Work in Progress

'Using Coronavirus Data to Improve Teaching and Learning in a Cell Biology Course'

Authors: Rosalyn Reid, Tracy Brown and Felesia Stukes

Background: Improving and implementing global learning into STEM courses is necessary for courses that will produce graduates that will enter medical and health related careers requiring them to interface with global systems. The Covid-19 crisis has increased awareness of our connectedness as a global society. The goal of this project was to use Covid-19 outbreak data to increase participation in global learning in a cell biology course at a historically black university in the Southeast region of the United States. Our main objective was to help students recognize reliable resources for information regarding the virus and to help students analyze data that was being shared about the crisis. This was important for many reasons, a few of which are as follows 1. many of our students come from an underrepresented background and may be relied upon as an information resource for their families and communities, 2. students were concerned about the data stating that African Americans were being negatively impacted by the virus at a rate higher than other ethnic groups, and 3. many students were planning to enter a health science related field after graduation.

Design: Our approach incorporated Covid-19 data as an assignment to increase participation in health-related data. Students reviewed data from Johns Hopkin's University School of Medicine Corona Resource Center (coronavirus.jhu.edu), as well as a clinical research study on the drug FAVIPIRAVIR (AVIGAN). After completing the assignment students volunteered to complete a survey to assess their understanding of specific data at coronavirus.jhu.edu.

Results: Through the Cell Biology Covid-19 global learning assignment, students became aware of clinical research being conducted to develop a treatment for Covid-19. Students also understood the difference between countries that contained cities labeled as "hotspots" and those countries that were not yet impacted by the virus. Our future plans are to create assignments that take a deeper dive into the long-term impacts of Covid-19 on underserved communities, as well as the link between health equity and increased risk for other chronic illnesses in the global community.