DETERMINING FEASIBILITY OF A STUDENT RUN CLINIC AT AN

ASSOCIATE NURSING PROGRAM

by

Diane M. Gomez

LINDA MATHESON, PhD, Faculty Mentor and Chair

TYRA DEAN-OUSLEY, PhD, Committee Member

MARCI DIAL, DNP, Committee Member

Patrick Robinson, PhD, Dean, School of Nursing and Health Sciences

A DNP Project Presented in Partial Fulfillment

Of the Requirements for the Degree

Doctor of Nursing Practice

Capella University

August 2015

Abstract

Nurses who graduate from the associate degree program at Valencia College lack the skills needed for the current complex health care environment. These new nurses are unable to translate the knowledge learned in the didactic environment to the clinical experience. The faculty of Valencia College felt that using a student-run clinic would be an effective means of addressing the academic drift seen in the new nurse. The student nurse could develop skill acquisition across the curriculum from a novice student nurse to the expert student nurse. Similar hands-on programs have succeeded at the baccalaureate and graduate degree levels for nursing and in medicine, pharmacy, and physical therapy; therefore, the assumption was that a hands-on program might work at the associate degree level. However, an analysis of the college's finances and resources, according to the Health Resources and Services Administration (2013), program requirements determined a student clinic on campus was not a feasible option for Valencia College. Student financial status did not meet the low or poverty income levels set by Health Resources and Services Administration for free clinic status and risk management coverage. Therefore, while student-run clinics support active learning, regrettably financial pro forma excludes the use of Health Resources and Services Administrations free clinic status and risk management coverage.

Key words: student-run clinic, didactic application, active learning

Determining Feasibility of a Student Run Clinic at an Associate Nursing Program

Faculty at colleges and universities are having difficulty-adjusting curriculum to meet the challenges encountered by the current entry-level nurse. Today's entry-level nurse is entering a workforce that must adapt to a complex health care organization functioning in a period of workforce shortages and higher patient acuity (Bartels, 2005). These new nurses lack the ability to translate the knowledge learned in the didactic environment to the clinical experience. The faculty of Valencia College, named with permission, believed the use of a student-run clinic would be an effective means of addressing the deficits seen in the new nurse. The adaptive learning strategies developed over the years to assist the new nurse in their transition from student to novice nurse would need revision. Faculty wanted to determine if a student-run nursing clinic would create an active learner and allow for a bridge into the clinical environment (Wolff, Pesut, & Regan, 2010). The purpose of this project was to conduct a feasibility study on a student-run clinic as a method to bridge the gap in academic practice identified with the current-nursing graduates.

Faculty discussions about curriculum, attrition rates, and board scores identified each course level where nurses' active learning activities required an increase. The active learning activities developed would build from course to course in complexity and skill acquisition and, if feasible, transition to the student clinic. A summative active learning simulation clinic environment would validate the nursing student's adaptability to whole-person learning. The active learning process can increase the retention and transfer of knowledge while developing skills needed for clinical practice (Middleton, 2013).

Background

The nursing program at Valencia College has supplied generations of nurses to Central Florida for over 40 years and changes have been incorporated into the nursing program to meet the needs of the growing and diverse patient population. The improvements made to the nursing program moved from the compartmentalized classroom experience of health assessment, pharmacology, medical surgical, and mental health care issues into a program where the students are learning to care for the whole person rather than just their disease process. Faculty changed from the small intimate classroom environment to an auditorium setting. The auditorium lecture setting allowed the facilitation of a team-based approach and active student learning using Bloom's taxonomy (Weigel & Bonica, 2014). Affective and psychomotor domains were enhanced through role-play or small group work (Elliott, 2014). The combination of the three taxonomies assisted nursing students to acquire skills local community partners require when hiring newly graduated nurses.

Simulated skill acquisition was included within the didactic learning environment and moved from a one-mannequin, one-room experience to a state-of-art-simulation setting at Valencia College. Course realignment further allowed the simulated environment to support the nursing student's psychomotor domain of active learning developed for each course level. The realignment allowed nursing students to move through each course while gaining new skills as novices and progressing to expert student nurses; thus, supporting the progression of student nurses through skill acquisition and knowledge transfer from the classroom setting to the simulated setting.

The faculty changed a twice a year admission policy to a triannual admission to combat the proprietary influx of nursing students. Unfortunately, the call to increase the number of nurses to meet the growing deficit throughout the country resulted in a proportional increase by the proprietary schools. The community partners' ability to accommodate the number of students enrolled in the Valencia College's program and the proprietary schools resulted in a request to limit the number of students allowed at each clinical location. Using simulation to offset the lack of clinical experiences increased to the percentage allowed by the Florida State Board of Nursing. The expectation was that a student-run clinic would become an additional clinical location the student nurses could use for real-life learning experiences and help bridge the academic gap noted by the community partners.

Purpose and Goals

The purpose of this feasibility study was to determine if there was a real need and ability to implement a clinic at Valencia College run by student nurses. A student nurse clinic could help with promoting healthy living and disease prevention education for students at Valencia College while addressing the need for community clinical sites for nursing students. The student nurse clinic could bridge the gap between academics and real-life medical practice for nursing students obtaining an associate's degree.

The three goals of the project were to identify the effect of a student nurse clinic on clinical skill acquisition at the associate level, identify healthcare access within a collegiate community, and determine nursing student and faculty interest in establishing a student nurse clinic. Together these three goals would assist in identifying if knowledge and psychomotor transfer is possible to the clinic setting and if the faculty should seek administrative assistance to

develop the clinic as an active learning modality that would support the college community

students uncomplicated health care needs.

Project Description

Conducting a feasibility study helped to determine if a student nurse clinic was

academically and financially practical for Valencia College. A literature search revealed

important information regarding similar associate degree nursing programs that used a student

nurse clinic to assist with student development. The literature review was followed by an

investigation of other associate level nursing programs and the use of a student nurse clinic for

student didactic learning. This same literature review also identified the Health Resources and

Services Administration and National Association of Community Health Centers websites as a

resource for development of a free clinic and identified techniques for obtaining monies for

starting a clinic and methods for reimbursement should the study result in a positive outcome.

Nursing students and faculty participated in a survey regarding their interest in developing and

utilizing a student nurse clinic.

Summary of Literature

Implementing student nurse clinics could support the novice student from the cognitive

learning of the academic environment to reinforcement in the psychomotor environment of the

clinical setting. The use of student nurse clinics has been limited to the graduate and

postgraduate level of health related fields of study. Fortunately, these same student nurse clinics

are active learning environments moving didactic learning into the clinical setting. The active

learning environment allows for skill acquisition, similar to Benner's novice to expert theory,

where nurses transform intrinsic knowledge into the care they give in different complex settings

as the nurse gains experience (Benner, 1984). The support for using a student clinic model across the nursing program will develop the student nurses from novices to experts through active learning activities that combine all learning domains in the student nurse clinic.

Novice to Expert

The nursing program at Valencia College has no specific nursing model or philosophy as student's progress through the curriculum. Nursing students acquire knowledge and skill complexity as they move from one course to another by building on prior knowledge and skill acquisition with the impetus toward lifelong learning (Valencia College, 2013-2014). Support for this progression was through the application of Benner's novice to expert theory, as determined by Homard (2013), wherein the student acquires knowledge and skill through practice and reflection. The application of this process results in nursing students who change from abstract thinkers and doers to experts with the ability to adjust to different clinical scenarios (Ulrich, 2011).

Following the use of the Dreyfus model of skill acquisition, Benner (1984, 2004) described nursing as an applied field practice and skill development supporting the scientific evidence used in clinical practice. The nursing students at Valencia College would be able to move through course programs matching each course level with a goal equivalent to the novice, advanced beginner, competent, and expert stages of Benner's (1984) framework. The first nursing course would meet the novice level. The novice students' use of static simulations and the successful demonstration of tasks and skills as the student progresses in the program will guide their actions during different patient scenarios. As the nursing students move into the second course, the novice level of skill is imperative in the clinical setting, providing a pathway

into the advanced beginner level. The inclusion in the advanced beginner level includes validation through a focused experience in the simulated environment. The nursing students develop a repertoire of knowledge through their preparation for their clinical experience while fine-tuning the skills developed in the first nursing course. Progression toward a level of competency attainable in the second course, and realized fully in the third course, where the nursing students can achieve proficiency as they plan their day in the clinical experience. The fourth and fifth nursing courses require the nursing students to solidify their confidence level and ability to work through complex clinical experiences in the simulation lab. The simulated experiences build on the skills developed in the static simulation of the first nursing course culminating in a high-stakes, high-fidelity simulated case scenario during the fifth nursing course. The expert level of Benner's framework is apparent in the sixth nursing course, in which nursing students provide holistic care, rather than fragmented care, observed in the lower level clinical and simulated experiences.

The successful progression of nursing students through the program supported Benner's framework through the culmination of practical experience and knowledge management (Anderson & Willson, 2009). The nursing students would have another real life opportunity unaffected by the increase in proprietary school influence. The real life experiences would support the transition from compartmentalized thinking to learners taking cues from patients instead of the expected outcomes elicited through classroom or simulated experiences (Hoffman, Aitken, & Duffield, 2009).

Student Run Clinic

Using a student-run clinic supports active learning that Kroning (2014) described as important to foster and develop critical thinking skills and knowledge management that comes with experience. The work as a group inherent in the clinic setting allows for developing communication skills and leadership abilities. The interaction surrounding the clinical experience in a group setting would further support the students understanding of content and close the academic practice gap that may occur using a simulated environment.

Students enhance leadership skills through a structured environment that allows for experience and development in the interdisciplinary clinical setting. Richards, O'Neill, Jones, Davis, and Krebs (2011) described the reinforcement needed between didactic learning and the clinical environment through the use of mentorships between the experienced practitioner and the student learner. Sheu, O'Brien, O'Sullivan, Kwong, and Lai (2013) evaluated the use of advanced practice mentors in the clinic setting for advanced practice nursing students. Therefore, reinforcing the concept of active learning as the bridge to the academic practice gap when utilized in a student clinic setting. The student nurse clinic allows the lower level (novice) nursing student to gain skill acquisition by being mentored (Benner, 2004). The expert nursing students would assist the novice nursing students to help bridge the academic gap observed in the practices of current nursing students and identified by Richards et al. (2011) and Sheu et al. (2013). Mentoring would be a modality to bridge the academic gap for graduate and postgraduate level nursing students.

Student-run clinics have been used successfully in other health care disciplines. Palombaro, Dole, and Lattanzi (2011) reviewed community support of physical therapy student

clinics by providing pro bono physical therapy services to uninsured or underinsured individuals. Sustainability related to funding was established through community involvement. The results of the Palombaro et al. (2011) review led to the development of improved physical therapy practices while developing students' leadership roles, administrative techniques, and cultural competence. Financial sustainability occurred through grant applications, student-led fundraising, faculty and alumni donations, and community partners. The reinforcement of an environment that reflects real-world experiences supported the student nurses' growth in the role of bedside nurse, developing leadership roles, and cultural competence within the community (Palombaro et al., 2011).

Student-run clinics were recognized in medical school models as a method to enhance learning and communication through diversity and providing higher quality care (Gu, McElroy, & Corcoran, 2012). The student nurses may develop and reinforce skills in patient-centered care controlled settings supporting the foundation of learning and adaptation in a complex health care system (Dotson & Lewis, 2013).

Sheu et al. (2013) substantiated the review of active learning conducted by Goldberg, Richburg, and Wood (2006). Graduate level nursing students had to provide a needed service to a community partner as part of their academic program. The graduate level nurses could transfer the knowledge they gained in the classroom setting to other situations (Goldberg et al., 2006). Furthermore, Sheu et al. (2013) supporting Tadesco-Schneck (2013) explained that nursing students develop accountability and intellectual curiosity when engaged in an active learning environment. Therefore, student nurse clinics may promote active learning by bridging the academic gap observed in nursing education and help support student growth. Benner's (2004)

model of novice to expert includes a framework supporting the learning and skills that creating

the student nurse clinics will provide to patients and communities. The student nurses can move

from a structured environment, such as simulation, to an environment allowing perceptive,

contextually determined performance (Dumchin, 2010).

Project Design

This feasibility project was conducted with a concurrent review of the Health Resources

and Services Administration (HRSA) and National Association of Community Health Centers

(NACHC) websites to determine information related to free clinic status. The HRSA website

(2013) provided an overview of program requirements to meet the free clinic status and

identified that the student population must meet the low-income or poverty level to receive

federal financial support and local health department backing for malpractice insurance. The

NACHC website (2011) provided a list of steps for starting a federally supported center. Both

the HRSA and NACHC websites suggested requesting grants and alumni support, fundraising

and community events to fund the student nurse clinics. Valencia College investigational review

(IR) was obtained to determine if the student population on campus reflected the financial need

identified on the HRSA website. Nursing students and faculty completed a survey (see

Appendix) during the 2012 spring and summer terms to assess the level of understanding of

active learning, service learning, and using a student nurse clinic for obtaining clinical

experience and reinforcement of learning.

Findings

The findings from this feasibility study did not support the implementation of a student

nurse clinic at Valencia College. While the literature revealed that student-run clinics provide

opportunities for active learning and skill acquisition, the student nurse clinics are not a viable

alternative for Valencia College. The review of the HRSA (2013) website described how to

develop a needs assessment for a specific target population. First, services, staffing

requirements, licensure, staff credentials, and privileges must be determined. In addition, the

website included a stipulation that the free clinic status must include substance abuse services.

The extensive listing of requirements described by HRSA resulted in providing only the needs

assessment in the survey (see Appendix) to the student population within the nursing program.

The NACHC website (2011) and resource documents revealed the support available to a

specific individual or group and identified the feasibility and requirements for opening a health

center. Unlike the HRSA website, the NACHC provided a checklist to keep the researcher

focused on tasks and information that must be gathered. The review of both websites defined a

clearer picture of what was needed to start and implement a health center or student nurse clinic

(National Association of Community Health Centers, 2011).

Financial standing of students registered in spring 2012 revealed an enrollment of 17,642

students on campus with the female population at 56% compared to the male population. As

expected, the age range of the student population under 25 was the largest, with decreasing

numbers as the students approached more than 60 years. The majority of the student population

was financially self-sufficient as reported on their college applications. Less than 1% of the

student population indicated a homeless status or received welfare support and food stamps.

Financial aid data indicated 50% of the student population received loans or multiple types of

funding. Scholarship recipients were at 18% while grants were awarded to 81% of the student

population. Therefore, the student population at Valencia College did not meet the poverty or low-income level, as indicated as required by HRSA (2013), for free clinic status.

Three hundred and fifty nursing students were asked to express their understanding of active learning and service learning in a clinic model to support the academic learning gap. Of the 350 students who received the survey, 133 responded resulting in a 38% response rate for the survey. More than 63% of the participants believed the use of a student-run clinic would facilitate active learning in a service-learning environment (see Appendix). Therefore, while students indicated they would be interested in using a student nurse clinic, the student population did not meet the financial requirements established by HRSA and NACHC. Financial pro forma did not support the free clinic status as indicated by HRSA

Discussion

Starting a student nurse clinic is not feasible for Valencia College. However, active learning is important for developing skill acquisition and bridging the academic gap observed in clinical settings. Faculty can now increase their percentage of static and high fidelity simulated experience from 25% to 50% of the clinical hours to assist nursing students in skill acquisition. Knowledge transfer can occur and lead to practical application in clinical settings through Benner's (1984, 2004) novice to expert theory. The use of the theory will allow the development of a curriculum providing a strong theoretical background supporting the lifelong learning for nursing students at Valencia College leading to the psychomotor application as a bedside caregiver (Dumchin, 2010).

There are three weaknesses in this project. The first relates to a gap in the research concerning the associate level of education. The research findings only reflected the graduate

and postgraduate level of health-related fields of study. Nursing, when mentioned, referred to the nurses as being part of the team in their practicums for baccalaureate training and as part of the training for those in their advanced practice training clinical work. The second weakness pertains to the investigational review investigation of student financial data. Continual review of student population pro forma requires further investigation to determine if the student population mix should change. The third weakness relates to the student nurse clinic as a venue to assist with the growing lack of clinical space. Nursing faculty must develop a modality for clinical focused active learning in the classroom environment that supplements the simulated and available clinical experiences.

Conclusion

Active learning supports the academic bridge from theory to practice. Interpretation at the associate level was implied through applying Benner's novice to expert theory of student development through the nursing program at Valencia College. Faculty must connect with the nursing students' cognitive learning processes. The connection between cognitive learning and active learning will allow novice student nurses to progress to expert student nurses as an entry-level graduate nurse.

Recommendation

Active learning environments supporting the application of knowledge in the clinical setting are recommended. The transition from the behaviorist pedagogy is crucial to nursing development allowing the student nurse to gain knowledge transfer from the classroom to the clinical environment. Environments or projects supporting student growth from novice student to expert student must be reinforced throughout the program. Faculty must develop active

methodologies encouraging the progression of the student nurse through the curriculum.

Enhancing the nursing curriculum by allowing student nurses to bridge theory application into

the clinical environment are important steps in accomplishing these tasks.

References

Anderson, J. A., & Willson, P. (2009). Knowledge management: Organizing nursing care knowledge. *Critical Care Nursing Quarterly, 32*(1), 1-9. doi:10.1097/01.CNQ.0000343127.04418.13

Benner, P. (1984). *From novice to expert*. Menlo Park, CA: Addison-Wesley.

Benner, P. (2004). Using the Dreyfus model of skill acquisition to describe and interpret skill acquisition and clinical judgment in nursing practice and education. *Bulletin of Science, Technology, and Society, 24*(3), 188-199. doi:10.1177/0270467604265061

Dotson, B. J., & Lewis, L. (2013). Teaching the quality improvement process to nursing students. *Journal of Nursing Education, 52*(7), 398-400. doi:10.3928/01484834-20130613-01

Dumchin, M. (2010). Redefining the future of perioperative nursing education: A conceptual framework. *AORN Journal, 92*(1), 87-100. doi:10.1016/j.aorn.2009.11.068

Elliott, S. (2014). Using a modified team-based learning approach to teach nursing students about communicable disease control and community health nursing. *Journal of Nursing Education, 53*(11), 651-653. doi:10.3928/01484834-20141027-01

Goldberg, L. R., Richburg, C. M., & Wood, L. A. (2006). Active learning through service-learning. *Communication Disorders Quarterly, 27*(3), 131-145. doi:10.1177/15257401060270030201

Gu, C. N., McElroy, J. A., & Corcoran, B. C. (2012). Potential advantage of student-run clinics for diversifying a medical school class. *Journal of Educational Evaluation for Health Professions, 9*(8), 8-12. doi:10.13352/jeehp.2010.9.8

Health Resources and Services Administration (2013). *Program assistance letter*. Retrieved

from http://bphc.hrsa.gov

Hoffman, K. A., Aitken, L. M., & Duffield, C. (2009). A comparison of novice and expert

nurses" cue collection during clinical decision-making: Verbal protocol analysis.

International Journal of Nursing Studies, 46(10), 1335-1344.

doi:10.1016/j.ijnurstu.2009.04.001

Homard, C. M. (2013). Impact of a standardized test package on exit examination scores and

NCLEX-RN outcomes. *The Journal of Nursing Education, 52*(3), 175-178.

doi:10.3928/01484834-20130219-01

Kroning, M. (2014). The importance of integrating active learning in education. *Nurse Education

in Practice, 14*(5), 447-448. doi:10.1016/j.nepr.2014.06.001

Middleton, R. (2013). Active learning and leadership in an undergraduate curriculum: How

effective is it for student learning and transition to practice? *Nurse Education in Practice,

13*(2), 83-88. doi:10.1016/j.nepr.2012.07.012

National Association of Community Health Centers (2011). *Health center information*. Retrieved

from http://www.nachc.org

Palombaro, K. M., Dole, R. L., & Lattanzi, J. B. (2011). A case report of a student-led pro bono

clinic: A proposed model for meeting student and community needs in a sustainable

manner. *Physical Therapy, 91*(11), 1627-1635. doi:10.2522/PTJ.20100437

Richards, E., O'Neil, E., Jones, C., Davis, L., & Krebs, L. (2011). Role of nursing students at

rural nurse-managed clinics. *Journal of Community Health Nursing, 28*(1), 23-28.

doi:10.1080/07370016.2011.539086

Sheu, L., O''Brien, B., O'Sullivan, P. S., Kwong, A., & Lai, C. J. (2013). Systems-based

practice learning opportunities in student-run clinics: A qualitative analysis of student

experiences. *Academic Medicine, 88*(6), 831-836. doi:10.1097/ACM.0b013e31828ff92c

Tadesco-Schneck, M. (2013). Active learning as a path to critical thinking: Are competencies a

roadblock? *Nurse Education in Practice, 13*(1), 58-60. doi:10.1016/j.nepr.2012.07.007

Ulrich, B. (2011). From novice to expert. *Nephrology Nursing Journal, 38*(1), 9. PubMed

database (PMID:21469548)

Valencia College (Ed.). (2013-2014). *Valencia College nursing program handbook 2013-2014*.

Weigel, F. K., Bonica, M. (2014). An active learning approach to Bloom's taxonomy: 2 games, 2

classrooms, 2 methods. *U.S. Army Medical Department Journal, 21-29.*

Wolff, A. C., Pesut, B., & Regan, S. (2010). New graduate nurse practice readiness: Perspectives

on context shaping our understanding and expectations. *Nurse Education Today, 30*(2),

187-191. doi:10.1016/j.nedt.2009.07.011

Appendix

Survey

1. I believe that service learning is beneficial to my clinical experience at Valencia
   a. *Strongly agree*
   b. *Agree*
   c. *Neutral*
   d. *Disagree*
   e. *Strongly disagree*
2. I believe that active learning is beneficial to my clinical experience at Valencia.
   a. *Strongly agree*
   b. *Agree*
   c. *Neutral*
   d. *Disagree*
   e. *Strongly disagree*
3. If I had the opportunity to utilize a student-run clinic on campus for my immunizations and acute care needs, I would take advantage of this opportunity.
   a. *Strongly agree*
   b. *Agree*
   c. *Neutral*
   d. *Disagree*
   e. *Strongly disagree*
4. I would be willing to volunteer my time to a student-run clinic on my campus.
   a. *Strongly agree*
   b. *Agree*
   c. *Neutral*
   d. *Disagree*
   e. *Strongly disagree*
5. I would rather have any time spent in a student-run clinic to count as clinical hours.
   a. *Strongly agree*
   b. *Agree*
   c. *Neutral*
   d. *Disagree*
   e. *Strongly disagree*

Note: Survey designed and created by D. Gomez (2012).

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*.

Learner name and date	Diane M. Gomez
	May 21, 2015
Mentor name	Dr. Linda Matheson
and school	School of Nursing and Health Sciences