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Dr. Nasca,

The American Nurses Credentialing Center (ANCC) is pleased to provide input on key dimensions of the learning and working environment as they pertain to learners within residency programs (physicians, nurses, pharmacists, and others), as well as practicing health care providers who function as learners, mentors and teachers. Our perspective is framed through the lens of nursing. Since nursing does not track resident duty hours, we are unable to comment on the value of a time-based metric on the quality of the learning environment.

The ANCC conducted a review of nursing literature focused on the clinical learning environment and identified several guiding principles that may help inform the ACGME standards. The full review is attached (Attachment 1), and a synopsis of findings is outlined below.

Two categories of themes emerged from the literature: factors that support a positive clinical learning environment and barriers to learning in the clinical environment. Factors that related to creating a positive clinical learning environment included: leadership support; strong teamwork and relationships (interprofessional and intraprofessional); and good communication skills. Other important themes in creating a supportive clinical learning environment within nursing included: manageable workloads; ensuring quality of the learning experience; strong clinical – academic partnerships; and an overall commitment to learning within the environment. Barriers to learning in the clinical environment for nursing included: time constraints both within the workplace and personal, and lack of financial resources. When an environment did not support learning or a culture of learning, nurses experience inconsistencies in access and quality to learning opportunities.

The ANCC believes that these principles, while published within the nursing literature, are applicable across professions and across the learning continuum.

An environment that:

- Includes engaged and supportive leaders
- Builds and sustains teamwork and positive relationships between and within professions
- Fosters strong communication skills
• Supports manageable workloads for clinicians and others
• Is focused on the quality of the learning experience, as opposed to quantity
• Develops strong partnerships between those in the clinical and academic environments
• Demonstrates an overall commitment to learning for all

The ANCC is also willing and honored to participate in a Resident Duty Hours in the Learning and Working Environment Congress to be held in Chicago in 2016.

We look forward to meaningful collaboration on behalf of all those who are learning and working together in health care, and on behalf of the patients and families they serve.

Sincerely,

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Director, Accreditation Program
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Executive Summary

Evaluating factors impacting the clinical learning environment as reported within nursing literature may help to identify common themes that impact the clinical learning environment for the interprofessional team. The purpose of this literature review was to explore the concept of the clinical learning environment within nursing.

Electronic databases (CINHAL and MEDLINE) were searched from January 2005 to January 2015 using the search terms “nursing” and “learning environment.” Additional limits to the search included English language and full text. Sixty articles matching the search criteria were identified. After review of abstracts, 6 articles evaluating the clinical learning environment were retained. A second search was then conducted based on findings from the first literature review using the search terms “nursing” and “learning culture.” Additional limits placed on the search included English language and years 2005-2015. One hundred eighteen articles were found matching the search criteria. Through careful analysis of abstracts, 3 articles were found to be pertinent to the search criteria and were retained.

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Empiric evidence describing factors that impact the clinical learning environment for nurses can begin to shape a national dialogue for the interprofessional team.
Governance Research


Researchers compared workplace attributes in three acute care hospitals in Australia (n = 2) and Singapore (n = 1). A representative sample of nurses working in in-patient acute care units participated in the study (Australia (n = 203) and Singapore (n = 154)). Two instruments were used to evaluate attributes of the workplace. The Support Instrument for Nurses Facilitating the Learning of Others (SINFLO) is comprised of 17 items measuring factors that facilitate staff to assist others’ learning in the workplace with 5 subscales: teamwork, communication, recognition, preparation and workload. The Clinical Learning Organizational Culture Survey (CLOCS) is comprised of 28 items measuring the strength of attributes recognized as important for quality learning environments with 5 subscales: recognition, affiliation, accomplishment, influence and dissatisfaction. Both instruments used a 5 point Likert rating scale with 1 = strongly disagree to 5 = strongly agree. Cronbach’s alpha was calculated to evaluate internal consistency of each instrument between countries. SINFLO had acceptable internal consistency with a Cronbach’s alpha greater than .70 for all variables except preparation and communication. CLOCS had acceptable internal consistency with Cronbach’s alpha greater than .70 for all variables except influence and accomplishment. Results demonstrated that nurses in Singapore reported significantly higher perception scores for their role in assisting others’ learning in the workplace for acknowledgement, workload and teamwork as compared to nurses in Australia. The majority of nurses in Singapore reported they received support to work with students or to orient and guide new graduates. There were no significant differences between countries on the CLOCS. The researchers concluded that recognition and reward has a positive impact on nurses’ perception of workplace support for facilitating the learning of others.


Congdon, Baker, & Chessman (2013) evaluated the impact of a Learning Environment Manager (LEM) with dedicated responsibility for supporting practice-based learning of undergraduate nursing students in a large hospital in England. Senior staff nurses with precepting and mentoring responsibilities were chosen to be LEMs. They participated in
a workshop designed to standardize and enhance the learning experiences for students, and were given up to 3 hours of dedicated time each week to organize key aspects of the learning environment. Goals of the project were to: enhance the practice-based learning experiences for students and establish consistent benchmark standards of excellence throughout the hospital; standardize the management of practice-based learning throughout the hospital; and strengthen the partnership between the hospital and university. The program was piloted over a 6 month period in 6 wards, evaluated, then implemented throughout the remaining 43 hospital practice sites. Evaluation was conducted through focus groups comprised of a variety of stakeholders including: LEMs, ward managers, mentors, nursing students, university lecturers and department managers. Three themes emerged from these focus groups: managing mentors within the practice setting, managing the students’ learning experience, and managing the quality of the learning experience. From an organizational standpoint, the LEM allowed hospital clinical educators more time to make strategic contributions to the clinical learning environment. On an individual staff level, the LEM provided a high level of support to mentors and staff, which often increased the quality of the learning experience. Overall, the role of the LEM positively contributed to improving the quality of practice-based learning throughout the hospital.


Ford et al (2013) described the development, implementation, and evaluation of an interprofessional clinical experience for healthcare students (occupational therapy, optometry, nursing, medicine, dentistry, nutrition, and social work) learning to care for older adults with multiple complex medical conditions within a nursing home setting. The Interprofessional Clinical Experience (ICE) was designed to expose healthcare students to the complex issues of aging as well as to interprofessional team-based care. The program was evaluated using a six-level model developed by Freeth and colleagues at the levels of reaction to the experience (level 1) and revision of attitudes and perceptions (level 2a). A total of 193 healthcare students participated in the program over a 12 month period. Overall, healthcare students rated the experience as positive.

Participants reported that accessing a patient’s health literacy level could improve quality of care (p<0.001); interprofessional care of the complex older adult was cost effective (p<0.007); and respecting a patient’s dignity and privacy when discussing the
care plan with the team was essential (p=0.01). Program implementation proved challenging in the areas of time to implement, inconsistencies in students’ experiences and scheduling. Despite the challenges, authors felt that ICE proved to be an innovative and rewarding experience, and better prepared healthcare students to provide collaborative and patient centered care.


The authors explored current literature and developed a framework which identified key factors necessary for encouraging interactions fundamental to learning in clinical practice (Henderson, Briggs, Schoonbeek, & Paterson, 2011). The framework consists of three variables: inspirational leadership, effective management, and the creation of positive partnerships.

Inspirational leadership was described as a critical factor for creating a positive learning environment. Leaders, through role modeling behaviors, encourage sharing of ideas which promotes trust, open communication, and self-respect for the team. The authors of this framework identified the Clinical Learning Organizational Culture Survey (CLOCS) as an instrument to measure the attributes associated with leadership including: affiliation, recognition, accomplishment, influence and dissatisfaction. The authors suggest that the use of CLOCS may facilitate leaders’ ability to identify specific areas for improvement in the clinical learning environment.

Effective management, the second variable in the framework, was identified as pivotal since the management team supports behaviors in the clinical learning environment that create opportunity for learning. When staff feel supported and adequately prepared by managers, they are better able to engage with students and novices. The Support Instrument for Nursing Teaching Roles (SINTR) was identified by the authors to measure factors necessary for creating a positive clinical environment. The instrument has four subscales: workload, preparation, teamwork, and culture. The SINTR may be used by managers and leaders to identify areas that are critical to creating a supportive learning environment.

Partnership between health care facilities and educational institutions, the third variable, was cited as a critical component of creating a strong clinical learning
environment. Partnership requires open communication and collaboration. The Student Clinical Learning Culture Survey (SCLCS) was identified as an instrument to measure students’ perception of inclusion and integration in the clinical learning environment, students’ motivation and attitude toward learning opportunities, and students’ overall satisfaction and dissatisfaction with the learning environment. This tool helps identify areas for improvement in the clinical setting that can impact the partnership.

The clinical learning framework presented in this article gives guidance for establishing and sustaining a positive learning environment. The framework can be used to depict factors that impact the clinical learning environment; identify the critical roles of leaders and managers; evaluate components of clinical settings; collect data that can be used to analyze aspects of the environment; and identify recommended strategies for implementation.


Researchers described how new ICU nurses perceive the clinical learning environment as well as factors that influenced their perception. Nurses with up to 2 years of experience working in 5 hospitals in Ireland participated in the study (n=47). Data were collected using a modified version of the Clinical Learning Scale (CLS), an instrument comprised of 24 questions with 6 subscales: satisfaction; nurse staff and intensive care nurses’ interpersonal relationships; educational staff commitment to learning; clinical nurse managers’ commitment to learning; and hierarchy and ritual. Content and face validity were evaluated on the revised subscales. Cronbach’s alpha was 0.77. The tool uses a 5 point Likert rating scale with 1 = strongly disagree to 5 = strongly agree. Results revealed that the majority of new nurses (75%) perceived the learning environment to be positive. Factors that influenced the nurses’ positive perception of the clinical environment included higher scores on interpersonal relationships, higher levels of educational staff commitment, higher clinical nurse managers’ commitment, and increased nurses’ length of time in the ICU. Factors that were not associated with positive perceptions of the clinical environment included hierarchy and ritual, and months since qualification. Researchers also compared nurses who qualified in Europe with those who qualified outside Europe. Non-European nurses had significantly higher levels of satisfaction in the ICU as a clinical learning environment. Researchers concluded that the ICU can be a positive clinical learning environment when support and commitment to learning, and interpersonal relationships between staff are strong.
Researchers utilized an ethnomethodologic approach to better understand factors that may contribute to or inhibit a culture of workplace learning in nursing. A series of composite “snap shots” of qualified nurses (n = 45) and student nurses (n = 50) interacting in their clinical practice settings were observed over a period of 9 months. The nurses were predominantly working in acute care settings of major tertiary care hospitals in Brisbane and Melbourne, Australia. Eight nurses were in aged care settings, and 16 nurses were in a major rural center facility. Researchers used both direct observation and participant interviews in the study.

Three themes emerged from the study: learning by doing; navigating through communication; and “entrustability.” Learning by doing was students’ preferred method of learning in the workplace. It was also the preferred method of learning by practicing nurses. When clinical areas were busy, however, staff nurses focused on immediate tasks which left little time for student interaction and support of learning. Communication was seen as integral to an individual’s ability to learn by doing. Good communication skills between practicing nurse (preceptor/mentor) and the student nurse led to students feeling more comfortable, relaxed and free to ask questions. “Entrustability” refers to rapport and trust between staff and student nurse, and leads to building students’ independent decision-making. Large, busy wards with frequent staff rotations decreased entrustability, and negatively impacted learning in the workplace.

Results from this study suggest learning in the workplace is facilitated by opportunities for learning by doing; consistent, clear communication between student and preceptor/mentor with time for reflection; and a supportive environment that generates trust. Factors that inhibit learning include lack of time which resulted in nurses becoming task-focused; frequent staff rotation/turnover; and failure to build trusting, supportive relationships.
Researchers conducted a mixed methods study to evaluate the perceptions of nurses who participate in the clinical education of students in dedicated education units (DEU) as compared to traditional unit-based models of instruction. DEUs utilize unit-based senior staff nurses with additional training to teach nursing students (Clinical Instructors (CI)) while academic faculty provide supplemental support. Traditional models, in contrast, utilize academic faculty as primary clinical instructors. Typically, the instructor to student ratio in a DEU is 1 (CI) to 2 (nursing students). In traditional models, an academic faculty instructor may accompany up to 8 students in a unit.

Data in this study were collected via focus groups and survey. Focus groups were held with 124 participants representing traditional units and DEUs in four states: Oregon, South Carolina, Tennessee and New York. Results from the focus groups revealed that staff-based clinical instructors in DEU units had clearer role definitions, better continuity, and stronger clinical learning progression with their academic partners when compared to faculty in traditional models. Students in DEUs also had opportunity to learn from an interprofessional team of clinical staff including physicians, technicians, social workers and other health care specialists. The quality of the clinical education in DEUs was perceived to be high due to integrating students into a more “complete picture” of nursing. In comparison, the level of collaboration, partnership and communication varied between academic faculty and unit-based staff in traditional models. Staff nurses supporting clinical instruction of students in traditional models reported challenges with logistics and dedicated time for teaching which negatively impacted their satisfaction.

In addition to collecting data via focus groups, nurses (n=122) from 17 units (8 traditional and 9 DEU) also completed the Clinical Nurse Teacher Survey (CNTS). The CNTS is a 72 item instrument with 7 subscales: learning atmosphere of the unit; leadership style of the nurse manager; quality of nursing care on the unit; nature of the clinical supervisory relationship; work-life satisfaction of nurses; professional development and faculty support; and student benefits and learning. Responses are rated on a 6 point Likert scale (1 = fully disagree to 6 = fully agree). The mean scores of nurses teaching in DEUs were higher for all 7 subscales when compared to nurses teaching in traditional clinical education models. Statistically significant differences (p < .05) were noted in 4 of 7 subscales (learning atmosphere of unit, nature of the clinical...
supervisory relationship, professional development and faculty support, and student benefits and learning). Results from focus groups and survey data suggest that a DEU creates a more welcoming environment for students; a stronger commitment to teaching; better clinical supervisory relationships; and improved overall quality of clinical education. Nurses in DEUs also reported larger education gains of the students, and improvements in their own clinical practice.


Through an integrative review of the literature, Santos described nurses’ self-reported barriers to learning. Five themes emerged: time constraints, financial constraints, workplace culture, access and relevance, and competency in accessing electronic evidence based practice literature.

Time constraints to learning as cited by nurses included lack of time off, inflexible working hours and family/personal obligations. Financial constraints that were work-related included lack of reimbursement by employer, no paid leave for education, and lack of an educational budget. Personal financial constraints included expenses related to tuition and travel. Workplace culture constraints included lack of leadership support to apply new knowledge and a negative perception of professional development in the workplace. Workplace culture was also described as impacting a learner’s willingness to share, risk in being judged by others, and receptiveness to new ideas. Access and relevance were identified as barriers to learning particularly for those in rural areas. Education (live) was more challenging to access for those living in rural areas. In addition, staffing limitations within rural areas negatively impacted a nurse’s ability to leave work and attend educational programs. Finally, competency in accessing electronic evidence-based literature was identified as a barrier due to lack of confidence, particularly for older nurses who had less exposure to searching for evidence-based resources electronically.

From this integrative review of existing literature, the author recommended further research be conducted within the United States as the majority of published literature was conducted internationally. In addition, the author noted implications for organizational policies and procedures to address barriers and promote learning.

Researchers conducted a mixed methods study to evaluate whether the perpetual novice phenomenon exists across nursing or just within the field of nephrology nursing. The perpetual novice “is a state in which nurses are unable to progress from novice to expert in one or more essential clinical skills which are used in practice” p. 3.

Data in this study were collected through interviews and survey. Clinical Educators, Clinical Nurse Specialists, Advance Practice Nurses and Nurse Practitioners from two university affiliated hospitals in Canada participated in the study. Semi-structured interviews were held with the purpose of exploring the concept of perpetual novice. A total of 9 interviews were used for content analysis. Four themes emerged: opportunities for education; context of learning; personal factors, motivation and initiative to learn; and culture of the unit.

Study participants described a variety of opportunities for staff to participate in educational activities, including opportunities in both passive and active learning formats. Clinical skills, learned in orientation, were not maintained once nurses moved into practice however, thus some nurses remained a perpetual novice in one or more areas.

Context of learning that contributed to the state of perpetual novice included limitations of time and funding for educators to develop and staff to participate in educational programs that promoted skill development. In addition, availability of staff coverage for nurses to leave the unit and high patient turnover resulted in fewer opportunities for nurses at all levels to maintain clinical skills. Nurse turnover impacted experienced nurses’ own skill development as they were forced to constantly function as mentors to orient new staff. Lack of support services impacted skill development as nurses were expected to handle non-nursing tasks thus distracting them from learning opportunities.

Study participants described certain characteristics of nurses as inhibiting skill development. Nurses who demonstrated a lack of interest in learning or avoided opportunities to learn remained in a perpetual novice state. Nurses who experienced “burnout” or who lacked confidence to learn also failed to acquire and/or maintain essential skills.
Unit culture where learning was noted to be dynamic, supportive, and collegial was positively related to skill acquisition and maintenance. Unit culture that demonstrated behaviors negatively impacting nurses’ skill development included bullying and intimidation. Participants recognized that culture was hard to change.

Study participants (n = 42; response rate 32.5%) also completed a survey that measured the extent to which they agreed or disagreed with statements describing the concept of the perpetual novice. This 12 item survey was developed based on two previous studies on the perpetual novice. Survey questions reflected the participants’ opinions on skill competency of the nurses in their areas of work and the extent to which they maintained competence. Responses were rated on a 5 point Likert scale (1 = strongly disagree to 5 = strongly agree). Highest ratings were given to items recognizing the importance of maintaining skill competence, including skills used infrequently but which were clinically important. Participants indicated that they could identify nurses who functioned as perpetual novices within the practice setting.

Researchers concluded that the phenomenon of perpetual novice does exist outside of nephrology nursing, and educators are challenged with identifying and creating environments where nurses can gain and maintain desired skill competence.