

# The Effect of a Pedagogy of Curriculum Infusion on Nursing Student Well-Being and Intent to Improve the Quality of Nursing Care

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**Aim:** The aim of this study was to determine if a pedagogy of curriculum infusion promotes nursing student well-being and intent to address quality care indicators of Quality and Safety Education for Nurses (QSEN) and American Association of Colleges of Nursing.

**Methods:** This mixed-method experimental design study is based on 86 students' experiences with curriculum infusion as an intervention in two undergraduate nursing courses from August to December 2011. Student reflections, case analyses, and narrative evaluations were examined.

**Findings:** Students experiencing curriculum infusion demonstrated intention to provide quality care as evidenced by case analysis and personal reflections.

**Conclusion:** Students acknowledged the importance of self-care and demonstrated intention to provide quality nursing care in five of the six QSEN competencies. Educators must be mindful to educate the whole student.

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RESEARCH ON BACCALAUREATE nursing students conducted by Yearwood and Riley (2010) concluded that nurse educators must be mindful of the level of stress their students experience personally and academically. Sources of stress include, but are not limited to, the increased rigor of our academic programs (American College Health Association, 2011; Goff, 2011), the number of students entering college with preexisting physical and mental health vulnerabilities (Kitzrow, 2003), students exposed to more complex patient presentations within complicated health care environments, student isolation and difficulty knowing when and how to access self-care services (Eisenberg, Hunt, Speer, & Zivin, 2011; Yorgason, Linville, & Zitman, 2008), students experiencing challenges transitioning from adolescence to young adulthood (Harward, 2012; Kadison & DeGeronimo, 2004), and transitioning to a professional role (Institute of Medicine [IOM], 2010). To promote and support student well-being, nurse

educators must find ways to increase nursing student self-awareness. One method the authors found effective was deliberately changing the student–faculty and student–student relational dynamics in the classroom through the use of a pedagogy of curriculum infusion.

As nurse educators, we teach our students to care for the whole patient. We would argue that as nurse educators we must recognize and address their comprehensive needs as students, not just nursing students, and attend to the whole student supporting their cognitive development while also supporting

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their psychological, physical, and emotional well-being. The values and mission of our university and school support this new pedagogy with its focus on educating the whole person and encourage faculty to put the core mission of the institution to practice in the classroom. A variety of courses are available to students in our liberal arts core, which provide them with opportunities for contemplation, reflective engagement, and action usually in the form of volunteerism, service, and study abroad. One goal of general education courses is to encourage depth of thought that may include use of reflective exercises and group discussion. These elements are foundational in shaping development of self, which in turn, we believe, will enrich student contributions to the nursing profession and patient care while enhancing their role-taking skills.

Until recently, nursing education has focused primarily on assessing our students and less on developing and employing classroom and clinical strategies to strengthen students' well-being and sense of self, precursors to leadership, and decision-making skills (Eckroth-Bucher, 2010; Ironside & Sitterding, 2009). With the groundbreaking IOM (2010) report on the Future of Nursing and the Quality and Safety Education for Nurses (QSEN) prelicensure competencies (Cronenwett et al., 2007), the profession is challenged and poised to transform nursing education to better prepare its graduates to improve quality care and safety in our complex health care environments. The research presented here builds on our previous work that looked at the effect of curriculum infusion on nursing student well-being and now examines students' intent to improve quality and safety of patient care.

#### LITERATURE REVIEW

In the 2008 Essentials of Baccalaureate Education for Professional Nursing Practice document, the American Association of Colleges of Nursing (AACN) repeatedly emphasized that preparation of the baccalaureate nurse must include curricular content that "promotes the understanding of self and others as these attributes contribute to safe, quality care" (AACN, 2008, p. 11). They endorsed the relationship between personal health, the need for self-renewal, and ongoing professional knowledge development and the ability to deliver sustained quality care (p. 28). In her analysis of the concept of self-awareness, Eckroth-Bucher

(2010) defined self-awareness as a dynamic, multi-dimensional process used by the individual to understand personal values, beliefs, emotions, and actions to gain insights that will inform deliberative responses and behavioral change. Self-aware practitioners know their skill set, know what they can do, and know how to translate their knowledge to the situation. Evidence indicates that self-concept has a critical impact on nurse's job satisfaction, stress, burnout, and attrition (Cowin, 2001).

Hensel (2011), in her study on nurses' professional self-concept, health, and lifestyle, found that nurses who incorporated health practices in their own lives felt professionally adequate, were more caring, and were better able to direct the health care team using available knowledge and information. This finding is consistent with the AACN's view that the baccalaureate graduate "engages in care of self to care for others" (p. 8).

Several studies conducted on nursing students, however, indicate that self-care and wellness behaviors in this group are inconsistent due to lack of time, self-care activities not seen as a priority, lack of understanding about the effects of unmanaged personal stress on care delivery quality, and curricula omission of teaching students about the importance of their own self-care (Chow & Kalischuk, 2008; Flaherty, 2001; Stark, Manning-Walsh, & Vliem, 2005). Nurse educators who engage in self-care behaviors may serve as role models for their students (Horneffer, 2006).

Stressors on baccalaureate nursing students impact all aspects of students' personal and professional development. College students with higher levels of learned resourcefulness develop greater self-confidence, motivation, and academic persistence and are less likely to become anxious, depressed, and frustrated (Goff, 2011). In a study of primary care physicians who participated in a continuing education series that focused on self-awareness, participants showed improved mood and personal well-being and exhibited decreased symptoms of burnout during the 8-week intervention and at 10-month follow-up. Participants demonstrated positive changes in empathy and psychosocial beliefs, which are both indicators of a patient-centered orientation associated with providing improved quality of care (Krasner et al., 2009).

The current health care system demands nurses who are able to provide comprehensive, complex care in a rapidly changing health care environment

(Benner, Sutphen, Leonard, & Day, 2010; IOM, 2010). The presenting patient intricacies and numerous human and non-human factors contributing to delivery of patient care add to the challenges of providing quality care. This in turn demands identification and testing of new and existing models of education to support nurses' success and engagement in team-based, patient-centered care (Gilliss, 2011). An educational experience that promotes self-awareness should enhance the mental health of our students and improve the quality of care they provide. We believe that this in turn will benefit the students personally and will contribute to improved health care outcomes.

Since 2005, nursing has been assessing, discussing, and developing strategies to reform prelicensure education with the goal of preparing students to enter the health care system equipped from the outset to provide safe quality care. QSEN provides a competency framework within the context of a care delivery system to assist in meeting this goal. The QSEN competencies focus on knowledge, skills, and attitudes of the nurse in six areas: patient-centered care, teamwork, evidence-based practice, quality improvement, safety, and informatics (Barnsteiner, 2011; Cronenwett et al., 2007; Sullivan, Hirst, & Cronenwett, 2009). Currently, nursing students are not consistently and thoughtfully exposed by the time of graduation to the elements necessary for professional identity formation and competence as identified by the AACN, the IOM, and the QSEN (Cooke, Ironside, & Ogrinc, 2011; Ironside & Sitterding, 2009). The National Council of State Boards of Nursing (2011) defined competence as "the application of knowledge and the interpersonal, decision-making and psychomotor skills expected for the practice role, within the context of public health" (p. 1).

Curriculum infusion is the blending of a health/wellness issue with the typical academic course content. As a classroom strategy, curriculum infusion calls upon the faculty to provide information on a predetermined topic and facilitate group dialogue about that message with a focus on health, prevention, and resources (Cordero, Israel, White, & Park, 2010). Cordero et al. believe that students internalize the information and that this strategy works when the faculty member is viewed as credible, trustworthy, and accessible. In the 2010 study by Yearwood and Riley, the issues of personal

development, self-awareness, and self-reflection were utilized in several nursing courses to address common college health issues seldom covered in the classroom in a nonjudgmental and open manner while giving students opportunities for reflective learning and engagement with educators and campus health professionals to address their well-being (Yearwood and Riley, 2010). Students were able to address not only their intellectual growth and development but also their emotional well-being and civic understanding. Through this process, students gained insight into educators' involvement in ensuring their well-being. It was the blending of self-awareness and self-reflection strategies with course content that provided connections for students with their lived experiences. The experience of using curriculum infusion resulted in nursing students taking time, developing self-awareness, valuing each other, and valuing the importance community plays in supporting individual well-being (Yearwood & Riley, 2010). Curriculum infusion deliberately changes the student-faculty and student-student relational dynamics.

Nurses who are able to be reflective practitioners will be able to use self-assessment to enhance the effectiveness of their practice. To develop reflective thinking in our students requires that nurse educators be prepared to facilitate the skills of reflection. Atkins and Murphy (1993) identified components of self-awareness as the ability to describe, critically analyze, synthesize, and evaluate. Dewey (1933) is credited with the educational tenet that critical thinking must be grounded by the ability to reflect on both experience and knowledge and that reflection should be systematic and disciplined. Reflection is a meaning-making process guided by scientific inquiry that is enriched in interaction with others and results in growth of self and others (Rodgers, 2002). It is in the thinking about their experiences as nursing students and sharing those experiences that the cognitive elements of the self connect with deeper understanding, personal and professional agency, competence development, and a greater understanding of quality practice (Burrows, 1995). Specific strategies educators use to promote self-reflection include focused assignments, coaching, facilitation, clinical journals, group work to discuss and analyze case scenarios, support groups, reflection papers, and dedicated class discussion time (Bolden, Cuevas, Raia, Meredith, & Prince, 2011; Lauterbach &

Becker, 1996). Self-assessment and self-reflection are necessary parts of competency evaluation for the improvement of nursing practice (Allen et al., 2008) and are a professional responsibility to ensure safe and high-quality care.

The theory of planned behavior guided this study, as our goal as researchers and educators was to develop behavioral intention in our students that would be directed at delivering safe quality care. Intention is at the core of the theory of planned behavior (Ajzen, 1985, 1991) that predicts deliberate behavior. A person's behavior is determined by his or her intention to perform the behavior and that is, in turn, due to his or her attitude toward the behavior and his or her subjective norm or belief about how people he or she cared about will view the behaviors. Perceived behavioral control (personal power to affect an outcome), often referred to as self-efficacy, is another component of intent. Godin and colleagues endorsed intention as proxy for behavior and concluded that intentions of health professionals are influenced by beliefs about abilities, consequences, social forces, self-concept, moral norm, and social and professional role (Chabot, Godin, & Gagnon, 2010; Godin, Belanger-Gravel, Eccles, & Grimshaw, 2008).

Self-assessment and self-reflection are essential to the development of the professional nurse. Attributes of a nurse that build competence must start with the self. Awareness of personal capabilities or characteristics (attributes) should be included in nursing education programs. To have self-knowledge and evaluate one's own competency lay the foundation to setting goals for improvement. Competence is required to practice safely and effectively. In nursing education, we must address the self to enhance and nurture the student's agency as a nurse. It seems obvious that to be able to care for others, the professional nurse must first be able to care for his- or herself physically, emotionally, and psychologically. The World Health Organization (2011) defined positive mental health as a "state of well-being in which the individual realizes his or her own abilities, can cope with the normal stressors of life, can work productively and fruitfully, and is able to make a contribution to his or her community" (p. 12). Most undergraduate nursing students are focused on acquiring health-related knowledge and technical skill competence and spend little to no time in assessing and developing their own personal and professional

agency. Continuous self-evaluation and ownership of the need to engage in lifelong learning are behavioral expectations of a baccalaureate graduate (AACN, 2008).

The study presented here builds on earlier work by Yearwood and Riley (2010), discussed previously, to examine curriculum infusion and its impact on well-being and intent to provide quality nursing care. The research presented here sought to answer the question—Does a pedagogy of curriculum infusion effect nursing student well-being and intent to improve quality nursing care?

## METHODS

This mixed-method experimental design study used Ajzen's (1991) theory of planned behavior as its framework. Data were collected from August to December 2011. Student data included demographics, self-care behaviors, emotional well-being, self-efficacy, narrative reflection, and case analyses. The data presented in this article focus on qualitative analysis of student narrative reflections and case study analyses.

### Participants

Participants for this study were traditional 4-year ( $n = 30$ ) and second-degree accelerated ( $n = 56$ ) baccalaureate nursing students enrolled in the same nursing program. Males and females aged 19–55 years were eligible to participate. Participants were as follows: 24.09 mean years of age; 90.8% female; 82.9% single and 17.1% married or partnered; 80.3% White not Hispanic, 5.3% Black not Hispanic, 5.3% Asian or Pacific Islander, 2.6% Hispanic, 1.3% biracial, and 1.3% American Indian or Alaskan Native; and, 61.8% Christian, 3.9% Jewish, 1.3% Muslim, 1.3% Buddhist, and 25% identified as other. Students were informed that they could choose not to participate in the study without fear of reprisal and that their course grade would not be affected by not participating. If they chose not to participate, they remained in the class and received the designated instruction but did not complete any of the study measures. Researchers were blinded in student choice regarding participation throughout the semester.

### Participant Recruitment

Students in two undergraduate nursing courses with two sections of each course were included in the study. One section of each course received the

intervention (curriculum infusion), and the other section served as the control group. Institutional review board approval was obtained to conduct the study. The study was explained to the students by the co-investigators, and informed consents were obtained by a research assistant after the co-investigators answered questions and left the room. All participants were adults enrolled in the courses and older than 18 years.

One section of each course received the curriculum infusion pedagogy, and the other section received usual course content materials. There was no compensation for participating in the study, and student course grades were not affected by participation. Data were analyzed after the close of the semester and grades had been assigned.

To measure intent to improve quality patient care at Week 11, students were asked to design a plan of care based on a *case study* (attitude) developed by the researchers and reviewed by three expert clinical faculty. The faculty experts deemed the content and case study questions appropriate for use with the students. Students brought their individual analysis to class on Week 12 to develop a plan of care as a small group (subjective norm) activity. The case scenario (intent) asked the students to describe management of the patient. Using guidelines from QSEN and AACN, all reflections and the case analyses were assessed for the following criteria: self (role, knowledge, attitude, value, and action); patient-centered care (teamwork, advocacy, communication, and collaboration); evidence-based practice; quality improvement (care coordination); safety; and informatics. The case scenario and assignment are found in [Table 1](#).

### Course Design

Students in the control and intervention groups all received instruction using the same topical outlines and the same readings. In one of the courses, the assignments were the same. In the second course, the control group had the same assignment used in past semesters, whereas the intervention group had a new assignment with increased reflective writing assignments, more discussion, and student participation of patient cases to illustrate course content and analysis. The control group (the usual assignments as in past semesters) did a group presentation on a topic of their choice.

**Table 1. Case Scenario**

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Mrs. Franklin is a 73-year-old woman with a 20-year history of smoking a pack of cigarettes daily. She has lived in a nursing home for the past 3 years after having some difficulty around caring for self. She is 5 ft 4 in. tall and weighs 168 lb. Her blood pressure range is 140/72–160/90. P = 70–86 and R = 20–28. Her temperature is usually 98.0. The staff has begun to notice that Mrs. Franklin has more difficulty remembering events, and on ambulation, her gait has been unsteady. She wears bifocals, and her last vision examination was 3 years ago. At around the time of her admission to the nursing home 3 years ago, she fell in the middle of the night when getting up to go to the bathroom. She was hospitalized at the local hospital for 2 weeks after that fall for a fractured hip. Mrs. Franklin's husband died 5 years ago from a stroke, and she has two adult daughters, both of whom live in another state approximately 3 hours away by plane.

- 1) Develop a comprehensive nursing plan of care for Mrs. Franklin.
  - a) Identify (list) all patient problems (nursing diagnoses, actual and potential).
  - b) Identify a plan on how you will address each patient problem.
- 2) Place these in order of priority needs for this patient.
- 3) What role does Mrs. Franklin play in her care?
- 4) What do you as the nurse need to care for this patient?

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Students enrolled in the intervention groups were participants in a university-wide initiative, the Engelhard Project, which connects course material to the lived experiences of students across disciplines. Traditional students in both the intervention and control groups may have been exposed to additional Engelhard courses in the same semester or in previous semesters. Our institution is part of a national project, Bringing Theory to Practice, to address student well-being and civic development through engaged learning strategies. Both intervention sections had additional opportunities to apply course material to self through reflective writing and processing experiences in the classroom, which are requirements of the Engelhard Project.

### Data Analysis

Qualitative data from narrative reflections and case scenarios were analyzed by the researchers for whether AACN and QSEN criteria (as previously listed in the [Methods](#) section) were addressed. Prior to looking at the data, the researchers developed three broad categories (self, others, and evidence) and applicable subcategories under each of these that reflected intent of the AACN and QSEN documents. Data analyzed included all student reflections, which were collected multiple times

during the semester, and student responses to the case study. First, student reflections were read independently by each researcher who looked for examples of how students referred to self: what the student thought they needed to know; what their attitude, value, or skill was in relation to caring for either patients or self; and descriptors of their role such as an advocate or educator. Second, descriptors that spoke about others (patient) were assessed for and included student comments about the importance of empowering the patient, collaboration, communication, personal agency within health care environments, and relationships with the patients or the health care team. Lastly, the researchers looked for evidence that referred to quality, safety, decision making, and use of theory. Researchers compared findings and concurred with supporting data found in each of these three areas. Researchers then independently examined the responses to the case scenarios in the intervention and control groups, looking for ability to identify key nursing priorities, what students saw as their role and the patient's role in their care, and identified needs of the nurse to better care for the patient. Analysis of all qualitative data provided the researchers with information about nursing student intent to improve quality nursing care.

## RESULTS

### Self

Student reflections confirmed an awareness and valuing of the need for care of self to be safe and effective practitioners. Providing time and value to students to address self was enthusiastically and positively received by all students. One student stated, "this seminar is the best 50 minutes of my week."

Students in all sections initially discussed being overwhelmed and stressed by the demands on their time and attention as nursing students. Change occurred among students in the intervention groups in that they developed strategies to manage their stress and became more open and comfortable discussing their student experiences. Students were reassured by the opportunity to address self and encouraged to have a strategy to manage their stress, "I began to reevaluate my behaviors related to health."

Students recognized the effect stress plays in their role as a nurse, as demonstrated by comments

such as, "Having reduced stress levels will make me a better nurse and should be a priority in my professional career" and "As a nurse, I hope to have an ability to be honest with myself about my stress levels so I can know when to ask for help." One student added, "This course really helped me to survive in the real world as a young adult."

Illustrative of the AACN Essentials were comments such as, "Self-awareness has helped me take on the role of nurse. Commitment to personal growth must be part of commitment to our patients" and "Keeping myself emotionally and physically safe is crucial to me being an effective nurse."

Students in the intervention groups discussed strategies they found useful. These included the knowledge of self, communication, self-advocacy, and prevention. Taking the course content about healthy behaviors and prevention, students applied this material to themselves and made deliberate efforts to care for self with strategies such as exercise, meditation, and time alone. One student wrote, "The course provided me the knowledge and skills to help patients improve their health but also helped me personally to be aware of my behaviors. I have been able to cut back on my alcohol consumption." Another student wrote, "I need to ensure that I take time for myself and have a strong support system to prevent (compassion fatigue/burnout). I need to take the time to add exercise back in my schedule. I do not take the time now to do the things I enjoy to add balance to my life." The importance of communication was demonstrated by this student comment, "I can truly talk to someone about my feelings and all the stresses that come along with them and not feel judged but instead be understood...I also have learned the importance of taking care of myself."

One student used an analogy that captured the group sentiment: "Similar to an airplane when the flight attendant explains that your oxygen mask must go on before you try to help anyone else—it's the same in nursing." Another student remarked, "The most important technique that I try to use in my practice as a nurse is self-reflection. It helps me regulate and deal with stress on multiple dimensions."

### Quality and Safety Education for Nurses

Students became aware of and recognized the value of QSEN elements as evidenced by their reflection and case study analyses. Their data

confirm beginning preparation to address their role in improving patient care quality. Data also support students taking responsibility for safety as participants in the health care team. Students were able to articulate why these competencies are important to their role as effective future nurses. This section is organized by the QSEN competencies: patient-centered care, teamwork and collaboration, evidence-based practice, quality improvement, safety, and informatics.

### Patient-Centered Care

Students recognized the patient as a partner in care and demonstrated respect of the uniqueness, values, and wishes of the patient. At the same time, they expressed concern, as stated by one student, "I think patient-centered care is extremely important and regret that it is often the first thing to disappear in a time crunch." One student supported patient-centered care with the comment, "not doing to them but doing with them," and another, "Don't be intimidated by intimidating patients, their questions and insights can help us learn and develop our skills" and "I need to find the balance between my 'to do' list and engaging in patient-centered care." Lastly, another student summarized, "from past clinical experiences I can tell a big difference in care when the patient feels involved, the outcome is better, families are happier and so is the nursing staff."

Words and phrases used in student writings that supported a philosophy of patient-centered care included the following: active participant, involve in decision making, involve in care planning, commit to patient participation, encourage involvement, provide knowledge to be able to participate in care, control over own care, listen to the patient, and partner with the patient toward their goals.

One student stated, "The patient plays an integral part in her care." Another said, "The nurse serves as an advocate for patients." One student cited a strategy to use, "I must use techniques such as teach back to ensure understanding as knowledge gives the patient control."

### Teamwork and Collaboration

In course discussions students said that they were intimidated on the units in interactions with the staff. They never experienced the feeling of being active members of the health care team. Yet, students craved to be part of the team, to work collaboratively, and to see patient outcomes

improved when all team members work toward common patient goals. "One of the most important aspects of the nursing profession that I have taken out of this course is teamwork and collaboration. I see firsthand the significance of this combined effort." Another student added, "You need the full support and cooperation of other staff..and resources." Lastly, another student commented, "Hospital hierarchies should signify a collaborative effort rather than a division of power."

Students identified their own strategy for increasing their involvement and participation as member of the team. This strategy was to take responsibility at the beginning of the shift to tell the unit nurses what skills they had mastered and to identify the areas where they needed support and guidance.

Referring to the case analysis, one student stated, "Collaboration with the team is essential to improve the care of this patient." Another stated, "It was important to have support from the nursing home staff to ensure holistic care." Looking at enriching our teams, one student wrote, "We must represent a spirit of compassion, healing, kindness, and respect for our fellow human beings. Not just patients under our care, but those working with us and around us."

### Evidence-Based Practice

Students saw the importance of evidence as the driver of quality care and how they operate as a nurse. Several students stated, "I see the importance of evidenced based practice." The courses utilized in this study relied on current literature and therefore had no textbook. Students were required to examine the strength of the evidence. One student remarked on this activity with the statement, "I am taking away the skills on where to find evidence based information."

Students noticed gaps in patient care information that were critical for them to develop a comprehensive and thorough plan of care. Specifically, data were missing about the patient's family, patient history, and nursing home care providers. Students identified the need to involve family members and other health care providers to develop social support for the patient. They saw the need to deliver optimal health care and to include addressing the impact of poor vision, unsteady gait, and poor memory. Students also sought more information "about the nursing home to which the patient was to return."

### Quality Improvement

The students were aware of processes that improve quality of care as evidenced by identification of specific nursing actions to ensure safety and prevent harm to the patient.

Students looked holistically at the plan of care of the patient and identified both actual and potential needs of the patient. Nursing students developed awareness that they are integral to the health care team and that the entire team must examine patient outcomes to be part of the quality improvement process. Students identified the need to “teach, advocate, take time, and work as part of the health care team” to better care for this patient. Students did not present data that involved measurement or indicated they were thinking of changes over time.

### Safety

An overwhelming result of the case analyses was student ability to identify and attend to multiple risks to patient safety. They recognized the nurses’ role to minimize risk of harm to the individual patient. One hundred percent of the intervention students identified strategies to address potential harm related to falls, impaired mobility, and social isolation in their care plans. Prevention was a major theme as shown in this student’s statement, “So many threats to patients can be *prevented* with proper techniques and proper precautions. Education takes time but can mean life or death to some populations that we serve,” and another, “I aim to always create a safe environment in which to engage with patients.”

One student reported a connection between personal balance and potential for patient harm when personal stressors are overwhelming, causing distractions and possible unsafe practice. “If we come to work stressed from external stressors and do not have adequate methods of stress relief..we will be more inclined to skip those important steps that require more energy and time and just do things that are required vs. what is needed by our patients. We will be less likely to go the extra mile to deliver quality patient care when (personal) stress symptoms are present.”

### Informatics

Students provided no specific data on how they would use information technology in their

care of the patient in their reflections, comments, or case analyses.

### Limitations

Possible limitations of this study included the short duration of our intervention (August–December) and few ( $n = 6$ ) male students in the four cohorts. Another limitation in the traditional student groups was the same instructor dealing with possible interaction contamination due to teaching one section with curriculum infusion and one without. The second-degree groups control versus intervention had different instructors creating a question about teacher impact. A further unknown possible limitation is that students may have been enrolled in a concurrent Engelhard course or previously taken an Engelhard course.

## DISCUSSION

Taking on the role of nurse is a significant life transition. It is crucial that nurse educators examine facilitators and inhibitors to student success in school and career and endorse coping strategies to ensure the personal and professional development of nurses who will provide high-quality, safe, and patient-centered care.

A positive outcome of the use of curriculum infusion in our study went beyond mere knowledge. Curriculum infusion provided students the ability to generate their own strategies with implications for their self-care and also for their role as future practitioner in the health care system. Students demonstrated an ability to be self-advocates when discussing the challenges they faced in their experiences.

Patient safety and quality of care support the development of nursing competency in the area of self. Competence is required for nurses to practice safely and effectively. In nursing education we must address the self to enhance and nurture each student’s agency as a nurse. To be able to care for others, the professional nurse must first be able to provide self-care. Curriculum infusion provides one method to facilitate self-awareness in our classrooms interaction with students.

Educational strategies designed to help students successfully navigate their transition from the role of student to the role of professional nurse are not well supported in prelicensure nursing education today. QSEN combined with AACN provides a



framework to facilitate and enhance this vitally important transition that must occur successfully.

### CONCLUSION

We embrace the QSEN competencies but challenge the nursing community to consider the *self* and *self-awareness* as important competencies to be addressed in nursing education. The AACN Essentials led us to identify self as the missing critical element for successful transition of the student to the professional role. The development of self and self-awareness allows the nursing student space to acquire the knowledge, skill, and attitude required for effective nurse agency. The ability to act competently and professionally comes from knowledge of the self.

Nursing education currently develops student competence as silos divorced from the self. Students in this particular research told us that you cannot omit the self. Students appreciated taking time for reflection and thought that taking time to understand self was not only valuable but also provided a missing transitional tool. Students saw the connection between their own agency and quality indicators and expressed the intention to work more confidently, competently, and holistically with their patients.

We recommend adopting Eckroth–Bucher’s definition of self-awareness as the framework for an additional QSEN competency. Further work is needed to identify the knowledge, skills, and attitudes objectives to be developed in prelicensure programs for competency. This expansion of the competencies will require nurse educators to engage in additional research on the effects of curriculum infusion and develop additional strategies that will promote self-awareness and nurse agency.

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