

Jason Vasser-Elong-UMSAEP Activities Spring 2024
March 20 – April 1st, 2024

Project Background

The purpose of our research at The University of the Western Cape (UWC) was to collect qualitative data from students who identified as ‘Colored’ on their experiences as STEM students. My new colleague, Dr. Melanie Luckay and I, Dr. Jason Vasser-Elong collaborated during the spring term at the University of the Western Cape, in Cape Town, South Africa, studying how to put learning environment research into practice.

This qualitative study examined factors that contributed to the retention of students enrolled in science, technology, engineering, and mathematics (STEM) courses. After receiving the University of the Western Cape’s version of the Internal Review Board approval, Dr. Vasser-Elong used a questionnaire (see Appendix A) to gather data from students enrolled as freshmen, sophomores, juniors or seniors, to answer a central research question “how learning environments impact students to matriculate through their degree programs?” Drs. Luckay and Elong plan to write a paper that focuses on how learning environment research can be put into practice for administrators, professors, and students.

Societal Background

The problem is that non-white, disadvantaged students in Cape Town, South Africa, face societal barriers in addition to academic challenges, which prevent many from matriculating with their degrees. Our goal is to find how the lived experiences of students impact the desire to complete their degrees. Additionally, we aim to measure if communal goal congruence impacts their learning in positive ways. Communal goals are articulated by the need for relatability, altruistic purpose, and collaboration and are fulfilled by the environment in which one is learning or working.

We hope to learn how the lived experiences of disadvantaged, non-white students at the University of the Western Cape, impact their retention in their science, technology, engineering, and mathematics (STEM), programs. Our research aims to identify ways for those students to achieve communal goals in STEM programs.

Post research, we will write a paper that contextualizes the issues that Colored students at the University of the Western Cape face and how the administration, faculty and staff can aid those students. We recognize that without over-generalizing student experience, we want to provide thoughtful voice to the issue’s students face. Jason and Melanie are currently looking into peer-reviewed journals to consider for publication.

Notable visits



Dr. Jason Vasser-Elong and Dr. Melanie Luckay

Upon our initial (face to face) meeting, Melanie organized interview sessions with students. During my visit, the campus was preparing for vacation. So, one of the limitations was the time frame of the visit. We (Melanie and Jason) found that future collaborations should occur during their regular course sessions. The challenge is that The University of Missouri System is on a different time frame and course schedule than the University of the Western Cape.

After meeting with a few of the faculty in the education department, we met to organize our time during my visit. I was able to meet with Dr. Simphiwe Sesanti, who after my research with Dr. Luckay, introduced me to the coordinator of the Robben Island Museum at (UWC), who gave access to digital files to use in developing a new course “Black and Creative: The Intersection of expression during the Black Arts Movement & Its South African equivalent”. With permission for the Robben Island Museum at UWC, I will compare the Arts Movement in Cape Town, South Africa to the Black Arts Movement in the United States of America. The Focus of this research is to find out how art was used during these two pivotal moments in history and create a course to highlight how those movements were similar, different and how they brought communities together during moments of political unrest.



Dr. Jason Vasser-Elong and Dr. Simphiwe Sesanti



Mariki Victor (UWC-Robben Island Mayibuye Archives Representative), Dr. Simphiwe Sesanti and Dr. Jason Vasser-Elong (after a day of exploration).

Meeting with students

Meeting with and spending time with students at the UWC was truly a remarkable experience. For five days, I drove (on the opposite side of the road) in a vehicle with the steering wheel (on the opposite side of the car), and with the advice of colleagues to keep to the left, I successfully

navigated to the university in full anticipation of understanding their education needs. My dissertation research was conducted at the Missouri S&T, and what I found in the students of Cape Town, South Africa, was that their needs were identical. At Missouri S&T, my research was conducted on female students and at UWC students were of both female and male genders. Additionally, while the female students at Missouri S&T were seeking communal goal congruence to succeed in their STEM programs, the same could be said for the South Africa students. The main difference was while the issues for the students at Missouri S&T were mostly about gender, the issues affecting the students at UWC were mostly about notions of race. In either case, both sets of students relied heavily on developing relationships within their respective groups.



Drs. Melanie Luckay and Jason Vasser-Elong with students after a group interview.

Some of the issues that the students discussed related to access. For example, due to the way neighborhoods are segregated in post-Apartied Cape Town, South Africa, Colored students must travel from neighborhoods far away from UWC. For those students that travel from great distances that are female, the risk of harm from the broader community is heightened. And while the male students did not have that particular fear of safety, they did have to content with protecting themselves from random acts of violence as well.

As STEM students, like the female students at Missouri S&T, all had their own struggles with micro-aggressions from fellow STEM students, but those of different ethnicities (e.g. White, Black, Indigenous). So, with respect, their issues with classmates have also negatively affected them.

In summary, what I found is that administrators, faculty, staff and students need to be made aware of the issues Colored students are facing. And with respect with students that identify as White, Black, and Indigenous, a similar study needs to be done to understand their struggles too, so that a more robust plan of reform can be developed for all students across the region.

Overall, I enjoyed my time in Cape Town, South Africa. My time with the students was very fruitful. One of them commented on the fact that ‘someone came all the way to Cape Town to hear their stories, and not one person from the community took the time’. That made me smile and took that with me on my way back home. I also enjoyed seeing some of the sights and eating the food, the fish was amazing.

Future research tied to this opportunity:

- 1) The writing and publication of a co-authored article with Dr. Melanie Luckay and myself.
- 2) The development of a course “Black and Creative: The Intersection of expression during the Black Arts Movement and Its South African equivalent”.

I am in conversations with Dr. Melanie Luckay, Dr. Simphiwe Sesanti and Mrs. Mariki Victor and will use this opportunity as a springboard for future research. I would like to thank Dr. Matthew Taylor for his guidance and support, Dr. Melanie Luckay and her fellow faculty and staff in the Faculty of Education at the University of the Western Cape. Also, I would like to thank Dr. Rodney Uphoff for organizing things on the ground. And a very special thank you to the University of Missouri South Africa Educators Ward Committee for selecting me for this grand opportunity to learn and make new connections that will last a lifetime.

Appendix A

Interview Questions

1. Please share your gender, year in school, and where you are from.
2. What degree program are you enrolled in?
3. Tell us about your educational background.
4. What motivated you to choose a major in the STEM field of study?
5. How did your experiences as a high school student influence your decision to choose a STEM major?
6. Describe your high school experiences related to Advanced Placement (AP) coursework or Dual Enrollment coursework.
7. Tell us about the study habits you developed as an AP student.
8. How have your study habits evolved to suit your needs as a STEM major?
9. What extracurricular activities do you participate in?
10. How have your experiences with extracurricular activities impacted your college experience?
11. What are some challenges of participating in extracurricular activities?
12. What are the benefits of participating in extracurricular activities?
13. Do you utilize art in your study habits? i.e., study with music, use color coding for notes, draw or paint to visualize concepts. Please explain.
14. In what ways do you think art can be used as a learning tool?
15. What has your experience been with work-study?
16. How has your participation in work-study impacted your learning experience?
17. How has your participation impacted you as a STEM major?
18. As a STEM student, what learning environments (i.e. in a group setting, with hands on materials, etc.) do you learn in best?
19. How can the challenges be improved?
20. Can your university do anything to be