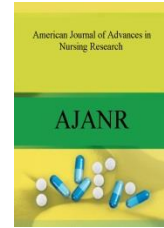




AMERICAN JOURNAL OF ADVANCES IN NURSING RESEARCH



Journal homepage: www.mcmed.us/journal/ajanr

LESSONS LEARNED FROM THE IMPLEMENTATION OF THE HYBRID EDUCATIONAL EXTENSION LEARNING PARTNERSHIP (HEELP) NURSING MODEL

Leslee H. Shepard*¹ and Elleton McCullough¹

¹Associate Professor of Nursing, Winston Salem State University, Winston Salem, North Carolina, United States.

Article Info

Received 25/06/2015

Revised 15/07/2015

Accepted 07/09/2015

Key word: Hybrid Learning; Resource Sharing, Academic Partnership, NCLEX Success; Faculty Collaboration; Collaborative Teaching.

ABSTRACT

Educators are accountable for ensuring students receive the essential curricular competencies needed to pass the national council licensure examination (NCLEX) the first time and ultimately provide safe competent care in the practice setting. Student pass rates on the NCLEX continue to be one of the primary indicators of program success. A systematic program evaluation plan is an optimal approach for continuous improvements. However, when curricular issues occur, the steps within the process of revising a program evaluation plan can be laborious, time-consuming, and oftentimes the results not evident for years. In the interim, it would be sensible to establish a plan that would facilitate immediate results. The purpose of this abstract proposal is to introduce the hybrid educational extension learning partnership (HEELP) nursing model. The HEELP[®] nursing model is a transformational approach to student learning and faculty development by way of resource sharing. The aim of the model is to develop collaborative partnerships between lower performing schools with higher performing schools based on NCLEX pass rates. The faculty of the higher performing schools offers HEELP[®] by way of resource sharing. Specifically, the HEELP[®] faculty will assess student's areas of weakness, design a tailored learning plan, implement the plan, and conduct a post intervention evaluation of student growth. Implementation of the HEELP[®] in nursing model between neighboring states of North Carolina and South Carolina substantiated its usefulness and resulted in the emergence of new founded use related to reciprocal professional development between faculty of each program.

INTRODUCTION

Students interested in enrolling in a nursing program have multiple options to choose from. In the United States there are three points of entry for a registered nurse which include the diploma, associate degree, and baccalaureate degree. Some schools offer the baccalaureate degree in a traditional option and an accelerated option.

Corresponding Author

Leslee H. Shepard
Email:- shepardl@wssu.edu

An accelerated curriculum typically mirrors the traditional program set by the university with the difference being the fast rate of delivery. A typical student can earn a degree within 14 months from the time of enrollment in an accelerated program. The stipulation to enrollment is that the candidate meets a specific set of criteria including having had already earned a baccalaureate degree in a different concentration area prior to enrollment. Irrespective of the program type, upon successful completion of the nursing program, all candidates will sit for the same National Council



Licensure Examination for Registered Nurses (NCLEX-RN) which is the examination used to assess entry-level competency for the novice nurse [1]. The percentage of first-time pass-rate is one of the primary indicators of a nursing school's overall performance. Consequently, student performance in nursing schools can be taxing on faculty regardless of the type or setting of nursing program.

The literature suggests faculty within Historically Black Colleges and Universities (HBCUs) are faced with a disproportionate set of challenges and barriers such as lower funding which limits quality resources and faculty development opportunities, students admitted with lower high school grade point averages (GPAs), and are from lower socioeconomic families than student attending non-HBCUs [2,3] Despite these barriers student who graduate from nursing programs are held to the exact same standard as their counterparts who may have attended an Ivey League nursing program.

Poor student performance can have a negative impact on student recruitment, retention, and National Council Licensure Examination for Registered Nurses (NCLEX-RN) pass-rates, all of which are direct indicators of a school's performance. The purpose of this case report is to introduce a model designed to facilitate performance improvement in schools challenged to meet standard benchmarks for NCLEX success.

Case Presentation

The Hybrid Educational Extension Learning Partnership (HEELP) Nursing Model is a transformational approach to student learning in which schools of nursing develop collaborative partnerships for the purpose of extending resources to other schools of nursing to enhance student success. The creation of the HEELP nursing model was inspired after faculty members from one HBCU baccalaureate nursing program located in the Southeastern area of the United States reached out to partner with a HBCU baccalaureate nursing program in a neighboring state for the purpose of assisting with improving low NCLEX pass-rates. *Figure 1* is an illustration of the HEELP Nursing Model which has registered copyright protection.

Program Assessment

Almost immediately after the partnership was established, the faculty from the different schools met to have dialogue about the goals and expected outcomes of the collaborative efforts. A small scale program evaluation of curriculum and instruction was conducted by the HEELP faculty for the purpose of identifying gaps of pertinent content. The evaluative program review focused on the major courses within the adult health content areas, courses that offered synthesis of all

program content, and senior level student scores on the standardized comprehensive predictor examinations.

Two major discoveries ensued from that review. The student scores revealed gaps in knowledge related to concepts in adult health nursing which was substantiated through discussions with the program faculty and lack of associated objectives in the adult health course syllabi. The second revelation of the gap analysis was that senior level students had not met learning outcomes across the curriculum as evidenced by a class average of less than 35% predictability of passing the NCLEX on first attempt.

The information gathered from the review resulted in the HEELP faculty creating, implementing, and evaluating the plan of action. The target group was the senior level nursing students enrolled in their final semester prior to graduation. The action plan would span across one 16-week semester. The following is a description of that plan and how it was implemented.

Implementation of HEELP Plan

Faculty collaborations across state lines require meticulous planning, being decisive with detail, taking in to account possible barriers, and identifying strategies for overcoming those barriers. In addition, when collaborating for student success considerations must be given to the mode of delivery, frequency of sessions, type of content within each session, and a plan for evaluating the effectiveness of the plan.

Selected Technology

The mode of delivery to implement the HEELP plan in this case was hybrid. This method was selected due to the distance between schools and the student need. According to the faculty of the school in need, the student population in their program learned better in a structured face-to-face but agree that the students would benefit from a hybrid program if the online days were used to reiterate content taught during the face-to-face sessions.

To that end, Elluminate, a live web conferencing system and a product of Blackboard Inc. was the program chosen. Elluminate permits multiple users to meet online in real time. This product would allow faculty to setup and host a live interactive session or pre-recorded lecture and send the invitation link to the participants to view at a later time [4]. This particular platform was already licensed for use at the HEELP faculty's institution making it free of charge to the users.

A blackboard course site was used as an enhancement feature allowing faculty to share documents such as the syllabus, course calendar, and learning tools such as PowerPoint presentations, videos, practice testing software and other supplemental learning materials. The site also provided a means of communication between



sessions using the email, threaded discussions, and for submitting assignments. In addition, blackboard allowed faculty to set up videos used to enhance learning by reiterating content taught during the synchronous online sessions.

Audience response systems such as Clickers are an invaluable tool used to engage students during face-to-face session. These were integrated into the lesson plan of some of the class activities to promote an active learning environment.

Integration of Adult Health Content

The purpose of the adult health section of the program was to help students build a deeper understanding of major content areas on nursing management of adult health clients. The focus was on the application of the nursing process to the delivery of care and management of adult clients with medical surgical alterations. There were six course objectives for each areas of study and were consistent across topics. Specifically the objectives were:

1. Describe the pathophysiology of adult health diseases.
2. Differentiate clinical manifestations specific to the condition from the norm
3. Develop an appropriate plan of care relevant to condition and assessment findings.
4. Choose applicable nursing interventions to disorder.
5. Evaluate therapeutic uses, nursing considerations, and effectiveness of specific medications.
6. Evaluate expected outcomes of nursing interventions

It is important to understand that the students were not receiving content for the first time but for the purpose of reiteration. Consequently, student learning outcomes expected at the completion of the program were that the student would be better able to utilize the nursing process when caring for clients with complex medical-surgical alterations and would have the enhanced ability to evaluate nursing interventions designed to achieve maximal level of wellness. Table 1 is an example of how a typical lesson plan was developed to ensure content identified on the gap analysis was reiterated.

Meeting Frequency

The course met for six hours one day a week and was spread across a typical 16-week semester. More specifically, the sessions were held every Saturday from 10:00 am to 5:00 pm. The adult health portion took place during the first three hours of each session. The second portion of the session was dedicated to NCLEX success. It was the faculty's intent to move beyond the barriers of time and distance by using a hybrid design. On the first and third Saturday of each month the classes were face-to-face, while the second and fourth Saturday of each

month the class convened in an online platform synchronously with asynchronous activities embedded. **Table 2** is an example of the preplanned 16-week calendar with a description of the mode of delivery each week and content to be covered. Creating this type calendar provided students with needed structure to prepare for the lesson of the week.

NCLEX Success Content

In attempt to facilitate enhanced student knowledge of overall curricular content, a specified amount of time was dedicated solely for the purpose of NCLEX success. Due to the limited time frame until students' graduation date, the decision was made to focus primarily on test taking strategies on application based examinations. The strategies were applicable to nursing topics identified on the NCLEX test plan.

As with the adult health content, students were given a calendar of topics to be discussed each week. A faculty developed copy of test-taking strategies were provided to each student for reference. The strategies included best practices to use for selecting the correct answers. One example of such notable strategy instructs student to approach multiple response questions, also referred to as select all that apply type questions, as each one being true or false. This strategy can help to eliminate the correct from the incorrect. Other strategies included look for clues in the stem of the question based on the nurses' behavior; when the stem indicates the nurse is assessing then the correct answer would be an assessment finding which means an option that is a goal could be eliminated. Other test-taking strategies included, identify qualifiers or terms such as most, best, essential, priority etc., how to restate the question in language that make sense to the individual without changing meaning, pacing time so that no more than approximately 1½ minutes are used per question. Students were reminded to approach the NCLEX in the ideal practice world with the understanding that there is no staffing shortage or lack of equipment in the ideal NCLEX hospital and delegation is based on scope of practice rather than what was observed during their clinical rotations.

Finally, due to the significantly low results in the areas of delegation and prioritization on the comprehensive predictor exam, special attention was dedicated to ensuring students were well versed on delegation and prioritization. This was accomplished by integrating concepts such as Maslow's Hierarchy of needs, Level I in prioritization ABC's (airway, breathing, circulation), and understanding the scope of practice for an unlicensed assistant as it relates to the rules of delegation and prioritization. At the end of the semester an evaluation of student learning was done via a standardized comprehensive predictor examination which



was a different version from the preprogram version. The class results showed great improvement from a class average of less than 35% predictability of passing the NCLEX on first attempt to a class average of 62%

predictability of passing. Although the increase in score was still well below benchmark the improvement in scores demonstrated the effectiveness of implementation of the HEELP model and future possibilities in its use.

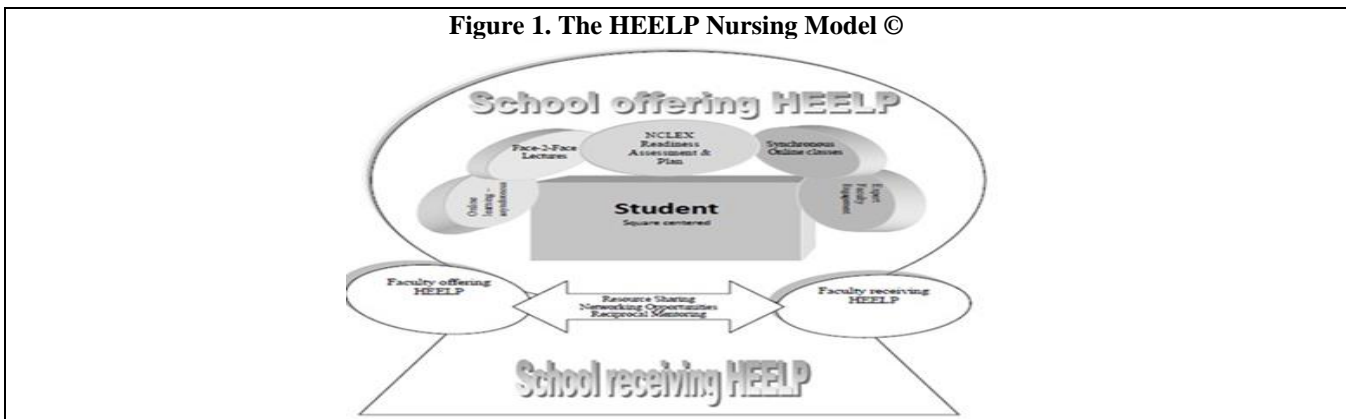
Table 1. Example Lesson Plan

<p>Week 1 – 3: Describe the pathophysiology of adult health diseases. Differentiate clinical manifestations specific to the condition from the norm Develop an appropriate plan of care relevant to condition and assessment findings. Choose applicable nursing interventions to disorder. Evaluate therapeutic uses, nursing considerations, and effectiveness of specific medications. Evaluate expected outcomes of nursing interventions</p>	
<p>Management of clients with Hematological Disorders</p> <p>Hematologic Polycythemia vera (PV) Thrombocytopenia Disseminated Intravascular Coagulation (DIC)</p> <p>Oncology Hodgkin’s Lymphoma & Nonhodgkin’s Lymphoma Multiple Myeloma Leukemia Lung Bladder Gastrointestinal cancer Bone cancer Primary bone cancer Metastatic bone cancer Sexual Reproductive Cancers cervical uterine ovarian and ovarian cysts testicular prostate breast</p> <p>Medical Management Blood and Blood products Chemotherapy Radiation Hormone therapy Surgery End of Life Care (Palliative Care)</p>	<p>Lesson Plan</p> <p><u>Day 1 -(F2F)</u> Introductions Syllabi Review/Discussion Course Calendar</p> <p>PowerPoint Guided Discussion: Review Lab Values Review Procedures Associated with Hematology Administration of PRBC and Platelets, Phlebotomy, Plasmapheresis, FFP</p> <p><i>Break</i></p> <p>Summarize procedures -Group Practice Quiz -Clickers Video-Overview of PV Work through objectives, class discussion and PowerPoint</p> <p><i>Break</i></p> <p>Videos- Thrombocytopenia, DIC Small groups to work through objectives.</p> <p><u>Day 2 -(Synchronous Online)</u> Ensure login to online platform by participants Roll Call Pop Quiz- Proctored by onsite faculty Reconvene small groups- Student presentations <i>Break</i> Review of Pop Quiz Oncology – Unfolding Case Studies- Independent work may collaborate with classmates <i>Break</i> Faculty Led discussion of case studies</p>



Table 2. Calendar: Week, Location, and Content

Week	Location	Content
1	SITE 1	Hematology
2	Synchronous Online	Hematology
3	SITE 2	Hematology/Immunity
4	Synchronous Online	Immunity
5	SITE 1	Renal
6	Synchronous Online	Renal
7	SITE 2	Mobility
8	Asynchronous Assignment	GI
9	Spring Break	
10	Synchronous Online	Vascular, Burns, Shock
11	SITE 1	Pulmonary
12	Synchronous Online	Neurology
13	SITE 2	Neuro cont./ Cardiac
14	Holiday Break	
15	SITE 1	Cardiac
16	Synchronous Online	Recap key concepts of the semester

Figure 1. The HEELP Nursing Model ©

DISCUSSION

Collaboration in schools is not a new concept. The literature has documented research that suggests collaboration between schools are effective resulting in improved student learning outcomes [5,6]. Contrary to known benefits, the evidence indicate that such collaborative efforts are not widely used. Traditionally, HBCUs are known to have less resources yet have a greater percentage of student enrollment who may not be as academically prepared for success in higher education as students enrolled in non-HBCUs. It seems logical for not only nursing programs within HBCUs to build collaborative partnerships but any nursing program in need of program improvement. Nursing schools have a large body of stakeholder routing for their success; but more importantly, the communities in which the new graduate nurses serve have the right to receive care from competent and safe in nurses. It is imperative that leaders of nursing programs recognize when their school is in

need of improvement and take action. One quality benchmark used to determine the success of a nursing program is the school's pass-rate on the NCLEX. When the scores drop below benchmark faculty must be swift in creating strategic process improvement efforts to raise the overall pass-rate score. The efforts are often time-consuming causing faculty to have less time for classroom preparation and instruction which creates a cyclic effect because the scores could continue to drop. The HEELP Nursing Model is one recourse that can be used to prevent jeopardizing the integrity of the program while internal process improvements are being made. Using the HEELP Nursing Model will ensure current students remain actively engaged in learning from dedicated faculty with an individualized approach.

The first use of the HEELP Nursing Model was between two baccalaureate schools of nursing with similar student demographics. One school located in



North Carolina and the other in South Carolina. A program review helped to identify weakness in specific content, design pedagogical strategies for that particular cohort of students, and implement the plan. The HEELP sessions were held every week, three hours in the morning followed by a three hour session in the afternoon. Pre and post scores on a NCLEX predictor comprehensive examination showed a group predictability of passing score increase of 27%.

Lessons learned as the result of the implementation of this program went beyond the anticipated purpose. In addition to recognizing that the use of the HEELP nursing model is beneficial with enhancing student learning outcomes in nursing programs, a new discovery emerged as it related to faculty development. Although more exploration is needed to fully understand the extent of professional development, anecdotal feedback from faculty on both ends of the model infer that a learning community emerged and there was reciprocity with regard to becoming a better faculty member through this collaborative effort. This feedback is consistent with findings in the literature that report the benefits of effective collaboration. According to Sim [5] teachers have a lot to gain from participating in professional collaboration communities when core features are present.

The four feature are shared knowledge, understanding and interaction, dissemination of knowledge in practice, and ensuring critical thinking and reflection occurs with the interactions [5]. Retrospectively, it was found that the implementation of the HEELP nursing model was inclusive of all of those core features and it is recommended that future implementation uses a more deliberate approach. The development of collaborative partnerships using the HEELP nursing model is a transformative and collegial approach to helping nursing programs succeed. It is recommended that research is conducted to determine effectiveness from a statistical point of view and have basis for modification for future use.

REFERENCES

1. National Council of State Boards of Nursing. *Test Plans*. Retrieved from: <https://www.ncsbn.org/1287.htm>
2. Kim MM. (2011). Early career earning of African American students: The impact of attendance at historically black versus white colleges and universities. *The Journal of Negro Education*, 80(4), 505-520.
3. Kim MM & Conrad C. (2006). The impact of historically Black colleges and universities on the academic success. *Research in Higher Education*, 47, 399-427.
4. Blackboard Collaborate (2015). Web conferencing that transforms teaching and learning. Retrieved from: <http://www.blackboard.com/platforms/collaborate/products/blackboard-collaborate/web-conferencing.aspx>
5. Sim C. (2010). Sustaining productive collaboration between faculties and schools. *Australian Journal of Teacher Education*, 25(5), 18-28.
6. Spice L & Quebec Fuentes S. (2011). Building a university-high school collaboration. *Academic Exchange Quarterly*, 15(4), 160-165.

All initial data suggest that the HEELP nursing model has great potential and is worthy of further exploration. It is not a consulting model but rather a model that is built on a framework of equal partnership working toward the same ultimate goal of sustaining nursing programs that prepare future nurses for safe practice.

CONCLUSION

Quality nursing programs are often predicated on student pass-rates on the NCLEX. Faculty shortages combined with a student population who are ill-prepared for higher education have created a barrier for success on nursing programs and jeopardizes the integrity of the entire nursing program. Faculty leaders in academia should break free from the silos of their individual programs and begin dialogue on how resource sharing can be used for the greater good. The idea of collaborative partnership between schools is not a new concept; however, such practice is rarely seen between nursing schools. The Hybrid Educational Extension Learning Partnership (HEELP) Nursing Model was created as a result of a partnership between two HBCU baccalaureate nursing programs working together with a shared goal of improving NCLEX pass rates, sustaining a nursing program, and ultimately contributing to the field of nursing by way of graduating students who add to the safe and competent nurses in the workforce. The transformational approach to student learning facilitated student retention of information while improving learning outcomes. The faculty offering HEELP as well as the faculty receiving HEELP reported that they were the beneficiaries of enhanced professional growth and development simply through the collaborative efforts. Implementation of the HEELP nursing model showed great potential that warrants further exploration.

ACKNOWLEDGEMENT: None.

CONFLICT OF INTEREST:

The authors declare that they have no conflict of interest.

