"Step Ahead for Success"- Utilizing an I-BEST Inspired Model to Improve Retention of Underrepresented Nursing Students

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Abstract

Aim: *The "Step Ahead for Success" program focused on improving retention of underrepresented nursing students through the use of an I-BEST inspired.*

Background: *The model was formulated to fit the student population at Moraine Valley Community College. Resources and focus groups were utilized for the intervention.*

Method: *The program utilized an Educational Specialist (ES) who attended class with the students and held mandatory supplemental instruction to review the material learned in the class. The program consisted of twenty-four students chosen by TEAS admission test scores.*

Results: *An increase in retention of 50% of English Language Learner Latino students was noted in their first nursing course (NUR 140). Results also indicated increased completion of English Language Learner Latino nursing students in the current program by 15%.*

Conclusion: *The project proved assisting students to overcome barriers to their academic success and improve retention for underrepresented nursing students at Moraine Valley.*

Keywords: *Latinos, Student Success, Underrepresentation, I-Best, Educational specialist, Retention, Graduation, Diversify*

1. PROBLEM

Latinos are projected to comprise nearly one-third of the U.S. population by 2060, however, Latino nurses comprise only 3.6% of all registered nurses (RNs) currently working in the United States (Alvarez, 2012). In Illinois, only 1.7% of registered nurses are Latino. Despite the need to increase the number of Latino nurses to meet the growing need, only 6.8% of students registered in nursing programs across the United States identify as Latino (Alvarez, 2012). Studies have consistently documented that patient-nurse race and ethnic concordance is linked with higher patient satisfaction and increased health care outcomes (Phillips, J & Malone, B, 2014). Additionally, it has been noted in the literature that racial, ethnic and language concordance will improve patient provider communication, tolerance, and trust, decision-making, and improve health outcomes (Gonzalez-Guarda, R, Hassmiler, S, 2011). Although the professional nursing population is growing in diversity,

Latino nurses remain an underrepresented minority. Recruiting and retaining underrepresented minority nursing students continues to be an important goal, but remains a challenge. In fall 2015, researchers at Moraine Valley Community College (MVCC) in Palos Hills, Illinois identified institutional data that revealed 21 of 162 (7.7%) students enrolled in the nursing program on the main campus were Latino (Khan, 2016). In addition to the low number of students, the attrition rate for Latino students were abnormally low (Khan, 2016). An increase in enrollment, retention, and graduation rates of underrepresented minority nursing students is necessary if the profession intends to meet the nation's diversity health care needs of the future.

The National League for Nursing (NLN), American Association of College of Nursing (AACN), Institute of Medicine (IOM) and American Nurses Association (ANA) agree that increasing the racial and ethnic diversity of nursing students is a high priority (Murphy,

2015-16). Under representation of Latino nursing students has been lagging nationally for many years.

2. NEED

Diversifying the nation's health care workforce is a necessary strategy to increase access to quality health care for all populations, reduce health disparities, and achieve health equity (Williams et al., 2014). The importance of continuous recruitment and retention of Latino nurses is a significant goal for many nursing programs. In order to obtain Latino nurses, Latino students must be recruited and retained in nursing programs. Historically, high attrition rates have been a significant concern for completion rates of nursing programs for Latinos (Phillips, J & Malone, B, 2014). The Institute of Medicine (IOM) in collaboration with the Robert Wood Johnson Foundation (RWJF) established a major initiative in July 2009, on the future of Nursing: Implications for Hispanic Nurses (Gonzalez-Guarda, R, Hassmiler, S, 2011). This initiative focused on the delivery of nursing services in a shortage environment and the capacity of the nursing education system (Gonzalez-Guarda, R, Hassmiler, S, 2011). The report went on to include that Latino nurses, in particular, need to be involved in implementing recommendations, for they represent the future face of health care. With Latinos being the fastest growing minority group in the United States they will comprise 29% of the population by 2050 (Gonzalez-Guarda, R, Hassmiler, S, 2011). One of the goals for the American Nurses Association 2020 Report is the nursing profession mirrors the diverse population it serves, and provides leadership to create positive changes in health policy and delivery system.

3. LITERATURE REVIEW

The review of the literature demonstrated evidence pertaining to the problem of underrepresentation of Latino nurses. Themes such as diversifying the workforce and Latinos in nursing to provide culturally competent healthcare were in many of the articles. The literature supported that racial/ethnic and language concordance will improve patient-provider communication, tolerance, trust, and decision making, thereby increasing access to quality and improved health care (Williams et al., 2014).

A study of six hospitals concluded that language barriers appear to increase the risks to patient safety, and that non-English speaking patients were more likely to experience adverse events than English speaking patients (Divi, Koss, Schmaltz, & Loeb, 2007). The study continued to discuss that data showed Latino nurses were culturally and linguistically sensitive to the needs of Latino patients leading to quality health care.

The literature continues to describe how the enrollment of racial/ethnic minorities in nursing schools is suboptimal. National organizations such as the Health Resources and Services Administration (HRSA) and other stakeholders have articulated the need for more diversity in nursing (Phillips, J & Malone, B, 2014). The literature also states in order to respond to this need, implementing and evaluating initiatives that focus on recruiting and retaining underrepresented minorities in nursing is a necessity.

There is research regarding the under representation of Latinos in nursing and the unique issues of recruitment and retention of this group in nursing education. Some key characteristics for successful recruitment and retention are academic support, financial support, mentoring students, and working with community partners (Phillips, J & Malone, B, 2014). Several authors discussed the importance of retention strategies focusing on student support during their progression of the program and successful licensure (Nugent, Childs, Jones, & Cook, 2004). Bond and Cason pointed out that barriers to success were financial difficulties, family responsibilities, poor English skills, feeling of underrepresentation, and discrimination. Nursing programs must pursue aggressive strategies to recruit and retain Latino students to meet the challenge of providing culturally competent care to decrease health disparities (Bond & Cason, 2014).

Swinney and Dobal discuss Embracing the Challenge project. This project was designed to recruit, support, and retain students. Cultural competency training for faculty and staff was necessary for the implementation of the project. The model SAFER reached students from diverse backgrounds by utilizing the following components: social support, academic support, financial support, empowerment of students, and responsibility of students. Research shows developing and maintaining support is critical for

the retention of minority students (Swinney & Dobal, 2008). In order for the nursing workforce to reflect the population served today and in the future, nursing professionals must embrace the challenge of educating and supporting minority and disadvantaged students (Swinney & Dobal, 2008). Overall the literature supports the strategies for the problem of increasing recruitment, retention, and graduation of Latino students.

4. PURPOSE

The purpose of this project is to increase the diversity and retention in the nursing program at MVCC, and allow access for Latino students to enroll in an accredited nursing school and be successful. The program also gave students tools and resources that can be utilized throughout their education to ensure success.

5. IMPLEMENTING THE I-BEST INSPIRED MODEL

The future of nursing is to enhance retention and graduation rates of minority and disadvantaged students through counseling, tutoring, and mentoring services that assist students in enrolling and completing nursing education programs. I-BEST inspired models traditionally promote the academic and professional achievement of minorities in the profession. The Integrated Basic Education and Skills Training (I-BEST) model combines career training and college level education to assist students in obtaining their goal of completion (Bragg, D., Kim, E., & Barnett, E, 2006). This type of program utilizes both college and career components, and reaches out to students that are underrepresented or may have difficulty with success in college. This model may be used with many high demand careers such as nursing to provide assistance with completion and retention. According to the Institute of Medicine's Future of Nursing Report, creating programs and educational pathways appear to be one way of increasing the overall diversity of the student body (IOM, 2011). I-BEST models represent a set of strategic interventions to address the persisting challenges experienced by individuals in accessing a profession. Within the health professions, these programs generally target racial minority groups or those from low socio-economic backgrounds (Bragg, D., Kim, E., & Barnett, E, 2006). Structurally, these programs are focused on one or all of the following goals:(1) recruitment and increasing enrollment, (2) maintaining student engagement and

retention, and (3) increasing certification/degree completion (Brooks-Carthon, Nguyen, Chittams, Park, & Guevara, 2014). The "Step Ahead for Success Program" utilized an I-BEST inspired model to formulate a program to meet the nursing program needs. Although varied in nature, the "Step Ahead for Success Program" attempted and succeeded in addressing the many barriers and obstacles that make careers in health care out of reach for many minorities. As part of the statewide and national trend to prepare adult education students for the workforce; the Learning Enrichment and College Readiness (LECR) department at MVCC had been seeking out pathways of transition to mid-level skill employment or higher education for its English Language Learner (ELL) students. The Nursing Department had become aware of an ever increasing demand for nurses who speak languages other than English – especially Spanish – and expressed interest in increasing the diversity of its trainees and graduates to be reflective of this demand. The two departments collaborated and a survey was developed and given to the freshman nursing class to distinguish the barriers of this group. (see Appendix A).

Common barriers experienced by nursing students include: academic under preparation, English as a second language, and unwelcoming institutional climates that together can undermine the confidence, and ultimately the achievement of those students (Brooks-Carthon et al., 2014). The partnership allowed the expertise of the educational specialist to assist with the support and resources the students expressed that was needed. Statistical analyses were done on the TEAS admission test to determine which students would be placed in the "Step Ahead for Success" program. After reviewing the scores, students who scored low in reading and science were placed in the program. There were 24 students that met the requirements and were enrolled in the program.

The use of the educational specialist was instrumental for this program. The Educational Specialist (ES)credentials consisted of a master's in education and experience in health care. The ES attended every class with these students to assure he understood the content that was being taught. Two supplemental sessions were developed with 12 students in each. The educational specialist then held mandatory supplemental sessions two hours a week to review the content that was taught. He would focus on study skills, test taking skills and

working through critical thinking skills. The students were given a contract to sign that described the "Step Ahead for Success" program and their commitment to the program for their success. If the students did not attend the mandatory tutoring sessions they would fail the course. It is important to note the ES was a support for the instructor and did not teach or evaluate the students. His sessions were completed independent of the course.

A student focus group was developed in addition to the supplemental sessions. The focus group was voluntary and focused on student's self-confidence and goals. Other department representatives from the college such as advising, financial aid, and counseling were invited to the focus groups to discuss the resources on campus in their perspective departments. Referrals were also made to these departments to assist the students with this support.

The evaluation plan utilized qualitative and quantitative methods. The previous term grades were compared to the current term grades. Pass, fail, and withdrawal rates were evaluated. The regular class group was compared against the intervention group. Grade distribution of the class was also analyzed to see if the intervention made a difference. The instructor was not aware of which students were in the intervention. This was important so to not skew the data.

Some important issues for the establishment of the project included; cost, the Educational Specialist, stakeholders support, and faculty buy in. Due to budget constraints, the nursing program was not able to hire an educational specialist, therefore the collaboration with the Learning Enrichment and College Readiness department assisted with this factor. Other than the salary for the Educational Specialist no other costs were inferred with this project. (see Appendix B).

A unique feature of this program is that the Educational Specialist (ES) attends each class that the intervention is being presented in with the students. In this particular instance, the ES attended NUR 140 for four hours each week for eight weeks. It is imperative that the faculty member understands the objectives for the Educational Specialist to attend their class. The ES does not teach the students, but provides support and assistance with resources. It is very important that the faculty member understands

that the ES will not evaluate or provide any recommendations to administration regarding their teaching style or techniques. It is important to be sensitive to the faculty member who usually is the only teacher in the class. The introduction of the program and the Educational Specialist must be done tactfully for the program to be successful and sustainable.

The strategic priorities of Moraine Valley Community College are retention and diversity. When the project was presented these priorities were considered and allowed for buy in from the different stakeholders. The stakeholders of this project include the Director of Nursing, Department Chair, Dean of Career Programs, Dean of Learning Enrichment and College Readiness, Vice President of Academic Affairs, and the MVCC President. It is important to have different stakeholders, as each has varying levels of power and interest in an organization (Wholey, Hatry, & Newcomer, 2010).

6. SYNTHESIS OF EVIDENCE

A survey was given to the incoming freshman class of 56 students and the results were as follows: 19.9% of the students were Latino, 19.57% of the students were English Language Learners, 44.44% Spanish was their first language, and 48.89% were first generation students (first in their immediate family to go to college). The survey asked: "What are some of the challenges you foresee being enrolled in the MVCC nursing program that may impact your success"? (see Appendix C).

The focus group was conducted week one of NUR 140 and week seven with the same students. The information that the students gave was very valuable to implement changes and find out what was done correctly. There were major differences in attitude and confidence from week one to week seven with the support that the students received. One comment the students made was "this program was great, we learned from our instructor, but we understood from the educational specialist." Many other points were noted such as why nursing was chosen, what has made it difficult to progress through the nursing program, obstacles that they have encountered, being discouraged, how has the program helped, and how has the program changed you. The responses included: the program helped make sense of the material they were learning, just

having someone to talk to that understood made everything better, they were able to use these techniques in other classes and they now know how to handle studying and feel more confident as they progress on. It is important to note that these students were all ELL students. (see Appendix D).

7. RESULTS

The first nursing course consisted of eight weeks and was used to evaluate the preceding intervention. Previously, this course had a 43% attrition rate for the last three consecutive semesters. The students that had failed/ withdrawn were English Language Learners. This program increased retention in the first nursing course for English Language Latino nursing students by 85% and followed them through with support and resources. The data from last semester showed that 66% of the students were unsuccessful in the course with 34% being successful. With the intervention in place, 85% of the students were successful with 15% being unsuccessful. As mentioned previously, there were two groups of students. Class one results showed that the intervention group class average was 87.59%. The nonintervention group class average was 83.43%. Class two results showed the intervention group class average was 83.87%. The nonintervention group class average was 80.34%. Overall the students in the intervention did better. The withdrawal rate also decreased. Last semester there was a 14% withdrawal rate, this semester a 5% withdrawal rate. In this semester the students in the intervention had a 0% withdrawal rate while the nonintervention students had a11% withdrawal rate. The data above shows that having resources and support helps with retention.

8. LIMITATIONS

Limitations noted were student, faculty and institutional related issues. Student related issues consisted of: -class one students were allowed to attend the supplemental sessions more than once before the test; while class two students were only able to attend one supplemental session before the test. This schedule may have had an impact on the results. The students in the program were not able to understand the effectiveness and reasoning for this intervention. A faculty related issue was faculty was resistance to having a non nurse part of the class. An institutional related issue was a marketing tool is needed to explain the program to prospective students who may need the extra assistance to be successful. The data from the intervention is limited. The "Step Ahead for Success" program is in the first implementation phase and therefore only one semester of data is being evaluated. Programs that deal with complex problems need to overcome barriers to be successful.

9. DISCUSSION

The projected increase in MVCC's college enrollment by race is 42% Latino during 2010-2021(Reis, 2015). This program will be one of the only programs in the area that provides a model of mentors, coaches, and tutors to assist with recruitment and retention. The program increased retention of English Language Learner Latino students by 50% in their first nursing course (NUR 140). Results also indicated increased completion of English Language Learner Latino nursing students in the current program by 15%. The evaluation plan consisted of a mixed qualitative analysis utilizing grades, surveys, focus groups, and withdrawal rates. Students were monitored, tracked and given resources for successful completion. This initiative increased education and support for underrepresented nursing students by utilizing various methods to decrease barriers and provide success.

RECOMMENDATIONS

After the implementation of the intervention, many recommendations were found to assist with making the "Step Ahead for Success" program successful. The Educational Specialist noted that he spent two of the beginning weeks to review study skills and organizational techniques. A pre course before the students start the program would be helpful in frontloading that information. Time would not be taken from the supplemental sessions to review basic skills. The students would be able to begin course content immediately when they start the program. The Educational Specialist cannot be available to meet every students schedule; therefore it is recommended that a nursing tutor be hired to assist with extra tutoring outside of the supplemental sessions.

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APPENDIX A

https://www.surveymonkey.com/r/nursingpipeline

APPENDIX B

Step Ahead for Success Program Budget	
Planned Student Enrollment	**Year One**
Student Headcount	20
Program Expenditures	
Instructional	$1,500.00
Faculty Full time	$8,000.00
Educational Specialist	$45,000.00
Operating Expenses	
Program Administrator	$8,000.00
Program Materials/Supplies	$200.00
Workshops on Cultural Diversity	$150.00
Total Program Expenditure	$62,850.00
Sources of Funds	
Tuition at $114.00 per credit hour for nursing course	$6,840.00
Student Fees	$4,700.00
Total Revenue Expected	$11,540.00

APPENDIX C

	Least Challenging 1	2	3	4	Most Challenging 5	Total
Work Schedule	0.00%	7.32% 3	17.07% 7	21.95% 9	53.66% 2	41
Language	78.05% 32	9.76% 4	7.32% 3	2.44% 1	2.44% 1	41
Personal Issues	10.81% 4	35.14% 13	32.43% 12	13.51% 5	8.11% 3	37

Financial Issues	2.38% 1	14.29% 6	14.29% 6	45.24% 19	23.81% 10	42
Confidence	13.33% 6	33.33% 15	28.89% 13	15.56% 7	8.89% 4	45

APPENDIX D

Focus Group Questions

1. How did you learn about the nursing program and why did you decide to enroll?

2. When and how did you become interested in pursuing a career in nursing?

3. What other things have made it easy for you to consider pursuing a career in nursing? Explain

4. What things have made it difficult for you as you progress through the nursing program?

5. What role if any has anyone played in your interest in pursuing a career in nursing?

6. What obstacles do you think lie ahead for you to complete your studies in nursing.

7. Were you ever discouraged throughout the program? Explain?

8. How have the study groups helped you? Explain

9. Do you feel more confident now that you have a study support?

10. Thinking back about the obstacles you mentioned from the last meeting, do you still feel you have the same obstacles or there have been changes?

APPENDIX E

Program Letter

Dear

Congratulations on being accepted to the Moraine Valley Community College Nursing Program. We are constantly striving for success for our students to achieve their goal of becoming a registered nurse. Due to your TEAS test scores you will be placed in our **STEP AHEAD FOR SUCCESS** program. This program is geared to assist you in transitioning into the nursing program and successfully passing your NUR 140 class.

The program will consist of **mandatory** supplemental sessions that will meet each Tuesday for 2 hours for the first 8 weeks beginning August 23rd.

Your session will meet each Tuesday from 12:30p-2:30p for the first 8 weeks.

Failure to attend the **mandatory** supplemental sessions will result in failure of NUR 140.

If you have any questions please feel free to contact us.

**During your orientation you were asked about voluntarily participating in a focus group. The first focus group will be held on Wednesday, August 24, 2016 from 12p-1pm. You will receive a gift card for your participation. Please respond to this email if you will be participating in the focus group.