In this case, neutrality in an inquiry imbedded in a social situation was not possible. The Delphi study design provided the means to investigate faculty peer members’ perceptions while
avoiding the use of untoward persuasion. The electronic Delphi survey rounds and the self-administered paper and pencil R₃ survey instrument served as a proxy interviewer mechanism for the researcher by physically placing the researcher apart from the study participants.

**Conflict of Interest Assessment**

A conflict of interest assessment of the professional relationship between the researcher’s educator role, the Delphi study locations and participants, or the study aims failed to find any conflict of interest. The researcher consistently attempted to maintain a high level of discretion throughout the study, and refrained from using the work to gain favor among faculty peers, or to gain advantage in career matters.

**Ethical Issues in the Study**

No ethical issues arose during the study. In keeping with Creswell’s (2009) recommendations, quantitative data interpretation accuracy was maintained through careful data management strategies. A second cross check was performed to verify initial data entry accuracy. The qualitative data collected from Delphi panelists in round one were included in the findings, but were de-identified during the analysis process and presented as such. No scientific misconduct was attempted during the study, and the research findings were interpreted in an authentic manner, with no attempts to suppress, falsify, or invent findings in order to satisfy the researcher’s interest, or the readers’ interests (Creswell, 2009).

**Chapter 3 Summary**

The mixed-methods design included a three round Delphi study. Survey instrument development was achieved over a six-month time period. The R₁ survey
required the greatest amount of time to prepare, and evolved over several months of reviewing the literature, a field test, and a pilot test. The R$_2$ survey required two weeks to develop and two weeks to administer. The R$_3$ survey was developed within one week following the R$_2$ survey data analysis. The complexity of researching a socially constructed phenomenon like the scholarship of teaching within the teaching context of a professions educational program required a significant time commitment. The post-data collection study phase was prolonged, as it became necessary to invest sufficient time to fully appreciate the depth and breathe of a mixed-methods study weighted heavily in qualitative methods of inquiry.
CHAPTER 4. DATA ANALYSIS AND RESULTS

Introduction

Chapter 4 provides descriptions of the faculty sample frame and faculty samples, and analysis of the data collected during the three Delphi survey rounds. Expert panelist demographic data for each of the three Delphi rounds were included. Data analyses of the findings from the three survey rounds were provided, and included a selection of the qualitative data collected in R1 of the Delphi study. A table of selected survey panelist narratives was also presented, with open coding and axial codes used to inform the crafting of the two subsequent Delphi surveys.

Description of the Sample Frame and Sample

Sample Frame

The sample frame for the R1 and R2 Delphi surveys was the full-time faculty list of undergraduate faculty employed during the 2013 summer academic term at a Midwest urban single purpose school of nursing (N = 25). The R3 Delphi survey sample frame was professional nurse educator conferees attending an educator conference during the third weekend of October, 2013 held at a Midwest urban convention hotel complex, and included all available conferees in attendance on Friday and Saturday only.

Study Samples

Three samples of nursing faculty were enrolled in the Delphi study: (a) the first group of faculty (N=19) were teaching at the same college as the investigator, (b) the second group of faculty (N=18) was comprised of 16 individuals from the first group (three dropped out) and two faculty members who did not participate in the first Delphi round, and (c) the third group of nursing faculty (N = 49) was comprised of professional
nurse educator group conferees. All three samples had similar demographic profiles, and that were reflective of the demographics reported by the NuFAQs and NLN surveys.

**R₁ Delphi panel.** The first Delphi round was conducted with a group of BSN faculty members (N=19) teaching at a private single-purpose school of nursing located in a mid-size (600-plus student population) Midwest urban college classified as a special focus institution by the Carnegie Foundation for the Advancement of Teaching. The inclusion criterion for five years of full-time teaching experience was only partially met. Eight of the 19 panelists reported having only taught for two to four years. The remaining 11 panelists reported five to 26 years of teaching experience. Four of the 19 R₁ panelists held PhD degrees in nursing, 14 held MSN degrees with three of those in the process of completing a DNP degree, and one had recently completed a DNP degree.

The R₁ Delphi survey panel members were a homogenous sample. Panelists self-reported as non-Hispanic White, female (n = 18), and male (n = 1). One panelist reported an age less than 40 years, four panelists reported being in their 40’s, 11 panelists reported being in their 50’s, and three panelists reported being in their 60’s. Three R₁ panelists dropped out of the study after completing the first round: one MSN with 23 years of teaching experience, and two MSNs each with three years of teaching experience.

**R₂ Delphi panel.** The second Delphi round was conducted with 16 R₁ panelists who chose to continue as Delphi study participants. Two new panelists were enrolled in round two: one held a PhD in nursing degree with 12 years of teaching experience, and the other held a DNP degree with five years of teaching experience. Both of the new
panelists met the inclusion criteria for expert nurse educator, with five or more years of full-time teaching experience.

**R3 Delphi panel.** The R3 Delphi panel convenience sample consisted of 49 professional registered nurse educators attending a weekend-long conference held at a different Midwest location than the first two Delphi surveys were conducted. None of the R3 Delphi panelists participated in the first two Delphi rounds, or had any prior knowledge of the study. Nine of the R3 respondents reported having less than five years of full-time teaching experience and failed to meet the criteria for expert nurse educator. However, this group of nurse educators included 18 individuals who reported holding doctoral-level degrees, with 10 PhDs in nursing, five EdDs, and three DNPs. Forty-seven of the 49 participants surveyed in round three omitted the faculty demographic data located at the end of the survey. Data imputation of the missing demographic data was not performed prior to the analysis. Missing values for the R3 Likert scale endorsement items were imputed using median values.

**Summary of the Results**

The three round Delphi study was conducted with the specific aim of developing a valid barriers scale instrument for measuring nursing faculty perceptions of the barriers to the SoTL in undergraduate programs. The iterative nature of the first two Delphi rounds yielded a third and final product, a pilot survey of faculty perceptions of the scholarship of teaching and learning in nursing education. The pilot survey was found to have good internal consistency using Cronbach’s alpha. The survey was also found to measure at least eight components, or factors, of the perceptions shared by undergraduate nursing faculty.
Detailed Analysis

Round 1 Survey Quantitative Data

Likert-type endorsement items were created for many of the defining attributes, or components of the SoTL identified in the literature. Results for each of the endorsement items, and for the faculty demographic items for the R₁ Delphi SurveyMonkey© survey were outlined below. Table 3 displays the Delphi survey ranking scheme by standard deviation score used to determine the level of consensus achieved by each survey item in all three Delphi rounds. The four levels of consensus/dissensus were designed to resemble Kreber’s (2002) leveling scheme, but using standard deviation scores instead of median values. The same survey consensus threshold values scheme was used to analyze all three Delphi survey round data sets.

Table 3 Delphi Survey Consensus Threshold Values

<table>
<thead>
<tr>
<th>Consensus Level</th>
<th>Five-point ordinal scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>SD scores between .500 and 1.000</td>
</tr>
<tr>
<td>Moderate</td>
<td>SD scores between 1.0001 and 1.0200</td>
</tr>
<tr>
<td>Low (divergent)</td>
<td>SD scores between 1.02001 and 1.0600</td>
</tr>
<tr>
<td>Dissensus</td>
<td>SD scores greater than 1.0600</td>
</tr>
</tbody>
</table>

The four tiered consensus level scheme was derived from a similar quartile concept used by Kreber (2002).

Rea and Parker (2005) recommended that surveys should contain sufficient numbers of items to be comprehensive enough to generate enough information to be informative, but not so long as to discourage participation and decrease response rates. The exploratory nature of survey development and the Delphi approach used to required limitations to be set for the R₁ survey length. According to Rea and Parker (2005), pilot version surveys using small sample sizes were typically not used to make statistical inferences to the general population. The R₁ Delphi survey was designed to limit the
amount of time panelists would need to complete the nine mixed-methods survey sections and a demographic section.

Consensus levels for the R₁ Likert scale items in table 4 were determined to have limited value in ruling out the use of all items that achieved low consensus or dissensus levels. One-half of the R₁ closed-ended survey items achieved a high level of consensus among the panelists. R₁ survey items that achieved SD scores higher than 1.060 were revisited, and were reworded for use in the R₂ survey.

**Table 4 R₁ Delphi Survey Item Ranking**

<table>
<thead>
<tr>
<th>Rank</th>
<th>Item Descriptor</th>
<th>N</th>
<th>Min</th>
<th>Max</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>SoTL invigorates teaching</td>
<td>19</td>
<td>3.00</td>
<td>5.00</td>
<td>4.26</td>
<td>.561</td>
</tr>
<tr>
<td>2</td>
<td>Teaching worthy of publication</td>
<td>19</td>
<td>3.00</td>
<td>5.00</td>
<td>3.89</td>
<td>.567</td>
</tr>
<tr>
<td>3</td>
<td>Scholarly activities used to teach</td>
<td>19</td>
<td>3.00</td>
<td>5.00</td>
<td>4.15</td>
<td>.602</td>
</tr>
<tr>
<td>4</td>
<td>Passionate about teaching</td>
<td>18</td>
<td>3.00</td>
<td>5.00</td>
<td>4.61</td>
<td>.607</td>
</tr>
<tr>
<td>5</td>
<td>Enjoys presenting to peers</td>
<td>19</td>
<td>3.00</td>
<td>5.00</td>
<td>4.15</td>
<td>.688</td>
</tr>
<tr>
<td>6</td>
<td>Interest in best teaching practices</td>
<td>19</td>
<td>3.00</td>
<td>5.00</td>
<td>4.52</td>
<td>.696</td>
</tr>
<tr>
<td>7</td>
<td>Millennials challenging to teach</td>
<td>19</td>
<td>2.00</td>
<td>5.00</td>
<td>4.05</td>
<td>.705</td>
</tr>
<tr>
<td>8</td>
<td>Has considered engaging in SoTL</td>
<td>19</td>
<td>3.00</td>
<td>5.00</td>
<td>4.31</td>
<td>.749</td>
</tr>
<tr>
<td>9</td>
<td>Teaching worthy of peer review</td>
<td>19</td>
<td>2.00</td>
<td>5.00</td>
<td>4.26</td>
<td>.805</td>
</tr>
<tr>
<td>10</td>
<td>Confidence level among peers</td>
<td>19</td>
<td>3.00</td>
<td>5.00</td>
<td>4.26</td>
<td>.805</td>
</tr>
<tr>
<td>11</td>
<td>Accepts assigned workload</td>
<td>18</td>
<td>2.00</td>
<td>5.00</td>
<td>3.50</td>
<td>.857</td>
</tr>
<tr>
<td>12</td>
<td>Uses SoTL to improve teaching</td>
<td>18</td>
<td>2.00</td>
<td>4.00</td>
<td>2.94</td>
<td>.872</td>
</tr>
<tr>
<td>13</td>
<td>Level of passion for learning</td>
<td>18</td>
<td>2.00</td>
<td>5.00</td>
<td>4.27</td>
<td>.894</td>
</tr>
<tr>
<td>14</td>
<td>Self-directed learner</td>
<td>19</td>
<td>2.00</td>
<td>5.00</td>
<td>4.31</td>
<td>.945</td>
</tr>
<tr>
<td>15</td>
<td>Teaching expertise level</td>
<td>19</td>
<td>2.00</td>
<td>5.00</td>
<td>3.36</td>
<td>.955</td>
</tr>
<tr>
<td>16</td>
<td>Natural teacher versus hard work</td>
<td>18</td>
<td>2.00</td>
<td>5.00</td>
<td>2.77</td>
<td>1.003</td>
</tr>
<tr>
<td>17</td>
<td>Aware of rigorous teaching duties</td>
<td>18</td>
<td>1.00</td>
<td>5.00</td>
<td>2.77</td>
<td>1.003</td>
</tr>
<tr>
<td>18</td>
<td>Teaching roles in the mission</td>
<td>18</td>
<td>2.00</td>
<td>5.00</td>
<td>3.72</td>
<td>1.017</td>
</tr>
<tr>
<td>19</td>
<td>Other faculty engaged in SoTL</td>
<td>19</td>
<td>2.00</td>
<td>5.00</td>
<td>4.21</td>
<td>1.031</td>
</tr>
<tr>
<td>20</td>
<td>Trial and error teaching approach</td>
<td>18</td>
<td>2.00</td>
<td>5.00</td>
<td>3.38</td>
<td>1.036</td>
</tr>
<tr>
<td>21</td>
<td>Support for new teaching roles</td>
<td>19</td>
<td>1.00</td>
<td>5.00</td>
<td>2.68</td>
<td>1.056</td>
</tr>
<tr>
<td>22</td>
<td>Recent experience with new role</td>
<td>19</td>
<td>1.00</td>
<td>5.00</td>
<td>3.63</td>
<td>1.065</td>
</tr>
<tr>
<td>23</td>
<td>Probability of engaging in SoTL</td>
<td>18</td>
<td>2.00</td>
<td>5.00</td>
<td>3.61</td>
<td>1.092</td>
</tr>
<tr>
<td>24</td>
<td>SoTL defined in faculty manual</td>
<td>18</td>
<td>1.00</td>
<td>5.00</td>
<td>3.50</td>
<td>1.150</td>
</tr>
<tr>
<td>25</td>
<td>Transition into teaching role</td>
<td>19</td>
<td>1.00</td>
<td>5.00</td>
<td>3.31</td>
<td>1.157</td>
</tr>
<tr>
<td>26</td>
<td>Considering SoTL</td>
<td>19</td>
<td>1.00</td>
<td>5.00</td>
<td>3.73</td>
<td>1.194</td>
</tr>
<tr>
<td>27</td>
<td>Efficiency over student-centered</td>
<td>19</td>
<td>1.00</td>
<td>5.00</td>
<td>3.00</td>
<td>1.290</td>
</tr>
</tbody>
</table>

Brief descriptors were derived from each of the survey items’ wording, or were paraphrased when necessary (see Appendix C).
Delphi R₁ Survey Qualitative Data Analysis

The R₁ survey items were grounded in the literature, and interpreted through a pragmatic constructivist’s lens. Thorne (2008) promoted the use of multiple angles of vision when constructing a perception of a process under investigation. The use of multiple angles of vision was compared to methodological triangulation (Thorne, 2008), and should provide sufficient evidence of representative credibility consistent with sampling approach used. The Delphi method allowed for the identification of multiple perspectives regarding the SoTL in nursing education (see Table 5) from the narratives collected with the R₁ survey reflected the Delphi panelists’ viewpoints surrounding the SoTL concept within the context of their teaching practices. These viewpoints were interpreted and used as artifacts that informed the development of next Delphi survey. Salient barriers to the SoTL were identified (see Table 2), and along with the R₁ expert panelists’ viewpoints (Table 5) and the quantitative results from the R₁ survey (Table 4) mixing of the qualitative and quantitative data streams was possible.

**Mixing qualitative and quantitative data streams.** A new organizing structure was derived through interpretive description and triangulation of the findings from the literature sources (Table 2) with the R₁ survey narrative content analysis (Table 5), and the R₁ survey item quantitative analysis (Table 5). According to Frels and Onwuegbuzie (2013), using a mixed-methods approach in an interview process enhanced the interpretive process and led to qualitative finding that were highly contextual in nature. The mixed-methods survey approach was found to be instrumental in conceptualizing and creating a proposed model of the SoTL for nursing faculty through theory derivation (Walker & Avant, 2005) of the three theories underpinning this study.
<table>
<thead>
<tr>
<th>Axial coding</th>
<th>Panelists’ Narrative Open Coding</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improving/evolving</td>
<td>“<em>enhance</em> my overall <em>experience</em>”</td>
</tr>
<tr>
<td></td>
<td>“[teaching as an] <em>evolving process</em>”</td>
</tr>
<tr>
<td></td>
<td>“[attending to their] <em>own schooling</em>”</td>
</tr>
<tr>
<td></td>
<td>“[learning to] <em>be a better teacher</em>”</td>
</tr>
<tr>
<td></td>
<td>“[student learning enriched by] <em>bonus learning material</em>”</td>
</tr>
<tr>
<td></td>
<td>“[seeing students having] <em>grown</em> as a result of my time invested in their learning”</td>
</tr>
<tr>
<td></td>
<td>“<em>looking forward</em> to being a better teacher”</td>
</tr>
<tr>
<td>Knowledge/Information</td>
<td>“[using] “<em>evaluative comments</em> [from students]”</td>
</tr>
<tr>
<td></td>
<td><strong>Reading literature</strong> about current nursing topics</td>
</tr>
<tr>
<td></td>
<td>Reading literature about <em>alternative learning</em> activities</td>
</tr>
<tr>
<td></td>
<td>Reading literature about <em>new teaching practices</em></td>
</tr>
<tr>
<td></td>
<td><strong>Using 10 different textbooks to prepare to teach</strong></td>
</tr>
<tr>
<td></td>
<td>Using <strong>journal articles</strong>, <strong>news articles</strong>, and <strong>online references</strong> to prepare to teach</td>
</tr>
<tr>
<td></td>
<td><strong>Creating literature reviews</strong></td>
</tr>
<tr>
<td></td>
<td>Read the <strong>learning materials</strong> in preparation for teaching about them</td>
</tr>
<tr>
<td></td>
<td>Use some of the Evolve [©] <strong>learning products</strong> that accompany the textbook(s)</td>
</tr>
<tr>
<td></td>
<td><strong>Read books on classroom teaching</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Use the library services to find articles</strong></td>
</tr>
<tr>
<td></td>
<td>Read through several <strong>textbooks</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Access medical news website(s) for new information</strong></td>
</tr>
<tr>
<td>Reflection/critical thinking</td>
<td>“<em>reflecting</em> on past classroom, simulation laboratory, and clinical site activities” to prepare for teaching</td>
</tr>
<tr>
<td></td>
<td>“<em>I think</em>” [about how students benefit from group activities that require] “<em>critical thinking</em>”</td>
</tr>
<tr>
<td></td>
<td><strong>having a belief in the</strong> creative SoTL processes increasing “my enjoyment of teaching”</td>
</tr>
<tr>
<td></td>
<td>“<em>critical reflections</em> are fun for me”</td>
</tr>
<tr>
<td></td>
<td>“<em>I believe that</em> the [teaching] approach, the [delivery] format, the method must be different” for second career learners”</td>
</tr>
<tr>
<td>Fun/adventure</td>
<td>“I <em>am having fun.</em>”</td>
</tr>
<tr>
<td></td>
<td>“<em>easy to engage in</em> scholarly teaching activities”</td>
</tr>
<tr>
<td></td>
<td>“<em>fun for me</em>” [doing literature reviews and critical reflection]</td>
</tr>
<tr>
<td></td>
<td>“<em>very happy and enthused</em> with teaching at the present”</td>
</tr>
<tr>
<td></td>
<td>“<em>looking forward to</em> learning how to be a better teacher”</td>
</tr>
<tr>
<td></td>
<td>“Change and new things . . . <em>keeps me inspired and invigorated.</em>”</td>
</tr>
</tbody>
</table>
Table 5 R₁ Survey Panelist Narratives Analysis Continued

<table>
<thead>
<tr>
<th>Axial Coding</th>
<th>Panelists Narrative Open-coding</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time</td>
<td>[SoTL] “has been endorsed <em>for some time</em> . . . faculty <em>don't get the time to</em> really engage in SoTL”</td>
</tr>
<tr>
<td></td>
<td>“<em>the time I spend</em> trying to make the class interesting and relevant”</td>
</tr>
<tr>
<td></td>
<td>read “3 [books on classroom teaching] <em>this year</em>”</td>
</tr>
<tr>
<td>Learner-centered</td>
<td>[Using] “approaches which are proposed to be <em>student centered.</em>”</td>
</tr>
<tr>
<td></td>
<td>“<em>considering student performance</em>” [when reflecting on teaching].</td>
</tr>
<tr>
<td></td>
<td>“I have <em>varied group activities</em> that require hands on work” for students.</td>
</tr>
<tr>
<td></td>
<td>I present “<em>bonus material to students</em> . . . [who are] hopefully enriched by it.”</td>
</tr>
<tr>
<td></td>
<td>“<em>ask for feedback</em> . . . to see if [they] have unspoken needs or frustrations, but also to see what is ‘working’ for them.”</td>
</tr>
<tr>
<td></td>
<td>“I think the students really benefit from the time I spend” [preparing new materials].</td>
</tr>
<tr>
<td>Creative</td>
<td>“<em>creating scholarship</em>” from their journey pursuing the doctorate”</td>
</tr>
<tr>
<td></td>
<td>“<em>adapt or edit</em> [new teaching] approaches”</td>
</tr>
<tr>
<td>New teaching practices</td>
<td>“<em>reading literature about . . . new teaching practices</em>”</td>
</tr>
<tr>
<td></td>
<td>“<em>I read books . . . about classroom teaching.</em>”</td>
</tr>
<tr>
<td></td>
<td>“<em>I regularly try new approaches</em>” to teaching.</td>
</tr>
<tr>
<td></td>
<td>“<em>Change and new things . . . keeps me inspired and invigorated.</em>”</td>
</tr>
<tr>
<td>Interesting/relevant</td>
<td>“the time I spend trying to <em>make the class interesting and relevant.</em>”</td>
</tr>
<tr>
<td>Participating/</td>
<td>“<em>sharing ideas with other faculty</em>”</td>
</tr>
<tr>
<td>belonging</td>
<td>“<em>participate in</em> [SoTL] soon.”</td>
</tr>
</tbody>
</table>

**Bold italicized** words and phrases were captured through open coding to facilitate identification of themes.

Table 6 provides a display of the R₂ survey data analysis. The cut-off point for retaining R₂ items was determined from the SD scores, and only items achieving high level consensus were retained. However, whenever possible, concepts within some of the R₂ survey items were retained and used to create the R₃ survey. A detailed discussion of the R₂ survey data analysis will follow in chapter 5.
Table 6 Retained R2 Delphi Survey Item Ranking

<table>
<thead>
<tr>
<th>Rank</th>
<th>Item Descriptor</th>
<th>n</th>
<th>Min</th>
<th>Max</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Sharing scholarship of teaching</td>
<td>18</td>
<td>4.00</td>
<td>5.00</td>
<td>4.67</td>
<td>.485</td>
</tr>
<tr>
<td>2</td>
<td>SoTL student-centered intent</td>
<td>17</td>
<td>3.00</td>
<td>5.00</td>
<td>4.47</td>
<td>.624</td>
</tr>
<tr>
<td>3</td>
<td>Scholarly teaching impacts learning</td>
<td>16</td>
<td>3.00</td>
<td>5.00</td>
<td>4.31</td>
<td>.704</td>
</tr>
<tr>
<td>4</td>
<td>Reprioritize time for SoTL</td>
<td>18</td>
<td>3.00</td>
<td>5.00</td>
<td>4.44</td>
<td>.704</td>
</tr>
<tr>
<td>5</td>
<td>Established faculty support new faculty</td>
<td>18</td>
<td>2.00</td>
<td>5.00</td>
<td>4.22</td>
<td>.732</td>
</tr>
<tr>
<td>6</td>
<td>Seasoned MSN scholars mentoring</td>
<td>18</td>
<td>2.00</td>
<td>5.00</td>
<td>4.33</td>
<td>.766</td>
</tr>
<tr>
<td>7</td>
<td>Variety in SoTL not understood</td>
<td>18</td>
<td>2.00</td>
<td>5.00</td>
<td>4.16</td>
<td>.857</td>
</tr>
<tr>
<td>8</td>
<td>Lack of early support and SoTL potential</td>
<td>18</td>
<td>2.00</td>
<td>5.00</td>
<td>4.05</td>
<td>.872</td>
</tr>
<tr>
<td>9</td>
<td>SoTL ill-defined concept</td>
<td>18</td>
<td>2.00</td>
<td>5.00</td>
<td>4.22</td>
<td>.878</td>
</tr>
<tr>
<td>10</td>
<td>SoTL not key to teaching role</td>
<td>18</td>
<td>2.00</td>
<td>5.00</td>
<td>4.00</td>
<td>.907</td>
</tr>
<tr>
<td>11</td>
<td>Planned change good for reflection</td>
<td>18</td>
<td>2.00</td>
<td>5.00</td>
<td>4.18</td>
<td>.910</td>
</tr>
<tr>
<td>12</td>
<td>Planned change and lack of support</td>
<td>17</td>
<td>1.00</td>
<td>5.00</td>
<td>4.11</td>
<td>.927</td>
</tr>
<tr>
<td>13</td>
<td>Robust support necessary for SoTL</td>
<td>18</td>
<td>1.00</td>
<td>5.00</td>
<td>4.05</td>
<td>.937</td>
</tr>
<tr>
<td>14</td>
<td>Peer review of teaching key to SoTL</td>
<td>18</td>
<td>2.00</td>
<td>5.00</td>
<td>3.88</td>
<td>.963</td>
</tr>
<tr>
<td>15</td>
<td>SoTL an expectation for all teachers</td>
<td>18</td>
<td>2.00</td>
<td>5.00</td>
<td>4.00</td>
<td>.970</td>
</tr>
<tr>
<td>16</td>
<td>Multiple ways scholarship informs teaching</td>
<td>18</td>
<td>1.00</td>
<td>5.00</td>
<td>4.50</td>
<td>.985</td>
</tr>
<tr>
<td>17</td>
<td>Scholarly teaching requires time sacrifices</td>
<td>18</td>
<td>2.00</td>
<td>5.00</td>
<td>4.05</td>
<td>.998</td>
</tr>
</tbody>
</table>

Brief descriptors were derived from each of the survey items’ wording, or were paraphrased when necessary (see Appendix D).

Table 7 provides a display of the final Delphi survey data analysis. The R3 survey items were crafted using data analyses from the R1 and R2 surveys, as well as qualitative data analyses from the literature in table 2.

Table 7 R3 Delphi Survey Ranking

<table>
<thead>
<tr>
<th>Rank</th>
<th>Item Descriptor</th>
<th>N</th>
<th>Min</th>
<th>Max</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Opportunities for faculty development</td>
<td>49</td>
<td>3</td>
<td>5</td>
<td>4.39</td>
<td>.533</td>
</tr>
<tr>
<td>2</td>
<td>Mission fosters teaching and research</td>
<td>49</td>
<td>3</td>
<td>5</td>
<td>4.37</td>
<td>.566</td>
</tr>
<tr>
<td>3</td>
<td>Supporting new faculty in scholarship</td>
<td>49</td>
<td>2</td>
<td>5</td>
<td>4.16</td>
<td>.688</td>
</tr>
<tr>
<td>4</td>
<td>Faculty autonomy and flex-time</td>
<td>49</td>
<td>2</td>
<td>5</td>
<td>4.20</td>
<td>.790</td>
</tr>
<tr>
<td>5</td>
<td>Published SoTL too theoretical to use</td>
<td>49</td>
<td>1</td>
<td>5</td>
<td>2.39</td>
<td>.812</td>
</tr>
<tr>
<td>6</td>
<td>Time invested in faculty development</td>
<td>49</td>
<td>2</td>
<td>5</td>
<td>3.96</td>
<td>.865</td>
</tr>
<tr>
<td>7</td>
<td>Faculty partner in curriculum revisions</td>
<td>49</td>
<td>2</td>
<td>5</td>
<td>4.10</td>
<td>.872</td>
</tr>
<tr>
<td>8</td>
<td>Curriculum reform from the top-down</td>
<td>49</td>
<td>1</td>
<td>5</td>
<td>2.18</td>
<td>.905</td>
</tr>
<tr>
<td>9</td>
<td>MSNs and PhDs model SoTL expertise</td>
<td>49</td>
<td>1</td>
<td>5</td>
<td>2.69</td>
<td>.983</td>
</tr>
<tr>
<td>10</td>
<td>Industrial education model and SoTL</td>
<td>49</td>
<td>1</td>
<td>5</td>
<td>2.76</td>
<td>.990</td>
</tr>
<tr>
<td>11</td>
<td>Faculty focus on teaching too limiting</td>
<td>49</td>
<td>1</td>
<td>5</td>
<td>2.27</td>
<td>1.016</td>
</tr>
<tr>
<td>12</td>
<td>Release time promotes SoTL efforts</td>
<td>48</td>
<td>1</td>
<td>5</td>
<td>3.50</td>
<td>1.031</td>
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<tr>
<td>13</td>
<td>Mentors effective in promoting SoTL</td>
<td>49</td>
<td>1</td>
<td>5</td>
<td>3.35</td>
<td>1.032</td>
</tr>
<tr>
<td>14</td>
<td>SoTL an underappreciated concept</td>
<td>49</td>
<td>1</td>
<td>5</td>
<td>3.29</td>
<td>1.041</td>
</tr>
<tr>
<td>15</td>
<td>Director appraisal of SoTL capacity</td>
<td>49</td>
<td>1</td>
<td>5</td>
<td>2.55</td>
<td>1.042</td>
</tr>
<tr>
<td>16</td>
<td>Only publication validates SoTL</td>
<td>49</td>
<td>1</td>
<td>5</td>
<td>3.24</td>
<td>1.051</td>
</tr>
</tbody>
</table>
Brief descriptors were derived from each of the survey items’ wording and paraphrased when necessary. R3 survey items were inverse coded (see Appendix E).

Table 8 provides a display of the eight factors derived from the R3 survey data using principle component analysis. The factor loading pattern was found to be of value in determining the most likely theme that would describe what the R3 survey items were potentially measuring. PCA with Varimax rotation and Kaiser normalization were used with the third Delphi survey round data set. Tabachnick and Fidell (2007) characterized PCA as a preferred method for extracting the maximum variance from a data set with each component. Twenty-five items were included in an initial PCA with no rotation method selected, and the Kaiser-Meyer-Olkin Measure of sampling adequacy was .531, indicating an inadequate sample for a component analysis (Tabachnick & Fidell, 2007). Nevertheless, for purposes of exploring the data further through a principle component analysis, 68.859 percent of the Eigenvalues were noted to be associated with eight components, and that the R3 Delphi survey was measuring multiple components.
Table 8 R₃ Delphi Survey Factor Loading

<table>
<thead>
<tr>
<th>Item</th>
<th>Factor 1</th>
<th>Factor 2</th>
<th>Factor 3</th>
<th>Factor 4</th>
<th>Factor 5</th>
<th>Factor 6</th>
<th>Factor 7</th>
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<tbody>
<tr>
<td>8</td>
<td>.790</td>
<td></td>
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<td>.340</td>
<td>.653</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Item 2 loading score was less than .300 and was therefore not included.

Survey items with loading scores greater than .300 were grouped in a selective coding scheme described below.

Analysis of the Delphi R₃ Barriers Scale

Axial coding of the R₃ survey items 8, 16, 20, 21, 22, 23, 24, and 25 group was facilitated by the PCA clusters and permitted the identification of 4 plausible themes for:

(a) *faculty development*, (b) *role expectations*, (c) *nursing education scholarship*, and (d) *academic culture*. In an initial selective coding group, survey items 5, 6, 8, 13, 15, 16, and 17 were interpreted as belonging to a central theme of the SoTL as being
underappreciated, unexamined, and under-experienced as a social phenomenon in undergraduate nursing academe.

Axial coding of the low to moderate consensus R3 survey items 1, 2, 6, 7, 10, 11, 13, and 14 group were examined using principle component analysis and resulted in identification of 3 themes: (a) faculty motivation, (b) self-determination, and (c) role expectations. In a second selective coding group, survey items 11, 14, 16, 20, 22, and 25 were interpreted as characteristics of the silo effect theme in nursing education.

Axial coding of the dissensus level R3 survey items 3, 4, 5, 9, 12, 17, and 19 group were examined using PCA and yielded 3 themes: (a) scholarship knowledge, (b) academic culture, and (c) role expectations. In a third selective coding group, survey items 17, 20, 22, 23, 24, and 25 were interpreted as building blocks for the theme scholarship capacity.

In a fourth selective coding group, survey items 1, 3, 4, 5, 7, 9, 18, and 21 were interpreted as the thematic SoTL elements autonomy and authenticity. In a fifth selective coding group, survey items 4, 5, and 6 were interpreted as thematic correlates of SoTL awareness. In a sixth selective coding group, survey items 7, 13, 18, 19, and 21 were interpreted as pertinent to an internal and external influences theme for the SoTL. Survey item 10 loaded on the seventh component, and was interpreted as a role expectation.

An eighth and final selective coding group included items 3, 11, 12, and 19, and were analyzed as a single theme productivity versus academic freedom. Item 11 and item 12 were interpreted as opposites, where item 11 indicated faculty perceived role overload as an impediment to the SoTL, and item 12 indicated that release time was not perceived
by faculty as a either being a barrier or a catalyst for engagement in the SoTL. Items 3 and 19 were interpreted as unrelated to one another. Opinions varied widely on item 19 and 12, and where both reached dissensus level SD scores. Item 11 was the only survey item that reached any consensus among respondents. Item 19 and item 12 were interpreted as polar opposites on an academic freedom continuum. Item 11 represented a condition of role overload, item 19 reflected a constraint to academic creativity, whereas item 12 introduced the possibility of an integrated SoTL in nursing education.

**The interpretive description.** The interpretive description began as a constructivist effort, where the researcher served as primary data collection instrument. Thick, rich descriptions were crafted into survey item statements, developed from iterative interpretations of qualitative data collected using maximum variation sampling of the literature. Three broad themes emerged during the initial interpretation process: (a) context-relevant factors that impacted nursing faculty members’ motivations to engage in the SoTL work, (b) the multiple aspects of self-determination, and (c) a persistent single-loop learning cycle in nursing education. These broad themes became determinants of how the survey items were crafted as artifacts for the interpretive description.

**Chapter 4 Summary**

Instrument development was the primary aim undertaken in this study. Information from the literature review was interpreted and transformed into Delphi survey items in an iterative manner in all three Delphi survey rounds. Kreber’s (2001) survey items were used to generate ideas for the initial Delphi survey (Appendix B, Table B4). The second Delphi survey was crafted using the qualitative data collected in the first Delphi survey round. The final Delphi survey items were selected for use based on
the R₂ Delphi panelists’ level of agreement on each item’s essentialness to a survey of faculty perceptions of barriers to the SoTL. Items for the third survey were then worded in a manner that required participants to read and consider their responses carefully. Unfortunately, there were many *unsure* responses in proportion to the numbers of other possible ones (Appendix B, table B2). This was likely due to the wording being unclear, or the subject matter being unfamiliar, and causing an increased number of blanket unsure responses.
CHAPTER 5. CONCLUSIONS AND DISCUSSION

Introduction

Chapter 5 includes a summative discussion of the qualitative and quantitative analyses of the literature review and the three Delphi study surveys. Conclusions are drawn about the Delphi method used for survey instrument development, and about the mixed-methods research approach used. A discussion of future research recommendations follows.

Summary of the Results

The iterative nature of the three round Delphi method used to develop the barriers scale resulted in a multi-component scale that demonstrated good internal consistency and avoided a one-dimensional scale. Table 2 included themes and barrier names identified in the literature, and spawned multiple survey items in Delphi rounds one through three. In the discussion of the results that follows, the Delphi surveys were analyzed item by item and compared with findings in the literature review. Interpretive description allowed for overarching themes to emerge from the findings of each survey, and the themes discussed in terms of the literature.

Discussion of the Results

Discussion of the Delphi study findings with a section dedicated to the detailed analysis of each survey round follows. The first section includes a thematic analysis completed in the first Delphi round. The second section includes a discussion of the emerging patterns of consensus and dissensus detected during the second Delphi round. The third section provides a detailed discussion of the R3 Delphi study survey results and includes some reflective statements about the instrument’s capacity to measure faculty perceptions.
Delphi Round 1

The global SoTL movement may be starting to create some interest in a few nursing faculty. However, the paucity of articles located in the literature and published by nurse educators on the SoTL was considered to be evidence that the movement is only just starting to take place in nursing education. The first Delphi round survey was designed with the intent to discover on a most basic level what BSN faculty perceptions of the SoTL were at a single purpose private college. The results from the first Delphi survey were very much in line with the information learned about the SoTL from the literature.

Nineteen Delphi panelists participated in the first survey on the scholarship of teaching. A two-week participation time allotted for the first Delphi survey, including the invitation to participate and consent to participate emails, and a single reminder email sent at the end of the first week. The R₁ survey was crafted with the panelists’ time commitments in mind. Rea and Parker’s (2005) basic guidelines for designing an effective questionnaire were used to develop the first survey. Hence, the R₁ Delphi survey was designed around themes that provided an easy to follow, logical structure that minimized the panelists’ participation time and maximized the quality of information collected.

Twenty-seven closed-ended survey items were crafted and grouped around 9 themes related to the scholarship of teaching identified in the literature. A single open-ended question followed each group of three related endorsement or statement completion style items. The 19 panelists who agreed to participate in the Delphi study were typical full-time BSN faculty members, and their responses to the R₁ survey items
indicated that they were engaged in their teaching practices. Analysis of the demographic data collected with the R₁ Delphi survey revealed a lack of experienced faculty availability for mentoring newer faculty. Fifty percent of the Delphi panelists reported three or fewer years’ experience at their current teaching post, and more than 50 percent of the panelists had fewer than seven years’ experience in their teaching career. Analysis of the qualitative data collected in the R₁ Delphi survey indicated that panelists did not feel there were sufficient opportunities to get valuable feedback on their teaching methods from their faculty peer group. The literature clearly identified multiple constraints on nursing faculty time, and sufficient numbers of faculty were commonplace barriers to advancing nursing education knowledge on a local level as well as on a global scale (Benner et al., 2010; Moseley, 2009; Shultz, 2009).

The narrative response rate for the nine open-ended questions was 44.4 percent. The low response rate on the narrative items was disappointing. It seemed likely that several possible factors may have been at work. A complete lack of familiarity with the purpose of a Delphi study was likely an issue. Even with IRB approved anonymity procedures in place, confidentiality-related concerns may have caused some panelists to refrain from sharing candid opinions. A few panelists may have felt obliged to participate out of a sense of duty, and parsed their time invested in the Delphi study to answering only closed-ended survey questions quickly and efficiently. One of the 10 panelists who participated in the R₁ survey provided two more narratives, completed the closed-ended items and skipped the remainder of the open-ended items. This panelist did not participate in the second Delphi round. Some of the panelists may have been teaching in overload, something not uncommon in BSN programs. Three of the panelists
who did not provide narrative responses were known to be at various stages of
completing a doctoral-level degree program, and may have not had much time to spare or
energy to share. Finally, it was possible that a few panelists were just not familiar
enough with the SoTL movement in higher education to formulate an opinion one way or
the other in a narrative form.

Round 1 Delphi panelists provided responses to eight demographic survey items
(see Table 2). The pre-established expert inclusion criterion for Delphi panelists was
only partially met, as four panelists lacked the minimum five-years of experience
generally considered sufficient for attaining expert status. However, due to the advance
practice status attained by those four panelists as expert clinician educators in their
respective specialties, their combined years of clinical patient education and academic
education preparation were taken into consideration, and their data were retained.

**Theme 1: Scholarly teaching practices.** The literature provides a few examples
of how faculty teaching in nursing programs might engage in the scholarship of teaching
and learning (SoTL). In general, faculty members are encouraged to begin engaging in
the SoTL through teaching that is current, relevant, and engages students. In the
following 3 statements, select the level of engagement that best reflects your teaching
preparation activities. Responses to item 1 were positive, and indicated that these 19
faculty members were generally positive about engaging in scholarly teaching.
Participants endorsed their level of engagement in scholarly teaching when preparing to
teach through literature reviews, critical reflection, or peer feedback, with 63.2 percent in
agreement and 26.3 percent with strong agreement. Only 10.5 percent of faculty were
unsure whether or not they engaged in scholarly teaching practices. Cross (as quoted by
McKinney, 2007) warned that a recent shift in the emphasis on engagement in scholarship and publication was more extrinsically motivated and less intrinsically motivated. McKinney (2007) found that many college faculty were unclear about what constituted SoTL versus what constituted scholarly teaching. Recent policy changes at the SON involved changes in the level of scholarship for all faculty, and may have impacted the level of panelist endorsement.

Responses to item 2 were mixed, and indicated that the SoTL was not something everyone considered engaging in at the time. Responses to item 3 indicated that most of the panelists believed that the SoTL had the potential to recharge their enthusiasm for teaching.

**Theme 1 open-ended item.** Please provide any feedback regarding your impressions of statements 1, 2 & 3, or some additional thoughts you would like to share in the text box below. You may consider including examples of your preferred methods of preparation for teaching, and any concerns you have about scholarship in general.

Ten of the 19 panelists provided narrative responses to the first open-ended item. Overall, the narratives provided sound evidence that scholarly teaching was something valued among the group, but engaging with the SoTL was another matter.

**Theme 2: Faculty role expectations.** The literature on scholarship offers many examples of why faculty teaching in higher education should engage in the scholarship of teaching (SoTL). However, there are very few examples of how someone might begin engaging in a scholarly teaching project in nursing education. Please reply to the following 3 statements [5, 6, & 7] about scholarly teaching projects where you teach.
Responses to item five indicated that opinions varied about scholarship expectations being defined in the faculty handbook. Responses to item six were mixed, but overall the SoTL was believed to be part of several faculty peer group members at the school. Fifty-two percent believed seven or more of their peers engaging in SoTL, 26.3 percent believed five or six were engaged in SoTL, 10.5 percent believed three or four peers were engaged in SoTL, and 10.5 percent believed one or two peers were engaged in SoTL. No one reported believing that no faculty peers were involved in SoTL at the time. These results were considered to signal that scholarship among peers was highly visible. Responses to item seven indicated that the prospect of a peer reviewing these faculty members’ teaching was something they would welcome, or at the very least not mind experiencing.

**Theme 2 open-ended item.** Please provide any feedback regarding your impressions of statements 5, 6 & 7, nor some additional thoughts you would like to share about scholarship and teaching in a BSN programs in the text box below. Ten of the nineteen panelists provided narrative responses to the second open-ended item. The information gathered from those narratives was instructive. Peer review was discussed and characterized as something that was lacking, something needed and very much desired, or something that potentially would not be practical at the time, due to the lack of knowledge about the SoTL among nursing faculty. The general consensus among panelists about the SoTL was that it was something that had potential, but may not be something that many would consider at the time.

**Theme 3: Scholarship defined.** Scholarship is judged for its potential or actual value in contributing to the knowledge within a field of study or discipline. In order to be...
“peer reviewed,” scholars must generate a scholarly artifact (a written essay, a journal article, a presentation, or other shared byproduct). Please respond to the next 3 statements [9, 10, & 11] regarding how you feel about making your own scholarly teaching efforts public. Panelists responded positively to all three closed-ended items in this group. The consensus reached on all three items indicated that this group of nursing faculty were in favor of promoting more scholarship in teaching in their school.

**Theme 3 open-ended question.** Please provide any feedback regarding your impressions of statements 9, 10 & 11, or some additional thoughts on what type of scholarly artifact(s) you might consider making public in the text box below.

Ten of the nineteen panelists provided narrative responses to the third open-ended item. The content of the narratives in this section was mostly positive, but not without some doubt as to whether or not peer review was a reality, or that faculty were considering presenting their work to their peers. Three of the narratives included specific examples of scholarly artifacts that panelists were contemplating, currently planning, or engaging in at the time.

**Theme 4: Challenges nursing professors face.** BSN program courses are traditionally taught using the transmission perspective, where the teacher is a content expert. Theory content in nursing has persistently grown, to the degree that the prospect of a teacher learning to teach a new course can be a real challenge. Also, numerous teaching resources and shifting pedagogical methods can require new faculty members upwards of 2 years teaching the same course repeatedly to become proficient. Please respond to the following statements [13, 14, & 15] related to your experiences as a
faculty member in a BSN program by selecting the response that most accurately represents your opinions on the challenges of teaching undergraduate nursing courses.

Responses to item 13 were very mixed and reflected a somewhat negative opinion about teaching support available to BSN faculty at their school. The responses to item 14 seemed to contradict the perceptions shared in item 13, as most panelists reported minimal to high tolerance for teaching a new course. A recent change in leadership at the college may have had a tempering effect among faculty members who were told that their teaching assignments would remain stable for the foreseeable future. In item 15, the majority of the panelists considered themselves to be self-directed learners and enjoyed new challenges.

**Theme 4 open-ended question.** In the text box below, please provide any feedback regarding your impressions of statements 13, 14 & 15, or some additional thoughts you would like to share about the support available to assist faculty with new courses where you teach. Ten of the 19 panelists provided narrative responses to the forth open-ended item. The narrative responses included positive messages about teaching in the BSN program, and a few comments about how conditions could be improved. One panelist provided a candid description of what typically transpires as they learned to teach a new course, which for this panelist was a common occurrence. Another panelist reported satisfaction with teaching the same course for a while. One narrative provided information that appeared to come directly from the literature on mentoring and supporting new faculty, particularly those entering teaching with advance degrees and no teaching experience.
Theme 5: Transition to the teaching role. New nursing faculty members enter academe as expert clinicians, and begin their academic teaching careers as novices. In the literature, descriptions of the conditions new faculty commonly faced during transition to teaching included a lack of adequate orientation processes, too brief of an orientation period, feelings of isolation following orientation, and no knowledge of available resources needed in their first year of teaching. Please respond to the next 3 statements [17, 18, & 19] regarding your socialization into teaching experience.

Responses to the 3 items in this section indicated that a dissensus existed among panelists about the quality of experiences transitioning into the teaching role, and a majority were either neutral or disappointed by the experience. Most of the panelists felt competent \( (n = 6) \), or proficient \( (n = 7) \) at teaching nursing courses. Two panelists identified with having reached the expert level in teaching. Not surprisingly, the newer teachers \( (n = 4) \) among the group identified with the advance novice level. The majority agreed that teaching in the BSN program was a scholarly endeavor, and they might consider making their work public, but four panelists were unsure if they agreed with the idea.

Theme 5 open-ended question. In the text box below, please provide any feedback regarding your impressions of statements 17, 18 & 19, or some additional thoughts you would like to share about your experiences transitioning into the teaching role, or about the socialization process into teaching undergraduate nursing courses.

Nine of the 19 panelists provided narrative responses to the fifth open-ended item. One panelist cited evidence from the literature that the general lack of attention given to assisting new faculty transition into the teaching role was a cause of high turnover among nursing faculty. Other narratives reflected mixed feelings about the transitional period
that new nursing faculty endured, whereas some shared positive experiences. The complexity of teaching nursing and the professional trajectory in teaching a profession were characterized in the narratives as needing improvement.

Single-loop learning conditions were evidenced by the R₁ Delphi survey data analysis. Respondents disclosed how they wished they had been mentored and peer-reviewed early in their teaching career. According to Mann, Gordon, and MacLeod (2009), effective learning from practice experience attributed to the development of competent health care professionals. A professional developed an identity based on an understanding of personal beliefs, espoused values, and attitudes formed over time within the context of the professional culture (Mann, Gordon, & MacLeod, 2009). However, if an individual lacked experience in sharing their knowledge with other professionals, the individual would have to rely on self-validation, which could lead to single-loop learning (Mann et al., 2009). Argyris (2006) referred to a double loop learning as active learning that led to the construction of new knowledge. Mann et al. (2009) characterized the self-aware, self-monitoring, and self-regulating professional as someone who used an active learning approach to construct new knowledge. Engagement with the SoTL was described as a form of active learning that professional nurse educators could choose to pursue when they desired to learn new knowledge about teaching and learning.

**Theme 6: Work Life.** The literature described a mixed picture of faculty satisfaction with their work life in higher education. Satisfaction levels were reported to be on an upward trend in some disciplines. Other reports in the literature were less encouraging, where faculty reported decreased satisfaction with work life balance, burdensome workloads, with a demanding three-part role expectation including teaching,
scholarship, and service. Please respond to the next 3 [21, 22, & 23] statements regarding your perception of satisfactory working conditions in teaching in an undergraduate nursing program. One panelist skipped over this section. Eighteen panelists failed to reach consensus on two of the three items in this group. Item 21 elicited mixed responses about the institution’s mission statement providing faculty with a clear sense of purpose. Consensus was reached among the 18 panelists about remaining flexible with workload expectations. Responses to item 23 indicated that the level of awareness about the level of commitment required for teaching nursing was mostly minimal or partial. Item 23 responses reflected the general lack of preparation for teaching expressed in discussions in the literature on nursing faculty retention and job satisfaction.

**Theme 6 open-ended question.** In the text box below, please provide any feedback regarding your impressions of statements 21, 22 & 23. You may consider sharing some additional thoughts you may have regarding teaching, scholarship, or service that you feel have impacted on the level of your work life satisfaction.

Eight of the 19 panelists provided narrative responses to the sixth open-ended question. The narratives in this section covered the spectrum of perceptions about what was expected of nursing instructors on a regular basis, about disparities among teaching assignments, and the unclear delineations of workload expectations when scholarship and teaching were involved. The literature on faculty workload issues was clear about the current faculty shortage having caused multiple ripples across the nursing education field. The consensus reached among panelists about the quality of work life in nursing education was not clear, but a closer reading of the narratives and the closed-ended items
in this section revealed that PhDs in nursing might march to a different rhythm, but the beat was fast for them, too.

**Theme 7: The Professional nurse educator.** Ideally, nurse educators model professionalism in nursing for their students, and back up their words with observable actions. Through scholarly teaching, nurse educators demonstrate their dedication to the nursing profession’s reputation for concerned, caring practices. Scholarship of teaching and learning (SoTL) in nursing is how some nurse educators achieve a personal level of excellence in teaching by engaging in peer review processes to validate one’s achievements. Others rely on trial and error methods, accumulating their experiences, and improving their teaching practice through independent critical reflection on those experiences. Please respond to the next 3 statements [25, 26, & 27] regarding your perception of how you achieve high quality teaching. Eighteen panelists responded to this group of items. Item 25 reached low-level consensus, with six panelists disagreeing to their use of traditional trial and error approaches to improving their teaching. Most panelists ($n = 11$) confirmed that the traditional approach was their way of making improvements. One panelist strongly agreed that it was their preferred method. Item 26 reached high consensus, with only three disagreeing to routinely engaging in the scholarship of teaching including peer review when planning improvements in their teaching. The majority were in agreement with the practice. Item 27 reached dissensus, with only two panelists strongly agreeing to the concept that there were natural born teachers who did not have to work at teaching, and one panelist agreeing to it. Six were unsure if they believed in natural born teachers, and nine disagreed with the concept.
Theme 7 open-ended question. Please provide any feedback regarding your impressions of statements 25, 26 & 27 in the text field below. You might consider sharing aspirations you have for transforming the course(s) you currently teach, or some ideas on how to increase the quality of nursing education in undergraduate programs.

Eight of the 19 panelists provided narrative responses to the seventh open-ended question. The narratives in this section indicated that most educators worked at improving their teaching, and relatively few panelists (n = 2) mentioned student feedback as a source of ideas for improving their teaching. One panelist mentioned reflection, but some of the narratives hinted at an idea that perhaps the way faculty appraisals were conducted could be improved, too.

Theme 8: Signature pedagogies. Nurse educators use several pedagogies, or structured teaching approaches to prepare the next generation of professional nurses. Lecture, case studies/problem-based learning approaches, supervised clinical experiences, human patient simulations, and nursing practice laboratory experiences are a few of the signature pedagogies for nursing education. Anyone teaching in a BSN program will include some or all of these signature pedagogies in their teaching practice. Passionate nurse educators engage in the scholarship of teaching and learning (SoTL), and subject their pedagogical achievements for peer review. Please respond to the next 3 statements [29, 30, & 31] about SoTL, the pedagogies unique to nursing education, and your passion for teaching. Eighteen panelists answered all three closed-ended questions in this section. Item 29 reached dissensus among panelists, with three disagreeing to having any plan to begin a SoTL program in nursing education, six unsure about the prospect, four agreeing to it, and five strongly agreeing to the idea. Item 30 reached
consensus, with panelists agreeing ($n = 5$) to being passionate about teaching, and 12 panelists strongly agreeing to being passionate about teaching. Only one panelist was unsure if they were passionate about teaching. Item 31 reached consensus, with the majority of panelists ($n = 9$) strongly agreeing to the idea that learning about new teaching strategies enhanced their passion for teaching, and six panelists agreeing to the statement. Only one panelist disagreed and two panelists were unsure.

**Theme 8 open-ended question.** Please provide any feedback regarding your impressions of statements 29, 30 & 31 in the text box below. Consider sharing your ideas, visions, or passion for developing a program of scholarship that excites you, or speak to your reservations about getting involved in SoTL while teaching in an undergraduate program. Four of the 19 panelists provided narrative responses to the eighth open-ended question. Apparently, the items in this section did not inspire much reflection on the topic of signature pedagogies in nursing. It was not possible to detect a reason for the lack of opinions offered by the panelists, but they may have felt that this section was redundant.

**Theme 9: Undergraduate nursing students.** The literature on nursing students provides a few articles on the millennial generation learner. This cohort of learners is curious, socially conscious, and they sometimes behave as though they are entitled to earn good grades without much effort. Some have said that millennial learners will change the way education is conducted like no prior generational cohort. Please respond to the next 3 statements [33, 34, & 35] regarding aspects of teaching and learning with millennial learners. Item 33 reached dissensus among panelists, and this was likely due to the confusing way the item was worded. Item 34 reached consensus, with the majority
of panelists (n = 12) agreeing that millennial learners presented challenges to the current teaching methods employed in nursing programs. Four panelists strongly agreed to this statement, one panelist was unsure, and one panelist disagreed with the statement.

**Theme 9 open-ended question.** Please provide any feedback regarding your impressions of statements 33, 34 & 35 in the text box below. You might consider sharing some examples from classroom and clinical teaching experiences you feel exemplify your responses to the items in this section. Seven of the 19 panelists provided narrative responses to the ninth open-ended question. Narrative responses in this section indicated that panelists generally agreed that the millennial student cohort entering nursing programs were sometimes a challenge. One panelist made a comment that every successive student cohort was likely to require different approaches to teaching. Another panelist felt that the current student cohort lacked a certain amount of humility and appreciation for the value of education. This panelist’s narrative was reflective of the literature on millennial students, who were found to resist traditional teaching and learning approaches. Two panelists identified active learning strategies as a major factor to consider when planning to teach the current student cohort. The SoTL literature in nursing included work in simulation-based teaching strategies, where hands-on learning was possible. Reflective work was also mentioned by one panelist in an earlier section. Reflective writing strategies were mentioned in the literature on narrative pedagogy.

Delphi round one (R1) was an opportunity to gain access to expert nurse educator knowledge of the SoTL with the intent of collecting general information about BSN faculty perceptions surrounding the phenomenon. Faculty participating in the R1 survey qualified themselves as having advanced preparation in nursing and education, with 72.2
percent holding a master of nursing science or doctoral degree in nursing. Faculty expertise was reported in terms of feeling worthy of their peers reviewing their teaching methods. Responses to the prospect of peer reviews indicated moderate to high confidence levels were shared among the group members. A supportive learning community in nursing education would rely on what Moseley (2009) described as *essentials of excellence* in nursing education, where there were adequate numbers of nursing faculty with higher competency levels in teaching practice, in research, and in the clinical arena.

Faculty engagement with the SoTL would appear to hinge upon some catalyst to move the above single loop learning environment into a double loop learning environment. McKinney (2007) identified two clear pathways educators used to enter into the SoTL work: (a) the *motivation to engage* in scholarship increased with experience, interest, and opportunity, and (b) the individual scholar’s background of *advanced disciplinary understanding* and expertise. The two pathways, motivation and advanced disciplinary understanding, were interpreted as components that had the potential to bridge scholarly teaching practices into engagement with the SoTL domain.

If there was an overarching theme in the Delphi panelists’ perceptions it would be that the SoTL will find a place in a few of their teaching practices, but that most nursing faculty would not be very likely to engage in the process. There did not appear to be any middle space for faculty opinions surrounding the SoTL, except for a couple of *maybes*. The complexities of teaching in the BSN program were most clearly expressed by panelists who provided narratives. Under the current conditions of heavy teaching loads, the SoTL may present a level of complexity that exceeds most BSN program faculty
members’ capacity. Those narratives provided information to direct the development of the second Delphi round survey.

**Delphi Round 2**

Round 2 of the Delphi study began at the beginning of October, 2013 and ended on October 15, 2013. Eighteen panelists responded to the 50 Likert scale items that asked whether the item ranked as *not essential, minimally essential, unsure, essential,* or *completely essential.* The 17 items that achieved low, moderate, or high-level consensus scores were ranked by a majority of panelists as *essential* or *completely essential.* No low, moderate, or high-level consensus scored survey item was ranked as *not essential* or *minimally essential* to a barriers scale that measures faculty perceptions of the SoTL.

Survey items that achieved dissensus-level scores (n = 20) were examined for underlying patterns that might explain the lack of consensus reached among the Delphi R2 panelists. Survey items positioned at the end of the survey, items 40 through 50, all received dissensus-level scores except for item 43, which received the lowest level consensus score. Survey fatigue could have been a reason for the high number of survey items achieving dissensus-level scores at the end of the survey.

Other items appeared to lack any inspirational qualities, or were not clear to the panelists. On reviewing item four, the wording of the item’s content was possibly not clear, or was viewed as irrelevant. Survey items 13, 17, 20 through 22, 25, 27, 29, 33, and 35 through 37 also appeared to lack sufficient relevance as indicated by a spread of responses these items received. Survey item six achieved a dissensus-level score of 1.064, just below the low-level consensus threshold (*SD* = 1.06 or greater) because eight of the 17 panelists who responded to it were unsure. Survey item seven achieved a
dissensus-level score although the topic was something proposed in the literature as a barrier. However, the R₂ survey panelists who responded (n = 16) did not rank it as something they felt was suitable for a barriers scale, and two panelists skipped it. Eleven panelists skipped eight items on the R₂ survey. Of the eight items skipped, items 23, 24, 30, and 34 achieved high-level consensus scores. The topic of items 23 and 24 topic was student-related, and the topic of items 30 and 34 was change-related. These items may have just not been relevant to those who chose to skip them, as the four items appeared to be relevant to the majority of panelists who selected essential or completely essential responses.

**High-level Consensus Items**

1. The scholarship of teaching and learning (SoTL) remains an ill-defined concept for nurse educators (SD = .878).

2. Nurse educators must sacrifice some of their personal time in order to engage in scholarly teaching (SD = .998).

5. Mid-to-late career scholars of teaching with a Master’s degree possess the teaching expertise necessary to mentor new scholars of teaching (SD = .766).

8. Academic nurse educators who experience insufficient support early in their teaching career are unlikely to develop an interest in the SoTL (SD = .872).

10. The variety of possibilities in pursuing the SoTL is not understood by faculty members of undergraduate nursing programs (SD = .857).

14. The expectation for academic nurse educators to engage in the SoTL should be a universal one (SD = .970).
15. The scholarship of teaching and learning (SoTL) requires nurse educators to reprioritize their time ($SD = .708$).

16. Peer review of teaching practices is a precondition for advancing the SoTL in nursing education ($SD = .963$).

19. The sharing of scholarly teaching methods within the academic community impacts the overall quality of teaching in nursing ($SD = .485$).

23. A nurse educator’s orientation toward scholarly teaching indirectly impacts student learning in a positive way ($SD = .704$).

24. Student-centered approaches to teaching should be the primary focus of the scholarship of teaching and learning (SoTL) in nursing education ($SD = .624$).

26. Nurse educators use multiple sources for informing their scholarly teaching activities ($SD = .985$).

30. In teaching, planned change is difficult when access to a robust teaching support system is unavailable ($SD = .927$).

31. Established faculty members provide the greatest amount of support made available to new faculty members ($SD = .732$).

32. Academic nurse educators who engage in the scholarship of teaching and learning (SoTL) will require a more robust teaching support system ($SD = .937$).

34. Planned change can promote an open space for faculty reflection on teaching practices ($SD = .910$).

39. Currently, the SoTL concept is not a key component of the undergraduate teaching role ($SD = .907$).
Moderate-level Consensus Items

28. Diversity of teaching styles is the main reason for promoting the SoTL movement in nursing education ($SD = 1.003$).

Low-level Consensus Items

12. The distinction between scholarly teaching and the SoTL is not understood by faculty members of undergraduate nursing programs ($SD = 1.055$).

38. Multiple demands on the educator’s time prevent more involvement in a SoTL project ($SD = 1.036$).

43. The constant changes in undergraduate faculty prohibit increasing the SoTL engagement level ($SD = 1.057$).

Dissensus-level Items

The following $R^2$ survey items achieved a dissensus-level standard deviation (SD) score greater than 1.060.

3. Nursing academics’ engagement in a SoTL project amounts to practicing what they profess about the value of professionals maintaining a lifelong learning orientation ($SD = 1.084$).

4. The early career scholar of teaching has enough practice-based expertise in their subject matter to begin a SoTL program ($SD = 1.127$).

6. New faculty and/or faculty planning to retire soon are unlikely to engage in an SoTL program ($SD = 1.064$).

7. Academic nurse educators will only engage in the SoTL when it is tied to their annual performance appraisals ($SD = 1.209$).
9. Undergraduate nursing faculty require a minimum of 5 years of experience before they are ready to engage in the SoTL ($SD = 1.200$).

11. Academic nurse educators who actively share innovative teaching methods with their peers should also publish their teaching scholarship ($SD = 1.131$).

13. Engagement in SoTL is an individual choice to subject one’s work to peer review, a necessary condition of SoTL ($SD = 1.289$).

17. Faculty peer review of one another’s teaching enhances the likelihood of the SoTL occurring in undergraduate nursing programs ($SD = 1.289$).

18. Exposure to scholarly teaching habits is an important factor in building confidence in early academic nursing careers ($SD = 1.111$).

20. A successful beginning SoTL experience requires a PhD degreed mentor’s support early in a new faculty member's teaching career ($SD = 1.339$).

21. Peer review of teaching practices in the classroom is a prerequisite for advancing the SoTL in nursing education ($SD = 1.092$).

22. A good mentor can make the difference between a new faculty member meeting professional teaching milestones beyond the advanced novice teacher level ($SD = 1.178$).

25. Creativity is a necessary component of preparing to teach the intergenerational nursing students in today’s BSN classrooms ($SD = 1.339$).

27. Through the SoTL, scholarly inquiry in teaching styles is an important consideration for improving student learning ($SD = 1.185$).

29. The choice to engage in the scholarship of teaching and learning (SoTL) should rest solely with the individual nurse educator ($SD = 1.200$).
33. The current teaching support system made up of experienced faculty does not provide adequate support for new faculty members ($SD = 1.881$).

35. Nurse practitioner and/or doctor of nursing practice (DNP) program graduates will require a robust teaching support system as they begin to learn teaching roles ($SD = 1.182$).

36. Academic nurse educators are more satisfied in their teaching role when they are afforded consistent teaching assignments ($SD = 1.178$).

37. Monetary policies limit opportunities for faculty to attend educational conferences, impeding the SoTL that is needed to transform undergraduate nursing education ($SD = 1.200$).

40. The service component of the undergraduate teaching role overshadows the SoTL concept ($SD = 1.236$).

41. Undergraduate teaching workloads are determined without consideration of the SoTL ($SD = 1.204$).

42. Undergraduate workload demands require time management strategies that only come with years of experience ($SD = 1.098$).

44. Undergraduate nursing program faculty who have not completed doctoral level studies are unlikely to begin a SoTL project on their own ($SD = 1.367$).

45. To engage in the SoTL, undergraduate faculty will need sufficient release time from regular teaching duties ($SD = 1.294$).

46. Any curriculum revision planning should consider implementing SoTL early in the process ($SD = 1.137$).
47. Peer review combined with student feedback provides a significant source for SoTL topics to investigate ($SD = 1.144$).

48. Faculty must find their passion in nursing education before pursuing a SoTL project ($SD = 1.304$).

49. A school-based center for the scholarship of teaching is essential to launching any SoTL projects in the undergraduate nursing program ($SD = 1.500$).

50. Undergraduate nursing program faculty members who only teach in the clinical setting need classroom teaching experience before beginning a SoTL project ($SD = 1.516$).

The $R_2$ survey items that were retained for use in the final Delphi survey’s development were displayed in chapter four (table 6).

**Delphi Round 3**

The survey for the final Delphi round was completed immediately following the $R_2$ survey data analysis. The $R_3$ survey was designed, reviewed for any last minute need for correction, and printed for use as an onsite paper and pencil clipboard survey. The survey was administered at the end of the third week in October, 2013.

**Delphi $R_3$ Survey Analysis**

The $R_3$ Delphi survey represented a cumulative result of qualitative and quantitative data stream mixing. Standard deviation scores were used to determine the level of consensus with the $R_3$ Delphi survey items administered to the professional nurse educator conferees (see Table 6, p. 135). Ten of the 25 $R_3$ survey items (8, 14, 16, 18, 20, 21, 22, 23, 24, and 25) attained high-level consensus among the participants.
However, several participants answered a total of 17 survey items with an *unsure* response, and this occurred approximately 10 percent of the time.

Several possible reasons were considered for the numerous unsure responses. Perhaps the decision to word the items using inverse coding was confusing and failed to achieve the intended effect of requiring participants to carefully interpret them and decrease the use of blanket responses. Perhaps the convention exhibition hall area where survey volunteers completed the survey was too noisy and too distracting to focus on the survey items’ intended meanings. Also, the survey subject matter may not have been sufficiently communicated to the volunteer participants, thereby catching some off guard and unsure about what participation in the survey would require of them in terms of prior knowledge surrounding the SoTL. Perhaps the subject matter was not relevant to some of the volunteer participants, and they completed the survey out of courtesy to the researcher, who was a fellow educator and conference attendee.

Findings from the R3 survey revealed that participants expressed positive opinions about six issues presented to them in the surveys: (a) participants agreed with the idea that academic leadership should encourage more autonomy among undergraduate program faculty in determining their workload mix, (b) participants agreed that a variety of faculty development and learning opportunities should be supported, (c) participants shared in the sentiment that faculty were valuable sources of knowledge for curriculum revision planning, (d) participants agreed that experienced faculty were an important resource for supporting newer faculty members’ success, (e) participants shared an opinion that advance practice nurses and DNPs would require significant faculty development time when beginning a teaching career in nursing, and (f) participants
agreed to the idea that the tripartite academic role expectations in nursing education should be balanced by a school mission that equated the SoTL with discipline-specific research.

Participants also expressed negative opinions about four topics presented to them in the study: (a) participants disagreed that a top-down reform of nursing education was more likely than reform efforts generated by faculty, (b) participants disagreed with the characterization of higher education as an industrialized setting where the expectations disagreed with the characterization that both MSN and/or PhD faculty lacked sufficient SoTL experience to be effective models to others, and (d) participants disagreed with the characterization of SoTL studies reported in nursing journals were too theoretical to be of any practical use in the classroom, simulation lab, clinical area, or reflective learning exercises.

**Discussion of the Results in Relation to the Literature**

A discussion of the results in relation to the literature reviewed in the chapter two is provided, and followed by a discussion of the implications of the results for practice and recommendations for future research.

**Credibility via the Audit Trail**

An audit trail of annotations was maintained throughout the study. According to Thorne (2008), four requirements that must be met by a qualitative study included epistemological integrity, representative credibility, analytic logic, and interpretive authority. In line with the pragmatic constructivist’s approach to interpretation, an iterative model of the SoTL phenomenon was constructed as a means of recording the audit trail annotations created over the course of the study (see figures 1 through 4, &
The mixed-method approaches used in the study were documented through the creation of a flow diagram (see figure 5). The model images and flow diagram were meant to achieve what Altheide and Johnson (as cited by Thorne, 2008) referred to as a form of reflexive accountability, in that each one depicts and account of what occurred over the course of the study.

**Trustworthiness of a Bricolage**

Trustworthiness has been used in qualitative research to describe what reliability means to quantitative researchers. Another term that has been used is consistency (Merriam, 2009) to mean that the results are consistent with the data collected. Lincoln and Guba (as cited by Merriam, 2009) re-conceptualized reliability in qualitative work as dependability or consistency (p, 221). According to Denzin and Lincoln (2013), the interpretive bricoleur’s product was like a complicated, reflexive construction or montage of interconnected visual representations of a phenomenon’s parts that connected to a larger whole. A montage is synonymous with the bricolage, or an assembly of bricoles, bits and parts gathered here and there to make something useful. The mixed-methods design proposed in this study was followed in the sequences described in figure 5, step-by-step to the end. Time to completion was protracted as the data stream mixing process peeled away layers of obscurity, and revealed new truths bit-by-bit until a whole could be discerned from the data streams. The extended time factor was critical to the researcher’s consistent, persistent efforts to develop a description of the SoTL phenomenon in terms that would be relevant to nurse educators. The results were evidenced by the creation of a barriers scale useful for advancing the knowledge surrounding the SoTL in nursing.
education, and a descriptive model that appeared to have relevance for nurse educators seeking understanding of the SoTL phenomenon within the context of teaching nursing.

Results of the three round Delphi study of faculty perceptions of barriers to the SoTL in BSN programs indicated that nursing faculty agreed that certain conditions within the teaching context of the undergraduate nursing program impacted nursing faculty engagement with the SoTL. The barriers scale was found to have application as a tool for capturing nursing faculties’ level of agreement about the SoTL in the context of teaching in a BSN program. The iterative survey development process was thoroughly grounded in the literature.

Over the course of a year and three months, the review of the literature served as the field in which constant comparisons were conducted, and from which theory triangulation yielded an emerging theory of the SoTL in undergraduate nursing. The SoTL cycle became the core category, or nucleus for thinking about the context in which undergraduate nursing faculty teach, conduct scholarship, and provide service to their institution of higher learning. The SoTL cycle (figure 1) constructs discover-plan-apply-evaluate-share were inductively derived from Kreber’s (2001) items (see appendix B, table B4) and from Patterson and Klein’s (2012) report of their survey-based study of nursing faculty utilization of evidence-based teaching practices (EBTPs).

Patterson and Klein (2012) described how the nursing faculty in their study initiated the use of evidence-based teaching practices (EBTPs) in the classroom and clinical setting. Planning was a central stem in the EBTP utilization process for faculty who made changes to their teaching routines (Patterson & Klein, 2012). However, assessment of a new teaching strategy was not an initial step taken by most of the
Patterson and Klein (2012) study participants, and occurred later, through student course evaluations and positive feedback about improved understanding of the material.

**The CrCD model.** Iwasiw et al. (2009) context-relevant curriculum development model constructs provided the core category *nurse educators* and the internal for consideration during the construction of the R1 Delphi survey Likert scale items the associated open-ended questions. Internal contextual factors derived from the CrCD model (Iwasiw et al., 2009) and used in constructing the R1 survey items included *academic culture, SON infrastructure, funding, rank and promotion policies, nursing and nursing education history, and the SON philosophy-mission-goals*. External contextual factors derived from the CrCD model (Iwasiw et al., 2009) and included for use in constructing the R1 survey items included *demographics, local and regional environment, health and healthcare infrastructure, local and regional culture, sociopolitical and socioeconomic trends, and technology*. The nurse educator nucleus became the central focus for constructing R1 Delphi survey items using the SDT (Deci and Ryan, 2002). Figure 6 depicts the SoTL environment in nursing academe, and represents concepts from the three theories, as well as from the literature reviewed in chapter two. The SoTL environmental model (see figure 7) was developed with a fluid quality in mind, and where components in the model could be replaced, or added to, to make it more relevant to another scholar’s research needs.
The SoTL environment model depicts a double-loop learning dynamic emerging from the single-loop learning cycle depicted in figure 3. The SoTL cycle (see figure 1) elements are incorporated in the SoTL environment model.

**Limitations**

The local nature of the research activities conducted during the first 2 Delphi rounds limits the transferability of the findings to other undergraduate nursing programs. The third Delphi round data were obtained from a wider group of expert nurse educators, and therefore may have provided a counterbalance to the very particularistic character of the first two Delphi data sets. However, the usefulness of the barriers scale would be limited in schools of nursing that lacked a balanced cadre of educators, clinicians, and researchers. The NLN (2013) Hallmarks of Excellence in Nursing Education faculty indicator statements included a necessary criterion where deliberate faculty selection
processes fostered a balanced resource of expert faculty members. Schools that lacked balance in the level of expertise among full-time faculty could not derive much good from an in depth survey of their faculty members’ perceptions surrounding the SoTL. Schools that lacked sufficient numbers of scholarship-savvy faculty would not have the necessary resources in place to act on the survey findings. The barriers scale’s utility would also be limited in schools of nursing where the mission is focused on teaching alone.

**Implication of the Results for Practice**

The initial idea for creating a valid barriers scale came from a notion that a survey instrument could be easily administered to a group of nursing faculty to explore their perceptions surrounding the scholarship of teaching. The barriers scale was crafted with nursing faculty in mind like those who participated in the three Delphi study rounds. The SoTL phenomenon was not something many of them considered, as was indicated by the data. However, over the course of the slow, deliberate data analysis phase, an unexpected and unrelated cultural shift in favor of scholarship occurred at the SON where the first two Delphi rounds were conducted.

A coincidental series of events at the researcher’s SON led toward a campus culture taking on a more research intensive purpose. The unexpected event of the SON’s increased focus on scholarship was appreciated and welcomed as an enhancement to the experience of investigating a potential for the SoTL as a catalyst to education reform in nursing. The new focus on scholarship at all levels of the SON became instructive for developing additional insight in matters of scholarship and BSN faculty inclinations toward scholarship. Although unplanned and unexpected, this positive turn of events
afforded the researcher a rare opportunity to witness some barriers to scholarship reduced by a cultural shift that encouraged faculty engagement in all forms of scholarship at the SON. Greater insight was gained by the researcher’s location as a participant observer in the SON’s transformation process. Hence, a better appreciation of the complexities of the SoTL as a phenomenon influenced by multiple socially contextual factors in undergraduate nursing education was gained, and the knowledge was used to inform the research findings. Implications of the study results for practice became clear; awareness of the need for faculty to consider engaging in some form of scholarship could be heightened by introducing a single, catalytic element into the social context of teaching.

Multiple context-relevant factors found in the literature were considered to be components that potentially impacted nurse educator engagement with scholarship. A moral aspect to scholarly teaching was one component with the potential to impact scholarship activities. According to Birmingham (2004), the moral aspect would require the teacher to reflect on what a virtuous person would do to be intellectually careful in order to avoid being swayed by too little evidence, or by requirements of excessive amounts of evidence. A common deterrent to the SoTL noted in the literature was a pernicious lack of time to engage in critical reflection on teaching matters. According to Ryan and Deci (2006), a control-oriented strategy would work to self-regulate actions accordingly when multiple demands on available time prevailed. Successful outcomes from the control-oriented strategy in nursing education would likely lead to the common endorsement that insufficient time was a normal social contingency. Therefore, autonomy in nursing education would be more easily attainable through strong time management skills, and through identification with the teaching role as something that
might be worth considering as a possible scholarship endeavor. Birmingham (2004) identified the qualities of social contingencies that teachers needed from a supportive learning community. Those qualities included freedom, security, time, and space enough to reflect, to take risks, and to ask important questions (Birmingham, 2004). The SoTL has been identified as something that requires all of the same attributes that Birmingham (2004) characterized as necessary in a supportive learning community. The Delphi study findings revealed that it was possible to quantify a nursing faculty group’s inclination to engage in scholarship by using an instrument like the barriers scale. The barriers scale might also be useful for qualitatively estimating the potential impact a catalyst for change might have on a particular group of faculty that were neither resistant to engaging in scholarship, or especially keen on becoming immersed in scholarly endeavors beyond the routine teaching role expectations.

Low to moderate research intensity level schools of nursing stand to benefit the most from implementing the barriers scale with faculty, and thereby begin a dialectic surrounding scholarship in undergraduate nursing. The barriers scale was conceived and designed with a pragmatic approach and a pragmatic end in mind. Research interest groups in SONs might find the barriers scale useful for quantifying what their faculty peers qualitatively feel about engaging in the scholarship of teaching. However, as no two schools of nursing share the same faculty, very different results may be obtained, and should therefore be interpreted with caution.

**Recommendations for Further Research**

Further research in faculty perceptions surrounding the SoTL in undergraduate nursing programs should include the continued refinement of the barriers scale.
According to Hassen and Keeney (2011), findings from Delphi studies should be confirmed through other means, including other methods such as focus groups and comparison with related published research. A focus group approach to improving the wording of the scale items would be one way to increase the representativeness of the items.

An improved version of the barriers scale would decrease survey error, and thereby increase the instrument’s reliability. A large scale study with 300-plus nurse educators would provide the means to determine both external validation and reliability of the instrument. Rea and Parker (2008) recommended a similar sample size for generalizing to a relatively small population of less than 100,000. However, the most recent nationwide survey of nurse educators revealed that scholarship was not an intellectual pursuit shared by many U. S. nursing faculty.

A review of cross-tabulated data collected by the Robert Wood Johnson Foundation funded nursing faculty survey (RWJF, 2009) revealed important differences in the research intensity level of an institution and the numbers of individuals with published articles. Low intensity institutions \( (n = 2329) \) had far more unpublished faculty \( (n = 2084) \) than faculty with one or more published articles \( (n = 245) \), or 89.5 percent unpublished versus 10.5 percent published; whereas high intensity institutions \( (n = 745) \) had an equal number of published faculty \( (n = 371) \) versus unpublished \( (n = 374) \), or 49.8 percent published versus 50.2 percent unpublished (RWJF, 2009). These numbers suggested that a realistic expectation of faculty following through with published scholarship was low for the majority of schools of nursing in the United States. The numbers also suggest that the level of research intensity where nursing faculty teach
was positively correlated with the potential for published scholarship. Therefore, it is likely that, by design, low level research intensity institutions create barriers to faculty participation in scholarship.

A review of the nurse faculty survey data revealed difference in scholarship activity levels between low and high level research intensity institutions. In low level intensity institutions \((n = 2336)\) the mean hours spent by faculty conducting research was 1.2 hours, whereas in high level intensity institutions \((n = 736)\) the mean hours spent by faculty conducting research was 7.5 hours (RWJF, 2009). One conclusion from these numbers is that when the faculty role expectation bar is raised for scholarship, more engagement in scholarship occurs. However, according to Bartels (2007), when faculty role expectations are too high, many nursing faculty will do it all, and then exit the role to return to practice, or to an early retirement. Insufficient time and role overload was acknowledged as two significant barriers to scholarship in nursing education. Faculty role expectation for engaging in scholarship appeared to act either as a barrier to scholarship in institutions identified as low level research intensity institutions, or sometimes as a catalyst for scholarship in institutions identified as high level research intensity institutions.

A balance in faculty role expectations appears to be key to decreasing barriers to the SoTL. According to Bittner and O’Connor (2012), a sample of nurse educators \((n = 226)\) reported an intent to leave their current position in the next five years because of insufficient compensation, a lack of work life balance and flexibility, retirement, or for a better job offer. The results of Bittner and O’Connor’s (2012) study indicated the complexities of academic nursing need attending to by deans and directors, who need to
focus on improving work load balance, faculty engagement levels, and increasing faculty development opportunities. Bartels (2007) recited Einstein’s statement that, “the significant challenges we have cannot be solved at the same level of thinking at which we created them” (p. 158). A very different level of thinking about how to address the significant challenges the nursing profession’s academy faces was explored during this Delphi study of nursing faculty perceptions.

The mixed methods design implemented in this study could be redesigned as an action research project that involved both nursing faculty and nursing students. Levin and Greenwood (2013) described action research as a means of connecting educators with stakeholders in a co-creative knowledge building collaboration. The theoretical underpinnings elaborated in this Delphi study would supply relevant constructs for an action research effort linking nurse educators with clinical practice experts, and with clinical students to collaborate on a SoTL study designed to decrease the widening practice-education gap. A final recommendation for further research might include other possible designs for expanding on the current research, but should not include the same lines of thinking about the SoTL and nurse educator work life that has prevailed over the past 40-plus years.

**Conclusion**

The faculty perceptions of barriers to the SoTL scale should be developed further, and tested with a larger sample of nurse educators prior to any practical application of the instrument. The goal of developing a barriers scale was to create a tool for nursing faculty to use to measure their perceptions of barriers to the SoTL, and enter into discussions surrounding those perceptions. The particularistic nature of an instrument
developed through the Delphi method may not require an extensive revision to achieve the qualities of a valid and reliable instrument.

Faculty discussions surrounding the shared perceptions of barriers to the SoTL could potentially result in educators coming to grips with some important issues that precluded any real transformation of nursing education. One very important finding in the study was an issue that nursing education shared with other disciplines in higher education, an educational system that had drifted away from its primary liberal education aims to add significant educational value to individuals, who in turn would add a significant value to society. Gresley (2009) characterized the current state of nursing education science as a nascent science that could only be advanced through scholarship that yielded evidence for improved teaching practices. An accurate appraisal of faculty perceptions of the scholarship of teaching through the use of valid and reliable survey instrument specifically designed to measure those perceptions would be useful for faculty development specialists and academic program administrators seeking clues to how they could approach a group of faculty needing guidance in increasing their engagement in scholarly activities.

Radical transformation of undergraduate nursing curricula will transpire when a sufficient number of nursing faculty are able to internalize the SoTL, and realize that the SoTL is a valuable skills set that they have lacked for many years. Nursing faculty have learned to educate generations of nurses within systems that were often at cross purposes with the nursing profession’s development. Hutchings et al. (2011) described how most institutions of higher learning were unaware of, “what and how much their students [were] learning” (p. xi). Similarly, Benner et al. (2010) described how most health care
organizations had developed continuing education for nurses, but the purpose of the continuing education was based in technical and regulatory issues that lacked any real potential to improve clinical know-how, or what Schön (as cited by Kinsella, 2007) referred to as knowing-in-action, and leading to improved practice. Goodman (2013) argued that the university and nursing education were conflicted in their educational purpose, and that nursing education was essentially back to instrumentally tending to the medical establishment as a handmaiden. The point Goodman (2013) advanced was that instrumentalism, the duty to produce practice-ready nurses, had stunted the profession’s intellectual growth and put nursing education in a state of reactivity to external forces beyond its control. In the Delphi study, panelists’ comments regarding their coping with the ever-changing context in teaching indicated that so many changes made evaluating teaching effectiveness almost an impossibility. One panelist’s comment put it very succinctly, stating that the SoTL seemed too involved to consider attempting at this point in her career. That single statement was a highly representative example of why advancements in nursing education science would seem to be an unrealistic expectation for the present, and given the lack of autonomy that nurse educators described in their experiences in teaching undergraduate nursing.

The SoTL was described in the literature as having theoretical and philosophical underpinnings. Teaching was characterized as serious intellectual work (Hutchings et al., 2012) with a critical view of student learning as its main purpose. Kreber (2013) provided an in depth explanation of the SoTL as a practice with virtues, and involved practitioners in deep reflection, and that it was not just another set of criteria for educators to check off as evidence for their scholarship duties. Kagan, Smith, Cowling,
and Chinn (2009) promoted a more emancipated form of nursing scholarship, and called for nurse educators to examine nursing education’s lack of opportunities for students to experience liberation and critical worldviews so important to developing reflective practitioners. These views of scholarship in teaching and specifically teaching in the professions do characterize teaching as serious intellectual work.

Teaching in nursing was described in a few discussions located in the literature as a theoretically-based intellectual activity. Bevis (as cited by Vandeveer, 2009) delineated the teacher’s role as one leading student engagement in intellectual processes, and not just the creation of conditions favorable to learning. Vandeveer (2009) summed up nursing education’s philosophical and theoretical underpinnings as elemental structures for the educational experience that engaged both learner and instructor in an increasingly emancipatory learning transaction. The teacher-student transaction concept was something Bellack (2008) characterized as essential to the transformation of nursing education, with expert faculty committed to an iterative improvement process involving rapid cycles of success and failure driven by faculty-student teams. The faculty-student team concept represents the crossroads that nursing education has reached.

Nursing faculty will have to guide curriculum reform efforts by involving their students in the process, and thereby create a new learning environment that is no longer content heavy and learning light (Bellack, 2008). A comment made by a Delphi panelist and nurse educator scholar expressed an essential aspect of engaging in the SoTL, stating that routine was her nemesis and that change energized her teaching. Another panelist explained how she believed that some students resisted learning how to be self-directed learners, and expressed their discomfort by complaining that they were teaching
themselves. The panelist added that when that occurred, she knew that the students were just beginning to learn to listen to themselves, and to reflect on what was really their own best way of learning in nursing. Faculty in the Delphi study were engaged in scholarly teaching practices, and were also student-centered to the degree that they were comfortable handing the proverbial reins over to their students. One panelist expressed her belief that students came to nursing with skills they acquired earlier, and those skills just needed to be redirected and applied to learning a profession. The ultimate barrier to the SoTL in nursing education may lie within faculty who cannot find a clear path to creating emancipating learning experiences for their students because they are disturbed by the prospect of failure, and because they failed to learn that failure was their best teacher when they were learning to be a nurse.

A final though is considered, one that came from teaching experience in BSN programs and reflecting on professional teaching practices. There are those who are content only teaching, and there are those who join committees because they enjoy the collegial interaction. The SoTL will become yet another career choice to pursue, as an individual’s intellectual interests influence their engagement with scholarship, with service to the college where they teach, or whether to persist only at the teaching role. Those who enjoy unraveling a particularly challenging educational problem compounded by the complexities associated with teaching, learning, and education science will find a fascinating aspect of nursing education to study. For the present, those who do engage in the SoTL in nursing will find that the opportunities to explore this uncharted territory will be wide open for some time to come, as so few others have gone before them and started the groundwork to advance nursing education science.
REFERENCES


Hebenstreit, J. J. (2012). Nurse educator perceptions of structural empowerment and innovative behavior. *Nursing Education Perspectives, 33*(5), 297-301. doi: 10.5480/1536-5026-33.5.297


APPENDIX A. STATEMENT OF ORIGINAL WORK

Academic Honesty Policy

Capella University’s Academic Honesty Policy (3.01.01) holds learners accountable for the integrity of work they submit, which includes but is not limited to discussion postings, assignments, comprehensive exams, and the dissertation or capstone project.

Established in the Policy are the expectations for original work, rationale for the policy, definition of terms that pertain to academic honesty and original work, and disciplinary consequences of academic dishonesty. Also stated in the Policy is the expectation that learners will follow APA rules for citing another person’s ideas or works.

The following standards for original work and definition of plagiarism are discussed in the Policy:

Learners are expected to be the sole authors of their work and to acknowledge the authorship of others’ work through proper citation and reference. Use of another person’s ideas, including another learner’s, without proper reference or citation constitutes plagiarism and academic dishonesty and is prohibited conduct. (p. 1)

Plagiarism is one example of academic dishonesty. Plagiarism is presenting someone else’s ideas or work as your own. Plagiarism also includes copying verbatim or rephrasing ideas without properly acknowledging the source by author, date, and publication medium. (p. 2)

Capella University’s Research Misconduct Policy (3.03.06) holds learners accountable for research integrity. What constitutes research misconduct is discussed in the Policy:

Research misconduct includes but is not limited to falsification, fabrication, plagiarism, misappropriation, or other practices that seriously deviate from those that are commonly accepted within the academic community for proposing, conducting, or reviewing research, or in reporting research results. (p. 1)

Learners failing to abide by these policies are subject to consequences, including but not limited to dismissal or revocation of the degree.
## Statement of Original Work and Signature

I have read, understood, and abided by Capella University’s Academic Honesty Policy (3.01.01) and Research Misconduct Policy (3.03.06), including the Policy Statements, Rationale, and Definitions.

I attest that this dissertation or capstone project is my own work. Where I have used the ideas or words of others, I have paraphrased, summarized, or used direct quotes following the guidelines set forth in the APA *Publication Manual*.

<table>
<thead>
<tr>
<th>Learner name</th>
<th>James Godwin Harris</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mentor name and school</td>
<td>Dr. Valerie Coxon   School of Education</td>
</tr>
<tr>
<td>Learner signature and date</td>
<td>James G. Harris 09/01/2014</td>
</tr>
<tr>
<td>Item</td>
<td>Statement</td>
</tr>
<tr>
<td>------</td>
<td>---------------------------------------------------------------------------</td>
</tr>
<tr>
<td>1</td>
<td>I engage in scholarly teaching activities (e.g. literature reviews, critical reflections on past teaching, peer feedback) whenever I prepare to teach.</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>I am considering beginning a SoTL program based on my teaching achievements</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>I believe that SoTL in nursing education provides a reinvigorating experience I believe would enhance my joy of teaching.</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>See narrative analysis</td>
</tr>
<tr>
<td>5</td>
<td>Where I teach, the expectation for faculty engaging in teaching-related scholarship activities is defined in a faculty handbook, or in a similar guideline.</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Complete the following statement. Where I teach, I believe _____ faculty members are engaged in the SoTL.</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Complete the following statement. The prospect of having my teaching subjected to peer review makes me feel _____ .</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>See narrative analysis</td>
</tr>
<tr>
<td>9</td>
<td>I have considered engaging in the scholarship of teaching and learning (SoTL).</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>I believe my teaching methods are worthy of peer review.</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table B1 Continued
Delphi Round 1 Survey Frequencies and Percentages

<table>
<thead>
<tr>
<th>Item</th>
<th>Statement</th>
<th>N</th>
<th>Response type and frequencies [percent]</th>
</tr>
</thead>
<tbody>
<tr>
<td>11</td>
<td>I enjoy the challenge of presenting a well-prepared presentation, essay, or other scholarly artifact to my peers.</td>
<td>19</td>
<td>Strongly Disagree Disagree Unsure Agree Strongly Agree</td>
</tr>
<tr>
<td></td>
<td>0 [0%]</td>
<td>0 [0%]</td>
<td>3 [15.8%]</td>
</tr>
<tr>
<td>12</td>
<td>See narrative analysis</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>BSN program faculty members (new or established) where I teach receive _____ support in their efforts to learn to teach courses that are new to them.</td>
<td>19</td>
<td>no minimal Inconsistent adequate exceptional</td>
</tr>
<tr>
<td></td>
<td>3 [15.8%]</td>
<td>4 [21.1%]</td>
<td>9 [47.4%]</td>
</tr>
<tr>
<td>14</td>
<td>Complete the following statement: My most recent experience with learning to teach a new course assignment was ________.</td>
<td>19</td>
<td>traumatic almost unbearable barely tolerable bearable optimal</td>
</tr>
<tr>
<td></td>
<td>1 [5.3%]</td>
<td>2 [10.5%]</td>
<td>3 [15.8%]</td>
</tr>
<tr>
<td>15</td>
<td>I consider myself to be a self-directed learner who enjoys a new challenge on a regular basis.</td>
<td>19</td>
<td>Strongly Disagree Disagree Unsure Agree Strongly Agree</td>
</tr>
<tr>
<td></td>
<td>0 [0%]</td>
<td>2 [10.5%]</td>
<td>0 [0%]</td>
</tr>
<tr>
<td>16</td>
<td>See narrative analysis</td>
<td></td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>Complete the following statement. My transition into teaching in nursing was a ________ experience.</td>
<td>19</td>
<td>very disappoint. somewhat disappoint. neutral satisfying very satisfying</td>
</tr>
<tr>
<td></td>
<td>1 [5.3%]</td>
<td>4 [21.0%]</td>
<td>5 [26.3%]</td>
</tr>
<tr>
<td>Item</td>
<td>Statement</td>
<td>N</td>
<td>Response type and frequencies [percent]</td>
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<tr>
<td>19</td>
<td>I feel that teaching in a BSN program is a worthwhile scholarly endeavor that I would like to share in a larger public forum.</td>
<td>19</td>
<td>Strongly Disagree Disagree Unsure Agree Strongly Agree</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>0 [0%] 0 [0%] 4 [21.1%] 13 [68.4%] 2 [10.5%]</td>
</tr>
<tr>
<td>20</td>
<td>See narrative analysis</td>
<td></td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>My institution’s mission clearly articulates a single (teaching), dual (teaching &amp; service), tripartite (teaching, service, research), or teaching and research expectation statement for faculty to follow.</td>
<td>18</td>
<td>Strongly Disagree Disagree Unsure Agree Strongly Agree</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>0 [0%] 3 [16.7%] 3 [16.7%] 8 [44.4%] 4 [22.2%]</td>
</tr>
<tr>
<td>22</td>
<td>I readily accept the workload expectations regardless of the level of commitment required.</td>
<td>18</td>
<td>Strongly Disagree Disagree Unsure Agree Strongly Agree</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>0 [0%] 3 [16.7%] 4 [22.2%] 10 [55.5%] 1 [5.6%]</td>
</tr>
<tr>
<td>23</td>
<td>Complete the following statement: I was ____ aware of the level of commitment required of teachers in nursing program[s] before I decided to begin my academic teaching career.</td>
<td>18</td>
<td>Strongly Disagree Disagree Unsure Agree Strongly Agree</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1 [5.6%] 7 [39.8%] 6 [33.3%] 3 [16.7%] 1 [5.6%]</td>
</tr>
<tr>
<td>25</td>
<td>I rely on a traditional trial and error approach to improving my teaching.</td>
<td>18</td>
<td>Strongly Disagree Disagree Unsure Agree Strongly Agree</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>0 [0%] 6 [33.3%] 0 [0%] 11 [61.1%] 1 [5.6%]</td>
</tr>
<tr>
<td>26</td>
<td>I engage in SoTL activities, including peer review, before I make improvements to my teaching.</td>
<td>18</td>
<td>Strongly Disagree Disagree Unsure Agree Strongly Agree</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>0 [0%] 3 [16.6%] 4 [22.2%] 10 [55.6%] 1 [5.6%]</td>
</tr>
<tr>
<td>27</td>
<td>I believe some people are natural-born teachers who do not need to work at improving their teaching as much as I do.</td>
<td>18</td>
<td>Strongly Disagree Disagree Unsure Agree Strongly Agree</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>0 [0%] 9 [50.0%] 6 [33.3%] 1 [5.6%] 2 [11.1%]</td>
</tr>
</tbody>
</table>
Table B1 Continued  
Delphi Round 1 Survey Frequencies and Percentages

<table>
<thead>
<tr>
<th>Item</th>
<th>Statement</th>
<th>N</th>
<th>Response type and frequencies [percent]</th>
</tr>
</thead>
<tbody>
<tr>
<td>28</td>
<td>See narrative analyses</td>
<td></td>
<td></td>
</tr>
<tr>
<td>29</td>
<td>I plan to develop a SoTL program around one or more of the signature pedagogies.</td>
<td>18</td>
<td>Strongly Disagree 0 [0%] Disagree 3 [16.7%] Unsure 6 [33.3%] Agree 4 [22.2%] Strongly Agree 5 [27.8%]</td>
</tr>
<tr>
<td>30</td>
<td>I am passionate about teaching nursing.</td>
<td>18</td>
<td>Strongly Disagree 0 [0%] Disagree 0 [0%] Unsure 1 [5.6%] Agree 5 [27.7%] Strongly Agree 12 [67.7%]</td>
</tr>
<tr>
<td>31</td>
<td>Learning about the expanding possibilities in nursing education challenges my level of passion for teaching in a positive way.</td>
<td>18</td>
<td>Strongly Disagree 0 [0%] Disagree 1 [5.6%] Unsure 2 [11.1%] Agree 6 [33.3%] Strongly Agree 9 [50.0%]</td>
</tr>
<tr>
<td>32</td>
<td>See narrative analysis</td>
<td></td>
<td></td>
</tr>
<tr>
<td>33</td>
<td>Undergraduate nursing programs must prepare future nurses 33 for professional practice through the most efficient manner possible, regardless of the generational cohort of learners’ characteristics.</td>
<td>18</td>
<td>Strongly Disagree 1 [5.6%] Disagree 7 [39.9%] Unsure 4 [22.2%] Agree 2 [11.1%] Strongly Agree 4 [22.2%]</td>
</tr>
<tr>
<td>34</td>
<td>Millennial learners present challenges to current teaching methods in undergraduate nursing program classrooms and clinical settings.</td>
<td>19</td>
<td>Strongly Disagree 0 [0%] Disagree 1 [5.3%] Unsure 1 [5.3%] Agree 12 [63.2%] Strongly Agree 4 [21.1%]</td>
</tr>
<tr>
<td>35</td>
<td>I am __________ interested in investigating best practices in teaching and learning for the millennial generation of nursing students.</td>
<td>19</td>
<td>not at all 0 [0%] minimally 0 [0%] partially 2 [11.1%] mostly 5 [27.8%] completely 11 [61.1%]</td>
</tr>
</tbody>
</table>
R1 Survey Demographic Data

37. Which of the following categories best describes your weekly teaching obligations?

<table>
<thead>
<tr>
<th>Hours per week teaching</th>
<th>1-4 hours</th>
<th>5-9 hours</th>
<th>10-14 hours</th>
<th>15-19 hours</th>
<th>20-24 hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>5.6%</td>
<td>16.7%</td>
<td>11.1%</td>
<td>11.1%</td>
<td>55.6%</td>
</tr>
<tr>
<td></td>
<td>(1)</td>
<td>(3)</td>
<td>(2)</td>
<td>(2)</td>
<td>(10)</td>
</tr>
</tbody>
</table>

38. Which category below includes your age?

<table>
<thead>
<tr>
<th>Age Category</th>
<th>21-29</th>
<th>30-39</th>
<th>40-49</th>
<th>50-59</th>
<th>60 or older</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage</td>
<td>0%</td>
<td>5.5%</td>
<td>16.7%</td>
<td>61.1%</td>
<td>16.7%</td>
</tr>
<tr>
<td>Response Count</td>
<td>(1)</td>
<td>(3)</td>
<td>(11)</td>
<td>(3)</td>
<td></td>
</tr>
</tbody>
</table>

39. Are you male or female?

<table>
<thead>
<tr>
<th>Gender</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage</td>
<td>5.6%</td>
<td>94.4%</td>
</tr>
<tr>
<td>Response Count</td>
<td>(1)</td>
<td>(17)</td>
</tr>
</tbody>
</table>

40. About how long have you been in your current position?

Range in years (mean = 4.5 years)

41. Which of the following best describes the field in which you received your highest degree?

<table>
<thead>
<tr>
<th>Field</th>
<th>Nursing Science</th>
<th>Education</th>
<th>Healthcare Admin</th>
<th>Public Health</th>
<th>Counseling</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage</td>
<td>72.2%</td>
<td>11.1%</td>
<td>0%</td>
<td>5.6%</td>
<td>0%</td>
<td>11%</td>
</tr>
<tr>
<td>Response Count</td>
<td>(13)</td>
<td>(2)</td>
<td>(1)</td>
<td>(1)</td>
<td>(1)</td>
<td>(2)</td>
</tr>
</tbody>
</table>

42. Do you consider yourself to be a non-Hispanic White or other race?

<table>
<thead>
<tr>
<th>Race</th>
<th>Non-Hispanic White</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage</td>
<td>100%</td>
<td>0%</td>
</tr>
<tr>
<td>Response Count</td>
<td>(18)</td>
<td></td>
</tr>
</tbody>
</table>

43. How many years in total have you taught in an undergraduate nursing program?

<table>
<thead>
<tr>
<th>Total Years</th>
<th>Response Average</th>
<th>Response Total</th>
<th>Response Count</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>8.67</td>
<td>156</td>
<td>18</td>
</tr>
</tbody>
</table>

44. Which of the following best describes your teaching rank?

<table>
<thead>
<tr>
<th>Full-time Instructor</th>
<th>Full-time Assist. Prof.</th>
<th>Full-time Assist. Prof.</th>
<th>Full-time Assoc. Prof.</th>
<th>Part-time Assist. Prof.</th>
<th>Part-time Assist. Prof.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(classroom/clinical)</td>
<td>(classroom)</td>
<td>(classroom/clinical)</td>
<td>(classroom/clinical)</td>
<td>(classroom)</td>
<td>(clinical only)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>190</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table B2
Delphi R2 Survey Item Frequencies and Percentages

<table>
<thead>
<tr>
<th>Item</th>
<th>Statement</th>
<th>N</th>
<th>Response type and frequencies [percent]</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>The scholarship of teaching and learning (SoTL) remains an ill-defined concept for nurse educators.</td>
<td>18</td>
<td>Not Essential, Minimally Essential, Unsure, Essential, Completely Essential</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0 [0%], 1 [5.6%], 2 [11.1%], 7 [38.9%], 8 [44.4%]</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Nurse educators must sacrifice some of their personal time in order to engage in scholarly teaching.</td>
<td>18</td>
<td>Not Essential, Minimally Essential, Unsure, Essential, Completely Essential</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0 [0%], 2 [11.1%], 7 [38.9%]</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Nursing academics’ engagement in a SoTL project amounts to practicing what they profess about the value of maintaining a lifelong learning orientation.</td>
<td>18</td>
<td>Not Essential, Minimally Essential, Unsure, Essential, Completely Essential</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1 [5.6%], 1 [5.6%], 9 [50.0%]</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>The early career scholar of teaching has enough practice-based expertise in their subject matter to begin a SoTL program.</td>
<td>18</td>
<td>Not Essential, Minimally Essential, Unsure, Essential, Completely Essential</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0 [0%], 6 [33.3%], 5 [27.8%]</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Mid-to-late career scholars of teaching with a Master’s degree possess the teaching expertise necessary to mentor new scholars of teaching.</td>
<td>18</td>
<td>Not Essential, Minimally Essential, Unsure, Essential, Completely Essential</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0 [0%], 1 [5.6%], 9 [50.0%]</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>New faculty and/or faculty planning to retire soon are unlikely to engage in an SoTL program.</td>
<td>17</td>
<td>Not Essential, Minimally Essential, Unsure, Essential, Completely Essential</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1 [5.9%], 8 [47.1%], 4 [23.5%]</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Academic nurse educators will only engage in the SoTL when it is tied to their annual performance appraisals.</td>
<td>16</td>
<td>Not Essential, Minimally Essential, Unsure, Essential, Completely Essential</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1 [6.3%], 4 [25.0%], 5 [31.3%]</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Academic nurse educators who experience insufficient support early in their teaching career are</td>
<td>18</td>
<td>Not Essential, Minimally Essential, Unsure, Essential, Completely Essential</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0 [0%], 3 [16.7%], 8 [44.4%]</td>
<td></td>
</tr>
</tbody>
</table>
unlikely to develop an interest in the SoTL.

Table B2 Continued
Delphi $R_2$ Survey Item Frequencies and Percentages

<table>
<thead>
<tr>
<th>Item</th>
<th>Statement</th>
<th>N</th>
<th>Response type and frequencies [percent]</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>Undergraduate nursing faculty require a minimum of 5-years experience before they are ready to engage in the SoTL.</td>
<td>18</td>
<td>Not Essential 6 [33.3%] Minimally Essential 7 [38.9%] Unsure 2 [11.1%] Essential 2 [11.1%] Completely Essential 1 [5.6%]</td>
</tr>
<tr>
<td>10</td>
<td>The variety of possibilities in pursuing the SoTL is not understood by faculty members of undergraduate nursing programs.</td>
<td>18</td>
<td>Not Essential 0 [0%] Minimally Essential 1 [5.6%] Unsure 2 [11.1%] Essential 8 [44.4%] Completely Essential 7 [38.9%]</td>
</tr>
<tr>
<td>11</td>
<td>Academic nurse educators who actively share innovative teaching methods with their peers should also publish their teaching scholarship.</td>
<td>17</td>
<td>Not Essential 1 [5.9%] Minimally Essential 1 [5.9%] Unsure 0 [0%] Essential 7 [41.2%] Completely Essential 8 [47.1%]</td>
</tr>
<tr>
<td>12</td>
<td>The distinction between scholarly teaching and the SoTL is not understood by faculty members of undergraduate nursing programs</td>
<td>18</td>
<td>Not Essential 1 [5.6%] Minimally Essential 0 [0.0%] Unsure 4 [22.2%] Essential 7 [38.9%] Completely Essential 6 [33.3%]</td>
</tr>
<tr>
<td>13</td>
<td>Engagement in SoTL is an individual choice to subject one’s work to peer review, a necessary condition of SoTL.</td>
<td>18</td>
<td>Not Essential 1 [5.6%] Minimally Essential 5 [27.8%] Unsure 2 [11.1%] Essential 6 [33.3%] Completely Essential 4 [22.2%]</td>
</tr>
<tr>
<td>14</td>
<td>The expectation for academic nurse educators to engage in the SoTL should be a universal one.</td>
<td>18</td>
<td>Not Essential 0 [0%] Minimally Essential 2 [11.1%] Unsure 2 [11.1%] Essential 8 [44.4%] Completely Essential 6 [33.3%]</td>
</tr>
<tr>
<td>15</td>
<td>The scholarship of teaching and learning (SoTL) requires nurse educators to reprioritize their time.</td>
<td>18</td>
<td>Not Essential 0 [0%] Minimally Essential 0 [0%] Unsure 2 [11.1%] Essential 6 [33.3%] Completely Essential 10 [55.6%]</td>
</tr>
</tbody>
</table>
Peer review of teaching practices is a precondition for advancing the SoTL in nursing education.

Table B2 Continued

<table>
<thead>
<tr>
<th>Table B2 Continued</th>
<th>Delphi R2 Survey Item Frequencies and Percentages</th>
</tr>
</thead>
<tbody>
<tr>
<td>16 Peer review of teaching practices in the classroom is a prerequisite for advancing the SoTL in nursing education.</td>
<td>18 Not Essential 18 Minimally Essential 18 Unsure Essential Completely Essential 0 [0%] 2 [11.1%] 3 [16.7%] 8 [44.4%] 5 [27.8%]</td>
</tr>
<tr>
<td>17 Faculty peer review of one another’s teaching enhances the likelihood of the SoTL occurring in undergraduate nursing programs.</td>
<td>18 Not Essential 18 Minimally Essential 18 Unsure Essential Completely Essential 1 [5.6%] 5 [27.8%] 2 [11.1%] 6 [33.3%] 4 [22.2%]</td>
</tr>
<tr>
<td>18 Exposure to scholarly teaching habits is an important factor in building confidence in early academic nursing careers.</td>
<td>17 Not Essential 17 Minimally Essential 17 Unsure Essential Completely Essential 1 [5.9%] 1 [5.9%] 0 [0%] 8 [47.1%] 7 [41.2%]</td>
</tr>
<tr>
<td>19 The sharing of scholarly teaching methods within the academic community impacts the overall quality of teaching in nursing.</td>
<td>18 Not Essential 18 Minimally Essential 18 Unsure Essential Completely Essential 0 [0%] 0 [0%] 0 [0%] 6 [33.3%] 12 [66.7%]</td>
</tr>
<tr>
<td>20 A successful beginning SoTL experience requires a PhD degree mentor’s support early in a new faculty member’s teaching career.</td>
<td>18 Not Essential 18 Minimally Essential 18 Unsure Essential Completely Essential 6 [33.3%] 3 [16.7%] 4 [22.2%] 4 [22.2%] 1 [5.6%]</td>
</tr>
<tr>
<td>21 Peer review of teaching practices in the classroom is a prerequisite for advancing the SoTL in nursing education</td>
<td>18 Not Essential 18 Minimally Essential 18 Unsure Essential Completely Essential 1 [5.6%] 5 [16.7%] 4 [22.2%] 8 [44.4%] 2 [11.1%]</td>
</tr>
<tr>
<td>22 A good mentor can make the difference between a new faculty member meeting professional teaching milestones beyond the advanced novice teacher level.</td>
<td>18 Not Essential 18 Minimally Essential 18 Unsure Essential Completely Essential 1 [5.6%] 1 [5.6%] 4 [22.2%] 11 [61.1%]</td>
</tr>
<tr>
<td>23 A nurse educator’s orientation toward scholarly teaching indirectly impacts student learning in a positive way.</td>
<td>16 Not Essential 16 Minimally Essential 16 Unsure Essential Completely Essential 0 [0%] 0 [0%] 2 [12.5%] 7 [38.9%] 7 [38.9%]</td>
</tr>
</tbody>
</table>

193
Table B2 Continued

Delphi Round 2 Survey Frequencies and Percentages

<table>
<thead>
<tr>
<th>Item</th>
<th>Statement</th>
<th>N</th>
<th>Response type and frequencies [percent]</th>
</tr>
</thead>
<tbody>
<tr>
<td>24</td>
<td>Student-centered approaches to teaching should be the primary focus of the scholarship of teaching and learning (SoTL) in nursing education.</td>
<td>17</td>
<td>Not Essential 0 [0%] Minimally Essential 0 [0%] Unsure 1 [5.9%] Essential 7 [41.2%] Completely Essential 9 [52.9%]</td>
</tr>
<tr>
<td>25</td>
<td>Creativity is a necessary component of preparing to teach the intergenerational nursing students in today’s BSN classrooms.</td>
<td>18</td>
<td>Not Essential 2 [11.1%] Minimally Essential 0 [0%] Unsure 2 [11.1%] Essential 3 [16.7%] Completely Essential 11 [61.1%]</td>
</tr>
<tr>
<td>26</td>
<td>Nurse educators use multiple sources for informing their scholarly teaching activities.</td>
<td>18</td>
<td>Not Essential 1 [5.6%] Minimally Essential 0 [0%] Unsure 0 [0%] Essential 5 [27.8%] Completely Essential 12 [66.7%]</td>
</tr>
<tr>
<td>27</td>
<td>Through the SoTL, scholarly inquiry in teaching styles is an important consideration for improving student learning.</td>
<td>17</td>
<td>Not Essential 1 [5.9%] Minimally Essential 1 [5.9%] Unsure 1 [5.9%] Essential 5 [29.4%] Completely Essential 9 [52.9%]</td>
</tr>
<tr>
<td>28</td>
<td>Diversity of teaching styles is the main reason for promoting the SoTL movement in nursing education.</td>
<td>18</td>
<td>Not Essential 1 [5.6%] Minimally Essential 5 [27.8%] Unsure 0 [0%] Essential 8 [44.4%] Completely Essential 4 [22.2%]</td>
</tr>
<tr>
<td>29</td>
<td>The choice to engage in the scholarship of teaching and learning (SoTL) should rest solely with the individual nurse educator.</td>
<td>18</td>
<td>Not Essential 2 [11.1%] Minimally Essential 6 [33.3%] Unsure 5 [27.8%] Essential 3 [16.7%] Completely Essential 2 [11.1%]</td>
</tr>
<tr>
<td>30</td>
<td>In teaching, planned change is difficult when access to a robust teaching support system is unavailable.</td>
<td>17</td>
<td>Not Essential 1 [5.9%] Minimally Essential 0 [0%] Unsure 0 [0%] Essential 11 [64.7%] Completely Essential 5 [29.4%]</td>
</tr>
<tr>
<td>31</td>
<td>Established faculty members provide the greatest amount</td>
<td>18</td>
<td>Not Essential Minimally Essential Unsure Essential Completely Essential</td>
</tr>
</tbody>
</table>
Table B2 Continued
Delphi Round 2 Survey Frequencies and Percentages

<table>
<thead>
<tr>
<th>Item</th>
<th>Statement</th>
<th>N</th>
<th>Response type and frequencies [percent]</th>
</tr>
</thead>
<tbody>
<tr>
<td>32</td>
<td>Academic nurse educators who engage in the scholarship of teaching and learning (SoTL) will require a more robust teaching support system.</td>
<td>18</td>
<td>Not Essential 1 [5.6%] Minimally Essential 0 [0%] Unsure Essential 11 [61.1%] Completely Essential 5 [27.8%]</td>
</tr>
<tr>
<td>33</td>
<td>The current teaching support system made up of experienced faculty does not provide adequate support for new faculty members.</td>
<td>18</td>
<td>Not Essential 1 [5.6%] Minimally Essential 2 [11.1%] Unsure Essential 6 [33.3%] Completely Essential 5 [27.8%]</td>
</tr>
<tr>
<td>34</td>
<td>Planned change can promote an open space for faculty reflection on teaching practices.</td>
<td>16</td>
<td>Not Essential 0 [0%] Minimally Essential 1 [6.3%] Unsure Essential 6 [37.5%] Completely Essential 7 [43.8%]</td>
</tr>
<tr>
<td>35</td>
<td>Nurse practitioner and/or doctor of nursing practice (DNP) program graduates will require a robust teaching support system as they begin to learn teaching roles.</td>
<td>18</td>
<td>Not Essential 1 [5.6%] Minimally Essential 1 [5.6%] Unsure Essential 5 [27.8%] Completely Essential 9 [50.0%]</td>
</tr>
<tr>
<td>36</td>
<td>Academic nurse educators are more satisfied in their teaching role when they are afforded consistent teaching assignments.</td>
<td>18</td>
<td>Not Essential 1 [5.6%] Minimally Essential 1 [5.6%] Unsure Essential 4 [22.2%] Completely Essential 11 [61.1%]</td>
</tr>
<tr>
<td>37</td>
<td>Monetary policies limit opportunities for faculty to attend educational conferences, impeding the SoTL that is needed to transform undergraduate nursing education.</td>
<td>18</td>
<td>Not Essential 1 [5.6%] Minimally Essential 1 [5.6%] Unsure Essential 4 [22.2%] Completely Essential 10 [55.6%]</td>
</tr>
<tr>
<td>38</td>
<td>Multiple demands on the educator's time prevent more involvement in a SoTL project</td>
<td>18</td>
<td>Not Essential 1 [5.6%] Minimally Essential 0 [0%] Unsure Essential 5 [27.8%] Completely Essential 11 [61.1%]</td>
</tr>
<tr>
<td>Item</td>
<td>Statement</td>
<td>N</td>
<td>Response type and frequencies [percent]</td>
</tr>
<tr>
<td>------</td>
<td>-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>----</td>
<td>---------------------------------------------------------</td>
</tr>
<tr>
<td>39</td>
<td>Currently, the SoTL concept is not a key component of the undergraduate teaching role.</td>
<td>18</td>
<td>Not Essential 0 [0%] Minimally Essential 1 [5.6%] Unsure 4[22.2%] Essential 7[38.9%] Completely Essential 6 [33.3%]</td>
</tr>
<tr>
<td>40</td>
<td>The service component of the undergraduate teaching role overshadows the SoTL concept.</td>
<td>18</td>
<td>Not Essential 0 [0%] Minimally Essential 3 [16.7%] Unsure 4[22.2%] Essential 1 [5.6%] Completely Essential 10 [55.6%]</td>
</tr>
<tr>
<td>41</td>
<td>Undergraduate teaching workloads are determined without consideration of the SoTL.</td>
<td>18</td>
<td>Not Essential 1 [5.6%] Minimally Essential 1 [5.6%] Unsure 1 [5.6%] Essential 5 [27.8%] Completely Essential 4 [44.4%]</td>
</tr>
<tr>
<td>42</td>
<td>Undergraduate workload demands require time management strategies that only come with years of experience.</td>
<td>18</td>
<td>Not Essential 1 [5.6%] Minimally Essential 2 [11.1%] Unsure 5 [27.8%] Essential 7 [38.9%] Completely Essential 3 [16.7%]</td>
</tr>
<tr>
<td>43</td>
<td>The constant changes in undergraduate faculty prohibit increasing the SoTL engagement level.</td>
<td>18</td>
<td>Not Essential 1 [5.6%] Minimally Essential 1 [5.6%] Unsure 4 [22.2%] Essential 8 [44.4%] Completely Essential 3 [16.7%]</td>
</tr>
<tr>
<td>44</td>
<td>Undergraduate nursing program faculty who have not completed doctoral level studies are unlikely to begin a SoTL project on their own.</td>
<td>18</td>
<td>Not Essential 3 [16.7%] Minimally Essential 5 [27.8%] Unsure 4 [22.2%] Essential 3 [16.7%] Completely Essential 3 [16.7%]</td>
</tr>
<tr>
<td>45</td>
<td>To engage in the SoTL, undergraduate faculty will need sufficient release time from regular teaching duties.</td>
<td>18</td>
<td>Not Essential 1 [5.6%] Minimally Essential 4 [22.2%] Unsure 3 [16.7%] Essential 5 [27.8%] Completely Essential 5 [27.8%]</td>
</tr>
<tr>
<td>46</td>
<td>Any curriculum revision planning should consider implementing SoTL early in the process.</td>
<td>18</td>
<td>Not Essential 1 [5.6%] Minimally Essential 1 [5.6%] Unsure 2 [11.1%] Essential 7 [38.9%] Completely Essential 7 [38.9%]</td>
</tr>
<tr>
<td>47</td>
<td>Peer review combined with student feedback provides a significant source for SoTL topics to investigate.</td>
<td>18</td>
<td>Not Essential 1 [5.6%] Minimally Essential 2 [11.1%] Unsure 4 [22.2%] Essential 7 [38.9%] Completely Essential 4 [22.2%]</td>
</tr>
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197
Table B2 Continued
Delphi Round 2 Survey Frequencies and Percentages

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<tr>
<th>Item</th>
<th>Statement</th>
<th>N</th>
<th>Response type and frequencies [percent]</th>
</tr>
</thead>
<tbody>
<tr>
<td>48</td>
<td>Faculty must find their passion in nursing education before pursuing a SoTL project.</td>
<td>18</td>
<td>Not Essential 1 [5.6%]</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Minimally Essential 8 [44.4%]</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Unsure 1 [5.6%]</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Essential 5 [27.8%]</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Completely Essential 3 [16.7%]</td>
</tr>
<tr>
<td>49</td>
<td>A school-based center for the scholarship of teaching is essential to launching any SoTL projects in the undergraduate nursing program.</td>
<td>18</td>
<td>Not Essential 3 [16.7%]</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Minimally Essential 2 [11.1%]</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Unsure 4 [22.2%]</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Essential 3 [16.7%]</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Completely Essential 6 [33.3%]</td>
</tr>
<tr>
<td>50</td>
<td>Undergraduate nursing program faculty members who only teach in the clinical setting need classroom teaching experience before beginning a SoTL project.</td>
<td>18</td>
<td>Not Essential 4 [22.2%]</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Minimally Essential 2 [11.1%]</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Unsure 2 [11.1%]</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Essential 6 [33.3%]</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Completely Essential 4 [22.2%]</td>
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Table B3
Delphi Round 3 Survey Item Frequency and Percent Scores

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<tr>
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<th>Statement</th>
<th>N</th>
<th>Response Type Frequency [percent]</th>
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<tbody>
<tr>
<td>1</td>
<td>The concept of the scholarship of teaching and learning (SoTL) has not been sufficiently explained in terms that undergraduate faculty can appreciate.</td>
<td>49</td>
<td>Strongly Disagree 3 [6.1 %]</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Disagree 10 [20.4 %]</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Unsure 8 [16.3 %]</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Agree 26 [53.1%]</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Strongly Agree 2 [4.1 %]</td>
</tr>
<tr>
<td>2</td>
<td>Only peer reviewed, published journal articles are considered as valid evidence for the SoTL in nursing education reform.</td>
<td>49</td>
<td>Strongly Disagree 1 [2.1 %]</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Disagree 14 [28.6 %]</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Unsure 11 [22.4 %]</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Agree 18 [36.7%]</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Strongly Agree 5 [10.2 %]</td>
</tr>
<tr>
<td>3</td>
<td>Undergraduate program nursing educators believe that lifelong learning and the scholarship of teaching are mutually exclusive concepts.</td>
<td>49</td>
<td>Strongly Disagree 11 [22.4 %]</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Disagree 23 [46.9 %]</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Unsure 4 [8.2 %]</td>
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<td></td>
<td></td>
<td></td>
<td>Agree 7 [14.3%]</td>
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<td></td>
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<td></td>
<td>Strongly Agree 4 [8.2 %]</td>
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Table B3 Continued
Delphi Round 3 Survey Item Frequency and Percent Scores

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<th>N</th>
<th>Response Type</th>
<th>Frequency [percent]</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>Undergraduate nursing program faculty are largely unaware of the many ways SoTL projects are conceived, evolve, and lead to new evidence-based teaching practices.</td>
<td>49</td>
<td>Strongly Disagree</td>
<td>2 [4.1 %]</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Disagree</td>
<td>10 [20.4 %]</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Unsure</td>
<td>5 [10.2 %]</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Agree</td>
<td>27 [55.1 %]</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Strongly Agree</td>
<td>5 [10.2 %]</td>
</tr>
<tr>
<td>5</td>
<td>Undergraduate nursing program faculty lack an appreciation for the scholarship of teaching as an integral factor in achieving continuous quality improvement in nursing education.</td>
<td>49</td>
<td>Strongly Disagree</td>
<td>6 [12.2 %]</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Disagree</td>
<td>22 [44.9 %]</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Unsure</td>
<td>5 [10.2 %]</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Agree</td>
<td>12 [24.5 %]</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Strongly Agree</td>
<td>4 [8.2 %]</td>
</tr>
<tr>
<td>6</td>
<td>Nursing faculty will remain disinterested in pursuing a SoTL study during their teaching career, largely due to insufficient numbers of examples of the role scholarship of teaching plays in professional education.</td>
<td>49</td>
<td>Strongly Disagree</td>
<td>3 [6.1 %]</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Disagree</td>
<td>19 [38.8 %]</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Unsure</td>
<td>7 [14.3 %]</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>Agree</td>
<td>19 [38.8 %]</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Strongly Agree</td>
<td>1 [2.0 %]</td>
</tr>
<tr>
<td>7</td>
<td>Regardless of the availability of a good faculty mentor, new faculty will only engage in the scholarship of teaching when they are ready to do so.</td>
<td>49</td>
<td>Strongly Disagree</td>
<td>2 [4.1 %]</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Disagree</td>
<td>12 [24.4 %]</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Unsure</td>
<td>4 [8.2 %]</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Agree</td>
<td>29 [59.2 %]</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Strongly Agree</td>
<td>2 [4.1 %]</td>
</tr>
<tr>
<td>8</td>
<td>Both Masters and/or PhD degreed undergraduate program faculty members lack the SoTL expertise necessary to effectively model the scholarship of teaching to others.</td>
<td>49</td>
<td>Strongly Disagree</td>
<td>2 [4.1 %]</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Disagree</td>
<td>26 [53.1 %]</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Unsure</td>
<td>7 [14.3 %]</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Agree</td>
<td>13 [26.5 %]</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Strongly Agree</td>
<td>1 [2.0 %]</td>
</tr>
<tr>
<td>9</td>
<td>Engagement with the SoTL should not be a standard role expectation for all academic nurse educators.</td>
<td>49</td>
<td>Strongly Disagree</td>
<td>14 [28.6 %]</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Disagree</td>
<td>19 [38.8 %]</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Unsure</td>
<td>5 [10.2 %]</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Agree</td>
<td>10 [20.4 %]</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Strongly Agree</td>
<td>1 [2.0 %]</td>
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Table B3 Continued  
Delphi Round 3 Survey Item Frequency and Percent Scores

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<thead>
<tr>
<th>Item</th>
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<th>N</th>
<th>Response Type</th>
<th>Frequency [percent]</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>It is reasonable to expect nursing program faculty members to commit personal time to engage in the SoTL.</td>
<td>49</td>
<td>Strongly Disagree, Disagree, Unsure, Agree, Strongly Agree</td>
<td>2 [4.1 %], 8 [16.3 %], 3 [6.1 %], 29 [59.2 %], 7 [14.3 %]</td>
</tr>
<tr>
<td>11</td>
<td>Undergraduate faculty in nursing programs struggle with time management to the degree that engaging in a SoTL study is a highly improbable prospect.</td>
<td>48</td>
<td>Strongly Disagree, Disagree, Unsure, Agree, Strongly Agree</td>
<td>2 [4.2 %], 8 [16.7 %], 7 [14.6 %], 26 [54.1 %], 5 [10.4 %]</td>
</tr>
<tr>
<td>12</td>
<td>The current release time policy in undergraduate nursing programs makes conducting a SoTL study a more likely prospect than was the case with faculty in the past.</td>
<td>49</td>
<td>Strongly Disagree, Disagree, Unsure, Agree, Strongly Agree</td>
<td>4 [8.2 %], 18 [36.7 %], 12 [24.5 %], 12 [24.5 %], 3 [6.1 %]</td>
</tr>
<tr>
<td>13</td>
<td>Nursing program directors are too distanced from the classroom/clinical area to accurately appraise the teaching scholarship potential their faculty possess.</td>
<td>49</td>
<td>Strongly Disagree, Disagree, Unsure, Agree, Strongly Agree</td>
<td>6 [12.2 %], 23 [46.9 %], 8 [16.3 %], 11 [22.4 %], 1 [2.0 %]</td>
</tr>
<tr>
<td>14</td>
<td>Nursing school administration/management should take steps to empower undergraduate faculty in determining current workload standards that allow for flexible release time to pursue scholarly interests.</td>
<td>49</td>
<td>Strongly Disagree, Disagree, Unsure, Agree, Strongly Agree</td>
<td>0 [0.0 %], 2 [4.1 %], 5 [10.2 %], 23 [46.9 %], 19 [38.8 %]</td>
</tr>
<tr>
<td>15</td>
<td>Because faculty are focused on teaching, advising, mentoring, and teaching students, they are not as well-suited to revise faculty workload policies as the administration/management.</td>
<td>49</td>
<td>Strongly Disagree, Disagree, Unsure, Agree, Strongly Agree</td>
<td>10 [20.4 %], 25 [51.0 %], 6 [12.2 %], 7 [14.6 %], 1 [2.0 %]</td>
</tr>
<tr>
<td>Item</td>
<td>Statement</td>
<td>N</td>
<td>Response Type Frequency [percent]</td>
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<td></td>
</tr>
<tr>
<td>16</td>
<td>The prospect of an &quot;openly visible&quot; culture of scholarship of teaching is depreciated by the prevailing industrialized culture of higher education, where it's &quot;all heads down&quot; while at work.</td>
<td>49</td>
<td>Strongly Disagree 4 [8.2%] Disagree 18 [36.7%] Unsure 14 [28.6%] Agree 12 [24.5%] Strongly Agree 1 [2.0%]</td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>Administration/management do not value the SoTL enough to assure adequate funding sources that faculty can count on to be there when they request them.</td>
<td>48</td>
<td>Strongly Disagree 1 [2.1%] Disagree 18 [37.6%] Unsure 8 [16.6%] Agree 17 [35.4%] Strongly Agree 4 [8.3%]</td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>Nursing education reform will come from the top-down, not from the promotion of faculty-driven scholarly teaching efforts that generate new evidence-based teaching practices.</td>
<td>49</td>
<td>Strongly Disagree 10 [20.4%] Disagree 26 [53.1%] Unsure 7 [14.6%] Agree 6 [12.2%] Strongly Agree 0 [0.0%]</td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>Currently, a student-centered approach to teaching and learning in undergraduate nursing programs is a subordinate goal to maintaining adequate first-time NCLEX pass rates.</td>
<td>49</td>
<td>Strongly Disagree 3 [6.1%] Disagree 17 [34.7%] Unsure 4 [8.2%] Agree 21 [42.8%] Strongly Agree 4 [8.2%]</td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>Faculty development in learning student-centered, scholarly teaching methods must be reinforced through learning opportunities at nursing education conferences, web-based seminars, or at journal article writing retreats.</td>
<td>49</td>
<td>Strongly Disagree 0 [0.0%] Disagree 0 [0.0%] Unsure 1 [2.0%] Agree 28 [57.0%] Strongly Agree 20 [41.0%]</td>
<td></td>
</tr>
<tr>
<td>Item</td>
<td>Statement</td>
<td>N</td>
<td>Response Type Frequency [percent]</td>
<td></td>
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<tr>
<td>------</td>
<td>-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
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<td></td>
</tr>
<tr>
<td>21</td>
<td>Published SoTL nursing education study findings in peer-reviewed journals are too theoretical to use in making practical improvements in the already well-established, signature nursing education pedagogies (e.g. lecture, clinical, simulation lab, case studies, reflective learning).</td>
<td>49</td>
<td>Strongly Disagree 2 [4.1%]  Disagree 34 [69.4%]  Unsure 5 [10.2%]  Agree 8 [16.3%]  Strongly Agree 0 [0.0%]</td>
<td></td>
</tr>
<tr>
<td>22</td>
<td>Curriculum revision planners who do not encourage faculty to become full partners in the revision efforts miss a window of opportunity to identify or appreciate the potential that faculty possess for advancing scholarly teaching.</td>
<td>49</td>
<td>Strongly Disagree 0 [0.0%]  Disagree 4 [8.2%]  Unsure 4 [8.2%]  Agree 24 [48.9%]  Strongly Agree 17 [34.7%]</td>
<td></td>
</tr>
<tr>
<td>23</td>
<td>The current teaching support system that experienced faculty provide to new hires must flourish if new faculty members are expected to meet critical teaching milestones, including developing scholarly teaching habits.</td>
<td>49</td>
<td>Strongly Disagree 0 [0.0%]  Disagree 2 [4.1%]  Unsure 2 [4.1%]  Agree 31 [63.2%]  Strongly Agree 14 [28.6%]</td>
<td></td>
</tr>
<tr>
<td>24</td>
<td>Without significantly more investment in faculty development time, nurse practitioners (APRNs) or doctors of nursing practice (DNPs) beginning a teaching career will lack the teaching knowledge necessary to be successful.</td>
<td>49</td>
<td>Strongly Disagree 0 [0.0%]  Disagree 4 [8.2%]  Unsure 7 [14.3%]  Agree 25 [51.0%]  Strongly Agree 13 [26.5%]</td>
<td></td>
</tr>
</tbody>
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Table B3 Continued
Delphi Round 3 Survey Item Frequency and Percent Scores

<table>
<thead>
<tr>
<th>Item</th>
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<th>N</th>
<th>Response Type</th>
<th>Frequency [percent]</th>
</tr>
</thead>
<tbody>
<tr>
<td>25</td>
<td>The SoTL will flourish only when faculty role expectations (e.g. teaching/service/scholarship) are balanced by an institutional mission that values teaching and research in an equitable manner.</td>
<td>49</td>
<td>Strongly Disagree</td>
<td>0 [0.0 %]</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Disagree</td>
<td>0 [0.0 %]</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Unsure</td>
<td>2 [4.1 %]</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Agree</td>
<td>27 [55.1 %]</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Strongly Agree</td>
<td>20 [40.8 %]</td>
</tr>
</tbody>
</table>

Delphi Survey R3 Demographics

26. How many years in total have you taught in an undergraduate nursing program?

- Less than 5 years: 18.8% (9)
- 5-9 years: 33.3% (16)
- 10-14 years: 8.3% (4)
- 15-20 Years: 12.5% (6)
- more than 20 years: 27.1% (13)

27. Which category below includes your age?

- 21-29 years: 2.1% (1)
- 30-39 years: 6.4% (3)
- 40-49 years: 12.8% (6)
- 50-59 years: 53.2% (25)
- 60 or older: 25.5% (12)

28. What is your gender?

- Male: 2.0% (1)
- Female: 98.0% (48)

29. Which racial category do you identify with?

- Non-Hispanic White: 87% (41)
- Other: 13% (6)

20 skipped

30. What is your highest academic degree earned?

- MSN-education: 34.5% (19)
- MSN-APRN: 5.5% (3)
- DNP: 5.5% (3)
- EdD: 9.1% (5)
- PhD: 18.2% (10)
- Other: 12.7% (7)

2 skipped
Delphi Survey R3 Demographics Continued

31. Which category best describes your current role in nursing education?

<table>
<thead>
<tr>
<th>Role</th>
<th>Count</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>I (Instruction only)</td>
<td>12</td>
<td>21.8%</td>
</tr>
<tr>
<td>I+A (Instruction with some administrative duties)</td>
<td>15</td>
<td>27.3%</td>
</tr>
<tr>
<td>A± (Mostly administration)</td>
<td>3</td>
<td>5.5%</td>
</tr>
<tr>
<td>A+ (Strictly administration)</td>
<td>5</td>
<td>9.1%</td>
</tr>
<tr>
<td>R (Primarily research track)</td>
<td>1</td>
<td>1.8%</td>
</tr>
<tr>
<td>R+T (Mixed research/teaching)</td>
<td>7</td>
<td>12.7%</td>
</tr>
<tr>
<td>O (Other)</td>
<td>4</td>
<td>7.3%</td>
</tr>
</tbody>
</table>

I (Instruction only), I+A (Instruction with some administrative duties), A± (Mostly administration), A+ (Strictly administration), R (Primarily research track), R+T (Mixed research/teaching), O (Other)

32. What is your current teaching rank?

<table>
<thead>
<tr>
<th>Rank</th>
<th>Count</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>A/P-T</td>
<td>5</td>
<td>9.1%</td>
</tr>
<tr>
<td>I</td>
<td>13</td>
<td>23.6%</td>
</tr>
<tr>
<td>Asst. P</td>
<td>10</td>
<td>18.2%</td>
</tr>
<tr>
<td>Assc. P</td>
<td>12</td>
<td>21.8%</td>
</tr>
<tr>
<td>P</td>
<td>5</td>
<td>9.1%</td>
</tr>
</tbody>
</table>

A/P-T (Adjunct and/or Part-time), I (Instructor), Asst. P (Assistant Professor), Assc. P (Associate Professor), P (Full Professor)

Table B4

Kreber Study High Agreement-Strong Group Consensus Items

Subcategory 1
(MDN = 6.0—7.0; IQR = 0—0.5)

2. Those who practice the scholarship of teaching carefully design ways to examine, interpret, and share learning about teaching. Thereby, they contribute to the scholarly community of their discipline.
21. Faculty that practice the scholarship of teaching are curious about the ways in which students learn and the effects of certain practices on that learning.
32. The scholarship of teaching has characteristics that make it different from other forms of scholarship, but it also has characteristics that encompass the dimensions of the scholarship of discovery, integration, and application.
41. Engaging in classroom research is important but is not sufficient for the scholarship of teaching.

Subcategory 2
(MDN = 6.0—7.0; IQR = 1.0)

23. For people who practice the scholarship of teaching, teaching is driven by an inquiry ethic.
36. Scholarly teachers are always learning both about knowledge in their field and how to make connections with students.
43. Scholarly teachers know that people learn in diverse ways; hence, they know that instruction should be diverse as well.
44. Learning to pose questions about teaching and learning is a starting point in the scholarship of teaching; gathering evidence, interpreting it, sharing results, and changing practice continue the process.
Table B4

Kreber Study High Agreement-Strong Group Consensus Items

45. The scholarship of teaching entails a public account of some or all of the following aspects of teaching; vision, design, interaction, outcomes, and analysis, in a manner that can be peer reviewed and used by members of one’s community.

Subcategory 3
(MDN = 6.0—7.0; IQR = 1.25—1.5)

1. A key feature in the scholarship of teaching is having an understanding of how people learn, knowing what practices are most effective, and having knowledge about what we have learned about teaching.

6. The conduct of research on teaching and learning (less formal and formal) contributes to the advancement of pedagogical content knowledge and presents forms of scholarship of discovery that overlap with, and are part of, the scholarship of teaching.

9. The scholarship of teaching involves constant reflection of the process and outcomes of teaching and learning and acknowledges the contextual nature of teaching.

13. People practicing the scholarship of teaching focus on change; they develop their practice through a cycle of action, reflection, and improvement.

15. People practicing the scholarship of teaching need to have assessment, evaluation, and research skills. They need to be able to conduct classroom research and document the process of teaching and learning and student progress.

18. The scholarship of teaching is an activity that, in the context of promoting student learning, meets each of the following criteria:
   - Requires high levels of discipline-related expertise
   - Breaks new ground and is innovative
   - Can be replicated and elaborated
   - Can be documented
   - Can be peer reviewed
   - Has significance or impact

20. People practicing the scholarship of teaching make a deliberate effort to share their experience with others (they act as mentors, communicators, faculty developers, etc.)

39. Individuals practicing the scholarship of teaching investigate the relationship between teaching and learning.

40. People who practice the scholarship of teaching generate new ideas about teaching.

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APPENDIX C

R1 Delphi Survey

This initial survey asks for your expert opinions about aspects of scholarship and teaching in BSN programs. The survey is divided into sections by theme, and each section presents 3 Likert-type items, or statement completion items, and an opportunity for narrative feedback.

The 3 Likert-type endorsement items/single answer items in each section allow you to make a selection that best reflects your perception of each topic related to issues surrounding teaching and scholarship in BSN programs.

Each section has 1 open-ended question requesting additional feedback from you related to the 3 statements included in that section. Please feel free to express your most candid thoughts on these items, or on a particular issue you may have with the topic presented in each section. No personal identification will link your identity to your responses, so please feel that you can freely express your opinions in a safe environment.

Your opinions will provide rich data that will inform the development of many new survey items for the final pilot version of a faculty perceptions of barriers to SoTL scale. The time required to complete this initial Delphi round survey is approximately 45-minutes. Thank you for participating as an expert nurse educator panelist member today.

Scholarly Teaching Practices

The literature provides a few examples of how faculty teaching in nursing programs might engage in the scholarship of teaching and learning (SoTL). In general, faculty members are encouraged to begin engaging in the SoTL through teaching that is current, relevant, and engages students. In the following 3 statements, select the level of engagement that best reflects your teaching preparation activities.

1. I engage in scholarly teaching activities (e.g., literature reviews, critical reflections on past teaching, peer feedback) whenever I prepare to teach.
   1. Strongly Disagree
   2. Disagree
   3. Unsure
   4. Agree
   5. Strongly Agree

2. I am considering beginning a SoTL program based on my teaching achievements.
   1. Strongly Disagree
   2. Disagree
   3. Unsure
   4. Agree
   5. Strongly Agree
3. I believe that the SoTL in nursing education provides a reinvigorating experience that would enhance my joy of teaching.
   1. Strongly Disagree
   2. Disagree
   3. Unsure
   4. Agree
   5. Strongly Agree

4. Please provide any feedback regarding your impressions of statements 1, 2 & 3, or some additional thoughts you would like to share in the text box below. You may consider including examples of your preferred methods of preparation for teaching, and any concerns you have about scholarship in general.

**Faculty Role Expectation**

The literature on scholarship offers many examples of why faculty teaching in higher education should engage in the scholarship of teaching (SoTL). However, there are very few examples of how someone might begin engaging in a scholarly teaching project in nursing education. Please reply to the following 3 statements about scholarly teaching projects where you teach.

5. Where I teach, the expectation for faculty engaging in teaching-related scholarship activities is defined in a faculty handbook, or in a similar guideline.
   1. Strongly Disagree
   2. Disagree
   3. Unsure
   4. Agree
   5. Strongly Agree

6. Complete the following statement. Where I teach, I believe ____________ faculty members are engaged in SoTL.
   1. no
   2. one or two
   3. three or four
   4. five or six
   5. seven or more

7. Complete the following statement. The prospect of having my teaching subjected to peer review makes me feel ____________.
   1. very insecure
   2. insecure
   3. ambivalent
   4. somewhat confident
   5. very confident
8. Please provide any feedback regarding your impressions of statements 5, 6 & 7, nor some additional thoughts you would like to share about scholarship and teaching in a BSN programs in the text box below.

**Scholarship Defined**

Scholarship is judged for its potential or actual value in contributing to the knowledge within a field of study or discipline. In order to be “peer reviewed,” scholars must generate a scholarly artifact (a written essay, a journal article, a presentation, or other shared by-product). Please respond to the next 3 statements regarding how you feel about making your own scholarly teaching efforts public.

9. I have considered engaging in scholarship of teaching and learning (SoTL).
   1. Strongly Disagree
   2. Disagree
   3. Unsure
   4. Agree
   5. Strongly Agree

10. I believe my teaching methods are worthy of peer review.
    1. Strongly Disagree
    2. Disagree
    3. Unsure
    4. Agree
    5. Strongly Agree

11. I enjoy the challenge of presenting a well-prepared presentation, essay, or other scholarly artifact to my peers.
    1. Strongly Disagree
    2. Disagree
    3. Unsure
    4. Agree
    5. Strongly Agree

12. Please provide any feedback regarding your impressions of statements 9, 10 & 11, or some additional thoughts on what type of scholarly artifact(s) you might consider making public in the text box below.

**Challenges Nursing Professors Face**

BSN program courses are traditionally taught using the transmission perspective, where the teacher is a content expert. Theory content in nursing has persistently grown, to the degree that the prospect of a teacher learning to teach a new course can be a real challenge. Also, numerous teaching resources and shifting pedagogical methods can require new faculty members upwards of 2 years teaching the same course repeatedly to become proficient. Please respond to the following statements related to your experiences as a faculty member in a BSN program by selecting the response that most accurately
represents your opinions on the challenges of teaching undergraduate nursing courses.

13. Complete the following statement. BSN program faculty members (new or established) where I teach receive _________ support in their efforts to learn to teach courses that are new to them.
   1. no
   2. minimal
   3. inconsistent
   4. adequate
   5. exceptional

14. Complete the following statement. My most recent experience with learning to teach a new course assignment was _________.
   1. traumatic
   2. almost unbearable
   3. barely tolerable
   4. bearable
   5. optimal

15. I consider myself to be a self-directed learner who enjoys a new challenge on a regular basis.
   1. Strongly Disagree
   2. Disagree
   3. Unsure
   4. Agree
   5. Strongly Agree

16. In the text box below, please provide any feedback regarding your impressions of statements 13, 14 & 15, or some additional thoughts you would like to share about the support available to assist faculty with new courses where you teach.
Transition to the Teaching Role
New nursing faculty members enter academe as expert clinicians, and begin their academic teaching careers as novices. In the literature, descriptions of the conditions new faculty commonly faced during transition to teaching included a lack of adequate orientation processes, too brief of an orientation period, feelings of isolation following orientation, and no knowledge of available resources needed in their first year of teaching. Please respond to the next 3 statements regarding your socialization into teaching experience.

17. Complete the following statement. My transition into teaching in nursing was a ___________ experience.
   1. very disappointing
   2. somewhat disappointing
   3. neutral
   4. satisfying
   5. very satisfying

18. Complete the following statement. I believe I am in the ___________ phase of my teaching expertise.
   1. novice
   2. advanced novice
   3. competent
   4. proficient
   5. expert

19. I feel that teaching in a BSN program is a worthwhile scholarly endeavor that I would like to share in a larger public forum.
   1. Strongly Disagree
   2. Disagree
   3. Unsure
   4. Agree
   5. Strongly Agree

20. In the text box below, please provide any feedback regarding your impressions of statements 17, 18 & 19, or some additional thoughts you would like to share about your experiences transitioning into the teaching role, or about the socialization process into teaching undergraduate nursing courses.
Work Life

The literature described a mixed picture of faculty satisfaction with their work life in higher education. Satisfaction levels were reported to be on an upward trend in some disciplines. Other reports in the literature were less encouraging, where faculty reported decreased satisfaction with work life balance, burdensome workloads, with a demanding three-part role expectation including teaching, scholarship, and service. Please respond to the next 3 statements regarding your perception of satisfactory working conditions in teaching in an undergraduate nursing program.

21. My institution's mission clearly articulates a single (teaching), dual (teaching & service), tripartite (teaching, service, research), or teaching and research expectation statement for faculty to follow.
   1. Strongly Disagree
   2. Disagree
   3. Unsure
   4. Agree
   5. Strongly Agree

22. I readily accept the workload expectations regardless of the level of commitment required.
   1. Strongly Disagree
   2. Disagree
   3. Unsure
   4. Agree
   5. Strongly Agree

23. Complete the following statement. I was _________ aware of the level of commitment required of teachers in nursing program before I decided to begin my academic teaching career.
   1. not at all
   2. minimally
   3. partially
   4. mostly
   5. completely

24. In the text box below, please provide any feedback regarding your impressions of statements 21, 22 & 23. You may consider sharing some additional thoughts you may have regarding teaching, scholarship, or service that you feel have impacted on the level of your work life satisfaction.
The Professional Nurse Educator

Ideally, nurse educators model professionalism in nursing for their students, and back up their words with observable actions. Through scholarly teaching, nurse educators demonstrate their dedication to the nursing profession’s reputation for concerned, caring practices. Scholarship of teaching and learning (SoTL) in nursing is how some nurse educators achieve a personal level of excellence in teaching by engaging in peer review processes to validate one’s achievements. Others rely on trial and error methods, accumulating their experiences, and improving their teaching practice through independent critical reflection on those experiences. Please respond to the next 3 statements regarding your perception of how you achieve high quality teaching.

25. I rely on a traditional trial and error approach to improving my teaching.
   1. Strongly Disagree
   2. Disagree
   3. Unsure
   4. Agree
   5. Strongly Agree

26. I engage in SoTL activities, including peer review, before I make improvements to my teaching.
   1. Strongly Disagree
   2. Disagree
   3. Unsure
   4. Agree
   5. Strongly Agree

27. I believe some people are natural-born teachers who do not need to work at improving their teaching as much as I do.
   1. Strongly Disagree
   2. Disagree
   3. Unsure
   4. Agree
   5. Strongly Agree

28. Please provide any feedback regarding your impressions of statements 25, 26 & 27 in the text field below. You might consider sharing aspirations you have for transforming the course(s) you currently teach, or some ideas on how to increase the quality of nursing education in undergraduate programs.
Signature Pedagogies

Nurse educators use several pedagogies, or structured teaching approaches to prepare the next generation of professional nurses. Lecture, case studies/problem-based learning approaches, supervised clinical experiences, human patient simulations, and nursing practice laboratory experiences are a few of the signature pedagogies for nursing education. Anyone teaching in a BSN program will include some or all of these signature pedagogies in their teaching practice. Passionate nurse educators engage in the SoTL, and subject their pedagogical achievements for peer review. Please respond to the next 3 statements about SoTL, the pedagogies unique to nursing education, and your passion for teaching.

29. I plan to develop a SoTL program around one or more of the signature pedagogies.
   1. Strongly Disagree
   2. Disagree
   3. Unsure
   4. Agree
   5. Strongly Agree

30. I am passionate about teaching nursing.
   1. Strongly Disagree
   2. Disagree
   3. Unsure
   4. Agree
   5. Strongly Agree

31. Learning about the expanding possibilities in nursing education (e.g. signature pedagogies) challenges my level of passion for teaching in a positive way.
   1. Strongly Disagree
   2. Disagree
   3. Unsure
   4. Agree
   5. Strongly Agree

32. Please provide any feedback regarding your impressions of statements 29, 30 & 31 in the text box below. Consider sharing your ideas, visions, or passion for developing a program of scholarship that excites you, or speak to your reservations about getting involved in SoTL while teaching in an undergraduate program.

Undergraduate Nursing Students

The literature on nursing students provides a few articles on the millennial generation learner. This cohort of learners is curious, socially conscious, and they sometimes behave as though they are entitled to earn good grades without much effort. Some have said that millennial learners will change the way education is conducted like no prior generational cohort. Please respond to the next 3 statements regarding aspects of teaching and learning with millennial learners.
33. Undergraduate nursing programs must prepare future nurses for professional practice through the most efficient manner possible, regardless of the generational cohort of learners’ characteristics.

   1. Strongly Disagree
   2. Disagree
   3. Unsure
   4. Agree
   5. Strongly Agree

34. Millennial learners present challenges to current teaching methods in undergraduate nursing program classrooms and clinical settings.

   1. Strongly Disagree
   2. Disagree
   3. Unsure
   4. Agree
   5. Strongly Agree

35. Complete the following statement. I am ______________ interested in investigating best practices in teaching and learning for the millennial generation of nursing students.

   1. not at all
   2. mostly not
   3. only minimally
   4. somewhat
   5. very much

36. Please provide any feedback regarding your impressions of statements 33, 34 & 35 in the text box below. You might consider sharing some examples from classroom and clinical teaching experiences you feel exemplify your responses to the items in this section.

Faculty Demographics

37. Which of the following categories best describes your weekly teaching obligations?

   1. Teaching 1-4 hours per week
   2. Teaching 5-9 hours per week
   3. Teaching 10-14 hours per week
   4. Teaching 15-19 hours per week
   5. Teaching 20-24 hours per week
38. Which category below includes your age?
   1. 21-29
   2. 30-39
   3. 40-49
   4. 50-59
   5. 60 or older

39. Are you male or female?
   1. Male
   2. Female

40. About how long have you been in your current position?
    (textbox)

41. Which of the following best describes the field in which you received your highest degree?
   o Education
   o Public Health
   o Nursing Science
   o Healthcare Administration
   o Counseling
   o Other (please specify)

42. Do you consider yourself to be a non-Hispanic White or other race?
   1. Non-Hispanic White
   2. Other

43. How many years in total have you taught in an undergraduate nursing program?
    (textbox)

44. Which of the following best describes your teaching rank?
   o Instructor, classroom and clinical
   o Instructor, clinical only
   o Assistant Professor, classroom
   o Assistant Professor, classroom and clinical
   o Associate Professor, classroom and clinical
   o Associate Professor, classroom part-time
   o Assistant Professor, clinical part-time

45. Any additional feedback on the overall impression you have about this first Delphi study round would be greatly appreciated. Please use the text box below to provide any comments about this survey, your personal feelings about participation as a Delphi panelist, or other ideas you would like to share.
This concludes the first Delphi round of questions. Thank you for agreeing to participate as an expert panelist in this study. Your opinions are important, and valued for their potential to move the science of nursing education forward through scholarship. The data analysis for this first Delphi round survey will inform a second survey that will be sent to you in approximately 2 weeks. The second survey will ask you to rank potential pilot barriers scale items, and the time requirement will be approximately 20 minutes. Again, thank you and watch your email for round 2.
APPENDIX D

R2 Delphi Survey

Thank you for participating in the second round of the Delphi study in the Scholarship of Teaching and Learning. Your participation will require approximately 30 minutes to read statements created from the first survey data you provided last month.

Your expert opinion is needed to evaluate each item in the survey as being of value to a pilot survey for the quantitative phase of this research. Please rank the importance of each item on the survey based on your perception of what a scholarship of teaching and learning survey of nursing faculty perceptions should include.

The statements included in this survey were derived from the narratives provided by the Delphi Round 1 participants. Some of the content may not be something you share, but might be something worth considering in a general survey of faculty perceptions. Respond to each item as candidly as possible when you consider a statement's level of essentialness.

Again, thank you for your continued participation in this important educational research project. Your expert opinions are valuable to the advancement of nursing education science.

1. The scholarship of teaching and learning (SoTL) remains an ill-defined concept for nurse educators.
   1. Not Essential
   2. Minimally Essential
   3. Unsure
   4. Essential
   5. Completely Essential

2. Nurse educators must sacrifice some of their personal time in order to engage in scholarly teaching.
   1. Not Essential
   2. Minimally Essential
   3. Unsure
   4. Essential
   5. Completely Essential
3. Nursing academics’ engagement in a SoTL project amounts to practicing what they profess about the value of professionals maintaining a lifelong learning orientation.
   1. Not Essential
   2. Minimally Essential
   3. Unsure
   4. Essential
   5. Completely Essential

4. The early career scholar of teaching has enough practice-based expertise in their subject matter to begin a SoTL program.
   1. Not Essential
   2. Minimally Essential
   3. Unsure
   4. Essential
   5. Completely Essential

5. Mid-to-late career scholars of teaching with a master’s degree possess the teaching expertise necessary to mentor new scholars of teaching.
   1. Not Essential
   2. Minimally Essential
   3. Unsure
   4. Essential
   5. Completely Essential

6. New faculty and/or faculty planning to retire soon are unlikely to engage in an SoTL program.
   1. Not Essential
   2. Minimally Essential
   3. Unsure
   4. Essential
   5. Completely Essential

7. Academic nurse educators will only engage in the SoTL when it is tied to their annual performance appraisals.
   1. Not Essential
   2. Minimally Essential
   3. Unsure
   4. Essential
   5. Completely Essential
8. Academic nurse educators who experience insufficient support early in their teaching career are unlikely to develop an interest in the SoTL.
   1. Not Essential
   2. Minimally Essential
   3. Unsure
   4. Essential
   5. Completely Essential

9. Undergraduate nursing faculty require a minimum of 5-years of experience before they are ready to engage in the SoTL.
   1. Not Essential
   2. Minimally Essential
   3. Unsure
   4. Essential
   5. Completely Essential

10. The variety of possibilities in pursuing the SoTL is not understood by faculty members of undergraduate nursing programs.
    1. Not Essential
    2. Minimally Essential
    3. Unsure
    4. Essential
    5. Completely Essential

11. Academic nurse educators who actively share innovative teaching methods with their peers should also publish their teaching scholarship.
    1. Not Essential
    2. Minimally Essential
    3. Unsure
    4. Essential
    5. Completely Essential

12. The distinction between scholarly teaching and the SoTL is not understood by faculty members of undergraduate nursing programs.
    1. Not Essential
    2. Minimally Essential
    3. Unsure
    4. Essential
    5. Completely Essential
13. Engagement in SoTL is an individual choice to subject one’s work to peer review, a necessary condition of SoTL.
   1. Not Essential
   2. Minimally Essential
   3. Unsure
   4. Essential
   5. Completely Essential

14. The expectation for academic nurse educators to engage in the SoTL should be a universal one.
   1. Not Essential
   2. Minimally Essential
   3. Unsure
   4. Essential
   5. Completely Essential

15. The scholarship of teaching and learning (SoTL) requires nurse educators to reprioritize their time.
   1. Not Essential
   2. Minimally Essential
   3. Unsure
   4. Essential
   5. Completely Essential

16. Peer review of teaching practices is a precondition for advancing the SoTL in nursing education.
   1. Not Essential
   2. Minimally Essential
   3. Unsure
   4. Essential
   5. Completely Essential

17. Faculty peer review of one another’s teaching enhances the likelihood of the SoTL occurring in undergraduate nursing programs.
   1. Not Essential
   2. Minimally Essential
   3. Unsure
   4. Essential
   5. Completely Essential
18. Exposure to scholarly teaching habits is an important factor in building confidence in early academic nursing careers.
   1. Not Essential
   2. Minimally Essential
   3. Unsure
   4. Essential
   5. Completely Essential

19. The sharing of scholarly teaching methods within the academic community impacts the overall quality of teaching in nursing.
   1. Not Essential
   2. Minimally Essential
   3. Unsure
   4. Essential
   5. Completely Essential

20. A successful beginning SoTL experience requires a PhD degreed mentor’s support early in a new faculty member's teaching career.
   1. Not Essential
   2. Minimally Essential
   3. Unsure
   4. Essential
   5. Completely Essential

21. Peer review of teaching practices in the classroom is a prerequisite for advancing the SoTL in nursing education.
   1. Not Essential
   2. Minimally Essential
   3. Unsure
   4. Essential
   5. Completely Essential

22. A good mentor can make the difference between a new faculty member meeting professional teaching milestones beyond the advanced novice teacher level.
   1. Not Essential
   2. Minimally Essential
   3. Unsure
   4. Essential
   5. Completely Essential
23. A nurse educator’s orientation toward scholarly teaching indirectly impacts student learning in a positive way.
   1. Not Essential
   2. Minimally Essential
   3. Unsure
   4. Essential
   5. Completely Essential

24. Student-centered approaches to teaching should be the primary focus of the scholarship of teaching and learning (SoTL) in nursing education.
   1. Not Essential
   2. Minimally Essential
   3. Unsure
   4. Essential
   5. Completely Essential

25. Creativity is a necessary component of preparing to teach the intergenerational nursing students in today’s BSN classrooms.
   1. Not Essential
   2. Minimally Essential
   3. Unsure
   4. Essential
   5. Completely Essential

26. Nurse educators use multiple sources for informing their scholarly teaching activities.
   1. Not Essential
   2. Minimally Essential
   3. Unsure
   4. Essential
   5. Completely Essential

27. Through the SoTL, scholarly inquiry in teaching styles is an important consideration for improving student learning.
   1. Not Essential
   2. Minimally Essential
   3. Unsure
   4. Essential
   5. Completely Essential
28. Diversity of teaching styles is the main reason for promoting the SoTL movement in nursing education.
   1. Not Essential
   2. Minimally Essential
   3. Unsure
   4. Essential
   5. Completely Essential

29. The choice to engage in the scholarship of teaching and learning (SoTL) should rest solely with the individual nurse educator.
   1. Not Essential
   2. Minimally Essential
   3. Unsure
   4. Essential
   5. Completely Essential

30. In teaching, planned change is difficult when access to a robust teaching support system is unavailable.
   1. Not Essential
   2. Minimally Essential
   3. Unsure
   4. Essential
   5. Completely Essential

31. Established faculty members provide the greatest amount of support made available to new faculty members.
   1. Not Essential
   2. Minimally Essential
   3. Unsure
   4. Essential
   5. Completely Essential

32. Academic nurse educators who engage in the scholarship of teaching and learning (SoTL) will require a more robust teaching support system.
   1. Not Essential
   2. Minimally Essential
   3. Unsure
   4. Essential
   5. Completely Essential
33. The current teaching support system made up of experienced faculty does not provide adequate support for new faculty members.
   1. Not Essential
   2. Minimally Essential
   3. Unsure
   4. Essential
   5. Completely Essential

34. Planned change can promote an open space for faculty reflection on teaching practices.
   1. Not Essential
   2. Minimally Essential
   3. Unsure
   4. Essential
   5. Completely Essential

35. Nurse practitioner and/or doctor of nursing practice (DNP) program graduates will require a robust teaching support system as they begin to learn teaching roles.
   1. Not Essential
   2. Minimally Essential
   3. Unsure
   4. Essential
   5. Completely Essential

36. Academic nurse educators are more satisfied in their teaching role when they are afforded consistent teaching assignments.
   1. Not Essential
   2. Minimally Essential
   3. Unsure
   4. Essential
   5. Completely Essential

37. Monetary policies limit opportunities for faculty to attend educational conferences, impeding the SoTL that is needed to transform undergraduate nursing education.
   1. Not Essential
   2. Minimally Essential
   3. Unsure
   4. Essential
   5. Completely Essential
38. Multiple demands on the educator’s time prevent more involvement in a SoTL project.
   1. Not Essential
   2. Minimally Essential
   3. Unsure
   4. Essential
   5. Completely Essential

39. Currently, the SoTL concept is not a key component of the undergraduate teaching role.
   1. Not Essential
   2. Minimally Essential
   3. Unsure
   4. Essential
   5. Completely Essential

40. The service component of the undergraduate teaching role overshadows the SoTL concept.
   1. Not Essential
   2. Minimally Essential
   3. Unsure
   4. Essential
   5. Completely Essential

41. Undergraduate teaching workloads are determined without consideration of the SoTL.
   1. Not Essential
   2. Minimally Essential
   3. Unsure
   4. Essential
   5. Completely Essential

42. Undergraduate workload demands require time management strategies that only come with years of experience.
   1. Not Essential
   2. Minimally Essential
   3. Unsure
   4. Essential
   5. Completely Essential
43. The constant changes in undergraduate faculty prohibit increasing the SoTL engagement level.
   1. Not Essential
   2. Minimally Essential
   3. Unsure
   4. Essential
   5. Completely Essential

44. Undergraduate nursing program faculty who have not completed doctoral level studies are unlikely to begin a SoTL project on their own.
   1. Not Essential
   2. Minimally Essential
   3. Unsure
   4. Essential
   5. Completely Essential

45. To engage in the SoTL, undergraduate faculty will need sufficient release time from regular teaching duties.
   1. Not Essential
   2. Minimally Essential
   3. Unsure
   4. Essential
   5. Completely Essential

46. Any curriculum revision planning should consider implementing SoTL early in the process.
   1. Not Essential
   2. Minimally Essential
   3. Unsure
   4. Essential
   5. Completely Essential

47. Peer review combined with student feedback provides a significant source for SoTL topics to investigate.
   1. Not Essential
   2. Minimally Essential
   3. Unsure
   4. Essential
   5. Completely Essential
48. Faculty must find their passion in nursing education before pursuing a SoTL project.
1. Not Essential
2. Minimally Essential
3. Unsure
4. Essential
5. Completely Essential

49. A school-based center for the scholarship of teaching is essential to launching any SoTL projects in the undergraduate nursing program.
1. Not Essential
2. Minimally Essential
3. Unsure
4. Essential
5. Completely Essential

50. Undergraduate nursing program faculty members who only teach in the clinical setting need classroom teaching experience before beginning a SoTL project.
1. Not Essential
2. Minimally Essential
3. Unsure
4. Essential
5. Completely Essential
APPENDIX E

R3 Delphi Survey

1. The concept of the scholarship of teaching and learning (SoTL) has not been sufficiently explained in terms that undergraduate faculty can appreciate.
   1. Strongly Disagree
   2. Disagree
   3. Unsure
   4. Agree
   5. Strongly Agree

2. Only peer reviewed, published journal articles are considered as valid evidence for the SoTL in nursing education reform.
   1. Strongly Disagree
   2. Disagree
   3. Unsure
   4. Agree
   5. Strongly Agree

3. Undergraduate program nursing educators believe that lifelong learning and the scholarship of teaching are mutually exclusive concepts.
   1. Strongly Disagree
   2. Disagree
   3. Unsure
   4. Agree
   5. Strongly Agree

4. Undergraduate nursing program faculty are largely unaware of the many ways SoTL projects are conceived, evolve, and lead to new evidence-based teaching practices.
   1. Strongly Disagree
   2. Disagree
   3. Unsure
   4. Agree
   5. Strongly Agree

5. Undergraduate nursing program faculty lack an appreciation for the scholarship of teaching as an integral factor in achieving continuous quality improvement in nursing education.
   1. Strongly Disagree
   2. Disagree
   3. Unsure
   4. Agree
   5. Strongly Agree
6. Nursing faculty will remain disinterested in pursuing a SoTL study during their teaching career, largely due to insufficient numbers of examples of the role scholarship of teaching plays in professional education.
   1. Strongly Disagree
   2. Disagree
   3. Unsure
   4. Agree
   5. Strongly Agree

7. Regardless of the availability of a good faculty mentor, new faculty will only engage in the scholarship of teaching when they are ready to do so.
   1. Strongly Disagree
   2. Disagree
   3. Unsure
   4. Agree
   5. Strongly Agree

8. Both Masters and/or PhD degreed undergraduate program faculty members lack the SoTL expertise necessary to effectively model the scholarship of teaching to others.
   1. Strongly Disagree
   2. Disagree
   3. Unsure
   4. Agree
   5. Strongly Agree

9. Engagement with the SoTL should not be a standard role expectation for all academic nurse educators.
   1. Strongly Disagree
   2. Disagree
   3. Unsure
   4. Agree
   5. Strongly Agree

10. It is reasonable to expect nursing program faculty members to commit personal time to engage in the SoTL.
   1. Strongly Disagree
   2. Disagree
   3. Unsure
   4. Agree
   5. Strongly Agree
11. Undergraduate faculty in nursing programs struggle with time management to the degree that engaging in a SoTL study is a highly improbable prospect.
   1. Strongly Disagree
   2. Disagree
   3. Unsure
   4. Agree
   5. Strongly Agree

12. The current release time policy in undergraduate nursing programs makes conducting a SoTL study a more likely prospect than was the case with faculty in the past.
   1. Strongly Disagree
   2. Disagree
   3. Unsure
   4. Agree
   5. Strongly Agree

13. Nursing program directors are too distanced from the classroom/clinical area to accurately appraise the teaching scholarship potential their faculty possess.
   1. Strongly Disagree
   2. Disagree
   3. Unsure
   4. Agree
   5. Strongly Agree

14. Nursing school administration/management should take steps to empower undergraduate faculty in determining current workload standards that allow for flexible release time to pursue scholarly interests.
   1. Strongly Disagree
   2. Disagree
   3. Unsure
   4. Agree
   5. Strongly Agree

15. Because faculty are focused on teaching, advising, mentoring, and teaching students, they are not as well-suited to revise faculty workload policies as the administration/management.
   1. Strongly Disagree
   2. Disagree
   3. Unsure
   4. Agree
   5. Strongly Agree
16. The prospect of an "openly visible" culture of scholarship of teaching is depreciated by the prevailing industrialized culture of higher education, where it's "all heads down" while at work.

1. Strongly Disagree
2. Disagree
3. Unsure
4. Agree
5. Strongly Agree

17. Administration/management do not value the SoTL enough to assure adequate funding sources that faculty can count on to be there when they request them.

1. Strongly Disagree
2. Disagree
3. Unsure
4. Agree
5. Strongly Agree

18. Nursing education reform will come from the top-down, not from the promotion of faculty-driven scholarly teaching efforts that generate new evidence-based teaching practices.

1. Strongly Disagree
2. Disagree
3. Unsure
4. Agree
5. Strongly Agree

19. Currently, a student-centered approach to teaching and learning in undergraduate nursing programs is a subordinate goal to maintaining adequate first-time NCLEX pass rates.

1. Strongly Disagree
2. Disagree
3. Unsure
4. Agree
5. Strongly Agree
20. Faculty development in learning student-centered, scholarly teaching methods must be reinforced through learning opportunities at nursing education conferences, web-based seminars, or at journal article writing retreats.
   1. Strongly Disagree
   2. Disagree
   3. Unsure
   4. Agree
   5. Strongly Agree

21. Published SoTL nursing education study findings in peer-reviewed journals are too theoretical to use in making practical improvements in the already well-established, signature nursing education pedagogies (e.g. lecture, clinical, simulation lab, case studies, reflective learning).
   1. Strongly Disagree
   2. Disagree
   3. Unsure
   4. Agree
   5. Strongly Agree

22. Curriculum revision planners who do not encourage faculty to become full partners in the revision efforts miss a window of opportunity to identify or appreciate the potential that faculty possess for advancing scholarly teaching.
   1. Strongly Disagree
   2. Disagree
   3. Unsure
   4. Agree
   5. Strongly Agree

23. The current teaching support system that experienced faculty provide to new hires must flourish if new faculty members are expected to meet critical teaching milestones, including developing scholarly teaching habits.
   1. Strongly Disagree
   2. Disagree
   3. Unsure
   4. Agree
   5. Strongly Agree
24. Without significantly more investment in faculty development time, nurse practitioners (APRNs) or doctors of nursing practice (DNPs) beginning a teaching career will lack the teaching knowledge necessary to be successful.

   1. Strongly Disagree
   2. Disagree
   3. Unsure
   4. Agree
   5. Strongly Agree

25. The SoTL will flourish only when faculty role expectations (e.g., teaching/service/scholarship) are balanced by an institutional mission that values teaching and research in an equitable manner.

   1. Strongly Disagree
   2. Disagree
   3. Unsure
   4. Agree
   5. Strongly Agree

26. How many years in total have you taught in an undergraduate nursing program?
   ○ ______ years
   ○ I have never taught in an undergraduate nursing program.

27. Which category below includes your age?
   1. 21-29 years
   2. 30-39 years
   3. 40-49 years
   4. 50-59 years
   5. 60 or older

28. What is your gender?
   1. male
   2. female

29. Which racial category do you identify with?
   1. NonHispanic White
   2. Other

30. What is your highest academic degree earned?
   1. MSN education
   2. MSN APRN
   3. DNP
   4. EdD
   5. PhD
   6. Other
31. Which category best describes your current role in nursing education?
   1. Instruction only
   2. Instruction with some administrative duties
   3. Mostly administration
   4. Strictly administration
   5. Primarily research track
   6. Mixed research/teaching
   7. Other

32. What is your current teaching rank?
   1. Adjunct or Part-time
   2. Instructor
   3. Assistant Professor
   4. Associate Professor
   5. Full Professor