Closing the Racial Achievement Gap for Pre–Nursing Freshmen at the College of Coastal Georgia

Laura Lynch

In response to the racial disparity in DFWI rates in gateway courses for nursing students, the College of Coastal Georgia is customizing their first-year experience program to promote greater engagement and support. This program is a collaboration between the Office of Academic Affairs, School of Nursing & Health Sciences, School of Arts & Sciences, Career and Academic Advising, Office of Diversity and Inclusion, Academic Support (tutoring), Office of eLearning, the Library, and Residence Life.

STATEMENT OF THE PROBLEM

In analyzing student success data as part of the Gateways to Completion process, disaggregation by race indicated that first-year courses typically taken by students wishing to pursue a nursing program had large racial disparities in DFWI rates. This prompted analyzing the DFWI rates for typical first-year courses disaggregated by both race and student major. The results were striking. Across all departments and general education areas, the racial achievement gap in first-year courses was significantly larger for pre- nursing students compared to students of other majors.

An immediate consequence of higher DFWI rates for students of color is a lower admission rate into a nursing program after completion of the general education requirements. Looking at admission rates into the College's associate or baccalaureate degree programs in Nursing, we noted a statistically significant difference by race, where new first-year classified as White, Hispanic, Asian, or Unknown who wanted to pursue nursing were admitted at comparable rates (35% overall) whereas the same population of students classified as Black or African American, Two or More Races, Native Hawaiian/Pacific Islander, or American Indian/Alaska Native had significantly lower rates (15% overall). It is noteworthy that these trends do not persist in graduation rates for students who are admitted into a nursing program. For example, for the Associate of Science in Nursing, the graduation rates are identical for white students and students of color; indicating that the problem occurs before the students get into nursing.

In an effort to close the racial achievement gap for pre-nursing students, we are revamping the first-year experience for a pilot group of 48 students that will include:

- Two and a half days of pre-semester activities (in addition to the one day of pre-semester activities all first-year complete)

- Living-Learning Community for 24 students, with a Residence Assistant who is a nursing major, and a Learning Community for 24 non-residential students.

- Supplemental Instruction

- Diversity Programming

- Greater Career Programming

- Mentoring and Interactions with upper-class nursing students and nursing faculty

METHODS

Student participation in the pilot program is based on the probability of admittance into a nursing program (Probability of Success - POS). The POS for each student is calculated based on statistically significant logistic regression models corresponding to their admission group and dependent on High School Grade Point Average (HSGPA). To have a 50% chance as a new first-year student of eventually being admitted into a nursing program,

students in the

- higher historical admission rates group (White, Hispanic, Asian, Unknown race) must have at least a 3.46 high school GPA

- lower historical admission rates group (Black or African American, Two or More Races, Native Hawaiian/Pacific Islander, American Indian or Alaska Native) must have at least a 3.82 high school GPA

To ensure equity of outcomes, students were eligible for the Fall 2021 learning communities based on having a POS below 50% (students with HSGPAs below the thresholds would be eligible), their willingness to participate (based on a question on a required orientation survey), as well as not having already completed any of the courses that are part of the learning community: MATH 1001 Quantitative Reasoning (3 credits), CHEM 1151 Survey of Chemistry I (3 credits), CHEM 1151L Survey of Chemistry I Lab (1 credit), GLOB 1001 Global Issues – Health focus (1 credit), ENGL 1101 English Composition I (3 credits) and, for a subset of students, ENGL 0999 Support for English Composition (1 credit).

Students in each learning community were enrolled in the same sections of the courses listed above. Faculty are collaborating to ensure due dates are spaced out and nursing faculty/students are also guest appearing in ENGL (to discuss the importance of clear oral and written communication in nursing) and in CHEM (a course designed specifically for nursing students). The nursing student organization (typically geared toward in-program students) has intentionally invited students from the learning community to their events. It should be noted these are the only learning communities occurring at the institution, so this is a unique treatment.

OUTCOMES

While the program has not yet concluded its first semester, the institution has implemented programming for the fall learning communities.

- The nursing academic advisor created an event for pre-nursing students that brought upperclassmen and instructors not only from Nursing, but also Health Science and Radiology, to discuss potential careers. There is significantly higher demand for our nursing programs than what we can accept each year given resources and accreditation standards, so it is a given that not all of the students will be accepted in the nursing program. It is crucial to have sufficient off-ramps for students to continue their education and ensure students are aware of their options.

- A pre-semester learning community orientation was scheduled that included: LMS tutorials, tours of the nursing and health science labs, financial aid workshop, library workshop, introduction to the tutoring center, various team building activities among the students but also with nursing faculty, with the learning community faculty, with students from the Office of Diversity Initiatives Leadership Academy, with nursing students from the nursing student organization, and with the supplemental instructors and residence life staff who will be part of the learning communities.

- Communications to improve student mindset have been woven throughout the interventions and activities: visits from nursing faculty/students to the learning community courses help students keep their eye on goal setting and continue to establish a purpose and relevance for the general education courses they take; invitations to nursing student events help promote a social belonging.

- More broad practices have also been discussed, including methods for gaining broader diversity among the student tutors.

In addition to these new initiatives, which are in themselves outcomes of the data analysis, the following are expected outcomes at the end of Fall 2021:

- Higher student success rates in all learning community courses

- Reduced racial achievement gap in all learning community courses

- Improved student mindset, as measured through a pre-/post-mindset survey administered to all new first-year over age 18 each fall semester

Long-term, we expect these initiatives will lead to a smaller racial achievement gap in admittance rates for the nursing program and an increase in the number of students of color graduating with a degree in Nursing.

PLANS FOR CONTINUATION AND EXPANSION

While the Fall 2021 learning communities only serve 48 students, the institution typically admits over 200 new first-year students who want to pursue nursing. The institution plans to take the lessons learned from the Fall 2021 programming and scale-up to serve all nursing students. Successful strategies and programming will also be brought to scale to serve students in other majors. We are excited to see how developing a sense of community and focusing on mindsets related to social belonging amongst nursing students will impact their success and such strategies could easily be applied to other majors or meta- majors.

The institution has discussed extending the learning community to the second semester first-year courses to keep the momentum going for these groups of students. Sustaining a positive academic mindset and sense of belonging will be key to helping these students succeed, whether it is in a nursing cohort or a different major such as Health Sciences. The institution is also beginning to work toward creating a first- year college success course and some of the programming content planned in this pilot would be a great fit for such a course.

LESSONS LEARNED AND POTENTIAL IMPLICATIONS

While this work is focusing on pre-nursing students where the racial achievement gap is largest, the gap exists more broadly. Students of color are not succeeding at comparable rates in most gateway courses, which has significant implications for their retention, persistence, and graduation. It is standard to look at the course success data and disaggregate by major or by race. However, this was the first time the institution had disaggregated by both of these at once and that was the largest lesson learned: the need to continue to monitor the data broken down by both student major and by race to find trends and create programming as needed. This monitoring can also be extended: looking not just at individual courses but conducting "pressure tests" for majors (i.e., how many students are reaching various milestones toward graduation in appropriate time frames) by race. There is also the specific question here as to why Nursing? What is specific about the mindsets of students wanting to pursue nursing so that the racial achievement gap is doubled that of other majors? Future efforts could be placed on qualitative research into the mindsets of these students and how those mindsets may differ by race.